University of New Mexico UNM Digital Repository

UNM Annual Reports

Campus Publications

6-30-2000

Annual Report of the University, 1999-2000, Volumes 1-4

University of New Mexico

Follow this and additional works at: https://digitalrepository.unm.edu/unm annual reports

Recommended Citation

 $\label{lem:condition} University of New Mexico. "Annual Report of the University, 1999-2000, Volumes 1-4." (2000). \\ https://digitalrepository.unm.edu/unm_annual_reports/41$

This Annual Report is brought to you for free and open access by the Campus Publications at UNM Digital Repository. It has been accepted for inclusion in UNM Annual Reports by an authorized administrator of UNM Digital Repository. For more information, please contact disc@unm.edu.

THE UNIVERSITY OF NEW MEXICO

1999-00 ANNUAL REPORTS

VOLUME I

ANNUAL REPORTS 1999-2000 VOLUMEI

PAG	3E
PRESIDENT	
EQUAL OPPORTUNITY, OFFICE OF (NOT SUBMITTED)	
BROVOSTAVIOE BREGIDENT FOR ACADEMIC AFFAIRS	
PROVOST/VICE PRESIDENT FOR ACADEMIC AFFAIRS ACADEMIC PROGRAM SUPPORT (CAPS) (NOT SUBMITTED)	
ANDERSON SCHOOLS OF MANAGEMENT.	
ARCHITECTURE AND PLANNING, SCHOOL OF	
ART MUSEUM	45
ARTS AND SCIENCES, COLLEGE OF	
ANTHROPOLOGY	
MAXWELL MUSEUM	
BIOLOGY	
CHEMISTRY	09
COMMUNICATION AND JOURNALISM	
EARTH AND PLANETARY SCIENCES	
INSTITUTE OF METEORITICS	
ECONOMICS 65	
ENGLISH	
FOREIGN LANGUAGES AND LITERATURES	
GEOGRAPHY	-
HISTORY	
LINGUISTICS 7	
MATHEMATICS AND STATISTICS	
PHILOSOPHY	
PHYSICS AND ASTRONOMY	
POLITICAL SCIENCE 78	
PSYCHOLOGY	
SOCIOLOGY	
SPANISH AND PORTUGUESE	
SPEECH AND HEARING SCIENCES 92	
WOMEN'S STUDIES 92	27
BRANCH CAMPUSES	
GALLUP (NOT SUBMITTED)	
LOS ALAMOS (NOT SUBMITTED)	
VALENCIA	33
CHICANA/O STUDIES PROGRAM (NOT SUBMITTED)	
COMPUTER AND INFORMATION RESEARCH AND TECHNOLOGY (CIRT) 96	38
CONTINUING EDUCATION (NOT SUBMITTED)	

The Robert O. Anderson School and Graduate School of Management at The University of New Mexico

Period of Report: July 1, 1999 to June 30, 2000

Submitted by Howard L. Smith, Dean

The Anderson Schools of Management is divided into four distinct divisions – the Department of Accounting; the Department of Finance, International and Technology Management; the Department of Marketing, Information and Decision Sciences; and the Department of Organizational Studies. This structure provides an opportunity for The Anderson Schools to develop four distinct areas of excellence, proven by results reported here.

I. Significant Developments During the Academic Year

The Anderson Schools of Management

- As a result of the multi-year gift from the Ford Motor Company, completed renovation of The Schools' Advisement and Placement Center, as well as all student organization offices.
- The Ford gift also provided for \$100,000 to support faculty research, case studies and course
 development.
- The Schools revised the MBA curriculum to meet the changing needs of professional, advanced business education.
- The Schools updated computer laboratory facilities, with the addition of a 45-unit cluster for teaching and student work.
- The faculty and staff of The Schools furthered outreach in economic development activities by
 participating directly as committee members and leaders in the cluster workgroups of the Next
 Generation Economy Initiative.
- The faculty, staff and students of The Schools contributed to the development of the Ethics in Business Awards; particularly exciting was the fact that all nominee packages were developed by student teams from The Anderson Schools.
- The Schools continue to generate more credit hours per faculty member than any other division of the UNM community.

The Accounting Department

Preparation and presentation of a progress report to accrediting body, the AACSB.

The Department of Finance, International and Technology Management

 The Department continued to focus on expansion of the Management of Technology program as a strategic strength of The Schools.

The Department of Marketing, Information and Decision Sciences

• Generated 9022 credit hours, with a student enrollment of 3070.

The Department of Organizational Studies

Coordinated the 9th UNM Universidad de Guanajuato (UG) Mexico Student Exchange.

II. Significant Plans and Recommendations for the Near Future

The Anderson Schools of Management

- Completion of the strategic planning process for The Schools, utilizing the input and resources of the faculty and staff alongside the Foundation Board and National Advisory Board.
- Complete revision of the mission statement of The Schools is planned.
- The Schools will continue to focus on community outreach, particularly in the area of economic development.
- The Schools will coordinate strategic planning and priority-setting efforts with the initiatives identified through the strategic planning process of The University.

Departmentally, The Schools will also be reviewing goals and objectives to make them reflective of future needs. Adaptations will be made to reflect the priorities identified in the strategic planning processes of The Schools and The University.

III. Appointments to Faculty/Staff

The Anderson Schools of Management None to report.

The Accounting Department

- Heather Harwick joined the staff as a new department administrator.
- Michele Chwastiak was hired effective August 1999 as an Assistant Professor.
- Melissa Walters-York was hired effective August 1999 as an Assistant Professor.

The Department of Finance, International and Technology Management

- Leslie Boni, Finance Area, joined in summer 2000.
- Jana Hranaiova, Finance Area, joined in summer 2000.

The Department of Marketing, Information and Decision Sciences

• Gerald Albaum joined the faculty as a visiting scholar in fall 1999.

The Department of Organizational Studies

Crystal Rose was appointed to the position of Administrative Assistant, March 2000.

IV. Separations of Faculty/Staff

The Anderson Schools of Management

- Jenny Lucero resigned as Administrative Assistant, April 2000.
- · Peg Merrill resigned her support staff post.
- Leslie Oakes served as Associate Dean until June 30, 2000, when she returned to her teaching role in the Accounting Department.

The Accounting Department

- Jesse Dillard resigned as department chair effective May 31, 2000, taking a position at Central Florida University.
- Alistair Preston was on sabbatical leave for the academic year 1999-2000.

The Department of Finance. International and Technology Management

- Donald Simonson retired in December 1999.
- Donald Coes transferred to the Economics Department in fall 1999.

The Department of Marketing, Information and Decision Sciences

- · Robert Rogers retired from his faculty post and joined the staff at Intel/Rio Rancho, May 2000.
- Stephen Burd was on sabbatical for fall 1999.

The Department of Organizational Studies

- Jaye Francis, Administrative Assistant, resigned as Administrative Assistant of the Department of Organizational Studies, March 2000.
- Monica North resigned from the Anderson faculty to take a position with the Albuquerque Police Department, June 2000.
- Robert Rehder retired from the Anderson faculty, June 2000.
- Yolanda Sarason resigned from the Anderson faculty to take a position at Colorado State University, June 2000.

V. Publications

The Anderson Schools of Management

All are reported in academic departments.

The Accounting Department

Dillard, Jesse F.

- It's Just Words Impacts of Information Technology on Moral Dialogue (with K. Yuthas and B. Drake) Journal of Business Ethics (2000).
- Ethical Development of Advanced Technology: A Postmodern Stakeholder Perspective (with K. Yuthas) Journal of Business Ethics (1999) 35-49.
- Teaching Ethical Decision Making: Adding a Structuration Dimension (with K. Yuthas) Journal of Teaching Business Ethics (1999) pp. 339-361.
- Health Care, Cost Accounting and Technological Domination: A Critical Study of Accountability in Rural Hospitals (with H. Smith) Accounting Forum (1999) 327-356.
- Configurations for Organization and Accounting Ethics (with K. Yuthas) Research on Accounting Ethics (1999) pp. 177-203.
- A Technical Matrix of Accounting Ethics, Research on Accounting Ethics (1999) pp. 141-143.

Bougen, Philip

- Organizational Crime Auditors and Liberal Government, International Journal of the Sociology of Law, 2000 Volume 28, pp. 69-82.
- Review of Mathews et al. The Priesthood of Industry, (Oxford University, Press, 1998) in British Accounting Review, 2000, Volume 31, pp. 255-259.

Chwastiak, Michele

- "Deconstructing the Principal-Agent Model: A View from the Bottom" Critical Perspectives on Accounting, August, 1999, pp. 425-441.
- "Accounting and the Cold War: The transformation of Waste into Riches" Critical Perspectives on Accounting, December, 1999, pp. 747-771.

Hamill, James R.

- Partnership's Ownership of Residence Does Not Deny Section 121 Exclusion. The Tax Adviser, Tax Clinic Section, June 2000, pp. 396, 398,
- Renovate Home-Sale Plans By Adding a Lease-Option, with Craig White, Practical Tax Strategies, May 2000, pp. 294-300.
- Fiscal-Year Individuals, with Maggie Zahm, The Tax Adviser, Tax Clinic Section, October 1999, pp. 690-691.
- Choice of Entities for Real Estate Development, with Craig White, Business Entities, September/October, 1999, pp. 26-33, 61-62.
- LLCs and LLPs: Much Ado About Nothings, with Jennifer Olson. The Tax Adviser, July, 1999, pp. 506-514.
- New CPA-client privilege leaves substantial attorney role. On Point, Spring 2000, p. 4.
- Cost segregation studies offer tax-saving opportunities. Client/Friend, Winter, 2000, pp. 1,3.
- Attorneys and CPAs: Overcoming friction to work better together. On Point, Summer 1999, p.2.
- The CPA's Guide to Choosing Business Entities, AICPA, 1999.
- The CPA's Guide to Benefit Plans for Small Business, AICPA, 1999.

Mouck, Tom

 "Beyond Panglossian Theory: Capital Investment Strategy in a Complex Adaptive World", Accounting, Organizations and Society, Vol. 25 (2000), pp. 261-283.

Qakes, Leslie

 Oakes, L.S., Mark Covaleski and Mark W. Dirsmith; Labor's Changing Responses to management Rhetorics: A Study of Accounting-Based Incentive Plans during the First Half of the 20th Century Accounting Historians Journal, Volume 26, N.2 December 1999, pp. 90-133.
 *Awarded Accounting Historian's Journal. Best Contribution for 1999.

Preston, Alistair M.

 Awerbuch, S., Hyman, L. and Vesey & contributing authors, Unlocking the Benefits of Restructuring: A Blueprint for Transmission Public Utilities Reports Inc. (1999)

Togo, Dennis F.

- Activity-Based Costing and Relevant Cost Analysis: An Example of Protective Force Services and Security Upgrades," *Journal of Nuclear Materials Management*, with Claude Potter, Spring 2000, pp. 31-39
- A data dictionary approach to meeting user requests for accounting information (with Yuthas, K.).
 Review of Accounting Information Systems, Vol 3, No. 1, Winter 1998-99, pp. 53-60.

Walters-York, Melissa

 "Individual Differences in Assessing Problem Similarity." Accounting Education, Vol. 8, No. 2, 1999, pp. 77-98.

White, Craig G.

- Sales to Controlled Entities Offer Character and Timing of Income Benefits (with J. Hamill) Business Entities (September/October): 26-33, 61-62
- The Upcoming Increase in Social Security's Normal Retirement Age Calls For A Review of the Application Timing Decision (with A. Young) Personal Financial Planning (March/April): 24-32
- Renovate Home-Sale Plans by Adding A Lease Option (with J. Hamill) Practical Tax Strategies (May): 294-300
- Electronic Filing: The IRS Is Asking You for a Favor, Client/Friend (Fall): 4.

Young, Joni J.

- Constructing the Global Corporation and Corporate Constructions of the Global (with Alistair Preston), Accounting, Organizations and Society (2000) pp. 427-449.
- What the Papers Said: The Irish Accountant and Tax Evasion (with Phil Bougen and Edward Cahill), European Accounting Review (1999) pp. 443-461.

The Department of Finance, International and Technology Management Grant. Dwight

 Dwight Grant and Gautam Vora, "Implementing No-Arbitrage Term Structure of Interest Rate Models in Discrete Time When Interest Rates Are Normally Distributed," *Journal of Fixed Income* 8 4 (March 1999), 85-98.

Kassicieh, Suleiman

 M. Igbaria, S. K. Kassicieh and Milton Silver, "Career Orientations and Career Success Among Research, Development and Engineering Professionals," *Journal of Engineering and Technology Management*, Vol. 16, pp. 29-54, 1999.

Schatzberg, John D.

- "Advertising Agency Terminations and Reviews: Stock Returns and Firm Performance," (with G. Hozier), Journal of Business Research (December 1999).
- "Evaluating a New Model of Software Piracy," (with L. Schatzberg and D. Reid), Journal of Informatics Education and Research, Fall 1999 (pp. 37-51).

Vora, Gautum

See above entry; paper with Dwight Grant.

The Department of Marketing, Information and Decision Sciences

Albaum, Gerald

- "An Empirical Test of Alternative Theories of Survey Response Behavior", Journal of the Market Research Society, Apr. 1999 (with F. Evangelista & P. Poon).
- "Management Style Comparisons Among Five European Nations", Journal of Global Marketing, 1999, Vol. 12, No. 4 (with J. Herche).

Bose, Ranjit

- "Application of Intelligent Agent Technology for Managerial Data Analysis and Mining, DATABASE for Advances in Information Systems, Winter 1999, Vol. 30, No. 1, pp. 77-94, (with V. Sugumaran).
- "Data Analysis & Mining Environment: A Distributed Intelligent Agent Technology Application", Industrial Management and Data Systems, Vol. 99, No. 2, pp. 71-80 (with V. Sugumaran).

Bullers, William I, Jr.

 "A Study of Strategic Information Systems Design in Home Health Agencies", The Journal of Computer Information Systems, Vol. 39, No. 3, Spring 1999, pp. 57-67, (with H. Smith).

Computer Inform Reid, Richard A.

- "Evaluating a New Model of Software Piracy", Journal of Informatics Education and Research, Vol. 1, No. 1, Fall, 1999, pp. 37-51, (with L. Schatzberg & J. Schatzberg).
- "The Deming Cycle Provides a Framework for Managing Environmentally Responsible Process Improvements, Quality Engineering, Vol. 12, No. 2, Oct. 1999, pp. 209-219 (with E.L. Koljonen & J.B. Buell).
- "TQM Principles and Tools Provide Structure for Process Improvement: A Small Business Perspective", Journal of Business & Enrepreneurship, Vol. 11, No. 2, Oct. 1999, pp. 1-25.
- "On Operations Management", New Mexico Business Journal, Vol. 23, No. 1, Jan/Feb. 1999, p. 80. Rogers, Robert D.
- "Measuring Gender Equity", Virginia Journal of Sports and the Law, Spring 1999, pp. 129-167, (with A. Mathewson).

Schatzberg, Laurie

- "Evaluating a New Model of Software Piracy", Journal of Informatics Education and Research, Vol. 1, No. 1, Fall 1999, pp. 37-51, (with J. Schatzberg & R. Reid).
- "Information Plan for Celerity Enterprises, Inc.", Annals of Cases on IT Management and Applications in Organizations, Vol. 2, 1999, pp. 187-213.
- "RESQ for FLASHMEM, Inc.", Informing Science, Vol. 1 (4), Jan. 1999, pp. 75-84.

The Department of Organizational Studies

Champoux, Joseph

- "Leadership and Self-Renewing Organizations." In T. D. Connors (Ed.), The Nonprofit Management Handbook. 3rd Edition. New York: John Wiley & Sons, Inc., in press, 2000.
- "Management Context of Not-for-Profit Organizations in the New Millennium: Diversity, Quality, Technology, Global Environment, and Ethics." In T. D. Connors (Ed.), The Nonprofit Management Handbook. 3rd Edition. New York: John Wiley & Sons, Inc., in press, 2000.
- Organizational Behavior: Using Film to Visualize Principles and Practices. Cincinnati, Ohio: South-Western College Publishing, in press, 2000.
- Management: Using Film to Visualize Principles and Practices. Cincinnati, Ohio: South-Western College Publishing. in press. 2000.
- Instructor's Teaching Resources, Management/Organizational Behavior: Using Film to Visualize Principles and Practices. Cincinnati, Ohio: South-Western College Publishing, in press, 2000.
- "Animated Films As a Teaching Resource." Journal of Management Education, in press, 2000.
- "Seeing and Valuing Diversity Through Film." Educational Media International, 1999, 36 (4): 310-316.

Corzine, Jan

The CEO's Psychological Characteristics and Ethical Culture, with J. M.Logsdon. In F. A. Rahim, R. T. Golembiewski, & K. D. Mackenzie (Eds.), Current Topics in Management Vol. 4. (pp. 63-79) Samford, Connecticut: JAI Press, 1999.

Dry, Eddie

 "Flying High at the Kodak Albuquerque International Balloon Fiesta, Market and Economic Impact Study, Bureau of Tourism & Recreation Research, Illinois State University (With Dr. Douglas Michele Turco, Illinois State University) October 1999.

Gerde, Virginia

- Gerde, Virginia W., and Swanson, Diane. Book Review: The Blackwell Encyclopedic Dictionary of Business Ethics. Business & Society, 39 (2): 220-239.
- Gerde, Virginia W., 2000 Stakeholders and Organization Design: An Empirical Test of Corporate Social Performance. Research in Stakeholder Theory, 1997-1998 in: The Sloan Foundation Minigrant Project, Redefining the Corporation. J. M. Lodsdon and D. J. Wood (Editors). The Clarkson Centre for Business Ethics: Toronto, Ontario, 2000.
- Goldsby, M. G., Neck, C. P., and Gerde, V. W., Inner Leadership: A Social Cognitive-Based Approach Toward Enhanced Ethical Decision Making. Teaching Business Ethics. 2: 229-247, 1999.

Logsdon, Jeanne

- Research in Stakeholder Theory, 1997-1998: The Sloan Foundation Minigrant Project. Edited by Jeanne M. Logsdon, Donna J. Wood, and Lee Benson. Toronto: Clarkson Centre for Business Ethics. Including:
- "Stakeholders and Corporate Performance Measures: An Impact Assessment," pp. 117-131. (With Patsy G. Lewellyn.)
- "Redefining the Corporation: The Performance Link," pp. 147-153. (With Donna J. Wood.)

Muller, Helen J.

- "Case 30: Business of Culture at Acoma Pueblo," Gilbert, R. & Muller, H. J., (pp.209-216) in P. Buller and R. Schuler, *Instructor's Manual for Managing Organizations and People*, 6th ed., South-Western College Publishing, 2000.
- "American Indian Business," Colorado Rocky Mountain School Bulletin, H. J. Muller (2000).
- "It takes a Community to Create an American Indian Business & Management Course," Journal of Management Education, Vol. 24, No. 2, pp. 177-206, 2000.

Parkman, Allen

- "Mutual Consent" in Anthony Dunes and Robert Rowthorn (eds) Marriage and Divorce: An Economic Perspective, Cambridge, UK: Cambridge University Press, in press, 2000.
- "Good Incentives Make Good Marriages," in Alan Hawkins and Lynn Wardle (eds), Revitalizing the Institution of Marriage for the 21st Century, Westport CT: Greenwood Publishing Co., in press, 2000.
- "Reforming Divorce Reform." Santa Clara Law Review, in press, 2000.

Porter, James

- "How Bell Manages Itself, New Mexico Business Journal, August/September, 1999, (With Rehder, R. & Adegon, L.).
- "The Business of Business is...the Environment?" review article in Alternatives Journal of Down to Earth by F. L. Reinhardt in Harvard Business School Press, 2000.

Rehder, Robert

"How Bell Manages Itself, New Mexico Business Journal, August/September, 1999, (With Rehder, R. & Adegon, L.).

Smith, Anne

- "The Clock is Ticking: Surviving Privatization and Deregulation by Utilizing the Running Time," *European Management Journal*, Vol. 17, no. 4, pages 409-421.
- "Top Management Team Research: A Virtual Organization in Need of Teamwork," Organization Science, August 1999.
- Patricia P., Smith, A., "Top Management Team Heterogeneity: Personality, Power, and Proxies," Organization Science, in press, 2000.
- "Off the Starting Blocks: A Comparative Case Analysis of Early International Expansion Processes of Three Telecommunications Service Providers" (2000).
- The following exercises and teaching notes were selected for publication in Helen Deresky's
 International Management textbook (4th edition, 1999) or its instructors manual (Prentice Hall/Addison Wesley Longman);
 - "Myths and Realities of Globalization" and teaching note (textbook)
 - "AB Telecom Exercise" and teaching note (instructor's manual)

"International Expansion Process" and teaching note (instructor's manual) "RBOC Partnering Exercise" and teaching note

Young, John E.

 "Entrepreneurial infrastructure in Singapore: Developing a Model and Mapping Participation" (with Teck-Meng Tan and Wee-Liang Tan). Journal of Entrepreneurship, 9 (1), 1-33, 2000.

VI. Outside Professional Activities of Staff Members

The Anderson Schools of Management

Livingston, Kate

Provided leadership to the national association of Executive MBA programs.

Parsons. Drew

Completed Leadership Albuquerque program.

Shepherd, Shawn

• Regular contributing writer to New Mexico Business Journal.

The Accounting Department

Bougen, Philip

- Ad hoc reviewer, AAAJ.
- Review of Papers for Organization.

Chwastiak, Michele

- · Editorial Board: Accounting Forum.
- Ad hoc reviewer: Critical Perspectives on Accounting; Accounting, Auditing and Accountability Journal; Accounting and the Public Interest.

Dillard, Jesse

- Accounting and the Public Interest (Editor, appointed 1999)
- Accounting, Auditing and Accountability Journal (Associate Editor, 1999, board member 1989present)
- Editorial Board Member: Research in Accounting Ethics (1998-present); Behavioral Research in Accounting (1992-1993, 1996-present); Critical Perspectives on Accounting (1989-present); Accounting Forum (1996-present); Accounting and Business Society (1996-present); Advances in Accounting (1991- present).
- Board of Directors, Albuquerque Chapter, NM Society of CPAs (1998-2000)

Hamill, James R.

- Power & Communication Contractor's Association, Mid-year meeting, 7/99, compensation planning for businesses.
- International Association for Financial Planning Financial and Estate Planning Update, 4/00.
- New Mexico Estate Planning Council Estate planning update, 1/2000.
- Editorial Board: Harcourt Brace Professional Publishing, Executive's Tax and Management Report.
- American Taxation Association, Chair, Tax Policy Research Oversight Committee, 1999-2000.
- New Mexico Society of CPAs: Board of Directors and CPE Director; Chair, CPE Strategic Plan Administration Task Force; CPE Selection Task Force; Speaker for Annual Tax Conference, December 12/99; Speaker for technical breakfast session.

Oakes, Leslie S.

Committee to Review USDA Hispanic-Serving Institutions Education Grant Applications, 1999.

Preston, Alistair

- Postal ABC: What are Reasonable Expectations Postal Services Conferences Portugal (June 1999).
 Togo, Dennis
 - AICPA Accounting and Reporting Preparation Subcommittee to the Board of Examiners.
- Institute of Management Accountants, campus coordinator.
- Sandia Audit Intern Program Committee.

Walters-York, Melissa

- "Technology Trends That Change the Role of Accountants", Invited presentation for the R.O. Anderson Schools of Management, Theta Xi Chapter of Beta Alpha Psi technical meeting, Albuquerque, October 1999.
- "Electronic Commerce and Its Implications for the Accounting Profession", Invited presentation for the Albuquerque Chapter of The Institute of Management Accountants, Albuquerque, March 2000.
- Member of the Association of Commerce & Industry, Albuquerque, NM.

White, Craig G.

- Designing and Selling a Charitable Remainder Trust as a Retirement Plan (with J. Hamill) at the New Mexico Society of CPAs' December 1999 Technical Session.
- Instructor AICPA National Tax Education Program, Week II. June 26-30.
- Cohosted a discussion with Representative Heather Wilson on R&D tax incentives for New Mexico Businesses (with S. Walsh) April 24, 2000.
- Treasurer, Easter Seals New Mexico.

Young, Joni J.

- Risk(ing) Metaphors presented as plenary paper at the Academy of Accounting Historians Conference on The Rhetoric of Accounting History, Toronto, Canada, November 1999.
- · Editorial board: Accounting History, Accounting Historian's Journal.
- Ad hoc reviewer: Critical Perspectives on Accounting, Accounting, Auditing and Accountability
 Journal, AOS, Accounting Historian's Journal, Accounting History, Accounting and the Public
 Interest.
- · Provided proposal comments for John Wiley on FARS Casebook.

The Department of Finance, International and Technology Management

Grant, Dwight

- 1999 FMA Annual Meeting Program: reviewed 12 papers, organized and chaired one session at the annual meeting.
- Reviewed "Currency Price Risk Hedging in a Random Walk Market" for the Journal of Futures Markets.
- The academic member of the board of the Financial Executives Institute.

Kassicieh, Suleiman

- Editor of special issue of IEEE Transactions in Engineering Management focused on Disruptive Technology and Discontinuous Innovation. Issue to appear in 2001.
- Program Chair for IEEE Engineering Management Society International Conference to be held in Albuquerque August 13-15, 2000.
- Program Chair for International Commercialization of MEMS conference to be held September 6-8, 2000 in Santa Fe.

Schatzberg, John D.

"Microcomputer Purchase Behavior in Multi-Computer Households," (with K. Baker, G. Hozier, R. Rogers, and L. Schatzberg), accepted for presentation at the 2000 Western Decision Sciences, Spring 2000

The Department of Marketing, Information and Decision Sciences

Baker, Kenneth G.

- "Hispanic Versus Non-Hispanics: Differences in Teenage Smoking Behavior", Cross-Cultural Research Conference Proceedings, Dec. 1999, (with Hozier & Rogers).
- "E-mail, WebPage and Personal Interview Survey Research: Response Pattern Comparisons", National Applied Business Research Proceedings, Aug. 1999, (with Hozier & Rogers).
- "E-mail, Mail, and Fax Survey Research: Response Pattern Comparisons", American Society of Business and Behavioral Sciences Proceedings, 6th Annual Meeting, Feb. 1999 (with Hozier & Rogers).
- Paper reviewer for three conferences.

Bose, Ranjit

- "Data Mining for Managers", Proceedings of the 1999 Annual Meeting of the Northeast Decision Sciences Institute, Newport, RI, Mar. 24-26, 1999.
- Summer faculty internship at Intel Corporation.

Bullers, William I, Jr.

"Zachman's Information System Architecture as a Conceptual and Navigation Aid for CASE", 1999
 Western Decision Sciences Institute Conference, Puerto Vallarta, Mexico, April 6-10, 1999.

Burd, Stephen

- Conference reviewer and session chair at AMCIS '99.
- Promotion review case for UAH.

Hozier, George C.

- "Hispanic Versus Non-Hispanics: Differences in Teenage Smoking Behavior", Cross-Cultural Research Conference Proceedings, Dec. 1999, (with Baker & Rogers).
- "E-mail, WebPage and Personal Interview Survey Research: Response Pattern Comparisons", National Applied Business Research Proceedings, Aug. 1999, (with Baker & Rogers).
- "E-mail, Mail, and Fax Survey Research: Response Pattern Comparisons", American Society of Business and Behavioral Sciences Proceedings, 6th Annual Meeting, Feb. 1999 (with Baker & Rogers).

Ravinder, H.

- "Joint Determination of Spare Part Inventory Levels and Age Replacement Strategies", Production and Operations Management Society National Meeting, Charleston, SC, April 1999 (with C. Schultz).
- Greater Albuquerque Chamber of Commerce Quality of Life Planning Council meetings.

Reid, Richard A.

- "Applying the Three Ps Constraint Framework in a Service Organization, 1999 APICS Constraints Management Symposium Proceedings, Tampa, FL, (with E.L. Koljonen).
- "Validating a Manufacturing Paradigm: A Systems Dynamic Modeling Approach", Proceedings of the Winter Simulation Conference, Phoeniz, AZ, Dec. 1999, pp. 759-765, (with E.L. Koljonen).
- "A Systems-Oriented Problem Analysis Framework: Application in a Law Firm", Proceedings of the
 5th International Conference of the Decision Sciences Institute, Athens, Greece, July 1999, p. 18121814, (with E.L. Koljonen).
- "Continuous Improvement: A Small Business Perspective", Proceedings of the 28th Annual Meeting of the Western Decision Sciences Institute, Puerto Vallarta, Mexico, April 1999, pp. 809-811.
- "Using Systems Dynamics Models to Validate Process Logic Diagrams", 1999 APICS Constraints Management Symposium Proceedings, Phoenix, AZ, March 1999, pp. 67-76, (with E.L. Koljonen).
- Editorial Board of Environmental Quality Management.
- Chair of LANL Business Operations External Advisory Committee.

Rogers, Robert D.

- "Hispanic Versus Non-Hispanics: Differences in Teenage Smoking Behavior", Cross-Cultural Research Conference Proceedings, Dec. 1999, (with Baker & Rogers).
- "E-mail, WebPage and Personal Interview Survey Research: Response Pattern Comparisons", National Applied Business Research Proceedings, Aug. 1999, (with Baker & Rogers).
- "E-mail, Mail, and Fax Survey Research: Response Pattern Comparisons", American Society of Business and Behavioral Sciences Proceedings, 6th Annual Meeting, Feb. 1999 (with Baker & Rogers).
- Reviewer for Western DSI conference.

Schatzberg, Laurie

- Associate Editor, Database,
- Treasurer/Secretary ACM SIGMIS for 1999-2002.

Schultz, Carl R.

- "Joint Determination of Spare Part Inventory Levels and Age Replacement Strategies", Production and Operations Management Society National Meeting, Charleston, SC, April 1999 (with H. Ravinder).
- Manuscript reviewer for Management Science and the International Journal of Production Economics.
 Shama, Avraham
- "The Experiences of U.S. Companies in Eastern Europe", 1999 Ninth Biennial World Marketing Congress, Malta, June, 1999.
- Journal reviewer for International Executive, Journal of World Business.

Yourstone, Steven A.

- "Health Care Process Improvement Practices", Annual Meeting of the Production and Operations Management Society, Charleston, SC, March 1999.
- Manuscript reviewer for IEE Transactions and Duxbury Press.

The Department of Organizational Studies

Champoux, Joseph

 "Future Directions of Organizations and Management." Invited at "Preparing the Manager of the 21st Century Conference," University of Macedonia, Thessaloniki, Greece, December, 1999.

Corzir

- Mentoring and Gender: Recent Trends in the Literature. Proceedings of the Sixth Annual International Conference on Advances in Management. Baton Rouge, Louisiana, July 1999, 70.
- Mentoring and Gender: Recent Trends in the Literature. Proceedings of the Sixth Annual International Conference on Advances in Management. Baton Rouge, Louisiana, July 1999, 70.

Dry. Eddie

- "Impact of the Euro on the Tourism Industry," Manager of the 21st Century Conference, University of Macedonia, Thessalonica, Greece. December 1999.
- "Marketing for the Bed and Breakfast," presentation at New Mexico Bed and Breakfast Association Annual Conference, Taos, NM, July 1999.

Gerde, Virginia

- Logsdon, J. M., and Gerde V. W., Qualitative Research in the Business-and-Society Field, Proceedings of the International Association for Business and Society, 11th Annual Meeting in Essex Junction, Vermont, March 2000.
- Gerde V. W., Stephens, C. U., and Wokutch, R. E. "The Just Organization in the New Millennium: Organization Design and Corporate Social Performance." Academy of Management Annual Meetings, SIM Division. Chicago, Illinois. August 1999.
- "Organizational Justice and Deviance: Breaking Rules at Work" SIM Division, Academy of Management Annual Meeting, Chicago, Illinois, August 1999.

Hood, Jacqueline

- Hood, J. N., and Logsdon, J. M., "Business Ethics in the NAFTA Countries: A Cross-Cultural Comparison," Proceedings of the Seventh Cross-Cultural Consumer and Business Studies, Cancun, December 1999.
- "Communication and Conflict in Organizations," invited presentation for New Mexico Association of Counties 2000 Annual Conference, Roswell, June.
- Alarid, T., Hood, J. N. & Albright, D. Staffing Plans in State Transportation Agencies. National Academy of Sciences, Transportation Research Board. Washington, D. C., December 1999.
- "Communication and Conflict in Organizations," invited presentation for the UNM Arts and Sciences Administrative Staff Retreat. September 1999.
- Éffective Conflict Management, in invited presentation for the Arts and Sciences Administrative Staff Retreat, September 1999.
- Hood, J. N., Muller, H. J., & Seitz, P. Changes in Attitudes of Hispanic and Anglo Management Students Surrounding a Workforce Diversity Intervention, Management Education Division, National Academy of Management meeting, Chicago, August 1999.
- "Mix up Your Talk for Effective Communication," invited workshop for the 14th Annual EEO/Diversity Training and Awareness Seminar for the Albuquerque /Santa Fe/Los Alamos Equal Employment Opportunity Council, July 1999.

Logsdon, Jeanne

- Logsdon, J. M., and Hood, J. H., "Business Ethics in the NAFTA Countries: A Cross-Cultural Comparison." Proceedings of the Seventh Cross-Cultural Research Conference, Cancun, December 1999.
- "Toward a Theory of Business Citizenship." Symposium on "Business Citizenship: Theory and Practice" at the Social Issues in Management Division, Academy of Management annual meeting, Chicago, August. 1999 (With Donna J. Wood.)

- "Toward a Theory of Business Citizenship," Ruffin Lectures in Business Ethics, sponsored by the Olson Center for Applied Ethics, Darden School, University of Virginia, October 1999. (With Donna J. Wood.)
- "Measuring Social Performance," Symposium on corporate social performance at the Decision Sciences Institute annual meeting. New Orleans, November 1999.
- Logsdon, J. M., and Hood, J. H., "Business Ethics in the NAFTA Countries: A Cross-Cultural Comparison." Seventh Cross-Cultural Research Conference, Cancun, December 1999.
- Logsdon, J. M., and Gerde, V. W., "Qualitative Research Traditions in the Business and Society Field: Past Perspectives and Future Directions." Presentation/workshop at the International Association for Business and Society annual meeting. March 2000.

Muller, Helen J.

- Bitsie, T. & Muller, H. J., "A Pueblo Tribe's Claim to the Sandia Mountains: A Conflict Among Diverse Organizations 1999 North American Case Research Association Annual Meeting Casebook, Santa Rosa, CA. (1999).
- Bitsie, T. & Muller, H. J, "Survival and Change at the San Juan Pueblo Agricultural Cooperative," Proceedings of the Western Casewriters Association 2000 Annual Meeting, Kona, Hawaii. (2000)
- Hood, J. N., H. J. Muller & P. Seitz, "Changes in Attitudes of Hispanic & Anglo Management Students Surrounding a Workforce Diversity Intervention," Academy of Management 1999 Annual Meeting, Chicago, August.
- Apfelthaler, G., H. J. Muller & R. Rehder, "A Quest for Global Culture: DaimlerChrysler & its Austrian-German-Japanese-U.S. M-Class Production," Strategic Management Society 19th Annual Conference, Berlin. October, 1999.
- Bitsie, T., & H. J. Muller, "A Pueblo Tribe's Claim to the Sandia Mountains: A Conflict Among Diverse Organizations," case study, North American Case Research Association 1999 annual meeting, Santa Rosa, CA, October.
- R. Rehder & H. J. Muller "Corporate Learning from Germany and Japan in Alabama and Austria, Western Academy of Management Annual Meeting 2000, Kona, Hawaii, (April).
- Bitsie, T. & H. J. Muller, "Survival and Change at the San Juan Pueblo Agricultural Cooperative," Western Casewriters Association 2000 annual meeting in Kona, Hawaii, (April).

North, Monica

 "The Who, the What, and the Why of Privilege: Individual orientations in meanings and access," Western Academy of Management, Kona. Hawaii, April 1999.

Parkman, Allen

- "From Status to Contract: Overcoming the Constitutional Constraint on Divorce Reform: Western Economic Association, San Diego, CA, July 1999.
- "Incentives to File for Divorce," Rocky Mountain Academy of Legal Studies in Business, Vail, CO, September 1999.

Rehder, Robert

- "A Quest for Global Culture: DaimlerChrysler & its Austrian-German-Japanese-U.S. M-Class Production," Apfelthaler, G., H. J. Muller & R. Rehder, Strategic Management Society 19th Annual Conference, Berlin, October 1999.
- "Corporate Learning from Germany and Japan in Alabama and Austria," R. Rehder & H. J. Muller, Western Academy of Management Annual Meeting 2000, Kona, Hawaii, (April).

Smith, Anne

 Discussant, Joint Symposium at the 2000 National Academy Meeting, Business Policy and Strategy and Management Education and Development Divisions, titled "New and Winning Conceptual Approaches to Teaching Strategy."

Young, John E.

"Motives and Processes for Entrepreneurial Learning: A Cross-Case Analysis," (with Donald L. Sexton). Proceedings International Conference on Advances in Management, (ICAM2000), Colorado Springs, July 2000.

VII. Outside Sponsored Research

: 1

The Anderson Schools of Management

The Ford Motor Company – a three-year grant provides for \$100,000 annually to support faculty research, case study development and course development across all disciplines.

The Accounting Department

White, Craig G.

Developing a Cost Model for MEMS Technologies (with S. Walsh) funded by Sandia National Laboratories.

The Department of Finance, International and Technology Management

Kassicieh, Suleiman; and Walsh. Steve T.

S. K. Kassicieh and S. T. Walsh "Technology Assessments for Sandia's Intelligent Systems and Robotics Center" grant awarded for \$14,000, 1999.

The Department of Marketing, Information and Decision Sciences None to report.

The Department of Organizational Studies

Hood, Jacqueline

New Mexico State Highway and Transportation Department Research Bureau. Research Consultant, 1999-2003. Principal investigator and assistant investigator on several research projects, including staffing plan survey of 50 DOS's, staff planning database development, benefit/cost of privatization, benefit/cost of research projects, and customer (public) needs survey. Received grant of \$300,000 over 4 years.

Logsdon, Jeanne

Sloan Foundation Business Citizenship Grant 1999-2000, \$15,000. (with Donna J. Wood.)



The University of New Mexico

School of Architecture & Planning 2414 Central SE Aibuquerque, NM 87131-1226 Telephone (505) 277-2903 FAX (505) 277-0076

MEMORANDUM

DATE:

November 22, 2000

TO:

Brian L. Foster, Vice President and Provost for Academic Affairs

FROM:

Ric Richardson, Associate D

RE:

Annual Report 1999-2000

This has been an excellent year for the School of Architecture and Planning. The School has appointed new program Directors for our professional degree programs in Architecture and Community and Regional Planning, and we are fortunate to have hired a director for our new Master of Landscape Architecture program. In June we were notified by the National Architectural Accreditation Board that the Architecture program received an excellent accreditation review with a 5 year time frame until the next regular review. In February the New Mexico Legislature voted to allocate 8.5 million dollars to the University for construction of our new facility, and in November the general obligation bond was passed by the citizen vote. Finally, we have hired three faculty members, two in architecture and one as a joint architecture and planning appointment. Attached are reports from the Architecture program, Planning program, the Institute for Environmental Education, and the Resource Center for Raza Planning.

c. Roger L. Schluntz, Dean

ARCHITECTURE Annual Report: July 1, 1999 - June 30, 2000 Submitted by: Andy Pressman, Director

What follows is the Architecture Annual Report covering the period July 1, 1999 through June 30, 2000. The report below documents key developments and events in the program regarding personnel, curriculum, student life and activities, public events and outreach, and administrative reforms. The report also addresses faculty research and professional activities.

Significant Developments and Events

National Architectural Accrediting Board Visit

A team from the National Architectural Accrediting Board visited the Program in April 2000. The Team included:

Jim Anstis, West Palm Beach, FL, chair Kin DuBois, Denver, CO Tim Fowler, San Luis Obispo University, CA John Carry, Washington, DC Maureen Walter, Albuquerque, NM Robert Campbell, Albuquerque, NM

In a report received in June 2000, the accreditation of the professional degree programs was extended for five years (the maximum period allowed). The report emphasized the many strengths of the program, and noted that there were no deficiencies in the student performance criteria.

Art in Public Places Forum

At the end of the Fall 1999 term, held a forum of artists, art critics and public art administrators on public art and public space. Mark Childs organized and raised funds for the event and Chris Wilson was moderator. More than 200 people attended.

John Gaw Meem Lecture Series

Several architects, historians, academics, and landscape architects participated in the School's John Gaw Meem Lecture Series, as follows:

FALL 1999

Rhett Russo, Architect, New York NY, Strokes

Sunil Bald & Yolande Daniels, SUMO Architects, Ithica NY, & Ann Arbor MI, Architecture/Object

Jaap Vos, PhD, Assistant Professor, Department of Urban & Regional Planning, Florida Atlantic University, Planners, Public Participation, and Environmental Justice: Justice for All?

Jenice View, PhD, Co-Principal, View Associates, Wasington DC, Role of Communities and Workers in Pollution Prevention and Mitigation

Beau Clowney, Beau Clowney Design, Charleston SC, Recent Works

Penelope Canan, PhD, Department of Sociology, University of Denver, SLAPPS (strategic Lawsuits Against Public Participation): Causes, Consequences

Jude LeBlanc & Brian Andrews, Architects, Atlanta GA, Interventions on the Third Coast

Jennifer Siegal, Principal, Office of Mobile Design, Associate Professor Woodbury University, Los Angeles CA, Relocation: Architecture in Transit

Michael Manfredi & Marion Weiss, Weiss/Manfred Architects, New York NY, Site Specific

Steve Viederman, President, Jessie Smith Noyce Foundation, New York NY, Corporate Responsibility in the Global Economy

Public Space & Public Art Panel, discussion moderated by Christopher Wilson, J.B. Jackson Professor of Cultural Landscape Studies

SPRING 2000

Antoine Predock, Architect, Albuquerque NM, Architectural Journeys

Norman Krumholtz, Professor, Cleveland State University, President American Institute of Certified Planners, Changing the Culture of Planning Towards Greater Equity

Bart Prince, Architect, Albuquerque NM, Recent Work

Mike Austin, Professor, University of Auckland, New Zealand, Post-Tourist Polynesia: Pacific Island Architecture

Emily Talen, Assistant Professor of Urban & Regional Planning, University of Illinois, Champaign-Urbana, Visualizing Fairness: Equity Maps for Planners

Michael Hughes, Visiting Assistant Professor, University of New Mexico School of Architecture and Planning, Constructed Hallucinations

Ila Berman, Assistant Professor, Tulane University, Material Topographies, Constructed Grounds

Annual Don Schlegel Lecture: David Heyman, Dean Undergraduate Programs, University of Texas, Austin, In On-Going Landscpaes

Moustafa Mourad, Director, Community Planning, Enterprise Foundation, Columbia MA, Economic Development Community-Based Asset Building

Marilys Nepomechie, Architect, Miami FL, Recent Work

New Mexico Board of Examiners for Architects

The architectural registration board held one of its quarterly meetings at the School in November. The meeting included a question and answer session with students and faculty. The Board also sponsored a forum on internships in April 2000.

American Institute of Architects

The AIA Albuquerque held one of its monthly meetings at the school. The meeting, held in May, focused on the issue of internships.

AIA Awards

The American Institute of Architects awarded the following design awards to faculty and students in the Architecture Program:

Students

AIA Henry Adams Medal
AIA Certificate
AIA Albuquerque
AIA Santa Fe
AIA New Mexico

Mike Ryan Mildred Ortiz Dan Monk Anne Boynton Joel Condon

Kramer Woodard

Faculty

Honor Award "High Bridge" Honor Award "Double Rainbow II" Merit Award "University Village...."

Edward Fitzgerald Architects Mark Childs, Richard Nordhaus Stephen Schreiber, Richard Eribes Kramer Woodard Christopher Calott

Merit Award "Villa Untitled" Merit Award "Darden Oaks"

Merit Award "Double Rainbow Interior"

Edward Fitzgerald Architects

Communications/Marketing

Landscape Architecture Magazine awarded its excellence in communications/marketing prize to the University Village Publication, produced by Brian Panasiti, Steve Schreiber and Dick Nordhaus.

Faculty

- Edith Cherry retired in Summer 2000, she is the School's first Professor Emerita.
- Geoff Adams was appointed Visiting Assistant Professor for the period August 1999 through June 2000.
- Barbara Coleman, Lecturer, left the Architecture Program in May 1999 to pursue her painting and personal activities.
- Mike Austin (New Zealand) and Marilys Nepomechie (Florida) joined the faculty as visiting distinguished critics in Spring 2000.
- Stephen Schreiber announced, on June 30, that he had accepted the position as
 Director of the School of Architecture & Design at the University of South Florida.
- As the result of national searches in the spring, the Program will welcome the following new tenure track faculty in Fall 2000:

Mark Childs, Assistant Professor Geoff Adams, Assistant Professor Kuppu Iyengar, Associate Professor

• The following Visiting Professors will also join the faculty in the Fall 2000:

Chris Calott, Visiting Associate Professor Christopher Domin, Visiting Assistant Professor

Curriculum

Curriculum Planning

The faculty has been involved in an extensive review of our graduate and undergraduate curricula. After much discussion, the faculty voted to approve significant changes to the pre-professional and professional programs, which will address deficiencies, observed by our accreditation board and will capitalize on our strengths. The new graduate curriculum will allow students to complete a fourth graduate studio instead of a project/thesis.

After review and approval by numerous School and University groups, the changes take effect in Fall 2001.

Evening and Weekend Degree Program

The School continues to offer one of the only evening and weekend professional Master of Architecture programs in the country. The program attracts many excellent students with daytime personal and career obligations

New Courses

- Auto Cad I, Steve Osborn, Summer 2000
- Constructed Hallucinations, Michael Hughes, Fall 1999
- Furniture Design, Michael Hughes, Spring 2000
- Art in Public Places, Mark Childs, Fall 1999
- Southwest Urbanism, Chris Wilson, Stefanos Polyzoides, Spring 2000
- Photography, Kirk Gittings, Spring 2000

Student Life

Architecture student groups were very active in 1999 – 2000. The program continues to have three organized groups, which are active in a broad range of areas:

- American Institute of Architecture Students (AIAS)
 The group sponsored symposia, workshops, mentorship programs, open houses and social activities (often in collaboration with the AIA).
- Society of Women in Architecture
 The Society sponsored dinners, lectures, film clips, receptions, and other activities.
- Native American Architecture Students
 The group sponsored mentorship programs, workshops, and lectures.

Student Awards

Architecture students received the following awards in 1999 - 2000:

Alphia Rho Chi

Martin Ouiroga

BPLW Design Competition Award
Friends of the School for 1* year studios
Friends of the School for 2nd year studios
Friends of the School for 3nd year studios
Friends of the School for 4th year studios
Friends of the School for DPAC
Friends of the School for 500 level studios
Frontier Scholarship
Holmes and Narver Award
Letha Leitka Bazard Memorial Scholarship

Doug Patterson
David Kendall
Amber Walbridge
Rachel Hill
Eric Anderson
Jeffery Fleming
Daniel Chavez
Michael Antonio
Craig Folsom
Tanya Johnson

Faculty Research and Professional Work

Gabriella Gutierrez

Remains a principal in her firm of Morris Gutierrez Architects located in Houston. Currently, she has two architectural design projects in schematic design phase. Both are residential remodels in Albuquerque. Her submission to last year's National Conference on the Beginning Design Student was accepted for exhibition. The proposal was about the Exhibition Wall in 200 Level and its use as a communication and pedagogical tool.

Christopher Domin

At the 53rd Annual Meeting of the Society of Architectural Historians at the Biltmore Hotel, Coral Gables, Florida, Christopher Domin presented "Paul Rudolph: Media and Medium."

Mark Childs

Published an article on "Civic Ecosystems" a theory of urban morphogensis. As part of his efforts to engage the general pubic in discourse about "good city form," he wrote "Make Places for Ducklings" which was published in Designer/Builder. This article was funded by a Graham Foundation grant to Designer/Builder, and is part of a set of articles he has written for them.

Paul Lusk

Used the balance of his Regent's Lectureship award of \$4550 to complete the essential elements of the Greenroom/Cool-tower project, to test its performance, and to write and disseminate the results. This work is a prototype of an intentional design process to create beauty by pursuing performance.

Richard Nordhaus

During the past year, he has continued to actively pursue creative professional work with Steve Dent, on his own and through DPAC (Design and Planning Assistance Center). Nordhaus and Dent have just completed a remodel of a major public space, the Congregation B'nai Israel Sanctuary. They plan to submit the project for publication and recognition. Professor Nordhaus also provided leadership on the "Design Guidelines for Affordable Infill – Housing" project and actively participated on the production of guidelines themselves including layout and illustrating the publication.

He also published a full page article on affordable housing and the DPAC affordable housing infill project in the Albuquerque Tribune.

Andy Pressman

Submitted the completed manuscript for *The Architectural Design Portable Handbook: A Guide to Excellent Practices*, to be published by McGraw-Hill in 2001. Summary excerpts were published in *Architectural Record* in September 1999, February 2000 and May 2000. In Spring 1999 he consulted on the renovation and preservation of a distinctive "Eichler" house located near San Francisco.

Anne Taylor

Chapter on Learning Environments published in Learn and Live, by George Lucas, California 1999. National Endowment for the Arts - Alternative Environments for Design Education - 1999 - Illustrated book of 120 pages being submitted for publication.

Chris Wilson

Drafted the introduction for a book on J.B. Jackson and American Cultural Landscape, and worked with eight of the selected authors, substantially rewriting two of their contributions. This manuscript, co-edited by Paul Groth, is currently being considered by outside readers to the University of California Press. He shopped a partial manuscript entitled Facing Southwest: The Houses and Life of John Gaw Meem (photographs by Robert Reck) to publishers, and secured a contract from W.W. Norton.

Kramer Woodard

The University of Texas at Austin School of Architecture appointed him the McDermott Lectureship. This prestigious award included a \$24,000 salary and the Charles Moore House to live in during lectureship.

Community and Regional Planning Annual Report July 1, 1999 – June 30, 2000 Submitted by: Claudia B. Isaac, Director

What follows is the CRP Annual Report covering the period July 1, 1999 through June 30, 2000. The report below documents key developments and events in the program regarding personnel, curriculum, student life and activities, public events and outreach, and administrative reforms. The report also addresses faculty research and professional activities and funded research

Significant Developments and Events

Barnraising

This year's annual "CRP Bamraising" was titled "The Great Planner's Divide: Land Tenure in Postmodern New Mexico". Over 50 people attended, our highest participation to date.

The 1/2-day event began with a panel of land practitioners from Native American, Hispano and Anglo traditions who talked about land use and land management issues of "The Old West". This panel was moderated by Monica Abeita, a CRP alumna, Planner in Taos County, and recent recipient of an award from the Society of American City and Regional Planning History. Moises Gonzales, a planner, land grant heir, and CRP graduate from Rio Arriba County spoke Hispano land tenure and the land grant system. Larry Rogers of the Navajo Trust Lands Office spoke about the intersection of Native and US Governmental values in resource management in Dine. Sid Goodhoe, a rancher from Capitan, New Mexico, talked about the history of the land practices of Anglo ranching, and spoke to the environmental implications of those practices.

All participants then broke into small groups to talk about land use and land tenure in "The New West" in an attempt to develop planning strategies that accommodate cultural, environmental and economic priorities. The "Tradition" discussion group looked at challenges to the current state of land tenure, specifically at the Federal Government's role as land regulator. The group discussed the ramifications of abolishing governmental oversight on the traditional land rights of Hispanos and Native Americans. The "Migration" discussion group examined the trend of increased migration to the new west by outsiders seeking a rural lifestyle. The group discussed the consequences of this migration — gentrification, socio-economic divisions, and demand for urban services. The "Resources and Technology" discussion group discussed the impact of rapid development on the New West. The group examined the conflict between urbanization and environmental protection.

Ted Jojola, CRP Professor, then led a plenary session of the entire group, geared toward synthesizing the findings of the small groups and moving toward problem solving and common strategies. The day ended with a keynote speech by William deBuys, historian and essayist on continued challenges to consensus around land tenure in New Mexico, followed by a barbecue reception.

Professional Development Series: A Collaboration between the John Gaw Meem Lecture Series and New Mexico Chapter of the American Planning Association:

The CRP Program collaborated with the New Mexico Chapter of the American Planning Association to bring four illustrious planning practitioners and scholars to New Mexico to participate in the John Gaw Meem Lecture Series and to provide professional development workshops for students, faculty and members of the Albuquerque planning community. The general theme of the series was Equity in the Practice of Planning, and each participant gave a lecture on a Monday

evening, followed by a 3 hours workshop the next morning. Each participant also contributed a working paper to the series *Working Papers for Working Professionals* published through the School's Center for Research and Development Working Papers Series. These working papers, and videotapes of the lectures and workshops, are available in the SAAP Resource Room and the City of Albuquerque Planning Department Library. Working Papers will also be available shortly on the NMAPA web site.

Participants:

Penelope Canaan, Ph.D.

Professor, Department of Sociology, University of Denver and Director, The Environment Institute in Denver.

"SLAPPs: Strategic Lawsuits Against Public Participation"

Norman Krumholtz, FAICP

President American Institute of Certified Planners and Professor, Levin College of Urban Affairs, Cleveland State University.

"Changing the Culture of Planning: Towards Greater Equity"

Emily Talin. Ph.D.

Assistant Professor of Urban and Regional Planning, University of Illinois Urbana-Champaign.
"Visualizing Fairness: Equity Maps for Planners"

Moustafa Mourad

Director of Community Planning, Enterprise Foundation, Columbia Md.

"Economic Development: Community Based Asset Development"

Visiting International Scholar

Carlos de la Parra, a natural resources planner from Colegio de la Frontera Norte in Tijuana, visited the CRP Program from April 10 through April 22, 2000. He met with students in 7 CRP classes to discuss the methodology and challenges of managing EcoParque, a research venue and ecological waste management system in Tijuana. He shared his insights on the implementation of community based planning principles in ecological planning, particularly viz. the use of social and environmental indicators as baselines for political debates about environmental planning in a presentation to the CRP community on April 18. He also met with students one on one to provide advice and insight into their class work and final professional projects.

Annual orientation event

In what is becoming a CRP tradition, new students had the opportunity in August to learn about the breadth and depth of planning directly from Albuquerque's professional community. At the August, 1999 event, municipal, regional, and community planners came prepared to discuss "How Can Planners Practice Community Based Physical Planning" with new students. The group, with strong representation by CRP alumni now working in local planning entities, focused their attention on what came to be seen as false distinctions between physical and social planning practice. The discussion emphasized the need for integrated planning that respects community understanding about the design process, and reflects a coherent and respectful community vision.

Resource Center for Raza Planning

Though still largely student-driven, shifted from a student organization to a full-fledged Center within the School of Architecture and Planning. RCRP continues to engage in policy issues on growth and economic development in New Mexico, and promotes integration between higher education and traditional communities through the application of planning processes and techniques. During 1999-2000, RCRP partnered with the Rio Grande Community Development Corporation to research small business incubation. The Center sponsored a number of Pláticas on economic development, agricultural preservation and municipal planning.

In addition to the above programmatic efforts, RCRP students were funded by the J.B. Jackson Endowment to undertake a recruitment initiative to increase the numbers of qualified applicants to the CRP programs from New Mexico traditional communities. RCRP students made presentations in local high schools. They identified undergraduate students with interest in the program through flyers on campus, through word of mouth in social and human service agencies around the state, and by making a point of talking about CRP to anyone they thought would make good applicants. RCRP held 2 recruitment fares, where prospective students came in to ask questions of other students and professors regarding the application process, planning in general, and the rigors of the programs. They sponsored a CRP day, where prospective students became planning students for a day – attending classes, associating with planning students, participating in projects, and talking with CRP professors. Throughout the semester, RCRP students acted as resource people to prospective applicants, making themselves available to answer questions about planning issues in New Mexico communities, the CRP Program, and the Resource Center.

ParaProfessional Training in Comprehensive Planning

In August, 1999, Professors Ted Jojola, Bill Fleming, and Adelamar Alcantara conducted a 3 day paraprofessional training in comprehensive planning in Dulce, New Mexico for the staff of the Community Development, Housing, and Natural Resources Departments of the Jicarilla Tribe. The training included training in indigenous planning theory, strategic planning methods and an introduction to resource inventories. Recipients received UNM Continuing Education Credit for the course, and produced hands-on preliminary plans for their program areas.

CRP Endowment

With initial donations from CRP Faculty members, the CRP Program instituted a "quasiendowment" to begin to build the program's funding capacity for student support, faculty professional development, alumni outreach, and public events and symposia. Though the fund will not generate income for some time, the CRP Program will devote initial energy to building the principle through in-school and public donations. We hope to begin generating income by 2002.

Faculty:

Personnel

Mark Childs was hired as an Assistant Professor of Architecture and Planning, with 40% participation in Planning (60% in Architecture). Prof. Childs, who served as a Visiting Professor in Architecture and Planning last year, will help build CRP strength in Urban Design and Physical Planning, and will contribute to teaching in the BAED Program.

- Christopher Callott was hired as an Adjunct Associate Professor, with 35% participation in Planning (65% in Architecture). He will contribute to professional practice and physical design teaching.
- There were no leaves, sabbaticals, or retirements among the CRP Faculty this year.

Curriculum:

Curriculum Planning and Innovation

The CRP Faculty has agreed to take on the management of the Bachelor of Arts in Environmental Design degree as a two-year pilot program. The program, until now administered by the Architecture Program, will be adjusted to emphasize the planning and landscape undergraduate emphases, and to prepare students for entry-level positions in those fields. The revised degree will also prepare students for graduate study.

In the MCRP Program, the faculty have agreed to initiate two significant changes in the CRP curriculum. Though "Land Use Controls" will still meet a core requirement, students may substitute "Community Growth and Land Use" as appropriate to their intended practice. The faculty also decided to limit the advanced studio options to "Advanced Planning Studio" and "Urban Studio". Students wishing to substitute a different studio for that requirement will now need to petition for that right.

In Spring '00, several CRP faculty members utilized a software package called WebCT to post course content and information on the web. In one course (Qualitative Research Methods), WebCT allowed a student to take the course from Ecuador without losing out on the discussion and feedback so important to a graduate seminar. In addition to facilitating communication among faculty and students, the use of WebCT allowed several CRP alumni and community members to "browse" in CRP courses over the course of the semester, with the professor's permission.

New Course Development

- Modeling the Environment (3 credit graduate seminar taught by William Fleming, Fall, 1999)
- Public Space and Public Art (3 credit graduate seminar taught by Mark Childs, Fall, 1999, cross listed with Architecture)
- City in History (3 credit upper division undergraduate course taught by Ned Farquhar, Spring, 2000, cross listed with History and Sociology)
- Community Economics (3 credit graduate seminar taught by Teresa Córdova, Spring, 2000)
- Southwest Urbanism (3 credit graduate seminar taught by Christopher Wilson, Spring, 2000, cross listed with Architecture and Landscape Architecture)
- Thesis/Project Completion Seminar (3 credit graduate seminar taught by Min Kantrowitz, Spring, 2000)
- Economic Development Workshop (4 credit graduate studio taught by Teresa Córdova and David Henkel, Summer, 2000)

 International Perspectives on Communication and Conflict (3 credit graduate seminar cotaught by Juan Tausk (Communications and Journalism) and Ric Richardson (CRP), Summer, 2000

Community Outreach in Classroom Settings

In keeping with a long-standing tradition of client-based studios, CRP faculty and students have conducted several important studio projects within the region. 1999 – 2000 studios included:

- "Community Land Use Planning For A Traditional Agricultural Village, La Cienega" (CRP 521 Studio taught by David Henkel and Bill Fleming). The studio outcomes were (1) LESA (Land Evaluation and Site Assessment) as a tool with which the village could prioritize land uses and structure responses to proposals for changing land use, and (2) a land use map developed in cooperation with the Santa Fe County Land Use Dept. and the SF County Assessor's office, required as a condition of the village being granted Traditional Historic Village zoning status. The status was conferred on La Cienega in June, and permits the village to formally enter into the land use review process.
- "Community History and Identity in Mountain Air" (CRP 510 Communications Studio
 taught by Min Kantrowitz, with Paul Lusk, Ric Richardson, Ted Jojola and Teresa
 Córdova). The studio produced a delightful public information brochure (in English and
 Spanish) and made connections with and brief final presentations to the local high School
 and the community health clinic.
- "University West SoLo Site Development Planning Studio" (CRP 520 Studio taught by Paul Lusk, Roger Schluntz, and Chris Callott, a collaboration between Planning, Architecture, and Landscape Architecture students). The studio worked in concert with the University (its client), the Spruce Park Neighborhood Association, and the City of Albuquerque to develop an informed strategy of design; set of guidelines for the "highest and best use": for the site's development. The outputs were developed in keeping with the diverse interests of the university, contiguous neighborhood and the City as a whole.
- Multiple Projects (CRP 408, DPAC Studio, taught by Dick Nordhaus and Mark Childs, a
 collaboration between Architecture and Planning students). Team projects, each with a
 different client, ranged from a playground for an elementary school in South Broadway, to
 public art in Barelas, to proposals for emergency homeless housing in San Francisco.
 CRP Professors Min Kantrowitz and Ric Richardson, with CRP Student Tim Karpoff,
 worked in three successive afternoon-long workshops for the DPAC students. The first
 workshop was on Teamwork and Team Building; the second was off Project
 Implementation and Action Planning; and the third was on Building Presentation Skills.
- "Mountain View Community Overview: Economic Development Foundational Work for Bernalillo County Sector Plan for the Second Street Comdor" (CRP 570: Economic Development Workshop, taught by Teresa Cordova and David Henkel).

Student Life

Student Organizations

Planners in Latin America (PILA) continued to build on the success of it's roundtable discussions with an October 15, 1999, PILA hosted a round table on conservation work in Latin America. Jim Tolisano from SUBIR discussed his group's efforts to foster community based conservation in Ecuador.

The Student Chapter of the American Planning Association continued and enhanced their role in the local APA chapter. Student members played a significant role in planning the State APA

Conference in Taos in October 27 - 29, 1999. The UNM Student APA Chapter also assisted students at New Mexico State University and Doña Ana Community College to form new Student APA Chapters.

Student Awards

Monica Abeita's thesis, "Historical Community Development in North-Central New Mexico" won the 1999 John Reps Prize for Best Master's Thesis and/or Doctoral Dissertation in American City and Regional Planning History. The award was given by the Society of American City and Regional Planning History.

The following students received annual awards for excellence from the CRP Faculty:

- Frontier Scholarship In Community And Regional Planning (in recognition of academic excellence and commitment to progressive planning in his home state of New Mexico): Arturo Archuleta
- NMAPA Exemplary Practice Award (in recognition of her commitment to use their planning degree to further planning practice, and their embodiment of the principles of the CRP Program in professional life): Sarah ljadi and KC Kress
- Outstanding Service to the CRP Program (in recognition of exemplary service to the collective governance and management of the CRP Program): Patrick Kraich and Sarita Nair
- Award for Outstanding Research/Scholarship (in recognition of exemplary academic performance, original research and contribution to peer and community planning audiences): Matt Foster
- Award for Community Building (in recognition of his enhancement of the intellectual, social, and emotional tenor of the CRP Program through service, team-building, communication and mobilizing resources for common purposes): Steve Lucero
- Award For Outstanding Service To The Wider Community (in recognition of exemplary
 practice that models the values of the CRP Program in service to popular and professional
 communities): Jennifer Glau and Angela Robbins.

Graduating Students

The following students graduated with an MCRP degree in the 1999-2000 academic year

Summer, 1999:

Robert Lambert Todd Miller (with distinction) Comine O'Hara-Vaandrager Mari Simbana Kate Somers

Fall 1999:

Regina Chapman (with distinction)
Barbara Ford (with distinction)

Cynthia Geuss Rachael Pitts Kenneth Romig (with distinction) Tony Sylvester (with distinction)

Spring 2000:

Alina Bokde
Matt Foster (with distinction)
Jennifer Glau
Eva Khoury
Kendra Montanari (with distinction)
Sarita Nair (with distinction)
Lisa Nicolas (with distinction)
Kenneth Pin

Faculty Research, Professional Work (including research grants and awards received)

Teresa Córdova, Associate Professor

Awarded Hyde Chair of Excellence, Department of Community and Regional Planning, University of Nebraska, 1999

"Anti-colonial Chicana Feminism", in New Political Science: A Journal of Politics and Culture, Vol. 20, #4, December 1999, pp. 379-397. Reprinted in Torres, Rodolfo D., and George Katsiaficas, eds. Latino Social Movements: Historical and Theoretical Perspectives, New York and London, Routldege Press, 1999, pp. 11-41.

"Building Networks to Tackle Global Restructuring: The Environmental and Economic Justice Movement", with Jose Bravo, Jeanne Gauna, Ruben Solis, and Richard Moore in Betencur, John J. and Douglas C. Gills, eds. The Collaborative City: Opportunities and Struggles for Blacks and Latinos in U.S. Citles. New York and London: Garland Press, January 2000, pp. 177-196.

Plenary Panel presentation at Conference on Environmental Justice sponsored by the Community University Consortium for Regional Environmental Justice, Rutgers University, 1999.

"Understanding Community Concerns about Environmental Justice and Economic Development", and "Integrating Transportation and Urban Planning in Support of Sustainable Communities", presented at Environmental Justice Conference: Strengthening the Bridge Between Economic Development and Sustainable Communities, sponsored by EPA and the Medical University of South Carolina, Hilton Head, June 1999.

Plenary Speaker, Planners Network Conference, Lowell Mass., summer, 1999.

"Bringing our Education Back Home", presented at La Conferencia Chicana: Journey to Aztlan, University of Wisconsin, October, 1999.

Received J.B. Jackson Endowment funding for RCRP Recruitment initiative, spring 2000.

Received University Student Service Award for Faculty, March, 2000.

Bill Fleming, Visiting Associate Professor

"Watershed health: an evaluation index for New Mexico". 1999. Proceedings, Rio Grande Ecosystems: Toward a sustainable Future for the Middle Rio Grande Basin

Received Deans Award for Teaching Excellence in Community and Regional Planning, 1999.

Received New Mexico American Planning Association Award in Education and Outreach (with Rich Schrader) for initiating and developing the New Mexico Watershed Watch Program, 1999.

"Water Conservation Incentives for New Mexico: Policy and Legislative Alternatives", (with E, Hall) Natural Resources Journal, Spring 2000.

"Community-based Riparian Health Monitoring" (with David Henkel), Journal of the American Planning Association, forthcoming, 2000.

"Erosion Hazards from Proposed Extension of Paseo del Norte to Unser Boulevard", Resource Center for Raza Planning Position Paper.

"Watershed Watch Workbook: A Watershed Approach to Environmental Education", (with Rich Schrader) New Mexico Department of Game and Fish, 2nd edition, 1999.

David Henkel, Assistant Professor

Executive Committee Member, Association of Borderlands Scholars

Continuing Funding from USDA Fund for Rural America on "Rural Agricultural Enterprise Networks in North-Central New Mexico" (with Lynwood Brown)

"The Application of Rapid Appraisal Techniques to International Environmental Assessment in Small Communities", International Planning Studies, 1999.

"Self Help Planning in the Colonias", Small Town, Fall, 1999

"Community-based Riparian Health Monitoring" (with David Henkel), Journal of the American Planning Association, forthcoming, 2000.

"Transnational Resource Planning", Journal of Planning Education and Research, forthcoming

Claudia Isaac, Associate Professor

"How Social Theory Informs Social Practice" presented at Fort Lewis College, April, 2000.

Received YWCA "Woman on the Move" for Education, Training and Development in March, 2000.

"Protecting the Rights of Immigrants", Insight And Opinion Section, *Albuquerque Tribune*, Tuesday, August 3, 1999, page D1.

"Structural Racism and Concentrated Poverty" Discussant of presentation by john powell: 'How Sprawl Makes Us Poor', 1000 Friends of New Mexico Forum, Albuquerque, NM, March 17, 2000.

"Negotiated Investment Strategies as a Means of Ensuring Community Voice in Community Development" Discussant of presentation by Chuck Mathai: 'Keeping The Community in

Community Development', 1000 Friends of New Mexico Development Forum, Albuquerque, NM, February 18, 2000.

"Planners, The State, and Alternative Theory: Comments on 'Planning, Urban Revitalization and the Inner City: an Exploration of Structural Racism' by Catherine Ross and Nancy Greenleigh. Presented at the Meetings of the Association of Collegiate Schools of Planning Chicago, October 1999.

"Cooperativismo como Estrategía Laboral", presented at Encuentro Laboral, Albuquerque, September 19, 1999.

"Community Monitoring of Rangeland Health", presented with David Henkel at the Meetings of the Society for Human Ecology, Montreal, May, 1999.

"New Mexico Watershed Watch: A Volunteer Monitoring Program for Watershed and Riparian Health", presented at the Meetings of the New Mexico Chapter of the American Planning Association, Taos, October, 1999.

Ted Jojola, Professor

Recipient of J.B. Jackson Endowment funding for Indigenous Planning Initiative, 1999.

"Indians of the Southwest", Encyclopedia of the United States in the Nineteenth Century, Chanes Scribners & Sons. 1999.

"Urban Indians in Albuquerque, New Mexico: A Study for the Department of Family and Community Services", City of Albuquerque, August 1999.

"The Politics of Numbers: Census 2000", AISES Winds of Change Magazine, Fall 1999.

\$30,000 to produce Just Like Us: The Bataan Corrigedor Experience in New Mexico.

Curator, Indians in Albuquerque exhibit at the Magnifico Gallery, Albuquerque, 2000.

Min Kantrowitz, Adjunct Associate Professor

"Communication with your Client", forthcoming in Andrew Pressmen (ed.), Communication with Your Client: A Decision Pyramid Approach to Design Excellence,

"Landmarks of the Mind", presented at the Western Social Science Association meeting, Texas, 1999.

"Transformation in Liturgy and Design", presented at the meetings of the Environmental Design Research Association, May, 2000.

Juror/ Selection Committee Member, Rudy Bruner Award for Urban Excellence, April 1999.

Paul Lusk, Associate Professor

"Digital Archive: History of Albuquerque Planning/Urban Design", AIA Albuquerque Chapter, Fall 1999 and on-going

"Albuquerque: Postcards from the Future", City of Albuquerque Planning Department, Spring 1999.

"The Albuquerque/ Bernalillo County Comprehensive Plan", present to the 1st Open Space Advisory Committee Meetings, December, 1999.

1999-2000, UNM Regent's Fellow

James (Ric) Richardson, Associate Professor

"Santa Fe Summit: City of Santa Fe/ Santa Fe County", Mediated Land Use Negotiation around Water Planning). (Reported in Susskind, et al, *Mediating Land Use Disputes: Pros and Cons*, Lincoln Land Institute, 2000.

\$50,000 grant from the McCune Foundation to develop a Strategic Plan with the Albuquerque Historic Neighborhoods Alliance,

Challenge Grant from the EPA (collaborating with the City of Albuquerque and Consensus Builders) on the development of Green Builder Industry in the metropolitan region.

Consultation to the US Forest Service on the public participation portion of the "Giant Sequoias Management Plan" for northern California.

Invited lecturer, Annual Hewlett Conference for University Programs in Negotiation and Conflict Resolution, Harvard, Cambridge, March 2000.

Design and Implementation of "Training Program in Alternative Dispute Resolution" for the Governor's Cabinet, June 2000.

"Resolving Conflicts and Dealing with Difficult Situations", presented in the Citizen Commissioner Training Program sponsored by the NM Municipal League of Zoning Officials", May 2000.

Steering Committee Member, Consortium for Research and Assessment of Community Based Collaboratives, based in the Institute for Environmental Negotiation at the University of Virginia.

October 30, 2000

To: Dean Roger Schuntz

From: Teresa Córdova, Director, Resource Center for Raza Planning

Re: Report of RCRP for period July 1, 1999 to June 30, 2000

We formed The Resource Center for Raza Planning to promote integration between higher education and our traditional communities through the application of planning processes and techniques. RCRP conceives planning as multi-disciplinary, intergenerational, directly responsive to community needs, and developed through ongoing, long-term relationships. We deal with issues such as land use, land ownership, infrastructure, transportation, water rights, water use and quality, agricultural preservation, economic development, and a multitude of other planning issues.

The Resource Center for Raza Planning has four major objectives:

- 1. Produce, compile, and distribute educational materials
- Generate and nurture a pipeline of individuals interested in planning and development issues
- 3. Produce research and policy analysis of planning issues
- Partner with other organizations to promote sustainable economic development strategies

I am very pleased to update you on the progress of the RCRP in the last twelve months. Our work, we believe, is a credit to the School of Architecture and Planning and to the University of New Mexico. We have provided an excellent example of community/university partnerships

Our goals for the previous year were to: 1) print and circulate our publications; 2) increase the pool of potential planning graduate students through outreach to undergraduates and community; 3) produce research and policy analyses; 4) sponsor workshops and platicas (small group discussions); 5) firm the organizational structure and complete by-laws and organizational chart; and 6) seek additional funding. I am pleased to report that we achieved these goals and more.

- We printed and circulated several of our documents including Planning in the South Valley: Previous Efforts, Obstacles, and Plan Implementation Strategies; Methods, Strategies, and Implementation of Agricultural Preservation in the South Valley; and a Guide to Planning Information in the Albuquerque Area. In fact, we attended a meeting in the South Valley where a visitor from the Aspen Institute was recommending to the audience that they should read one of our documents, not knowing that we were in the audience.
- 2) We are directly responsible for recruiting eight of the entering graduate students into Community and Regional Planning. Each of these students is bright, highly motivated, and hardworking. We are continuing to provide these students mentoring and support. We also applied and received a J.B. Jackson grant to increase our recruitment activities and the pool of entering graduate students.
- 3) We sponsored several workshops on community economic development. We were fortunate to have some very prestigious experts join us for these series of workshops, including a former Mayor the City of Berkeley who was also the Executive Director of the Dudley Street Neighborhood Initiative (in Boston), one of the most famous examples of community based planning. Also joining us were two individuals from the Economic Development Office while Harold Washington was the Mayor of Chicago. Participants at these workshops included graduate and undergraduate students and community members representing several organizations.
- 4) We finalized our organizational structure, by-laws and a statement of principles.
- 5) We sought additional funding for RCRP. In additional to the JB Jackson grant, we applied for and received a \$400,000 grant from HUD for Hispanic Serving Institutions Assisting Communities.) We received two fellowships for students from the Center for Regional Studies. We also received \$10,000 that we have used to support our activities, hire a graduate student for staff, and purchase a computer.
- 6) In addition to reaching our goals from last year, we engaged in a economic development project that led to our writing the Economic Development language for the Southwest Area Plan of Bernalillo County. This was a major feather in our cap in that we produced high quality work in a short period of time that is being directly used in a planning document. Thus far, the reaction of County Staff and County and City Commissioners is very positive.
- 7) We also produced an analysis of a proposed five-lane road on Isleta Boulevard for County Public Works. We conducted a door-to-door survey to provide the data for this report. Both the Isleta Project and the SWAP project demonstrated our ability to produce sophisticated work that is a credit to ourselves and to the University.
- 8) We also conducted several community meetings for Mountain View Neighborhood for a possible sector plan in the 2nd Street Corridor. We provided the neighborhood

association infrastructure data on their sector; the results of a visioning process; and demographic information on their neighborhood.

9) We have built an exciting and vibrant community of young planners who are passionate, hardworking, intelligent, and are committed to one another.

Our goals for the coming year include continuing publications, workshops, recruitment, and grantwriting. In addition, we will continue our work on the economic development section of the SWAP to see it through. This will involve attending and testifying at public hearings, helping to develop compromise language, etc. In addition, we will provide a site assessment of a proposed learning center in the South Valley and we will assist a local community development corporation in its building of a small business incubator. The HSIAC grant will keep us very busy conducting community assessments and program development.

We also seek to build capacity and skills of Center affiliates, most of whom are New Mexico natives and to enhance the learning process here at UNM through direct involvement in planning processes and techniques.

The Center functions out of my office in a very small space with one computer. A further goal is for the fifteen or more students who work out of the Center to have a place where they can more effectively conduct their work. An important goal is for the Center to have space in the new building.

We are pleased that we are able to serve both UNM and New Mexico communities. We appreciate the support that you have provided us.

cc. Professor Ric Richardson, Associate Dean, SAAP



The University of New Mexico

School of Architecture & Planning 2414 Central SE Albuquerque, NM 87131-1226 Telephone (505) 277-2903 FAX (505) 277-0076

INSTITUTE FOR ENVIRONMENTAL EDUCATION

ANNUAL REPORT

ANNE TAYLOR, PH.D., Hon. AIA

Fall 1999-Fall 2000

MISSION STATEMENT

The Institute for Environmental Education (IEE) is the leading developer and provider of an innovative and comprehensive model of education and related services for learning environments and design education.

The Institute for Environmental Education has three operational missions:

- To promote design education for teachers, children and community through the use of an integrated model of teaching and learning borrowed from the architectural design studio.
- The Institute acts as a research and development center, which addresses learning environment design and its effects as well as architectural and educational programming issues.
- The IEE acts as a repository for information pertaining to the above areas of research and development.

GOALS AND OBJECTIVES

The IEE has three goals and objectives for the Institute which include

- 1) the training of teachers in the Albuquerque and New Mexico area as well as nationally and internationally in design education
- 2) the development and delivery of design academies for children
- facilitation of new programming and processes for school facility design.

- •The training uses a well tested curriculum (Architecture and Children) and site specific supplemental curricula to teach architecture and design to children using math, science, social studies and art in a real life format. By empowering youth to take responsible action in their communities, the Institute is educating a new kind of participant in the design process: one already informed and aware of the value of good planning and design. This program also gives youth a chance to participate in democratic decision making and to make known their ideas through competent visual and verbal communication, both in school and in their communities.
- •Summer classes in design education are planned to help children have a total immersion in architecture and design. Architecture students are learning how to teach and perhaps someday, the IEE will offer a non-architectural degree program to certify architects to teach in the schools.
- •Programs to facilitate new thinking in school facility design are being planned as well as the compilation of research on the effects of environment on learning which is beginning to emerge on a national scale. Taylor was a member of the Design Share jury to judge some of the best new school designs in the country.

STAFF OF THE INSTITUTE FOR ENVIRONMENTAL EDUCATION 1999-2000

Anne Taylor, Ph.D., Hon. AIA, Director Swati (Tina) Patel, M. Arch., Associate Director (until March 30, 2000) Jean Marie Krygowski, Research Associate (until March 30, 2000 Juli Cobb, Program Director for Summer 2000 Design Academies Lyset Solis, Work study Lisa Thomas, Consultant Youth Build

Consultants for summer program:
Mannie Juarez
Krystine Graziano
David Kindel
Mark Kimball
Natalie Olson
Judy Marquez

Summer Design Academy Assistants: Taylor Blueher – 11 years and former student Steve Sagenbach 13 years and former student

FUND RAISING

Taylor spent the first semester working with Pam Hurd-Knief making a plan for fund raising for the Institute. She set up a \$10,000 gift from an anonymous donor as a seed for a larger endowment to support the Institute for Environmental Education. A data base of trained teachers, friends of Architecture and Children and potential donors is underway. Several grants have been written and some funded:

Written:

National Science Foundation – Japan exchange in New Mexico
Japan Foundation – Japan exchange in New Mexico
Barnard/Fain Foundation – for translation of Architecture and Children curriculum into Spansih
Intel – concept paper

Junior League and Albuquerque Community Foundation UNM walking tour.

Funded:

Junior League and Albq. Community Foundation – \$5,000

To publish a UNM walking tour for children

NM Legislature – Rio Grande Educational Collaborative - \$125,000

APS and College of Education and others –

Harrison Middle School Design Center \$69,000

Youth Build- Design Academy for Students from School On Wheels \$ 1200.

New York City Schools exchange to train teachers - \$50,000

DATA BASE

Liset Solis has been working on a data base for potential funders for the IEE. The data base includes:

- Friends of Architecture and Children
- Parents of Children who have taken the Design Academies
- Corporations and larger single donors who know Taylor and the program

GRADUATE COURSES TAUGHT BY TAYLOR

Architecture and Children – Architecture students teaching in the schools

Thesis Prep – Students wrote proposals and posters explaining their research
displayed in the School of Architecture and Planning

Research Methodology – Methods of research as applied to proposal writing for graduate students.

Thesis advisement Independent Studies

NACARB VISIT - Accreditation

Taylor had dinner with the examiners, they visited the Institute and viewed a display of the work we do with teachers and children. This exhibit was displayed in the upper halls of the SAAP.

RESEARCH, PUBLIC OUTREACH AND SERVICE

1 Harrison Middle School Design Center

The established design center is still functioning at Harrison Middle school.

Patel and Grygowski trained teachers from APS to teach design to children. They also trained over 300 children. During the summer the trained teachers ran programs for over 50 children. A training notebook was written by Patel adapted from the Architecture and Children curriculum.

Note: The Harrison school principal liked the design studio so much that he hired a full time art teacher to carry on the work of the studio during the year and many children throughout the school are taking design classes and loving it. The teacher is Julie Stouffler. Dr. Amy Atkins from the College of Education is co-sponsoring the design studio and will be evaluating the results of the studio.

2 School on Wheels classes – two contracts Youth Build classes

Lisa Thomas taught two sessions of classes with 30 students each for School on Wheels. High school students loved the class so much that they begged for an additional 16 week course. We are negotiating other classes for this youth group and will be teaching at the School of Wheels in the fall of 2000.

3 Montezuma Elementary School

Taylor and architecture students Juli Cobb, Sandee Jensen, Cheryl Harris, Mannie Juarez, Atsuko Sakai continued teaching architecture and design at Montezuma school in preparation for an exchange with the Japanese Ashinokuchi Elementary school in Sendai Japan. Seventy-five fifth grade students learned architectural conventions and built models of sustainable housing in preparation for a selected few to go to Japan and to be exhibited at the Science museum in Sendai. Three fifth graders were chosen to go to Japan along with four architecture students and Dr. Taylor.

4 Japan Cultural Exhange - Architecture and Children Network

4 Institute for Environmental Education report Fall1999-Fall2000 - Anne Taylor, Dir.

In March, three fifth grade students from Albuquerque's Montezuma Elementary School and faculty and students from the University of New Mexico School of Architecture and Planning traveled to Japan with Dr. Anne Taylor. The American students and their counterparts from Ashinokuchi Elementary School in Sendai shared their designs for ecologically friendly houses of the future as part of a cultural exchange program involving home visits, Architecture and Children workshops, and sight seeing opportunities which included looking at the modern architecture and bridges of Tokyo.

All American visitors participated in home stays, and a symposium given at the museum. (see attached newsletter for more news, photos and sponsors of the project).

5. Design Academies

Julie Cobb assisted by Lyset Solis and Mark Kimball organized two summer Design Academies. For the first time the IEE offered a Design Academy on the West side of Albuquerque at the Bosque school. Parents attended presentations for both the School of Architecture academy held in June and for the Bosque school academy in July. Students did excellent work in designing houses and bridges. (see publicity attached)

5 Rio Grande Educational Collaborative

Under the direction of Tina Patel the RGEC program continues to design the learning environment of the future for the Rio Grande High School. This project was awarded \$125,000 from the legislature to continue work already begun. The RGEC will provide the Rio Grande Cluster and Post-secondary students with an opportunity to learn through experience and mentorship. Architecture students will assist cluster students to design the building of an innovative learning facility designated for a selected site. There is a separate report available from Patel at the School of Architecture and Planning which explains the project more fully.

7. New York City teaching training exchange

A \$50,000 contract was awarded the IEE to train selected New York city teachers in the IEE Design Education and Architecture and Children educational process. This project is directed by Tina Patel and facilitated by Jean Marie Grygowski in New York. (Separate report available from Patel at School of Architecture and Planning).

8. University of Buffalo

Taylor gave a three day workshop to over 40 people at the School of

Architecture and Planning at the University of Buffalo sponsored by the Buffalo AIA and the School.

9. Cornell University

Taylor gave a speech to the College of Human Ecology on school facility design and shared her vision of the future based on a lifetime of work. She followed up that speech with a paper on School Facility Planning and the Impact on the Community. (Available from Taylor at IEE).

Conferences, Meetings attended, Speeches, Travel and Good works

Exhibition of design education -

Art Education Gallery, College of Education - November 2000

IEE - Website - Assembled and ready to be installed

Sanger School District

Taylor is working with the Sanger, CA school district to develop a new school (Quail Lake) and its curriculum based on using the environment as a learning tool and the inclusion of design education as an integrated focus of study. She will collaborate with Perkins and Will of Pasadena, CA. To design a school based on an integrated curriculum which emphasizes the Environment and Design.

Design Share

Taylor is a member of a national committee and jury, Design Share which is reviewing entries from architects on schools designs. Criteria for judgment of excellence include learning, community involvement and use, the process of programming, security, use of resources and flexibility.

Keystone Learning Centers

Taylor complete 17 volumes of preschool curriculum based on Reggio Emilio principles and trained Keystone personnel in Montgomery, Alabama.

Publication:

NEA grant completed by Taylor -

Guidelines for Alternative Learning Environments for Design Education

Business Plan

Taylor will work with a team from the Anderson School of Business to form a business plant for IEE. (In process) It will include A history of IEE and its program

The Mission statement – Goals and Objectives
The Team needed for success
A market summary
Opportunities
Business Concepts
An analysis of the competition
Resource requirements
Key Issues
National and international affiliates
Financial resources needed and budget

IEE - BUDGET and EXPENDITURES

Attached

Note: Due to lack of funding for Patel and Krygowski, they left the Institute in March 2000. After legislative funding for the RGEC project came in July Patel returned to work on that project and the New York training project with Krygowski who moved to New York. These projects are still IEE projects houses at the main building of the School of Architecture and Planning.

Institute for Environmental Education 1999-2000 Summary Budget

INCOME

UNM- Salaries (ING Acct) Benefits	\$65,000 \$15,600			
	\$80,600			
Youth Build \$ 1,20				
SAAP Summer Design Academy				
Bosque Summer Design Academy	\$12,325			
APS, COE, PNM- For Salaries	\$69,000			
JB Jackson Grant	\$ 1,200			
Total Income	\$164,325			
EXPENDITURES				
Personnel- Director's Salary 9 mo. Benefits @24%	\$65,000 \$15,600			
Patel Krygowski/12mo. (including benefits)	\$69,000			
Consultants- Lisa Stewart Benefits @ 10%	\$ 1,000 \$ 10			
Workshop Supplies	\$ 200			
Summer Workshops -Salaries/Supplies	\$12,950			
Total Expenses	\$163,750			
Net Balance \$ 575				

ARCHITECTORES AND CHILDRES









Institute for Environmental Education School of Architecture and Planning 2414 Central, SE University of New Mexico Albuquerque, NM 87131

Around the World in Japan

March, 2000

Design education brought them to Japan. They experienced plenty of excitement—an earthquake, a snow storm, and lost luggage—but what they remember most is Japan's wonderful people.



Summer Design Academy

The Bosque School-Summer 2000

Week One

Session 1: Schematic Drawings Open House and Orientation Visual/Verbal Journals Schematic Drawings

- 1. The Life Story of a Bubble
- 2. The Great Balloon Race
- 3. Toy Sketches
- 4. Sound Graphics
- 5. Slinky Diagram

Group Display / Discussion

Session 2: Architectural Conventions

Design in Nature

- 1. Positive Form/Negative Space
- 2 Visual Concepts

Elevations/Cross Section Concepts

1. Vegetables / Fruits

Group Display/Discussion

Session 3: Structural Concepts

Elevations/Section Concepts continued

Enlargements

2. Shells/Seed Pods

Entryways

1. "Be a Structure" Body Structures

Paper Strip Models

Group Display/Discussion

Session 4: Origins of Southwest Architecture

History/Materials

Spanish Colonial Design

- 1. Architectural Details
- 2. Walking/ Sketching Hike-

Group Display / Discussion

Session 5: Pueblo Design Concepts-Community Design

History-Pueblo Bonito at Chaco Canyon

Slide Show

Environment & Energy Conservation

Community Design/Plaza

- 1. Clay-Designs Individual Homes
- 2. Community Needs/Design

Group Display / Discussion



DESIGN ACADEMY FOR YOUTHS

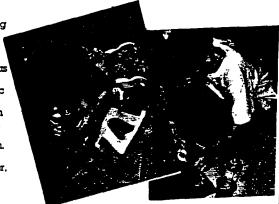
SUMMER 2000

Monday through Friday 9:00 AM to 12:00 PM June 5 to June 16

Offered by the Institute for Environmental Education through the Architecture+Children Program at the University of New Mexico School of Architecture and Planning

The Program

While teaching about Architecture, design, and engineering, this program largely focuses on helping children learn through visual and spatial thinking. creative problem solving, group interaction, communication skills, and making critical aesthetic judgments. The goal of the classes is to use design as a means for teaching math, science, art, and ecology. Students will learn architectural schematic drawings, 2-D design, and 3-D model building techniques in a studio learning environment through hands-on activities. They will design a structure and build a model based on their design, and learn to draw and design using a computer graphic program. Students will be guided by architectural and design professionals who are colleagues of Dr. Anne Taylor, Professor of Architecture, the program's developer.



FOR INFORMATION/ REGISTRATION

Call (505) 277-5058

Cost: \$250 per child (includes design kit)

Limited number of spaces are available for the Design Academy and registration is 1st come, 1st serve. Register early to reserve your child's space in the program. One \$25 discount per family when more that one child from a family enrolls in the design classes.

Location: School of Architecture & Planning University of New Mexico 2414 Central Ave SE Albuquerque, New Mexico 87131

Registration: Complete and University of New Mexico 24				
NAME	AGE	GENDER	GRADE	
ADDRESS				··
PHONE				
WORK PHONE	PARENTS PLACE OF	EMPLOYMENT		
EMERGENCY CONTACT NAM	E&#</td><td></td><td></td><td></td></tr><tr><td>PARENT'S SIGNATURE</td><td colspan=3>TS SIGNATUREDATE</td><td></td></tr><tr><td></td><td></td><td>173</td><td>`</td><td>AGE GROUPS 1-3rd grade</td></tr></tbody></table>			

4-7th grade 8-12th grade

RIO GRANDE EDUÇATIONAL COLLABORATIVE

&

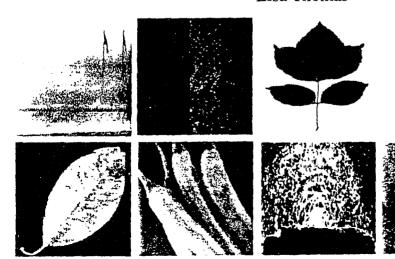
NEW YORK CITY SCHOOL DISTRICT 30 EXCHANGE

TEACHER TRAINING WORKSHOP



OCTOBER 18, 2000 - OCTOBER 20, 2000

Tina Patel
Jean Marie Krygowski
Lisa Thomas



UNIVERSITY OF NEW MEXICO

University Art Museum

Annual Report 1999-2000

Peter Walch, Director

October 31, 2000

1. Significant Developments

The following area-by-area reports document another fruitful year at the University Art Museum, and a somewhat quiet one at the Jonson Gallery (which, considering the turmoil and uncertainties of the previous year, was not altogether unwelcome). At the University Art Museum, nineteen exhibitions and fifty-one gallery talks, symposia, and other public events brought close to 41,000 visitors to our spaces; this represented a roughly 15% increase over the previous year. After the resignation, for health reasons, of Curator Tiska Blankenship in November, we cut back significantly on the exhibition schedule at the Jonson Gallery, which led in turn to a significant drop in attendance there. The new Jonson Gallery Curator, Robert O. Ware, is working rapidly to rebuild that institution's programs and presence.

It was a banner year for building the collections. Gifts brought to the permanent collection over 400 objects, literally from A (Berenice Abbott) to Z (Piet Zwart). Private donors and our Friends of Art gave us over \$200,000 in acquisition funds, with which we purchased close to 100 works. The bulk of both our purchases and gifts were concentrated in photographs. As this is being written, an exhibition called "New Faces" is going up in the Coke Gallery, documenting the astonishing variety and quality of photographic portraits which have come into the collection over the past three years. Any major museum would be delighted to mount such an exhibition drawn from its entire collection. That we are able to do so from just three years' acquisitions testifies to the continuing generosity of our patrons, and to their recognition of the stature of our collections.

A minor crisis will soon be turned into a long-range benefit: in January, the Center for the Arts elevator which services our Main, Coke, and Lower Galleries broke down, and remained out of service until June. During these months, in addition to not being able to move by elevator heavy objects between our three levels, we lost handicapped access. There was nothing we could do in the short term. But working with the UNM Office of Equal Opportunity and the Facility Planning Department, we now have funding and a design for a wheelchair ramp to our Main Gallery. This will be built during the December-January, 2000-2001 break between semesters (and exhibitions), and will remove the embarrassing contortions which wheelchair-bound patrons have previously been subjected to in order to view our major exhibitions.

Judy Jones, Vice President for Institutional Advancement, facilitated a series of steps which at least partially alleviated our long-standing isolation from the UNM Development Office. Development Specialist Lawrence Walsh was assigned to work part-time with us on two major projects: a proposal (submitted in June) to the National Endowment for the Humanities for \$400,000 towards our HVAC controls system (see the 1998-1999 Annual Report), and another (still in draft form) to the Wallace-Reader's Digest Fund for major funding for a "virtual museum" project, in conjunction with the Maxwell Museum of Anthropology and the Technology and Education Center. In addition to his help with these specific projects, Walsh has kept us informally apprised of various Development Office initiatives (e.g., the pending publication of a Major Giving Opportunities brochure), about which we would have remained in ignorance were it not for his timely alerts. Still, we look for a more viable solution to enhancing our development efforts, and ensuring that they are properly coordinated with the UNM Development Office.

2. Plans and Recommendations

At the start of FY 2000-2001, our reporting structure was changed within the Office of the Provost. Associate Vice President David Stuart replaces Associate Provost Richard Holder as the officer to whom the University Art Museum Director reports. Simultaneously, a consortium of UNM research museum directors (representing the Maxwell Museum of Anthropology, the Museum of Southwestern Biology, and the Institute of Meteoritics Museum, in addition to the University Art Museum) commenced meetings with Associate Vice President Stuart, to address how these museums might better be represented and recognized within the University. Shared concerns about development efforts will be one topic of discussion.

Still festering is the question of funding for the Jonson Gallery. As previous annual reports document, since 1995 the Museum and the Museum Advisory Committee have annually pleaded for the re-institution of sufficient UNM General Fund support to assure the basic operations of the Jonson. Annually, we have succeeded in obtaining such funding on a non-continuing basis. As this is written, Provost Brian Foster is about to convene a meeting which promises resolution (we hope, on favorable terms) of this matter. Should this be so resolved, we can then move forward with ambitious plans to attract community support for the historical restoration of the Jonson, and its transformation into an attractive center for receptions, seminars, and other such functions.

We will shortly begin another transformation, which will result in half of our Far Storage area (CFA B-126) being made into a permanent, year-round conservation laboratory. Funding will come from the Educational Foundation of America, the Stockman Family Foundation (our long-time partners in conservation), and a pledge from the Vice President for Business and Finance. We look forward to this long-anticipated extension of what has, for the last eight years, been largely a summer program.

In September, we received notification of the award of a two-year, \$112,500 General Operating Support Grant from the Institute of Museum and Library Services. As with previous IMLS-GOS grants, this is both important funding and welcome peer recognition of the basic goodness of our staff and our institution. Roughly half of the funds will, per our proposal, be put toward accelerating the placing of digital images of our permanent collection on our newly-enhanced SNAP computerized collections-management system. We have obtained the enthusiastic endorsement of the Department of Art and Art History to use \$30,000 of these grant monies for graduate internships at the Museum, providing that the University pledge a roughly similar amount toward graduate scholarships. The supply of incoming graduate students in the history of photography and the graphic arts has alarmingly ceased over the past two years; without such students, our wonderful collections go severely under-utilized. We hope that a combination of scholarships and internships will revitalize graduate education in this historically important area.

Finally, over the next year we hope to resume progress toward planning for a new facility. With the Deans of Library Services and of the School of Architecture and Planning, we have floated a proposal to find a new home for the Fine Arts Library (which also desperately needs expanded space). The Museum would then occupy the Fine Arts Library spaces directly above us, and connect what would then be four floors with an internal elevator. This proposal holds great promise. Since 1974, the University has intermittently recognized the need of an expanded and appropriate facility for the Museum. We will work diligently with the latest new administration to bring this to reality.

3. Staff Appointments

Mark G. Cattanach

September 27,1999

4. Staff Separations

Tiska Blankenship

April 22, 1985-November 30, 1999

5. Achievements/Products

A. Exhibitions

University Art Museum

Upper Gallery 1999

Through Sept. 26 That Certain Look! The Minimalist Tradition in New Mexico

Curators: Jonathan Abrams and Kathleen Howe

Oct. 15—Dec. 19 Excavations—Patrick Nagatani/Ryoichi Excavation Project and Richard

Barnes: Still Rooms and Excavations.

Curator: Kathleen Howe

2000

Jan. 18-May 14 School of the U, Part 2

Curator: Peter Walch

June 6-Aug. 24 Tamarind at 40

Curator: Kathleen Howe

West

1999

Through August 1 Dancing through the Lens

Curator: Kathleen Howe

Aug. 10-Sept. 26 Doris Cross: Remembrancer

Curator: Bonnie Verardo

2000

Jan. 18—March 5 Focus on Faculty: Jackie Tileston

Curator: Peter Walch

March 21—June 4 Old (and not-so-old) Masters

Curator: Peter Walch

Van Deren Coke Gallery 1999

Through August 17

Dances: Religious Observance/Tourist Attraction

Curator: Kathleen Howe

Oct. 19—Dec. 19 Multiple Impressions: Native American Artists and the Print

Curators: Joyce Szabo and Kathleen Howe (also West)

2000

Jan. 18—March 5 A Sense of Self: Photographic Self Portraits by Anne Noggle

Curator: Kathleen Howe

March 14—May 14 Art in the Age of Aquarius

Curators: Lee Savary

June 6—Sept. 24 Dr. Freud's Century

Curator: Peter Walch

Study Gallery

1999

July 20—Sept. 19 Making Book: A Spread by Dennis Farber

Curator: Kathleen Howe

Oct. 5---Dec. 5

Personal Icons—Betye Saar Curator: Peter Walch

2000

Jan. 11—March 5

Veneer: Paintings and a Video by Michael Cook

Curator: Kathleen Howe

Lower Gallery

1999

Through Sept. 5 Visual Puns and Hard-Edge Poems: Works by Frederick Hammersley

Organized by the Museum of Fine Arts, Museum of New Mexico

Sept. 21--Feb. 20

Five Centuries/Three Continents

Curator: Peter Walch

March 21-June 4

Sixth Annual Juried Graduate Student Exhibition

Curator: Michael Certo

Jonson Gallery

1999

Through July 30 Angela Battle

Curator: Tiska Blankenship

Through July 30

Kindred Notes: Raymond Jonson's Artistic Development

Revealed through Family Correspondence from 1911 to 1946

Curator: Tiska Blankenship

August 17—October 8

Cleavage

Curator: Danielle Rae Miller and Tiska Blankenship

October 19-May 12

Kindred Notes (see above)

2000

March 7---May 12

New Era Art

May 30---September 8

Jonson Gallery 50th Anniversary

B. Print Study Room

During Fall Semester 1999 and Spring Semester 2000, the Print Study Room supported classes offered through the Departments of Art and Art History, History, English, and the General Honors College. Graduate seminars in Art History and Cultural Studies met in the Print Study Room, as did studio classes in photography, printmaking, painting, and drawing. Participants in programs offered by the Tamarind Institute and the Latin American and Iberian Studies Institute also used the Print Seminar Room. In all, faculty scheduled sixty-seven class meetings in the Print Study Room. Over 1065 individual student and faculty visits were logged during Fall 1999 and Spring 2000 semesters.

Non-UNM visitors to the Print Study Room included classes from Santa Fe Community College, an Oakland Museum of Art tour group, the Albuquerque Academy Summer Art Camp, and Albuquerque Day School. In addition, Museum collections of photographs and prints were utilized by researchers from six other museums and universities.

Beginning in May 2000 and continuing through the summer, Print Room staff performed an item level condition and location audit of all photographs in the Museum collection. The audit was completed in August 2000. Planning is underway for an audit of the print collection in summer 2001.

C. Purchases and Gifts Purchases

University Art Museum:

Anonymous Untitled, c. 1914-18 Gelatin silver print 99.35.5

Army Signal Corps Group of nineteen photographs, 1944-45 Gelatin silver prints 99.23,1-.19

Army Signal Corps
Aircraft Carrier, 1941-44
Gelatin silver print
99.35.6

Army Signal Corps Twisted Beachhead Bridge, 1944 Gelatin silver print 99.35.7

Army Signal Corps Hwei-Tung Footbridge, 1944 Gelatin silver print 99.35.8

Army Signal Corps
Officer with Binoculars, 1941-44
Gelatin silver print
99.35.9

Army Signal Corps Twenty-six Aeroplanes, n.d. Gelatin silver print 99.35.10

Army Signal Corps
Begrimed Sergeant, 1944
Gelatin silver print
99.35.11

Army Signal Corps
Medics Treat a Wounded Infantryman, 1944
Gelatin silver print
99.35.13

Army Signal Corps
A French Girl Wounded by German Shelling, 1944
Gelatin silver print
99.35.14

Army Signal Corps German Atrocities, 1945 Gelatin silver print 99.35.15

Army Signal Corps Drinking German Beer, 1945 Gelatin silver print 99.35.16

Army Signal Corps Pfc Edward L. Brazzell, 1945 Gelatin silver print 99.35.17

Army Signal Corps Transfer Corps Manila Harbor, n.d. Gelatin silver print 99.35.18

Becher, Berndt and Hilla Industrial Structure, n.d. Photograph 2000.17.2

Berman. Zeke Untitled (Double Cup), 1984 Gelatin silver print 2000.21

Brodeur, C. A. Untitled, n.d. Ink on paper 2000.3.1

Brooks, James Untitled, 1951 Black ink on paper 2000.4.1

Bull, Thomas Sinclair Jack Benny, 1936 Gelatin silver print 99.52.16

Chagoya, Enrique
Les Aventures Des Cannibales Des Modernistes, 1999
Color litho/woodcut/chine colle
2000.11

Davis, William Gordon Group of 44 photographs, 1944 (for British "Housing Manual") Gelatin silver prints 99.20.1-.44

Epstein, Jerome Camera with a Shadow, c. 1930 Gelatin silver print 99.53.1

Epstein, Jerome Moore Push Pins, 1930 Gelatin silver print 99.53.2

Epstein, Jerome

Bathing Suit Advertisement (2 photos), 1930

Gelatin silver print

99.53.3a-b

Epstein, Jerome Study of Fabric, 1930 Gelatin silver print 99.53.4

Epstein, Jerome Knickerbocker Hard Water Soap, 1930 Gelatin silver print 99.53.5

Epstein, Jerome Jasmine Perfume, c. 1930 Gelatin silver print 99.53.6

Epstein, Jerome Amish Boys, c. 1940 Gelatin silver print 99.54.1

Epstein, Jerome The Waiting Room, c. 1940 Gelatin silver print 99.54.2

Epstein, Jerome The Well – Nepal, c. 1960 Gelatin silver print 99.54.3

Epstein, Jerome Group of 15 vintage gelatin silver prints, c. 1930 99.66.1 - .15 Frith, Francis
The Rameseum of El-Kurneh-Thebes-Second View,
1857
Mammoth plate, albumen
99.23.21

Frith, Francis
Mount Serval From the Wadee Feyrean, 1857
Albumen print
99.52.7

Frith, Francis
The Masque Kartbey, 1857-58
Albumen print
99.52.8

Hanford, Warren The Grant Foot, c. 1970 Gelatin silver print 99.35.1

Hanford, Warren River Scene, c. 1970 Gelatin silver print 99.35.2

Hanford, Warren Eroded Rock, c. 1970 Gelatin silver print 99.35.3

Hanford, Warren Eroded Rock, c. 1970 Gelatin silver print 99.35.4

Hicks, Bobby Untitled, n.d. Enamel on paperboard 2000.3.2

Joint Army and Navy Task Force One Group of 251 photographs of the Bikini Atoll nuclear tests Gelatin silver prints

Kassak, Lajos MA, 1923 Color linoleum cut 2000.15

2000.7.1 - .251

La Carte Surrealiste Premiere Group of twenty-one postcards by surrealist artists and one title slip, 1937 Printed in black on silver ground 99.22.1-22

Lauschmann, Jan Brno CR, 1927 Photograph 2000.17.1

Lummis, Charles
Canon of Pine Creek, Arizona Territories, c. 1880
Cyanotype
99.35.12

Nagatani, Patrick Untitled (Pink Men), 1997 Photo transfer and acrylic on paper 99.68

Prather, Winter Rancho de Taos Mission, c. 1950 Gelatin silver print 99.52.17

Rubenstein, Eva Untitled, c. 1970 Gelatin silver print 99.52.1

Rubenstein, Eva Untitled, c. 1970 Gelatin silver print 99.52.2

Rubenstein, Eva Untitled, c. 1970 Gelatin silver print 99.52.3

Rubenstein, Eva Passageway thru Waterloo Station, 1969 Gelatin silver print 99.52.4

Rubenstein, Eva Untitled, c. 1970 Gelatin silver print 99,52.5

Rubenstein, Eva Sisters Italy, 1973 Gelatin silver print 99.52.6 Rubenstein, Eva Untitled, c. 1970 Gelatin silver print 99,52.9

Rubenstein, Eva Untitled, c. 1970 Gelatin silver print 99.52.10

Ross, Alan Strawberry Creek, Berkeley California, 1968 Gelatin silver print 99.23.20

Sherman, Cindy Untitled, 1990 Color photograph 2000.4.2

Siegel, Arthur Untitled, 1951 Dye transfer 99.55.5

Strand, Paul Nancy Thompson, n.d. Gelatin silver print 2000.13

Unknown Group of 131 photographs of aftermath of nuclear strike on Nagasaki Gelatin silver prints 2000.8.1 - .131

Varisek, Josef Untitled, c. 1930 Gelatin silver print 99.55.1

Varisek, Josef Untitled, c. 1930's Gelatin silver print 99.55.2

Varisek, Josef Untitled, c. 1930's Gelatin silver print 99.55.3

Varisek, Josef Untitled, c. 1930's Gelatin silver print 99.55.4 Various artists Group of 41 lithographs, 1999 The Tamarind Archive Collection 99.61.1-.41

Ward, John Argo Mill, Idaho Springs, CO, 1974 Gelatin silver print 99.52,18

Ward, John Factory, Chattanooga, Tennessee, 1975 Gelatin silver print 99,52,19

Ward, John Mount Ranier National Park, 1972 Gelatin silver print 99.52.20

Ward, John Field and Fog, Boulder, Colorado, 1973 Gelatin silver print 99.52.21

Ward, John Broken Window, Idaho Springs, Colorado, 1974 Gelatin silver print 99.52.22

Warren, George
Untitled (from series of photographs from Yale
University), c. 1865
Albumen print
99,52.11

Warren, George Untitled (from series of photographs from Yale University), c. 1865 Albumen print 99.52.12

Warren, George "O. K. Marvel's" by Farm at Edgewood (from series of photographs from Yale University), c. 1865 Albumen print 99.52.13

Warren, George Untitled (from series of photographs from Yale University), c. 1865 Albumen print 99.52.14 Warren, George Untilled (from series of photographs from Yale University), c. 1865
Albumen print
99.52.15

Jonson Gallery

No purchases for FY 1999-2000.

Gifts

University Art Museum

Abbott. Berenice Untitled Group of 11 gelatin silver prints, n.d. Gift of Eric Alterman 99.31.17 - .27

Adams, Ansel Edward Weston, n.d. Gelatin silver print Gift of Joan and Van Deren Coke 99.62.9

Alinari, Fratelli View of Florence, n.d. Albumen print Gift of Joan and Van Deren Coke 99.62.14

Antreasian, Garo Attic Reflections I, 1995 Serigraph Gift of Burt and Jane Berman 99.60.7

Antreasian, Garo Attic Reflections II, 1995 Serigraph Gift of Burt and Jane Berman 99.60.2

Antreasian, Garo Attic Reflections III, 1995 Serigraph Gift of Burt and Jane Berman 99.60.8

Antreasian, Garo Attic Reflections IV, 1995 Serigraph Gift of Burt and Jane Berman 99,60.9

Antreasian, Garo Cross and Dark Form, 1992 Charcoal on paper Gift of Burt and Jane Berman 99.60.6

Art and Language Music-Language Corrected Slogans, 1973-76 33-1/3 RPM vinyl record Gift of Vernon Nikkel 2000.5.8

Atget, Jean-Eugene-Auguste Untitled, 1895 Albumen print Gift of Joan and Van Deren Coke 99.62.1

Atget, Jean-Eugene-Auguste Untitled, 1895 Albumen print Gift of Joan and Van Deren Coke 99.62.2

Aziz and Cucher Untitled, n.d. Color photograph Gift of John and Mary Mulvaney 2000.19.2

Baldus, Edouard Eglise Ste. Trophiome, n.d. Albumen print Gift of Eric Alterman 99.31.5

Baldus, Edouard Pont du Gard, n.d. Albumen print Gift of Eric Alterman 99.31.7

Baldus, Edouard Maison Carree, n.d. Albumen print Gift of Eric Alterman 99.31.6

Baldus, Edouard Temple of Diane, n.d. Albumen print Gift of Eric Alterman 99.31.8

Bartlett, Jennifer From Rhapsody, 1987 Etching on paper, aquatint Gift of Fay and Jonathan Abrams 99.52.2

Berscht, Auguste
Pollin de Cactus, c. 1852-53
Salt print
Gift of Judith Hochberg and Michael Mattis
2000.1

Blanquart-Evrard

Pont de la Reforme, c. 1851

Salt print
Gift of Joan and Van Deren Coke
99.62.28

Bradford [no first name]
No. 102, The Steamer, 1869
Gift of Joan and Van Deren Coke
99.62.7

Brandt, Bill
Deep Shelter, 1940
Gelatin silver print
Gift of Brenda Hochberg and David Dalgarno
99,30.1

Brogi, Lanzioni Genova, c. 1880 Albumen print Gift of Joan and Van Deren Coke 99.62.27

Buren, Daniel Untitled, 1970 Screenprint on fabric with handpainting, 1970 Gift of Vernon Nikkel 2000.5.3

Carjat, Etienne
Untitled (various portaits of men)
Group of 5 albumen prints
Gift of James Gollin
99.3.9 - . 13

Chappell, Walter
Cape Kiwanda, Oregon, 1963
Gelatin silver print
Gift of Brenda Hochberg and David Dalgarno
99.30.25

Chappell, Walter
Mauna Kea, Hawati, 1979
Gelatin silver print
Gift of Brenda Hochberg and David Dalgarno
99.30.26

Colescott, Warrington
Senefelder Receiving the Secrets of Lithography, 1976
Lithograph (color intaglio)
Gift of Garo and Jeanne Antreasian
99.37.1

Cottingham, Robert Star, 1985 Lithograph Gift of Garo and Jeanne Antreasian 99.37.2

Crane, Barbara
Coloma to Covert Stick, 1997
Gelatin silver print
Gift of John and Mary Mulvany
99.21.4

Disderi, A. E. Ty Kin, 1862 Albumen/carte de visite Gift of Brenda Hochberg and David Dalgarno 99.30.22

Disderi, A. E.

Comte D' Assailly, 1859

Albumen/carte de visite

Gift of Brenda Hochberg and David Dalgarno
99.30.23

Disderi, A. E. Untitled, n.d. Albumen/carte de visite Gift of Brenda Hochberg and David Dalgarno 99.30.24

Dunning, Jeanne
Double Moustache, 1992-96
Chromogenic print
Gift of John and Mary Mulvany
99.21.16

Estes, Richard Subway Car (From series "Urban Landscape"), 1981 Lithograph Gift of Fay and Jonathan Abrams 99.57.1 Estrada [no first name] Untitled, c. 1900 Albumen print Gift of Peter Walch 99.58.2

Estrada [no first name] Untitled, c. 1900 Albumen print Gift of Peter Walch 99 58 3

Estrada Untitled, c. 1900 Albumen print Gift of Peter Walch 99.58.4

Evans, Walker Cuban Man with Cigar, c. 1932 Gelatin silver print Gift of Joan and Van Deren Coke 99,62,10

Fenton, Roger Lincoln Cathederal, n.d. Photograph Gift of Joan and Van Deren Coke 99.62.5

Fielding, Jed Naples #709, 1990 Gelatin silver print Gift of John and Mary Mulvany 99.21.12

Fitch, Steve Honkey Tonk Near Vaughn, Eastern New Mexico, May 21, 1991 Chromogenic print Gift of the New Mexico Council on Photography 2000.16.1

Fitch, Steve Bathroom in Motel, Eastern Colorado, February 11, 1994 Chromogenic print Gift of the New Mexico Council on Photography 2000.16.2

Foster, Gus
Nebraska Wedding, n.d.
Gelatin silver print
Gift of Joan and Van Deren Coke
99.33.2

Foster, Gus
Truchas Lake, 1986
C-print (color photograph)
Gift of Larry Bell
99.67

Frith Francis
The Hypaethral Temple, Philae, 1857
Albumen print
Gift of James Gollin
99.46

Gardner, A. Incidence of War, March 1862 Albumen print & one title page, Manassas Junction, Virginia Gift of Dr. Richard E. Kremer 2000.20a-b

Gilpin, Laura
Untitled, 1969
Gelatin silver print
Gift of Joan and Van Deren Coke
99.33.3

Grooms, Red
Wedding Vows, 1987
Lithograph
Gift of Virginia Bush Suttman
99.59.1

Hahn, Betty Circumstances of Awakening Series, 1990
Group of 5 gelatin silver prints and 6 color photographs
Gift of Charles McClelland
99.18.1-11

Hanna, Forman Group of 18 photographs, n.d. Gelatin silver prints Gift of Mark Lemelman 99.41.1-18

Hanna, Forman Group of 19 photographs, n.d. Gelatin silver prints Gift of Neil Lemelman 99.40.1-.19

Hill, David Octavius & Robert Adamson John Henning, n.d. Salt print Gift of Alexander Novak 2000.12.5 Hill, David Octavius & Robert Adamson Misses Binnie, n.d. Salt print Gift of Alexander Novak 2000.12.4

Hill, David Octavius & Robert Adamson Lady Elizabeth Eastlake, n.d. Salt print Gift of Alexander Novak 2000.12.3

Hill, David Octavius & Robert Adamson New Haven Fisherwives, n.d. Salt print Gift of Alexander Novak 2000.12.2

Hoffman, Heinrich Untitled, c. 1935 Gelatin silver print Anonymous gift 99.42.1

Hoffman, Heinrich Untitled, c. 1935 Gelatin silver print Anonymous gift 99,42.2

Hoffman, Heinrich Untitled, c. 1935 Gelatin silver print Anonymous gift 99.42.3

Hoffman, Heinrich Untitled, c. 1935 Gelatin silver print Anonymous gift 99.42.4

Hoffman, Heinrich Untitled, c. 1935 Gelatin silver print Anonymous gift 99.42.5

Hoffman, Heinrich Untitled, c. 1935 Gelatin silver print Anonymous gift 99.42.6 Hultberg, John
The Shop, 1958
Oil on canvas
Gift of Joan and Van Deren Coke
99.62.38

Kalina, Richard Until, 1991 Graphite and watercolor on paper Gift of Vernon Nikkel 2000.5.1

Kasten, Barbara Axis Mundi, 1990 Chromogenic print Gift of John and Mary Mulvany 99.21.2

Kasten, Barbara
Untitled, n.d.
Polaroid photograph, large format
Gift of John and Mary Mulvany
2000.14

Kelly, Robert Summa I, 1997 Lithograph Gift of Burt and Jane Berman 99.60.11

Kelly, Robert Summa XLVII, 1996 Monoprint Gift of Burt and Jane Berman 99,60,10

Klett, Mark Byron Checking the Position of the Moon with His Laptop, 1997 Gelatin silver print Gift of John and Mary Mulvany 99.21.5

Klute, Jeannette

Damselfly, n.d.

Dye transfer print

Gift of Brenda Hochberg and David Dalgarno

99.30.2

Klute, Jeannette
May Apple, n.d.
Dye transfer print
Gift of Brenda Hochberg and David Dalgarno
99.30.3

Klute, Jeannette
Green Grasses, n.d.
Dye transfer print
Gift of Brenda Hochberg and David Dalgarno
99.30.4

Klute, Jeannette
Luna Moth, n.d.
Dye transfer print
Gift of Brenda Hochberg and David Dalgarno
99.30.5

Klute, Jeannette
Frosted Tree, n.d.
Dye transfer print
Gift of Brenda Hochberg and David Dalgarno
99.30.6

Iris and Bud, n.d.
Dye transfer print
Gift of Brenda Hochberg and David Dalgarno
99.30.7

Klute, Jeannette

Klute, Jeannette

Larkspur, n.d.

Dye transfer print

Gift of Brenda Hochberg and David Dalgarno
99.30.8

Klute, Jeannette
Yellow Iris, n.d.
Dye transfer print
Gift of Brenda Hochberg and David Dalgarno
99.30.9

Klute, Jeannette Birch Grove, n.d. Dye transfer print Gift of Brenda Hochberg and David Dalgamo 99.30.10

Klute, Jeannette
Ferns in the Fall, n.d.
Dye transfer print
Gift of Brenda Hochberg and David Dalgarno
99.30.11

Klute, Jeannette
Beech Fern, n.d.
Dye transfer print
Gift of Brenda Hochberg and David Dalgarno
99.30.12

Klute, Jeannette

Pink-Specked Flower, n.d.

Dye transfer print

Gift of Brenda Hochberg and David Dalgarno

99.30.13

Klute, Jeannette
Grape Leaves, n.d.
Dye transfer print
Gift of Brenda Hochberg and David Dalgarno
99.30.14

Klute, Jeannette

Apple Blossom, n.d.

Dye transfer print

Gift of Brenda Hochberg and David Dalgarno

99.30.15

Klute, Jeannette
Cardinal Flower, n.d.
Dye transfer print
Gift of Brenda Hochberg and David Dalgarno
99.30.16

Klute, Jeannette

Yellow Iris, n.d.

Dye transfer print

Gift of Brenda Hochberg and David Dalgarno

99.30.17

Klute, Jeannette
Black Eyed Susan, n.d.
Dye transfer print
Gift of Brenda Hochberg and David Dalgarno
99.30.18

Klute, Jeannette
Green Grasses – Blue, n.d.
Dye transfer print
Gift of Brenda Hochberg and David Dalgarno
99.30.19

Klute, Jeannette

Dark Trees — Winter Storm, n.d.

Dye transfer print

Gift of Brenda Hochberg and David Dalgarno

99,30.20

Klute, Jeannette
Verriain, n.d.
Dye transfer print
Gift of Brenda Hochberg and David Dalgarno
99.30.21

Lange, Dorthea
General View of One End of the Camp, 1939
Gelatin silver print
Gift of Eric Alterman
99.31.14

Laurent, J.
Espagna, n.d.
Albumen print
Gift of Joan and Van Deren Coke
99.6.2

Laurent, J.

Espagna Guarde Civil, n.d.

Albumen print

Gift of Joan and Van Deren Coke

99.6.3

Laurent, Juan 33 Photographs, c. 1870s Albumen prints Gift of Dan and Mary Solomon 99.43.1-.33

Lazorik, Wayne R. (collaboration with Ellen Garvins) Before the Chocolate Ones, 1981 Gelatin silver print, hand-colored Gift of Joel Peter Witkin 99.24

Lehnert &Landrock Untitled, n.d. Albumen print Gift of Alex Novak 99.45

Le Secq, Henri Rheims, n.d. Salt print Gift of Alexander Novak 2000.12.1

Lee, Russell
Wife of Migratory Worker, 1940
Gelatin silver print
Gift of Eric Alterman
99.31.9

Lee, Russell
Rows of Metal Shelters, 1940
Gelatin silver print
Gift of Eric Alterman
99,31.10

Lee, Russell
Corner of Kitchen in House, c. 1940
Gelatin silver print
Gift of Eric Alterman
99.31.11

Lee, Russell
Hay Barn, 1940
Gelatin silver print
Gift of Eric Alterman
99.31.12

Lee, Russell
Librarian, 1940
Gelatin silver print
Gift of Eric Alterman
99.31.13

Leventhal, David
Untilled, n.d.
Cibachrome print
Gift of John and Mary Mulvaney
2000.19.1

MacPherson, Robert Santa Maria Maggiore, c. 1869 Albumen print Gift of Joan and Van Deren Coke 99,62.24

MacPherson, Robert
Fountain in Rome, c. 1857
Albumen print
Gift of Joan and Van Deren Coke
99,62.25

MacPherson, Robert Arch of Constantine, 1857 Albumen print Gift of Joan and Van Deren Coke 99.62.26

MANUAL Log Road, 1991 Gelatin silver print Gift of John and Mary Mulvany 99.21.8

Marc, Stephen (Steve Smith) Untitled, 1997 Gelatin silver print Gift of John and Mary Mulvany 99.21.3 Marc, Stephen (Steve Smith)
Untitled, n.d.
Gelatin silver print from digitally composed negative
Gift of John and Mary Mulvany
99.21.15

Marsh, Reginald On Third Avenue, 1949 Chinese ink on paper Gift of Peter Eller 99.56

McCullin, Donald Cambodia: The Day McCullin Was Hit, 1970 Gelatin silver print Gift of Eric Alterman 99.31.1

McCullin, Donald Cambodia: The Moment McCullin Was Hit, 1970 Gelatin silver print Gift of Eric Alterman 99.31.2

McCullin, Donald Untitled, n.d. Gelatin silver print Gift of Eric Alterman 99.31.3

McCullin, Donald Untitled, n.d. Gelatin silver print Gift of Eric Alterman 99.31.4

Michals, Duane
Warren Beatty, n.d.
Gelatin silver print
Gift of Joan and Van Deren Coke
99.62.13

Model, Lisette Untitled (women in swim suits), 1976 Gelatin silver print Gift of Joan and Van Deren Coke 99,62.8

Model, Lisette Untitled (reflection in window), 1970 Gelatin silver print Gift of Joan and Van Deren Coke 99,62.12

Morris, Robert Untitled, n.d. Drawing, ink on paper Gift of Vernon Nikkel 2000.5.6

Morris, Robert Untitled, n.d. Drawing, ink on paper Gift of Vernon Nikkel 2000.5.7

Moses, Forrest
Orange/Gray Trees, n.d.
Lithograph
Gift of Burt and Jane Berman
99.60.4

Mulvany, John
The Chairman of the Minority Committee
Meets the Chairman of the French National Bank and
They Exchange Hats
Giclee print diptych
Gift of John and Mary Mulvany
99.21.9a-b

Nagatani, Patrick Untitled (Orange Women), 1997 Photo transfer with acrylic medium Gift of Patrick Nagatani 99.32.1

Nagatani, Patrick
Untitled (Cigar Man), 1997
Photo transfer with acrylic medium
Gift of Patrick Nagatani
99.32.2

Nagatani, Patrick Untitled (Chromo-Therapy Series), 1978 Cibachrome Gift of Joan and Van Deren Coke 99.62.6

Namingha, Dan Hopi Horizon VII, 1997 Acrylic on paper Gift of Burt and Jane Berman 99.60.1

Namingha, Dan
West of Hopi, n.d.
Lithograph
Gift of Burt and Jane Berman
99.60.5

64 Neimanas, Joyce Safety and Security, 1994 Giclee print Gift of John and Mary Mulvany 99.21.6

Nesbitt, Lowell Untitled 741250 (Red Rose), 1981 Lithograph Gift of John and Mary Mulvany 99 21.1

Newberry, Sandra Pastoral #6 Gelatin silver print, 1994 Gift of John and Mary Mulvany 99.21.14

Nicosa, Nic Love and Lust #I, 1990/97 Gelatin silver print Gift of John and Mary Mulvany 99.21.10

Northrup, Michael Bakes' Hand in Tulips, 1973 Gelatin silver print Gift of Tom Barrow 99.47

Ocampo, Manuel L. Ron Hubbard, 1994 Oil and acrylic on canvas Gift of Vernon Nikkel 2000.5.2

O'Hara, Frederick Prints in the Desert New Mexico, c. 1950 Portfolio with text, prints, photographs, and drawings Gift of F. P. "Pete" Clements 99.25

O'Hara, Frederick Ceremonial, 1959 Lithograph Gift of Garo and Jeanne Antreasian 99.37.3

O'Hara, Frederick Migrants, 1959 Lithograph Gift of Garo and Jeanne Antreasian 99.37.4 ParkeHarrison, Robert
Exhausted Globe, 1997
Photogravure with wax
Gift of Robert and Shana ParkeHarrison
2000.2 1

ParkeHarrison, Robert
Consumption, 1997
Photogravure with wax
Gift of Robert and Shana ParkeHarrison
2000.2.2

Pearson, John
Communion #2 Reticence, 1991
Gouache and graphite
Gift of Vernon Nikkel
2000.5.11

Pearson, John Untitled, 1981 Screenprint Gift of Vernon Nikkel 2000.5.12

Pearson, John
"...#11", n.d. [title is illegible]
Acrylic on mat board
Gift of Vernon Nikkel
2000.5.13

Petit, Gaston

Des Songes aux Guals le Root Ritie, 1976

Lithograph

Gift of Garo and Jeanne Antreasian

99.37.5

Poons, Larry Untitled, n.d. Graphite on graph paper Gift of Vernon Nikkel 2000.5.10

Pratt, Charles Group of fifty-six photographs, 1950s to 1970s Gelatin silver prints Gift of Julie Pratt 99.39.1-56

Reynolds, Charles Saguaro Monument, 1975 Photogravure Gift of John and Mary Mulvany 99.21.17 Ribak, Louis
Getting Warm, c. 1930
Oil on canvas
Gift of Joan and Van Deren Coke
99.6.1

Rioki, L. T.

The Great Roof, 1980

Lithograph

Gift of Garo and Jeanne Antreasian
99.37.6

Rodriguez, Jose L.

The Sort of Annual Memorial Softball Showdown, 1999
Poster
Gift of Jose Rodriguez
99.28

Rogers, Thomas Gussy & Letty, n.d. Albumen print Gift of Joan and Van Deren Coke 99,62.32

Rothstein, Arthur Newly Constructed FSA Migrant Camp, 1940 Gelatin silver print Gift of Eric Alterman 99.31.15

Rothstein, Arthur Newly Constructed FSA Migrant Camp, 1940 Gelatin silver print Gift of Eric Alterman 99.31.16

Salzmann, August Jerusalem Casque Trouve Dans Le Jourdain, n.d. Albumen print Gift of James L. Hughes 99.26

Sander, August

Der Dadaist (Portrait of Raoul Hausmann), n.d.

Gelatin silver print
Gift of James Hughes
99.29.1

Sawyer Viewmaster slide viewer and color slides, c. 1950s Plastic/metal Anonymous gift 99.38.1-20 Sawyer, Lydell In the Twilight, c. 1888 Photogravure Gift of Joan and Van Deren Coke 99,62.18

Sawyer, Lydell Boat Builders, c. 1888 Photogravure Gift of Joan and Van Deren Coke 99,62.19

Sawyer, Lydell The Castle Garth, c.1888 Photogravure Gift of Joan and Van Deren Coke 99.62.39

Sawyer, Lydell Untitled, n.d. Essay/Portfolio about Sawyer Lydell Gift of Joan and Van Deren Coke 99,62,40

Schneider, Gary Denise, 1998 Gelatin silver print Gift of John and Mary Mulvany 99.21.11

Scholder, Fritz
Passion #24, 1989
Acrylic on paper
Gift of Burt and Jane Berman
99.60.3

Shepherd and Robertson Ground Food and Spices, c. 1860 Albumen print Gift of Joan and Van Deren Coke 99.62.29

Siegel, Arthur Lucidograms, 1972 Gelatin silver print Gift of Robert Frerck 99.19.2

Siegel, Arthur Lucidograms, 1976 Gelatin silver print Gift of Robert Frerck 99.19.3 66

Siegel, Arthur Lucidograms, 1970 Gelatin silver print Gift of Robert Frerck 99.19.4

Siegel, Arthur Lucidograms, 1976 Gelatin silver print Gift of Robert Frerck 99.19.5

Siegel, Arthur Lucidograms, 1976 Gelatin silver print Gift of Robert Frerck 99.19.6

Skeen, W. L. H. & Co. *Untitled*, n.d. Four albumen prints Gift of Joan and Van Deren Coke 99.6.4-7

Sonneman, Eve Untitled, n.d. Gelatin silver print Gift of Vernon Nikkel 2000.5.4

Sonneman, Eve Pension Merc, Barcelona, 1970 Gelatin silver print Gift of Vernon Nikkel 2000 5 5

Suttman, Paul Letters Passing, c. 1970 Bronze Sculpture Gift of Virginia B. Suttman 99.59.2a-c

Steichen, Edward Steichen, Dana 58 photographs and 1 photo album (gelatin silver prints and 1 platinum print) Gift of Joan Hodes 99.63.1-.55

Stevens, Thomas R.M.S. Lusitania, n.d. Stevengraph Gift of Peter Walch 99.58.1

Stuler, Jack
Untitled, 1998
Gelatin silver print
Gift of Joan and Van Deren Coke
99 33 1

Sutcliffe, Frank W. Fisherman of Whitby, c. 1880 Albumen print Gift of Joan and Van Deren Coke 99.62.21

Sutcliffe, Frank W.
Entrance to Whitby Harbor, c. 1880
Albumen print
Gift of Joan and Van Deren Coke
99.62.22

Sutcliffe, Frank W.

Gathering Hay, c. 1880

Albumen print

Gift of Joan and Van Deren Coke

99,62.23

Telberg, Val
Kathleen in Paris, c. 1949
Print
Gift of Joan and Van Deren Coke
99.62.3

Teynard, Felix Edifice de L'est, Face Laterale, 1852 Salt Print Gift of James Hughes 99.3.8

Unknown

Have Patience, c. 1876

Albumen print, stereo
Gift of Joan and Van Deren Coke
99, 62, 15

Unknown Cradle of Liberty, c. 1876 Albumen print, stereo Gift of Joan and Van Deren Coke 99.62.16

Unknown
Extracting Teeth, c. 1876
Albumen print, stereo
Gift of Joan and Van Deren Coke
99.62.17

Unknown
The Turban Loom, c. 1880
Albumen print
Gift of Joan and Van Deren Coke
99.62.20

Unknown
North House (Hlauuma), n.d.
Photogravure
Gift of Joan and Van Deren Coke
99.62.31

Unknown
Untitled (India, Men), c. 1865
Albumen print
Gift of Joan and Van Der en Coke
99.62.33

Unknown
Untitled (India, Women), c. 1865
Albumen print
Gift of Joan and Van Deren Coke
99.62.34

Unknown
Stone Carving at Elen, n.d.
Albumen print
Gift of Joan and Van Deren Coke
99.62.35a

Unknown
The Rev. T. I. Rowsell, n.d.
Albumen print
Gift of Joan and Van Deren Coke
99.62.35b

Unknown T. I. R. and Family, n.d. Albumen print Gift of Joan and Van Deren Coke 99.62.35c

Unknown Servants Preparing Chota Hazrce, n.d. Albumen print Gift of Joan and Van Deren Coke 99.62.36a

Unknown
Untitled, n.d.
Textile from altar cloth
Gift of Robert Ellis and Caroline Lee
2000.18

Unknown Woodsellers, n.d. Albumen print Gift of Joan and Van Deren Coke 99.62.36b

Unknown H.M. 's 2/24th Regt, 1870 Albumen print Gift of Joan and Van Deren Coke 99,62,36c

Unknown
Untitled (peddlars), n.d.
Albumen print
Gift of Joan and Van Deren Coke
99.62.37

Various artists Group of 53 miscellaneous photographs, 19th and 20th century Various mediums Gift of Richard Perl 99.44.1-.21, 99.51.1-.13, 99.65.1-.19

Various artists 19 pieces of artwork, 20th century Various mediums Gift of the Lannan Foundation 99.61.1-19

Various artists 21 photographs, 19th and 20th century Various mediums Gift of Alexander Novak 99.64.1-.21

Various artists
14 works of art (paintings and drawings), 1904-1946
Various mediums
Gift of Zabriskie Gallery, Inc.
2000.10.1 - .14

Walkowitz, Abraham *Untitled*, c. 1908 3 pencil and ink drawings Gift of Virginia Zabriskie 99.27.1-3

Web, Alex Puerto Rico, 1990 Chromogenic print Gift of John and Mary Mulvany 99,21.13 Weegee (Arthur Fellig) Charles Farrel with Pig/WG1288, n.d. Gelatin silver print Gift of Robert Frerck 99.19.1

Weston, Edward Untitled, 1940 Gelatin silver print Gift of Joan and Van Deren Coke 99.62.4

Wilson, George Washington On the Dove, n.d. Albumen print Gift of Joan and Van Deren Coke 99,62,30

Wilson, Helena Chappelin Wilson Clara, 1997 Digital ink-jet print Gift of John and Mary Mulvany 99.21.7

Wynfield, David Wilkes William Frederick Yeams, c. 1860 Albumen print Gift of Joan and Van Deren Coke 99,62.11

Yucikas, Robert Untitled, 1973 Acrylic on canvas Gift of Vernon Nikkel 2000.5.9

Yucikas, Robert New York 12-87, 1987 Graphite and color pencil Gift of Vernon Nikkel 2000.5.14

Yucikas, Robert Clovis, New Mexico 7-78, 1978 Graphite and colored pencil on paper Gift of Vernon Nikkel 2000.5.15

Zwart, Piet Shovel and Woodcut Interior, 1929 Gelatin silver print Gift of James Hughes 99.29.2

Jonson Gallery

Battle, Angela

October 13, 82, 21% Humidity, 1999

Gift of the artist

Cohen, Phyllis

Jonson Gallery Panel, 1999 Gift of the artist (Accepted into archives only) Felix, Sushe Stand of Trees, 1999 Gift of the artist

Xceron, Jean No. 161, 1939

Gift of James Shelton

D. Works Deaccessioned

University Art Museum

No works deaccessioned in 1999-2000.

Jonson Gallery

No works deaccessioned in 1999-2000.

E. Conservation

University Art Museum

Medium

Artist

Accession Number

Oil on canvas

Gerald Laing

77.214

Photographs

17 Various

Posters

Four Various

Jonson Gallery

No works conserved in 1999-2000.

F. Institutions to Which We Have Loaned Work

University Art Museum

Albuquerque Museum

Albuquerque, New Mexico

Brigham Young University Museum of Art Provo, Utah

Columbus Museum of Art

Exhibits USA

Kansas City, Missouri (Traveling exhibition)

Tour:

Southwest School of Arts and Crafts, San Antonio, Texas

Riverside Art Museum, Riverside, California

J. Wayne Stark University Center Gallery, College Station, Texas

Perspective Gallery, Blacksburg, Virginia Plains Art Museum, Fargo, North Dakota

Georgia O'Keeffe Museum Santa Fe, New Mexico

Harwood Museum

Taos, New Mexico

Magnifico Artspace
Albuquerque, New Mexico

Menil Collection

Houston, Texas

Museum of Contemporary Art Chicago, Illinois

Museum of New Mexico Santa Fe, New Mexico

Phoenix Art Museum Phoenix, Arizona

Snite Museum, University of Notre Dame

Notre Dame, Indiana (Traveling exhibition)

Tour: Albuquerque Museum, Albuquerque, New Mexico

The Marion Koogler McNay Art Museum, San Antonio, Texas

The Snite Museum, Notre Dame, Indiana Thomas Gilcrease Museum, Tulsa, Oklahoma

The Trust for Museum Exhibitions

Washington DC (Traveling exhibition)

Tour: Mississippi Museum of Art, Jackson Mississippi

Terra Museum of American Art, Chicago, Illinois

Toledo Museum of Art, Toledo, Ohio

University Art Gallery, New Mexico State University
Las Cruces, New Mexico (Traveling exhibition)

Tour: University Art Gallery, New Mexico State University, Las Cruces, New Mexico

Museo de Historia Mexicana, Monterrey, Mexico

Walker Art Center

Minneapolis, Minnesota (Traveling exhibition)

Tour: Walker Art Center, Minneapolis, Minnesota

Modern Art Museum of Fort Worth, Fort Worth, Texas

M. H. de Young Memorial Museum, San Francisco, California

Jonson Gallery

Smithsonian National Museum of American History New Mexico Museum of Fine Arts UNM University House UNM Fine Arts-Dean Dodson

21

21

Jefferson M.S. Tour

Print Study Class

G. Programs, Receptions, and Other Events

The total number of visitors to the University Art Museum including the Jonson Gallery was 44,005, an increase of 1,523 from FY 1998-99. Total general attendance to the main University Art Museum was 40,918 an increase of 5,209 (up 15%) from last year. The combined tours, public programs and special events attendance to the main University Art Museum was 7,812, an increase of 3,075 (up 65%) from last fiscal year. Attendance is broken up into several categories: public and private school tours, UNM class tours, community organizations tours, and finally Tuesday Talks, Museum Events, and Opening Reception attendance.

Private Univer Comm	AATION & PUBLIC PROGRAMS TOTALS: e and public school tours sity class tours unity organizations tours 245 ay Talks, Museum Events, Opening Receptions 5.219 TOTAL: 7.812	3 5 <u>2</u>
INIV	ERSITY ART MUSEUM	-
JULY		NUMBER ATTENDED
4	Contemporary Art Society Tour	10
6	Manzano Daycare Tour	17
7	Martineztown Community Center	21
8	UNM Daycare Tour	26
11	Frederick Hammersley Walk-through Tour	31
20	UNM Art History Class	33
20	Opening Reception (Hammersley)	171
25	Art Center Tours (2)	32
23	The Conton Tours (2)	
AUGU	ST 1999	
5	Tamarind Class	11
12	UNM College Bound Tour	17
18	UNM Orientation Tour	15
24	Artists' Forum	39
25	School on Wheels Tour	10
27	UNM Painting Class Tour	19
31	Tuesday Talk (Ed Ranney)	98
31	Tuesday Taik (Ed Rainley)	
SEPTE	MBER 1999	
7	UNM Print Rm, Class	11
7	Tuesday Talk (Mary Lance Film on Agnes Martin)	71
14	Carlos Rey Elem. Tour	26
16	Print Class Tour	18
21	Tuesday Talk (Minimalism- Peter Walch)	51
22	UNM Drawing Class Tour	15
23	Magdalena H.S. Tour	15
28	Artists' Forum	21
29	Cultural Studies Colloq. (CSC)	25
23	Caltaral Studies Colloq. (CSC)	23
OCTO	BER 1999	
5	UNM Art History Class	29
7	Print Room Class Visit	15
12	Artists' Forum	75
13	Hope H.S. Tour	31
15	Opening Reception (Excavations-Nagatani/Barnes)	517
19		184
	Tuesday Talk (Nagatani)	164
20	UNM Photo Class	14

25

12

26	Tuesday Talk (Szabo- Multiple Impressions)	41	
27	UNM Drawing Class Tour	26	
27	CSC at Noon	37	
28	TVI Class Tour	16	
29	Albuquerque H.S. Tour	35	
	MBER 1999	·	
2	Albuq. Country Day School Tour	7	
3	CSC at Noon	24	
4	Print Room Class	18	
8	Emmi Whitehorse Reception (Multiple Impressions)	29	
9	Artists' Forum	35	
10	CSC at Noon	32	
10	UNM Photo Class Visit	16	
11	UNM Photo Class (Barrow) Visit	12 11	
16	UNM Photo Class (Barrow) Visit		
16	Tuesday Talk (Excavations- Richard Barnes) Ramah Elem. School Tour	187	
17 22	UNM Photo Class	39 17	
23	Annunciation School Tour	21	
23 30		63	
30	McKinley M.S. Tours (3) Joan Myers Booksigning/ Talk	54	
30	Joan Myers Booksigning/ Talk	34	
DECE	MBER 1999		
1	Princeton Club Mtg.	34	
2	Betye Saar Talk	103	
7	Tamarind Class Visit	11	
9	Canyoncito School Tour	27	
10	Albuq. Country Day School Tour	7	
14	Artists' Forum	43	
16	Montoya Elem, Class Tour	18	
JANUA	ARY 2000		
18	UNM Painting Class Visit	40	
19	UNM Painting Class (Wenger) Visit	14	
19	UNM Painting Class (Amdur) Visit	19	
19	UNM Painting Class (Wenger) Visit	17	
21	Opening Reception (School of the U. Pt.2)	338	
25	Opening Reception/ Tuesday Talk (Anne Noggle)	201	
26	Wary Elem. School Tour	23	
26	Tuesday Talk (Goodman/Kraft)	62	
	JARY 2000		
1	UNM Kirtland Branch Class Tour	34	
2	Native American H.S. Program Tour	5	
3	CSC at noon	46	
3	UNM Painting Class (Cook) Visit	16	
8	Rio Grande H.S. Tour	18	
9	CSC at Noon	52 136	
15	Tuesday Talk (Veneer)	136	
16	UNM Photo Class Visit	12	
16	CSC at Noon	59	
17	Longfellow Elem. Class Tour	14	
22	UNM Painting Class (Cook) Visit	14 35	
22	Artists' Forum	35 27	
23	CSC at Noon	21	

25 29	Truman M.S. Tours (4) UNM Art History Class	120 12
29	New Era Art Panel Discussion	37
	11011 Data 1111 I date 2 subdustion	3,
	RCH 2000	· ,
1	CSC at noon	48
8	School on Wheels Tour	10
8	CSC at Noon	63
9	Print Room Class	7
14	Opening Reception (Age of Aquarius)	37
15	Rio Rancho H.S. Tour	21
15	UNM Photo Class Visit	10
15	CSC at Noon	55
21	Artists' Forum	33
22	CSC at Noon	55
23	UNM Print Room Classes (2)	24
24	Eldorado H.S. Tour	44
24	Opening Reception (Juried Graduate Show)	560
28	Eisenhower M.S. Class Tour	12
29	CSC at noon	26
30	UNM Photo Class (Barrow) Visit	20
30	UNM Print Room Class Visit	15
31	Rio Grande H.S. Tours (3)	100
31	Upward Bound Tour	12
4 DD I	T 2000	
4 4	L 2000 Santa Fe M.S. Tour	35
4	Cast of "HAIR" Tour	30
5	UNM Art History Class Visit	12
5	UNM Photo Class Visit	12
5	Gallup M.S. Tours (3)	80
6	Belen Elem. Tour	30
6	Print Room Class	20
6	Socorto Elem. Tours (2)	55
7	Special Ed. Class Tour	8
7	UNM Art History Class	12
7	Print Room Class	14
7	Gallup M.S. Tour	12
9	School of the U. pt2 Panel Discussion	14
11	Rte 66 Elem. Tour	31
11	Tuesday Talk (FOA Awards)	38
12	UNM Art History 101 Visit	22
13	La Luz Elem. Tour	20
13	"HAIR" Panel Discussion	25
14	UNM Art History 101 Visit	18
18	Artists' Forum	30
19	UNM Art History 101 Visit	13
19	CSC at Noon	55
20	Belen Elem, Tour	39
21	UNM Art History 101 Visit	13
21	Print Room Class	5
25	UNM Photo Class Visit	8
26	CSC at Noon	26
27	Print Room Class	21
28	UNM Art Studio Class Visit	14
30	Contemporary Art Society Lecture (Certo)	23
50	commission, and cooledy because (conto)	

MAY	2000	
3	Ruidoso Elem. Tour	18
3	FOA Dinner	37
4	Lowell Elem. Tour	25
4	UNM Dance Class Visit	22
4	Senior Citizen Tour	20
6	Print Tour	24
9	La Mesa Elem. Tours (2)	65
9	Artists' Forum	13
10	Annunciation School Tours (2)	43
10	La Mesa Elem. Tours (3)	74
10	Donor's Reception	145
11	UNM Art History Class (Batchen)	20
16	Moriarty H.S. Tour	31
16	Kennedy M.S. Tour	15
18	Alamosa M.S. Tours (2)	46
25	Manzanita Group Tour	7
JUNE	2000	
1	UNM Orientation Group	12
2	Pres. Dinner Reception	203
6	Kindercare Tour	20
9	Opening Reception (Tamarind at 40)	294
13	Chavez Elem. Tour	18
13	Parks and Rec. Tour	16
13	Rio Grande H.S. Tour	15
16	Wells Fargo Reception	204
23	Kids Summer Art Program Tours (3)	48
29	Alvarado Elem. Tour	16
	ams and Education Attendance Summaries rsity Art Museum	
66	Private and Public School tours	1,540
47	UNM class tours	808
10	Community Organizations tours	245
10	Tuesday Talks, Museum Events, Opening Receptions	<u>5,219</u>
	Total Attendance	7,812
	A OTHE PERCONAUTION	7,012

	ON GALLERY	
JULY		NUMBER ATTENDED
31	Historic Preservation Alliance meeting	16
AUGU	ST 1999	
20	Talk (Cleavage)	240
25	2 (2102, 48+)	
	MBER 1999	
3	Gallery Talk (Marcelle Karp)	53
14	Panel Discussion (Breast Feeding)	43
24	UNM English class Visit	77
29	Unknown Class Tour	27
30	APS Class Tour	10
50	110 01110 1011	
OCTO	BER 1999	
1	Gallery Talk (Marilyn Yalom)	109
5	UNM Secondary Education class visit	21
NOVE	MBER 1999	
2	Tuesday Talk (Tiska Blankenship)	59
DECEN	4BER 1999	
7	Tuesday Talk (Historic Architectural Preservation)	16
′	Thesady Talk (Thistoric Architectural Treservation)	10
JANUA	RY 2000	
proper	(A.D.), 0000	
rebku 1	ARY 2000	37
1	Tuesday Talk (Kirby Gookin)	37
MARC	4 2000	
7	Tuesday Talk (Robert Walters)	36
,	Tuesday Taik (Robert Walters)	30
APRIL	2000	
4	Tuesday Talk (Elizabeth Hutchinson)	18
13	APS Class (tour)	11
27	APS Class (tour)	6
3443/2	000	
MAY 2 2	Tuesday Talk (Screening of Colores program, Raymo	nd Iongon) 4
8		16
٥	APS class (tour)	10
JUNE 2	000	
2	Opening Reception (50th Anniversary Exhibition)	23
•	, 5	
SUMM.	ARY OF JONSON GALLERY ATTENDANCE	
5	Private and Public School Tours	70
5	UNM Class Visits	126
	Gallery Talks/Museum Events/Opening Receptions	723
	General Attendance	2,168
	Total Attendance	3,087
		-

H. Publications

University Art Museum

Catalogs:

A Sense of Self: Photographic Self Portraits by Anne Noggle
Essay by Kathleen Howe, poems by Anne Noggle, introduction by Peter Walch
10 b/w illustrations, January 2000.

The Sixth Annual Juried Graduate Student Exhibition
Essays by student art historians, preface by Jim Jacob
47 b/w illustrations. March 2000.

Gallery Guides, other:

That Certain Look! The Minimalist Tradition in New Mexico.
Essay by Jonathan Abrams. 6 panels. June 1999.

Veneer: Paintings and a Video by Michael Cook
Essays by Kathleen Howe and Michael Cook. CD by Michael Cook
8 panels, 1 b/w illustration. January 2000.

<u>Jonson Gallery</u> No publications for 1999-2000. The museum shop made a \$58.81 inventory correction at the end of the year, compared to the \$4,638.32 correction last year. The Booklog accounting software reports, the store ledgers, and the FRS all dovetailed nicely. Store ledgers for expenses were \$1.58 under the FRS reports. The income ledgers were \$18.35 short for the year, partially attributed to the store's Monthly Financial Report, which rounds to the dollar.

Our profit margin was up from last year. For fiscal year 1998-1999, we ran a \$10,076 deficit; the largest expense was payroll due to the four month absence of a manager and a \$2469.05 museum acquisition expense. The museum acquisition charge is not a direct store expense; without it the store ran a \$7606.00 deficit.

For FY 1999-2000, the store ran a \$3178.18 deficit. Of this, \$9500.00 was a museum acquisition expense. Without that charge, the store was \$6321.84 in the black, up from last year. Sales of the new Mata Ortiz book helped immensely. Overall we sold \$8220.58 worth of the two Mata Ortiz books combined.

In addition to these sales, relying more on work-study employees and less on student employees, keeping inventory low, and working toward a higher inventory turnover rate helped the store become more profitable. Booklog has helped also, by tracking sales and identifying deadwood, and also identifying real sales costs.

The FRS reports yearly income as \$30,522.16. The store ledger reports it as \$30,503.62. The discrepancy can be attributed to two things: a bank deposit error resulting in a shortage of \$349.46, to be corrected in FY 2000-2001. The second source of discrepancy is that the Booklog software records pending sales as goods sold. At year-end, we had three outstanding payments for Mata Ortiz books, to be accounted for in FY 2000-2001.

J. Friends of Art

Activities:

Sponsored two APS student artist pony panels Held Spring 2000 lecture series (3 lectures by Peter Walch), "Old (and Not So Old) Masters" Held Annual Meeting and Dinner at the University Art Museum, May 3, 2000

Donation to University Art Museum:

Enrique Chagoya, Les Aventures Des Cannibales Des Modernistes, 1999

Awards Given:

Art History: Kelly Donahue-Wallace, Political Prints in Mexico Art Studio: Sarah Spengler, Site Remains, 1999 Best Friend: Frauke and Keith Roth, Peter Eller

Board 1999-2000:

Louise St. John, President
Cindy Lematta and Peter Eller, Vice Presidents
Malu Cooper, Treasurer
Jane Bradley
Mary Gilstrap
Ellin Hewes
Ina Krieble
Susan Lentz
Wes Pulkka

Frauke Roth Patricia Savignac Luis Neri Zagal

6. Outside Sponsored Research and Collections Development

University Art Museum

Funding Agent: Title:

Dates: Amount: Project Director: Stockman Family Foundation Trust Art Restoration and Conservation July 1, 1999 - June 30, 2000

\$80,000 Peter Walch

Funding Agent:

James Gollin Title:

Dates: Amount: Photography Acquisitions July 1, 1999 - June 30, 2000 \$155,000

Project Director:

Peter Walch

Funding Agent:

Title: Dates: Richard Perle

Photography Acquisitions July 1, 1999 - June 30, 2000

\$45,000 Amount: Peter Walch Project Director:

Funding Agent:

Neal Lemelman Art Acquisitions Title: Dates:

Amount: Project Director: July 1, 1999 - June 30, 2000 \$3503

Peter Walch

Jonson Gallery:

Funding Agent: Title:

New Mexico Endowment for the Humanities Dr. Marilyn Yalom, Author Visit and Slide Lecture

Dates:

October 1, 1999 - June 30, 2000

Amount: Project Director: \$2000 Peter Walch

7. Professional Activities

Tyler Anderson

16th Century Transition from Pre-Columbian to Spanish Colonial Art in Mexico, Spring 2000

Linda Bahm

Member, Museum Cooperative Council of Albuquerque

Member, New Mexico Association of Museums

Member, UNM Research Administrators Network

UNM Representative, Harwood Museum Advisory Board

Professional meetings and classes attended:

Mountain Plains/New Mexico Museums Associations Joint Annual Meeting, Santa Fe, New Mexico

October 13-16, 1999

UNM Corporate Time Software Training, July 23, 1999

UNM Civil Rights Training, August 12, 1999

Alaska Native Music and Culture (audit), Spring 2000

UNM Financial/Retirement Planning Workshop, March 6, 13, 20, and 27, 2000

UNM Seven Habits of Highly Effective People, March 10, 17, 24, 2000

UNM Mulberry Class, March 30, 2000

UNM Projects and Project Management, May 4, 2000

Kelvin Beliele

Member, English Graduate Student Association

Member, Graduate and Professional Student Association

Professional meetings and classes attended:

Elementary Latin, July 6-July 31, 1999

UNM Understanding the FRS Reports, August 3, 1999

UNM Corporate Time, August 5, 1999

Intermediate Latin, August 23, 1999-December 10, 1999

Introduction to Professional Study (English Literature), August 23, 1999-December 10, 1999

Readings in Latin, January 18-May 5, 2000

American Banned Book: James Baldwin, January 18-May 5, 2000

UNM Mulberry, March 30, 2000

UNM Civil Rights at Work At UNM, April 13, 2000

Mark Cattanach

Member, New Mexico Association of Museums

Member, Mountain Plains Museum Association

Professional meetings and classes attended:

Mountain Plains/New Mexico Museums Associations Joint Annual Meeting, Santa Fe, New Mexico

October 13-16, 1999

UNM Financial/Retirement Planning Workshop, May 2000

UNM Mulberry Class, June 8, 2000

UNM Introduction to PC's, January 2000

Beginning Microsoft Windows, January-February 2000

Beginning Microsoft Word for Office '97, February 2000

Intermediate Word for Office '97, March 2000

Beginning Microsoft Access ' 97, June 2000

Willoughby Associates, Ltd. SNAP! Database, May 4, 2000

Michael Certo

Member, Board Member of Albuquerque Contemporary Art Center [AC²]

Member, Albuquerque Arts Alliance

Member, Artists' Awards Committee for Magnifico Festival of the Arts

Professional activities:

Lecture to the Contemporary Art Society on the Annual Juried Graduate Student Exhibition, UAM

Moderator, Artists' Forum Program, UAM

Director, Volunteer Docent Program, UAM

Juror, New Era Art exhibition, Magnifico Art Space

Lecture on Collaboration in the Arts for Media Arts Department, UNM

Chief Curator, Albuquerque Contemporary Art Center (formerly ARC Gallery), Downtown Albuquerque

Curator, statewide Film and Video Show, ARC Gallery, [AC]²

Curator, Annual Juried Graduate Student Exhibition, University Art Museum, UNM

Kathryn A.Guscott

Professional meetings and classes attended:

Photographic Collections Management Workshop, The Society of American Archivists, Santa Fe, NM, February 4-5, 2000

History of Graphics I. Fall 1999

Nineteenth Century Photography, Fall 1999

Twentieth Century Photography, Spring 2000

Willoughby Associates, Ltd. SNAP! Database, May 4, 2000

History of Graphic Arts, Spring 2000

Teaching:

"The Proper Handling and Framing of Artwork," Non-silver Photography, April 2000 In-service workshop, Art Handling, Harwood Art Museum, Taos NM, May 2000

Kathleen Stewart Howe

Co-chair, Cultural Studies Committee, University of New Mexico

Member, Print Council of America

Member, American Association of Museums

Member, College Art Association

Member, Historians of Nineteenth-Century Art

Member, Society for Photographic Education

Professional meetings and classes attended:

Print Council Annual Meeting, Los Angeles, May 2000

Media Literacy Symposium, Taos, New Mexico, April 2000

Willoughby Associates, Ltd. SNAP! Database, May 4, 2000

Teaching:

Art History 419/519 History of Nineteenth-Century Photography, Fall Semester 1999, UNM Dept. of Art and Art History

Supervised independent study courses for one undergraduate (Fall Semester, 1999) and one graduate student (Summer Semester, 2000) through UNM Dept. of Art and Art History

Served on three MA Thesis committees and one PhD Dissertation committee

Professional activities:

Coordinator for Cultural Studies Colloquium Series

Juror, Vision 2000, a national photographic competition held by the Santa Fe Center for Visual Arts, February 2000

Advisor to Magnifco Jury "Why Albuquerque?" March 2000

Portfolio reviewer for College of Santa Fe, Monothon, January 2000

Research undertaken at the Newberry Library, Chicago, November 1999; private photographic collection, London, England, September, 1999; and Center for the Study of Political Graphics, Los Angeles, January 2000

Cindy Leyba

Professional meetings and classes attended:

Purchasing & Accounts Payable: Bookholder Training, Willoughby Associates, Ltd. SNAP! Database, May 4, 2000

Lee Savary

UAM Y2K Coordinator

Professional Meetings and Classes Attended:

Electronics Photography

Exhibition Designer and Manager, La Luz: Comtemporary Latino Art in the United States

Photoshop Workshop, Jan 26, 2000

Bonnie K. Verardo

Member, Public Art Program, City of Albuquerque, FUNd project

Member, New Mexico Association of Museums

Exhibiting Artist:

"Artist's Choice," Richard Levy Gallery, Albuquerque, NM. Dec. 1999

Professional activities:

Nina Bean Memorial Charity Art Exhibition/Sale, Fine Arts Gallery, State Fair, Albuquerque,

May 19-20, 2000

Photographic Collections Management Workshop, The Society of American Archivists, Santa Fe, NM.

February 4-5, 2000

Acting Registrar, National Hispanic Cultural Center of New Mexico. Visual Arts Department, independent contractor (total of 30-40 hours per month). November 1, 1999-present

Willoughby Associates, Ltd. SNAP! Database Training Session, May 4, 2000

Appendices

- A. Personnel: University Art Museum and Jonson Gallery
 B. Committees: University Art Museum and Jonson Gallery

Staff:

Tyler R. Anderson, Office Assistant
Linda Bahm, Associate Director
Kelvin Beliele, Administrative Assistant
Tiska Blankenship, Curator, Jonson Gallery
Mark Cattanach, Collection Manager
Michael Certo, Curator of Education and
Public Programs
Kathryn A. Guscott, Preparator
David M. Gutierrez, Museum Shop Manager
Kathleen S. Howe, Print/Photo Curator
Cindy L. Leyba, Curatorial Assistant,
Jonson Gallery
Lee Savary, Exhibitions Curator

Bonnie K. Verardo, Curator I

Peter S. Walch, Director

January 8, 1999 December 9, 1985 April 19, 1999 April 22, 1985-November 30, 1999 September 27, 1999

April 5, 1999 July 3, 1995 September 15, 1998 July 11, 1994

September 29, 1998 August 3, 1992 November 1, 1995 July 1, 1985

Work Study, Student, and Temporary Employees:

Linda K. Brown Lonnette Butler Joanne Carrubba Nanibah Chacon Kimberly Cleveland Scott B. Davis Heather Feeney Connie J. Fulwyler Carol Gilge Jason B. Jones Jenna Hinton Sneiina Iankova Amy Kennedy Jeff Leidner Jeffrey Lillie Sara Marion

Carol McCusker
Shannon N. Pritchard
Daniel Roybal
Cody Saxton
Naavah Schneider
Portia Sharp
Cynthia Shoemaker
Rachel Sussillo

October 20, 1998
June 5, 2000
June 5, 2000
March 8, 1999
August 20, 1999
July 7, 1998
August 23, 1999
June 16, 1997-May 19, 2000

September 2, 1997 August 28, 1998-December 17, 1999

June 1, 1999

July 19, 1999-July 23, 1999

January 30, 1999-December 17, 1999 June 14, 1999-August 20, 1999 February 3, 2000-May 19, 2000

1 Corumy 5, 2000-11111 15,

August 16, 1999

March 3, 1997-September 24,1999 June 1, 1999-December 17,1999 August 23, 1999-December 2,1999

February 8, 2000

March 13, 2000-May 19, 2000 May 22, 2000-July 11, 2000 August 2, 1999-September 20, 1999 January 18, 2000-February 16, 2000

University Art Museum Advisory Committee 1999-2000

Clinton Adams, Professor Emeritus, Art and Art History, Chair Peter Walch, Director, University Art Museums, Secretary Thomas A. Dodson, Dean, College of Fine Arts Roger L. Schuntz, Dean, School of Architecture and Planning Flora Clancy, Chair, Art and Art History Thomas F. Barrow, Professor, Art and Art History Van Deren Coke, Professor Emeritus, Art and Art History Joyce Szabo, Professor, Art and Art History Nancy Uscher, Acting Associate Provost, Academic Affairs Susan Mullins, University Auditor
Louise St. John, President, Friends of Art Sheilah Garcia, Community Representative

Jonson Gallery
Sub-Committee on Jonson Collections

Julie Weaks, University Budget Director Susan Mullins, University Auditor Joyce Szabo, Associate Professor, Department of Art and Art History

Ex-Officio Members

Peter Walch, Director, University Art Museum

Julie Weaks, Susan Mullins, and Joyce Szabo are the Standing Committee of the University Art Museum's Advisory Committee for the Jonson Collection.

Jonson Gallery Group

Penny Rembe Gail Doyel Martha Day

Volunteers: Jonson Gallery

Tiska Blankenship Marcelle Hackbardt Bill Kennedy David Matulka Danielle Miller Scott Nacke

Adjunct Curators: University Art Museum

Clinton Adams Thomas F. Barrow David Craven Christopher Mead O. J. Rothrock

COLLEGE OF ARTS AND SCIENCES

ANNUAL REPORT

July 1, 1999 - June 30, 2000

FRITZ ALLEN, INTERIM DEAN

COLLEGE OF ARTS AND SCIENCES

Annual Report, July 1, 1999 - June 30, 2000

TABLE OF CONTENTS

		Page
I.	Overview of Arts and Sciences, 1999-2000	1
II.	Administration	1
III.	Recent Major Developments in the	2
IV.	Affirmative Action	5
v.	Research and Scholarly Activities	5
VI.	Teaching	6
VII.	Special Projects and Functions	6
VIII.	Departmental Reports	17

The 1999-00 academic year in the College of Arts and Sciences saw slight decreases both in the head count of students enrolled and in student credit hours recorded, consistent with the trend of the past three years.

The ranks of the tenure-stream faculty in the College remained essentially unchanged as eighteen new tenure-track faculty were hired and fifteen resigned or retired. Funds were budgeted for the College in the Spring of 2000 to provide an average salary increase of 3.5% for faculty returning in 2000-01. Although all funds available to the College for 2000-01 exceed funds available in 1999-00, this increase is insufficient to support several aspects of the College's operations which remain seriously underfunded.

II. ADMINISTRATION

The College's administration in 1999-2000 changed compared to 1998-99. Michael R. Fischer, Dean, appointed Vera Norwood, Laura Crossey and Kenneth Frandsen as Associate Deans. Associate Deans of the College accepted individual responsibilities similar to those identified in annual reports covering the previous three years.

Associate Dean Laura Crossey assumed responsibility for the College's student advisement effort and for validation of curriculum changes and graduation requirements. She continued to serve as the College office's liaison with the College's Undergraduate Education Committee and with the College's Graduate Education Committee, and provide oversight of the various scholarly publications that the College supports. During 1999-00, she assumed responsibility for coordinating college-wide outcomes assessment.

Associate Dean Kenneth Frandsen continued to provide assistance and information concerning Affirmative Action and Equal Opportunity policies and data sources, liaison with

the Equal Opportunity and Faculty Contracts offices, and oversight of search and screening efforts in conjunction with the appointment of regular and temporary part-time faculty in the departments of the College and in the African-American Studies and Women Studies Programs. Also, he served as Interim Chair, Speech and Hearing Sciences Department.

Associate Dean Vera Norwood assumed responsibility for various aspects of College administration related to faculty, particularly oversight of the process by which files of individuals being considered for promotion and tenure are prepared, received and reviewed at the College level. She administered requests for sabbatical leaves, the allocation of College funds to support special faculty travel and the allocation of funds to support visiting lecturers and the expenses of professional publications. Also, she served as Area Coordinator for the College's participation in the University United Way Campaign.

III. RECENT MAJOR DEVELOPMENTS IN THE COLLEGE OF ARTS AND SCIENCES

A number of important changes impacted the College of Arts and Sciences in the 1999-2000 academic year. Among these the most important and far reaching is the departure of Dean Michael Fischer at the end of the academic year. Dean Fischer is now the Academic Vice President at Trinity University in San Antonio, Texas. This has resulted in the appointment of an Interim Dean to manage the College until a permanent replacement can be found. Fritz Allen, former chair of the Chemistry department has accepted the Interim appointment.

This year the college has new chairs in almost one third of the departments. We have been offering workshops to the new chairs on aspects of hiring faculty, dealing with tenure and promotion issues and student grievance and discipline procedures. These sessions have been

well attended and are helping to integrate the new chairs into the cadre of seasoned departmental administrators.

In 1999-00, the College of Arts and Sciences continued its emphasis on two major initiatives: improving undergraduate education and strengthening our contributions to K-12 education. In addition the College began an effort to plan for its future. To improve undergraduate education, strengthen our K-12 outreach and support the College planning program, we

- * Have made a 50% expansion of the programs of the Albuquerque Teacher's Institute
- Continued a new Excellence in Undergraduate Education fund to support innovative teaching, curricular development, outcomes assessment, and other educational contributions
- * Continued a new freshman seminar program featuring small classes taught by eminent senior instructors on central issues in particular disciplines, such as exploring the mysteries of the ancient world in anthropology
- * Offered a strong seminar series to high school faculty on Chivalry and the Arthurian Romance through the Medieval Studies Institute
- * Instituted a comprehensive planning effort within the College

Our participation in the public schools starts with individual faculty members working with K-12 students and sharing their expertise: setting up mathematics contests, staging chemistry shows, judging science fairs, discussing their scholarly interests with students of all ages. Our special college facilities-among them, the Museum of Southwestern Biology, the Maxwell Museum of Anthropology, the Geology Museum, the Physics and Astronomy campus observatory, the Charlie Morrisey Research Hall-regularly host visits from school children and other community groups. The Geology Museum, for example, is free, open to the public, and

includes exhibits on New Mexico's rocks, minerals, fossils, and geology. Department faculty, staff, and graduate students give guided tours and talks to classes.

In addition, numerous Arts and Sciences courses are required of education majors. These courses include our Natural Sciences Program, a three-semester sequence of courses in the physical sciences, life sciences, and environmental science especially conceived for prospective elementary and middle school teachers. Students in these courses learn science by doing it in experiments and projects that can in turn be taught to school children.

The Albuquerque Teachers' Institute is one of four national sites designed to improve secondary education and features seminars taught by Arts and Sciences faculty on topics chosen by APS teachers. The teachers targeted by the institute work in the six APS high schools with the highest dropout rate, along with their feeder middle schools. In addition to providing continuing professional development for teachers, the seminars focus on developing new curricular strategies for teachers to take back their classrooms. This year we have expanded this dynamic program with a 50% increase in seminar activity.

In a similar way to the Albuquerque Teachers Institute, the Medieval Studies program has been offering a series of six all-day seminars to the high school teaching community. These programs feature well known visiting scholars and UNM faculty presenting lectures on interesting topics from the middle ages. The lectures are followed up with teaching units and materials that make it easy to incorporate the day's materials into the classroom.

Dean Fischer appointed a committee to help in defining a plan for the optimum operation of the College in an environment with no growth resources. This group helped to define the values of the College and the aspects of departmental activity that should be rewarded. We

continue to ask the question of how to apply those ideas to assessing how the various elements of the College contribute to the College mission.

IV. AFFIRMATIVE ACTION

The College continued its efforts to increase the cultural and gender diversity among its faculty during the 1999-00 AY. Consistent with Regents' policy concerning diversification of search committee membership, several of the members of search committees were from ethnic groups currently underrepresented in the faculty and many of the search committee members were female.

Appointments resulting from conventional searches, conducted during AY 1999-00, added eighteen new tenure track faculty to the College of Arts and Sciences ranks for AY 2000-01. Of those appointed, nine are female, three are Hispanic, and two are Asian American. Of the fifteen separating tenure track faculty, none are female and three are members of protected groups.

During AY 1999-00, the College continued efforts to ensure equity within the faculty salary structure for members of underrepresented groups and to provide support to those faculty for the purpose of career development at the individual level. These efforts to nurture and develop faculty already at UNM will continue during AY 2000-01.

V. RESEARCH AND SCHOLARLY ACTIVITY

The scholarly and creative achievements of Arts and Sciences faculty that resulted in published works during 1999 are thoroughly documented in the annual volume of <u>Faculty Publications and Creative Works</u> issued by the Office of the Associate Provost for Research.

The level of activity both in grant expenditures and new grant awards increased significantly in AY 1999-00 compared to AY 1998-99 as detailed in Table 10.

VI. TEACHING

Summary data on various aspects of the College's teaching efforts are presented in Tables 5,6,7,8 and 9. Although classrooms with a better profile of capacities continue to be a requisite for improved efficiency of instructional delivery, the College's numerical productivity has declined only slightly, especially with respect to enrollments in courses offered during evening and weekend hours. This decline is particularly notable in view of only a slight decline in the total FTE budgeted faculty for AY 1999-00 compared to AY 1998-99, as detailed in Table 4. However, our analysis indicates that, in the context of student demand, the College instructional efforts are seriously understaffed, especially in the category, graduate teaching assistants.

VII. SPECIAL PROJECTS AND FUNCTIONS

Advisement and Record Center

Under the supervision of the Associate Dean for Student Academic Affairs, Laura Crossey, the College Advisement Center admits students to the College, advises them and monitors their academic performance (including placing students on probation or suspending them if necessary), and certifies them for graduation. During the report period, the Associate Dean was Laura Crossey. Six (one half-time) advisors conducted 14,619 personal advisement sessions and handled an approximately equal number of telephone inquiries.

The Center continued operation under modified hours (as in AY98-99): opening from 8:30 am until 4:30 pm Monday through Friday including lunch. Time from 8-8:30 am and

4:30-5 pm is utilized for processing, caseworking and phone contacts. In addition to seeing students on a walk-in basis, each advisor is responsible for a student caseload of 753. Advisors also assist with new admittees and transfer students on Saturdays and after hours. The Advisement Center offers appointments with individual advisors before 10 AM and after 3 PM. All Arts and Sciences athletes are required to make an appointment with an advisor in Arts and Sciences and report to athletic advisement to confirm that the appointment was kept.

In addition to routine matters, the Center handles all student petitions for waivers and the first steps in grievance procedures. Advisors are responsible for all pre-professional advisement.

The advisors continue to assist the Office of the Registrar with Project Progress: a computerized degree audit system. The Associate Dean and advisors met periodically with the Associate Registrar to clarify the rules and academic regulations in the College of Arts and Sciences to implement Progress for our College. The advisors continue to use computers to provide more consistent and efficient advising.

The advisors in Arts and Sciences continue to play a major role in Summer Freshman Orientation and are using trained group leaders to assist in advising students. Advisors meet with the undergraduate group leaders and observe their first sessions with incoming freshman to assure that needs are met within the given timeframe (two days, with limited time for academic advising). Freshman students are brought to Ortega Hall by group leaders on the afternoon of the first day for a presentation by A&S advisors. On the morning of registration, they return having already prepared a tentative schedule with the assistance of a group leader. Throughout the morning the students are brought to the Advisement Center where they

meet individually with the advisors, who use the computer to check on availability of courses and assist the student in actually registering for classes using I-TEL UNM. In this way we ensure successful registration for the student's first university schedule.

The Advisement Center office staff helps in the record keeping in advisement by computerizing all the changes in College Curriculum which have been approved and which will be added to the next university catalog.

One or more advisors and the Associate Dean participated in the following extramural or campuswide advising activities this year:

Welcome Back Days Senior Day New Faculty Orientation Evening and Weekend Orientation Advisement High School Visitation Day African American Student Day American Indian Student Day Pre-Dental Reception Spring Orientation for Freshman Transfer Day Star Scholar Reception American Indian Graduation Ceremony Advisors Networking Group Academic Retention Meeting American Indian Retention Meeting College Enrichment Program

This year the advisors made multiple trips to the following campuses for advisement:

Gallup
Santa Fe Community College
TVI-Albuquerque
TVI-Montoya
Los Alamos
Valencia
Taos

The advisement staff this year consisted of:

Laura Crossey, Associate Dean
Julie Fields, Receptionist
Julie Bustamante, Advisement Co-ordinator
Monique Denzler, Advisement Co-ordinator
Leonor Lucero, Advisor
Mary Lou Wilkerson, Advisor
Susanna Sprague, Advisor
Jan Wallentine, Advisor
Randa Gamal, Advisor

College of Arts and Sciences Curriculum

The College Curriculum Committee consists of six Faculty Undergraduate and Graduate Advisors covering the range of disciplinary areas within the College (Humanities, Social Sciences, Natural Sciences and Mathematics). The subcommittee reviews proposals for curricular modification prior to consideration by the Associate Dean or the College faculty (see procedures below).

College of Arts and Sciences Graduate Committee

Charge - The A&S Graduate Committee is responsible for maintaining and enhancing the quality of graduate education in the College. This includes activities related to curriculum change impacting the College, participating as necessary in periodic reviews of instructional programs, reviewing academic advisement procedures as necessary, and considering changes in administrative or academic regulations which affect graduate programs.

Membership - Each of the 20 academic departments in the College designates one faculty

98

representative (voting faculty as defined in the Faculty Handbook) to the A&S Graduate

Committee (see Table 2). In addition, three representatives from this Committee (representing

Humanities, Social Sciences and Sciences) serve jointly on the Faculty Senate Graduate

Committee. The Committee is chaired by Tom Niemczyk (Chemistry).

Activities Related to A&S Graduate Committee - The A&S Subcommittee on Curriculum comprises six appointed members (three members from the A&S Undergraduate and three from the A&S Graduate Committees). The Subcommittee acts on behalf of the College in curricular concerns as described above. The A&S Subcommittee on Students assists in handling appeals to the College in areas related to graduate student employment in the College. Other types of programmatic changes (e.g., Core Curriculum, College admission/graduation requirements) may be brought to the Committee for discussion/revision/recommendation on an as-needed basis. Members of the Graduate Committee are also called upon as necessary to assist in College selection committees related to graduate programs. Members serve as Departmental contacts when the College distributes information pertaining to graduate issues. The Committee assists in implementing administrative changes impacting graduate programs and graduate students.

College of Arts and Sciences Undergraduate Committee

Charge - The A&S Undergraduate Committee is responsible for maintaining and enhancing the quality of undergraduate education in the College. This includes activities related to curriculum change impacting the College, participating as necessary in periodic reviews of instructional programs, reviewing academic advisement procedures as necessary, and considering changes in administrative or academic regulations which affect undergraduate programs.

Membership - Each of the 20 academic departments in the College designates one faculty representative (voting faculty as defined in the Faculty Handbook) to the A&S Undergraduate Committee (see Table 2). The A&S Undergraduate Committee meets in conjunction with representatives from interdisciplinary degree-granting programs and staff academic advisors within the College. Visitors to the meetings are welcome, and may be called upon to speak to the group as necessary. The Subcommittee on Curriculum provides a brief report at each meeting.

Activities Related to A&S Undergraduate Committee - The A&S Subcommittee on Curriculum comprises six appointed members (three members from the A&S Undergraduate and three from the A&S Graduate Committees). The Subcommittee acts on behalf of the College in curricular concerns. Forms A (minor changes to existing courses) are handled by the Associate Dean for Student Academic Affairs in consultation with the Subcommittee on Curriculum as necessary. Both the Subcommittee on Curriculum and the Associate Dean for Student Academic Affairs approve Forms B (new courses). Forms C (degree/program changes) are handled in the same fashion, but brought to the entire A&S faculty when necessary. Forms D (new graduate degrees) are brought before the entire A&S Faculty after approval by the Subcommittee on Curriculum. Other types of programmatic changes (e.g., Core Curriculum, College admission/graduation requirements) may be brought to the Undergraduate Committee for discussion/revision/recommendation on an as-needed basis. Members of the Undergraduate Committee are also called upon as necessary to assist in College selection committees related to undergraduate programs. Members serve as Departmental contacts when the College distributes information pertaining to undergraduate issues. The Committee assists in

100

implementing administrative changes impacting undergraduate programs (e.g., automated degree audits, transfer articulation, and distance learning).

The Arts and Sciences Undergraduate Committee reviews requests from departments both within and outside the College for curricular degree changes that may impact one or more Arts and Sciences departments. The Committee also met with Kathleen Sena, Associate Registrar and staff from the Office of the Registrar to discuss implementation of Project Progress.

College of Arts and Sciences Curriculum Sub-committee

The Curriculum Sub-committee composed of Charlie Steen (Chair), Steve Huestis, Cliff Dahm, Brad Hall, Ed Fuge, approved 100 Forms A, 14 Forms B, and 6 Forms C. The Committee also approved one Form D to establish a Master of Science in Optical Science and Engineering.

College_Grant Initiatives

New Mexico Collaborative for Excellence in Teacher Preparation

UNM continues as a major partner in the New Mexico Collaborative for Excellence in Teacher Preparation (CETP). Funded by the National Science Foundation in 1997, CETP represents a major investment in the preparation of future K-12 teachers in New Mexico. Centered at New Mexico State University, the Collaborative fosters interactions among institutions of higher learning (UNM, NMSU, ENMU, WNMU, UNM-V, NMHU, NNMCC, Dine College) and their surrounding school districts. In addition, partners include LANL, SNL, UCAN Rural Systemic Initiative, NM-AMP, NM CHE, NM MESA, NM Department of

Education, and the New Mexico Partnership for Math and Science Education. The UNM CETP effort is centered in the College of Arts and Sciences, and is involved in all key components of the statewide collaborative, including

- * Reform of pre-service teacher curricula in the science and math areas, including integration of classroom teaching with field experiences (involving Master Teachers from APS).
- * Novice teacher support incorporating UNM faculty, Master Teachers, professional development opportunities, and material resource/loan programs.
- * Recruitment/retention of pre-service teachers through scholarships.

UNM/APS Teachers' Institute

The University of New Mexico was awarded an implementation grant for the Albuquerque Teachers' Institute (\$380,000 over three years from the DeWitt Wallace-Reader's Digest Fund). During the report period an additional \$200,000 was raised from private foundations and \$45,000 from the Federal Eisenhower Program through the Commission of Higher Education. The institute is being modelled after the highly successful Yale-New Haven Teachers' Institute in New Haven, Connecticut. In the Albuquerque Teachers' Institute, College of Arts and Sciences faculty create seminars of interest to public school teachers. To date, 73 Arts and Sciences teachers have taken seminars led by nine Arts and Sciences faculty and one from Architecture and Planning. During the seminars, the teachers are colleagues, rather than students, and are paid for their participation. The objectives of the seminars are continuing education in key content areas for teachers and the development of new curriculum units to be used in the public schools and shared with other teachers. Arts and Sciences is assisting with formulating a self-sustaining financial support plan for the Institute through development and legislative efforts.

Pursue Program

The National Aeronautics and Space Administration (NASA) has funded the University of New Mexico (UNM) and its collaborating higher education institutions, i.e., Highland University of New Mexico (NMHU); Albuquerque Technical Vocational Institute (ATVI); and Southwestern Indian Polytechnic Institute (SIPI), to build upon their NASA research to enhance the quality of the Mathematics, Science, Engineering, and Technology (MSET) undergraduate education. The goal of the PURSUE program is to strengthen the MSET baccalaureate degree-producing capacity of the University of New Mexico and its collaborating higher education institutions by building upon previous NASA funding. The project focuses on integrating cutting-edge science and technology concepts and practices into relevant areas of the undergraduate curriculum, including into introductory-level courses and laboratories for majors and non-majors. The project also increases participation by faculty and students in projects that both foster collaborative inquiry, and that promote broad and significant improvements to undergraduate teaching and learning, especially of the techniques and methodologies associated with the conduct of research.

Dean's List - College of Arts and Sciences Honor Roll

The criteria for inclusion on the Dean's List are a semester GPA of 3.75 or higher while enrolled for 12 or more credit hours with letter grades, and a cumulative GPA for UNM coursework of at least 3.25. In Fall 1999, 402 students achieved this honor; in Spring 2000 the number of students was 429. Students who met the criteria for inclusion on the Dean's List received a letter of appreciation and congratulations signed by Dean Fischer.

Summer Session

The 2000 Summer session allocation to the College was slightly less than that of 1999, as detailed in Table 12. Our support of unique summer programs - intensive language institutes, study abroad programs and field schools - continued.

Travel and Special College Funds

The College disbursed about \$21,060.09 to faculty in the College for travel expenses to supplement the support provided by departments. It also distributed \$11,872.49 to individual faculty to defray the costs of reprints of their scholarly work. In addition, the College provided \$3,399.50 to departments to support honoraria for guest speakers. A summary of these distributions appears in Tables 13 and 14.

Research Semester

The A&S Research Semester Program permits faculty selected on a competitive basis to be relieved of formal teaching responsibilities for one semester in order to pursue research activities. Faculty proposals are evaluated according to the applicant's prior research record, merits of the proposed research, and (in case of senior faculty awards) the proposed project's benefit for graduate students. The program was modified to provide one senior and two junior awards each semester, rather than two senior and one junior award. The modification represented the Dean's commitment to providing more research resources for junior faculty as they near their tenure decision date. This year senior awards went to Lawrence Strauss (Anthropology) in Fall 1999 and Krzysztof Galicki (Mathematics and Statistics) in Spring 2000. The junior award winners were Joseph Powell (Anthropology) and Aparna Huzurbazar

104

(Mathematics and Statistics) in Fall 1999 and Lonna Atkeson (Political Science) and Deborah Jenson (Foreign Languages and Literatures) in Spring 2000.

Development Efforts

In 1999-2000, the College of Arts and Sciences received gifts totaling \$1,842,005 in 1,636 transactions, confirming that an annual base of support of over \$1,000,000 is reasonable for the College. Responses to the solicitation included in the Spring 2000 issue of *Inside Arts and Sciences* totaled \$4,298.00. In any given year the total will vary as a result of planned gifts.

The Arts and Sciences Dean's Council is in the process of gearing up for major cultivations for the newly created Arts and Sciences Endowment which is needed to help support the efforts of our faculty and students in teaching and research. The Council now consists of

Connie Beimer
Diane Denish
Robert J. Eagan
Felice G. Gonzales
Robert M. Goodman
Allen Hartford
James Hinton
Eric D. (Rick) Johnson
Janeth Mattox
Doris Rhodes
Vangie Samora

Council meetings included a luncheon with Dr. Maggie Werner-Washburne, who discussed her Genomic research and what this research could mean in terms of economic development for the state.

VIII. DEPARTMENTAL REPORTS

Detailed reports on activities in the twenty departments comprising the College of Arts and Sciences are forwarded along with this College report.

CHAIRPERSONS AND INTERDEPARTMENTAL PROGRAM DIRECTORS, 1999-2000

AMERICAN STUDIES

Gabriel Melendez

ANTHROPOLOGY

Marta Weigle

BIOLOGY

Kathryn Vogel

CHEMISTRY

Fritz Allen

COMMUNICATION/JOURNALISM

Karen Foss

EARTH & PLANETARY SCIENCES

Les McFadden

ECONOMICS

David Brookshire

ENGLISH

Scott Sanders

FOREIGN LANG & LITERATURE

Walter Putnam

GEOGRAPHY

Paul Matthews

HISTORY

Richard Robbins

LINGUISTICS

Garland Bills

MATHEMATICS & STATISTICS

Ronald Schrader

PHILOSOPHY

Fred Schueler

PHYSICS & ASTRONOMY

John McIver

POLITICAL SCIENCE

Neil Mitchell

PSYCHOLOGY

Michael Dougher

SOCIOLOGY

Richard Coughlin

SPANISH & PORTUGUESE

John Lipski

SPEECH & HEARING SCIENCES

Ken Frandsen (Interim Chair)

ASIAN STUDIES (minor, major)

Ted Sturm

COMPARATIVE LITERATURE (minor,

major)

Diana Robin

ECONOMICS-PHILOSOPHY (major)

Russell Goodman

EUROPEAN STUDIES (minor, major)

Carolyn Woodward

ITALIAN STUDIES (minor)

Rachele Duke

MEDIEVAL STUDIES (minor)

Helen Damico

PEACE STUDIES (minor)

Ted Sturm

QUATERNARY STUDIES (minor)

Les McFadden

RUSSIAN STUDIES & EAST EUROPEAN

STUDIES (minor, major)

Natasha Kolchevska

BIOCHEMISTRY (major)
Beulah Woodfin

CRIMINOLOGY (minor, major)

Paul Steele, Lisa Broidy

Bert Useem

ENGLISH-PHILOSOPHY (major)

Barbara Hannan

LATIN AMERICAN STUDIES (Ph.D.)

Linda Hall

RELIGIOUS STUDIES (minor, major)

Andrew Burgess/Louis Hieb

SCIENCE, TECHNOLOGY & SOCIETY

(minor)

Ron Reichel

WOMEN STUDIES (minor)

Shane Phelan

SOCIAL WELFARE (minor)

Richard Coughlin

AFRICAN-AMERICAN STUDIES (minor,

major)

Shiame Okunor

TABLE 2

STANDING & SPECIAL COMMITTEES COLLEGE OF ARTS AND SCIENCES, 1999-2000

A&S Graduate Committee

Tom Niemczyk, Chemistry, (Chair) Beth Bailey, American Studies Patricia Crown, Anthropology Cliff Dahm, Biology Brad Hall. Communication & Journalism Maya Elrick, Earth & Planetary Sciences Kishore Gawande, Economics Gail Houston, English Natasha Kolchevska, Foreign Lang & Lit Brad Cullen, Geography Patricia Risso, History Garland Bills, Linguistics Alejandro Aceves, Mathematics & Statistics Sergio Tenenbaum, Philosophy John Matthews, Physics & Astronomy Joseph Stewart, Political Science Dick Harris, Psychology Richard Wood, Sociology Anthony Cardenas, Spanish & Portuguese Bopanna Ballachanda, Speech & Hearing Sciences

A&S Undergraduate Committee

Ruth Salvaggio, American Studies
Les Field, Anthropology
Gordon Johnson, Biology
Mark Ondrias, Chemistry
Mike McDevitt, Communication & Journalism
Steve Huestis, Earth & Planetary Sciences
Phil Ganderton, Economics
Mary Powers, English
Warren Smith, Foreign Lang & Lit
Jerry Williams, Geography

Charlie Steen, History
Melissa Axelrod, Linguistics
Vageli Coutsias, Mathematics & Statistics
John Taber, Philosophy
Daniel Finley, Physics & Astronomy
Ellen Grigsby, Political Science
Gordon Hodge, Psychology
Jane Hood, Sociology
Tey Diana Rebolledo, Spanish & Portuguese
Linda Bivins, Speech & Hearing Sciences

A&S Junior Faculty Promotion and Tenure Committee

John Geissman, E&PS (Chair)
Alejandro Aceves, Mathematics and Statistics
Alok Bohara, Economics
Melissa Bokovoy, History
Lorraine Deck, Chemistry
Bob Fiala, Sociology
John Gluck, Psychology
Mary Ann Nelson, Biology
Susan Rivera, Spanish and Portuguese
Richard Schaefer, Communication and Journalism
Sally Seidel, Physics and Astronomy
John Taber, Philosophy

A&S Senior Faculty Promotion and Tenure Committee

John Panitz, Physics & Astronomy (Chair)
Patricia Crown, Anthropology
David Farber, History
Steve Gangestad, Psychology
Barry Gaines, English
Frank Gilfeather, Mathematics and Statistics
David Ligon, Biology
Tey Diana Rebolledo, Spanish and Portuguese
Diana Robin, Foreign Languages and Literatures
Ruth Salvaggio, American Studies
Jan Schuetz, Communication and Journalism
Bert Useem, Sociology

110 TABLE 3

Changes in status of tenure-stream faculty in the College of Arts and Sciences: Decisions reached in AY 1998-99 to take effect in AY 1999-00.

Promotions to Full Professor

Hill, Kim	Promotion	Anthropology
Lamadrid, Enrique	Promotion	Spanish & Portuguese
Selverstone, Jane	Promotion	Earth & Planetary Sciences
Slaughter, Jane	Promotion	History
Smith, Gary	Promotion	Earth & Planetary Sciences
Yazawa, Mel	Promotion	History

Promotions to Associate Professor and Award of Tenure

Axelrod, Melissa	P/T	Linguistics
Berrens, Robert	P/T	Economics
Bieber, Judy	P/T	History
Chermak, Janie	P/T	Economics
Field, Les	P/T	Anthropology
Lopez, Kimberle	P/T	Spanish & Portuguese
Moy, Timothy	P/T	History
Paine, Charles	P/T	English
Patterson, Janet	P/T	Speech & Hearing Sciences
Warner, Sharon	P/T	English
Wilcox, Phyllis	P/T	Linguistics

Positive Third-Year Reviews

Brearly, Adrian	Earth & Planetary Sciences
Evans, Deborah	Chemistry
Fawcett, Peter	Earth & Planetary Sciences
Hutchison, Elizabeth	History
Li, Bai-Lian (Larry)	Biology
Oetzel, John	Communication & Journalism
Partin, Randall	Political Science
Schroeter, Katrin	Foreign Languages & Literatures
Sharp, Zachary	Earth & Planetary Sciences

i :

Positive Third-Year Reviews (Continued)

Shigekuni, Julie Tang, Akaysha English Psychology

1999-00 New Appointments

Ball, Durwood Bishop, Stephen Hanson, Timothy Kandath, Krishna McKnight, Kathryn Meyer, Grant

Meyer, Grant
Putkaradze, Vachtang
Ramirez, Catherine
Reyes, Barbara
Romano, Susan
Romero, Bazan
Roy, Mousumi
Schaffer, Barbara
Tesche, Carolyn
Thomson, Ian

Tierney, David Torres-Cacoullos, Rena

Watt, Richard Wohlert, Amy Wolf, Blair History

Foreign Lang & Lit
Mathematics & Statistics
Communication & Journalism
Spanish & Portuguese
Earth & Planetary Sciences
Mathematics & Statistics

English History English

American Studies

Earth & Planetary Sciences

Linguistics Psychology Philosophy Chemistry

Spanish & Portuguese

Chemistry

Speech & Hearing Sciences

Biology

Resignations/Retirements (effective 1999-00)

Eterline, Andrew Finn, Patrick Fischer, Michael Gallagher, Patrick Harris, Richard Johnson, Gordon Kern, Robert Kudo, Bert Lafree, Gary Lipski, John McPherson, David Owens, Louis Political Science

Speech & Hearing Sciences

English English Psychology Biology History

Earth & Planetary Sciences

Sociology

Spanish & Portuguese

English English

TABLE 3 (continued)

Resignations/Retirements (continued)

Papadopolous, E.P. Treat, James Zimmer, William Chemistry
American Studies
Mathematics & Statistics

TABLE 4
FTE BUDGETED FACULTY, 1999-00

Department	Regular Faculty	Residual Instruction	GAs/TAs
American Studies	6.00	.11	3.00
Anthropology	22.30	.11	7.25
Biology	30.59	.11	21.00
Chemistry	20.22	1.70	16.00
Communication/Journalism	14.67	1.67	3.50
Earth & Planetary Sciences	16.50	.11	6.50
Economics	14.92	.09	6.25
English	33.83	3.13	29.50
For Lang & Lit	11.50	.09	7.75
Geography	5.83	.09	1.50
History	21.92	.09	11.00
Linguistics	10.90	.09	2.00
Mathematics & Statistics	32.65	1.79	21.00
Philosophy	10.00	.09	3.50
Physics & Astronomy	27.67	.22	12.00
Political Science	18.50	.09	5.50
Psychology	22.00	.11	12.25
Sociology	16.72	.11	7.00
Spanish & Portuguese	13.50	.11	18.00
Speech/Hearing Sci	5.00	.09	1.00
Total	355.19	10.00	195.50

Data Source: College of Arts and Sciences Instructional Budget, 1999-00

TABLE 5

NUMBER OF STUDENTS ENROLLED COLLEGE OF ARTS AND SCIENCES

		% Inc. Over		% Inc. Over
Year	Semester I	Previous Year	Semester II	Previous Year
1990-91	4,252	6.7	4,393	4.2
1991-92	4,434	4.2	4,598	4.6
1992-93	4,720	6.4	4,813	4.6
1993-94	5,048	6.9	5,041	4.7
1994-95	4,564	-9.5	4,643	-7.8
1995-96	4,195	-8.08	4,166	-10.2
1996-97	4,056	-3.31	4,181	3.6
1997-98	4,129	1.79	4,132	-1.17
1998-99	4,112	-0.41	4,218	2.08
1999-00	4,019	-2.26	3,957	-6.18

Data Source: Arts and Sciences Registered Students Listing - 21 day report

TABLE 6

DEGREES AWARDED COLLEGE OF ARTS AND SCIENCES

	Bachelor's Degrees			I	Advanced Degrees			
	No.	% Inc. Over	Mas	ter's (a)	Do	ctor's	T	'otal
Year Inc.	Degree	Prev. Yr.	No.	% Inc.	No.	% Inc.	No.	%
1991	837	9.7	159	2.6	73	15.9	232	6.4
1992	856	2.3	226	42.1	74	1.4	300	29.3
1993	905	5.7	205	-9.3	75	1.4	280	-6.7
1994	1020	12.7	236	15.1	82	9.3	318	13.6
1995	1133	11.1	229	-2.5	85	3.7	314	-1.3
1996	1005	-11.2	275	20.1	96	10.6	371	18.2
1997	1193	18.7	224	-18.5	72	-25.0	296	-20.2
1998	1065	-10.7	222	-0.9	84	16.7	306	3.4
1999	1076	1.0	193	-13.1	96	14.3	289	-5.8
2000	1055	-2.4	206	6.7	88	-8.3	294	1.7
10 Year								
Change	218	26.0	47	29.6	25	39.7	72	33.0

Data Sources: Bachelors taken from A&S final graduation lists. Advanced degrees taken from Graduate Studies final graduation lists.

⁽a) These figures do not include Master of Arts in Teaching and Master of Education in Science degrees.

TABLE 7
DEGREES AWARDED BY DEPARTMENT*

	I	Bachelor	.'s	M	[aster's	3	Ι	Ooctora	l
Department			2000	1998	1999	2000	1998	1999	2000
_									
Af Am	-	-	1_	-	-	-	-	-	-
Am St	21	11	7	4	0	4	2	1	7
Anthro	53	35	52	19	13	17	6	10	9
Astroph	2	2	1	-	-	-	-	-	
Biochem	14	6	19	-	-	-	_	-	-
Biology	181	196	187	15	15	7	7	13	6
Chem	17	23	20	5	9	9	7	10	3
Comm.	65	63	69	12	15	6	-	2	7
Comp Lit	1	0	1	1	5	1	-	-	-
Crimin	97	87	86			-	-	-	-
Econ	31	1	39	6	0	6	8	0	2
Econ-Phil	1	1	1	-	-	-	-	-	-
English	111	115	98	17	13	18	5	13	7
Engl-Phil.	1	5	1	-	-	-	-	-	-
Geography	11	15	12	7	6	9	-	-	-
E & PS	12	16	15	11	6	4	3	5	2
History	68	61	69	6	5	13	4	7	11
Journ	64	77	62	-	-	-	-	-	-
Ling	2	2	5	1	5	5	1	-	2
Lt Am St	8	13	11	22	20	13	1	5	0
Math & Stat	. 16	20	16	9	14	13	3	8	1
FL&L	20	17	21	9	5	4	-	3	0
Phil	4	11	.5	4	6	4	2	1	3
Physics	5	4	11	5	11	9	13	6	7
Pol Sci	93	81	66	6	2	2	1	1	7
Psych	178	167	226	9	8	8	17	5	9
Rel St	7	5	4	-	-	-	-	-	-
Russian St.	1	_	-	-	-	-	-	-	-
Sgn Lng Int	10	5	8	-	_	-	-	-	-
Sociology	48	53	56	6	5	8	6	1	-
Sp & Port	57	48	59	12	12	11	5	5	5
Sp Hrg Sci	19	29	26	35	31	29	-	-	-
Other Prog	24	-	21	-	-	-	-	-	-
Total (3)	1252	1199	1275	222	212	206	84	104	88

- 1 Includes both Spanish and Romance Language Ph.D.s.
- 2 Bachelor's degrees granted with double majors are counted once in each department, so this total will not agree with Table 6.
- Includes summer, fall and spring graduates.

Data Sources: Bachelors from A&S final graduation lists. Advanced degrees from Graduate Studies final graduation lists.

TABLE 8

ACADEMIC PROBATIONS, SUSPENSIONS AND RELEASES

	1995-96	1996-97	1997-98	1998-99	1999-00
	<u>No. %</u>	<u>No. %</u>	<u>No. %</u>	No. %	<u>No. %</u>
Semester I					
On Probation	129 -8.51	141 9.30	150 6.38	149 .66	113 -24.16
Suspended	56 -6.66	40 -28.5	37 -7.5	42 13.5	54 28.57
Released	51 2.0	29 -43.1	40 37.9	56 40.0	50 -10.71
Semester II					
On Probation	111 -7.5	98 -11.7	103 5.10	110 6.79	75 -31.81
Suspended	51 -36.25	69 35.2	66 -4.34	78 18.1	61 -21.79
Released	54 -8.47	37 -31.4	57 54.05	62 8.77	46 -25.80

Number of Students Errolled in Arts and Sciences

Semester I, 1999-00 4019 Semester II, 1999-00 3957

TABLE 9

DEGREES GRANTED WITH HONORS*

Honors in General Studies

Summa Cum Laude	22
Magna Cum Laude	15
Cum Laude	5

Departmental Honors

American Studies	2
Anthropology	5
Biochemistry	7
Biology	12
Creative Writing	2
Earth & Planetary Sci	3
Economics	1
English	2
History	4
Latin American Studies	1
Philosophy	1
Political Science	4
Professional Writing	2
Psychology	7
Spanish	2
Initiated into Phi Beta Kappa	101
Initiated into Phi Kappa Phi	62

^{*}Requirements completed Summer 1999; Semester I, 1999-00; Semester II, 1999-00

TABLE 10

NEW RESEARCH AND TRAINING GRANTS, 1999-00 (tenure track and research faculty)

<u>Department</u>	<u>Dollars</u>	Number of <u>Faculty</u>	Number of Grants
A&S	\$ 561,618	4	3
Anthropology	172,748	7	7
Maxwell	28,703	2	3
OCA	445,630	2 3	10
Biology	8,236,839	49	72
Chemistry	1,760,749	12	21
Communication & Journ	178,307	3	4
Earth & Pl Sciences	819,749	17	21
IOM	483,057	6	5
Economics	168,564	5	5
English	7,500	1	5 2
FL&L	47,883	1	1
Geography	Ô	0	0
History	89,511	2	2
Linguistics	80,181	2	2 2
Mathematics & Stats.	902,417	14	16
Physics & Astronomy	16,862,065*	25	38
Political Science/IPP	1,535,855	6	12
Psychology	1,522,384	6	8
Sociology/ISR	1,991,400	10	23
Speech & Hearing	93,317	1	. 1
Total	\$35,988,477	175	256

^{*} LodeStar \$12 million - one time allocation.

TABLE 11

BUDGETED GAS/TAS, RESEARCH AND PROJECT ASSISTANTS, 1999-00

<u>Departments</u>	GAs & TAs	RAs & PAs
African-American Studies	1	0
American Studies	27	1
Anthropology	38	3
Arts & Sciences	0	1
Biology	48	44
CASAA	0	15
Chemistry	35	31
Communication/Journalism	36	4
Earth & Planetary Sciences	24	28
Economics	21	8
English	65	1
Foreign Lang & Lit	22	0
Geography	4	6
History	29	1
IOM	0	13
IPP	0	8
ISR	0	29
Linguistics	16	3
Mathematics & Statistics	47	12
NMHR	0	8
Philosophy	11	1
Physics & Astronomy	36	38
Political Science	188	1
Psychology	43	31
Sociology	40	0
Spanish & Portuguese	50	0
Speech & Hearing Sciences	2	1
Women Studies	9	0
Community Medicine	0	6
CHNE	0	1
HPCERC	0	1
EDAC	0	17
TOTAL	792	313

TABLE 12
SUMMER SESSION DATA, 1999 AND 2000

<u>Department</u>	Final 199 Allocation	•	Final 200 Allocation	0 Figures
American Studies	\$ 10,885	1.10	\$ 11,132	1.20
Anthropology	61,222	6.21	58,905	6.34
Biology	38,862	3.94	34,775	3.74
Chemistry	63,736	6.46	63,926	6.88
Communication/Journalism	44,529	4.52	40,365	4.34
Earth & Plan Sciences	30,918	3.14	28,993	3.12
Economics	30,960	3.14	29,075	3.13
English	82,993	8.42	78,749	8.47
Foreign Lang & Lit	9,770	0.99	11,770	1.27
Geography	13,470	1.37	9,585	1.03
History	38,195	3.87	32,310	3.48
Linguistics	19,640	1.99	17,734	1.91
Mathematics & Statistics	113,590	11.52	108,045	11.62
German	31,000	3.14	31,000	3,33
French	15,000	1.52	18,000	1.94
Philosophy	22,540	2.29	18,770	2.02
Physics & Astronomy	24,208	2.46	24,273	2.61
Political Science	30,525	3.10	24,170	2.60
Psychology	46,610	4.73	42,725	4.60
Sociology	39,396	4.00	36,485	3.92
Spanish & Portuguese	53,025	5.38	40,940	4.40
Speech & Hearing Sci	33,693	3.42	30,676	3.30
Women Studies	12,470	1.26	9,770	1.05
Afri-Amer Studies	16,259	1.65	17,600	1.89
International Programs	42,900	4.35	42,900	4.61
Contingency	23,905	2.42	30,000	3.23
Admin	28,687	2.91	30,000	3.23
Nat Science	7,000	0.71	7,000	0.75
TOTAL	\$985,988	100.00	\$929,673	100.00

TABLE 13

A&S TRAVEL DISBURSEMENTS, 1999-00

<u>Department</u>	General/Departmental Allocations	Special Request Allocations
American Studies	\$ 3,195.00	\$ 1,277.00
Anthropology	10,650.00	0
Biology	15,975.00	2,497.50
Chemistry	10,650.00	0
Communication & Journalism	8,520.00	1,620.00
Earth & Planetary Sci	5,325.00	0
Economics	9,585.00	132.00
English	19,170.00	3,172.00
Foreign Lang & Lit	5,325.00	1,997.07
Geography	2,000.00	0
History	12,780.00	800.00
Linguistics	5,325.00	1,269.00
Mathematics & Statistics	14,900.00	800.00
Philosophy	5,325.00	1,749.00
Physics & Astronomy	15,440.00	1,228.00
Political Science	13,845.00	400.00
Psychology	11,610.00	0
Sociology	9,585.00	1,739.27
Spanish & Portuguese	7,455.00	1,825.25
Speech & Hearing Sciences	2,130.00	554.00
Women Studies	1,750.00	0
TOTAL	\$190,540.00	\$ 21,060.09

ANNUAL REPORT OF THE DEPARTMENT OF AMERICAN STUDIES COLLEGE OF ARTS AND SCIENCE

July 1, 1999 to June 30, 2000 A. Gabriel Meléndez, Chair

The faculty in American Studies continues to operate as a committee-of-the-whole in setting policy for its undergraduate and graduate program. Professor A. Gabriel Meléndez's appointment as Interim Chair (1998-1999) was made permanent by the unanimous vote of the faculty and with the approval of Michael Fischer, the Dean of Arts and Sciences. During the 1999-2000 year Professor Beth Bailey served as Graduate Director and Professor Ruth Salvaggio served as Undergraduate Director.

I. Significant Developments

Of consequence with respect to personnel in the department, Professor Eric Porter, a specialist in African-American critical studies, completed the first full year of his appointment in American Studies. Bazán Romero, hired under the Minority Doctoral Student Program, finished requirements for his dissertation in the PhD program at Bowling Green State University and, thus, met the pre-requisite for being reassigned from Lecturer II to a tenure-track position in American Studies. Romero will assume the rank of Assistant Professor I in the fall of 2000. This past year American Studies launched a Media Technology Initiative to meet a critical need for media assisted instruction in its graduate and undergraduate curriculum. Organized by Professor Bailey, this effort met with initial success. Multimedia, video, computer and sound amplification equipment was purchased and installed in Mitchell Hall 120, a room designated as the American Studies media room. Unfortunately, much of the equipment was lost to theft within weeks of its installation.

A. Faculty Contributions

During the period covered by this review, the faculty in American Studies maintained a high level of professional activity at the national and international level. The reputation of American Studies as a first-rate graduate and undergraduate program rests primarily on the

strengths and contributions of its faculty. Summaries of the major accomplishments of the faculty follow:

Professor Beth Bailey's principal teaching assignment continues to be in Popular Culture. In the fall of 1999 she offered one of American Studies most popular undergraduate courses, "Television and American Culture." In the spring of 2000 she taught Am. St. 545 "Popular Culture, Theory and Method." This year Professor Bailey organized a new media initiative for American Studies which included supervision of a media lab and technical support for GAs and TAs. As the department's Graduate Director she was responsible for the supervision of our student instructors.

Professor Bailey's book, *Sex in the Heartland: Politics, Culture and the Sexual Revolution*, was published by Harvard University Press in 1999. Her short article "Sally Rand," also appeared in *American National Biography* (Oxford, 1999). Professor Bailey has several research publications in-progress.

In June, 1999 Professor Bailey delivered a series of 6 international talks at a like number of Japanese institutions, including the University of Tokyo. Also in 1999, Prof. Bailey was an invited presenter for a pre-convention workshop of the American Studies Association titled, "American Studies and the New Media," at which time she described her use of multimedia teaching approaches for other educators.

Professor Bailey is active in professional organizations in History and American Studies. She is on the advisory committee for the Japanese Association of American Studies Project and serves on the Board of Editors for the *Pacific Historical Review* and *American Studies*. This year Professor Bailey served on several university-wide committees. In the late spring the department received word that Professor Bailey was being named a 1999-2000 Regents' Lecturer in Arts and Sciences. Professor Bailey cochaired the Cultural Studies Program and is a board member on the University Press Committee and for the Feminist Research Institute. She is also a representative to the University Senate from the College of Arts and Sciences.

Professor A. Gabriel Meléndez's on-going teaching and research areas continue to be in Cultural Autobiography/Biography, Chicano/Latino Film Studies, Hispanic Southwest and Border Culture. He is co-editing *The Multicultural Southwest: A Contemporary Reader*, with Patricia Moore, Patrick Pynes and M. Jane Young, an anthology of readings being piloted in Am. St. 186, "Introduction to Southwest Studies." Professor Meléndez and his co-editors negotiated a contract with the University of Arizona to publish *The Multicultural Southwest*.

Professor Meléndez chairs (3) dissertation committees, co-chairs a third doctoral committee and is a committee member on 5 other dissertation committees. In the fall of 1999, he offered a graduate seminar, Am. St. 550.001, "The Politics of Cultural Identity in Southwest." In the spring of 2000 he offered Am. St. 508 "Cultural Autobiography."

Professor Meléndez had two chapter-length articles accepted for publication in scholarly publications. In addition, he has two other book projects in progress. One, a compilation, translation and annotation of a 1911 biography of Colorado State Senator, Casimiro Barela, is being prepared for publication by the *Recovering the U.S. Literary Heritage Project* at the University of Houston, the other is a collection of popular political poetry in New Mexico he is co-editing with Philip Gonzales in the Sociology Department.

This year Professor Meléndez served on several university-wide committees including the Provost's Committee on Southwest Studies, the Provost's Committee on Hispanic Professional Hiring and he chaired the Curriculum Sub-Committee of the Office of Graduate Studies' Senate Graduate Committee. He was re-appointed in 1999 to the faculty of the Bread Loaf School of English (Middlebury College) and taught at Bread Loaf's New Mexico campus in the summer. In the spring of 2000 he was invited to join the editorial board of *The Recovering the U.S. Literary Heritage Project* at the University of Houston.

Professor Vera Norwood's duties over the 1999-2000 academic year have been split between her appointment in American Studies and her post as Associate Dean in the

College of Arts and Sciences. She taught Am. St. 324/524 in the summer and Am. St. 285 in the fall. In the spring of 2000, Professor Norwood taught Am. St. 485, the capstone course for majors and minors in our program. Professor Norwood placed a chapter-length article, "Constructing Gender in Nature: Bird Society Through the Eyes of Florence Merriam Bailey and John Burroughs," in *Human Nature*, an anthology forthcoming from the University of New Mexico Press. She has been solicited to provide a chapter and a forward for two forthcoming book projects. This past year she organized two sessions for the annual meeting of the European American Association for American Studies and she was invited to lecture on gender and nature at Northern Arizona University in December. She was co-principal investigator on a Southwest Regional Humanities Center proposal that went forth to the NEH from UNM in the summer of 1999. Professor Norwood continues to be active in all aspects of the graduate and undergraduate curriculum. She is also a key member of the Arts and Science faculty and assists in major initiatives and programs for the College.

In his first year at UNM, Professor Eric Porter began the work of building African-American intellectual and cultural history, black cultural studies and popular music studies into the American Studies curriculum at the graduate and undergraduate level. Two of the four courses he offered this past year ("Racial Formation," 553 and "Politics of Popular Music," 540) qualify as graduate seminars and have helped the department to meet a continuing need for seminars in the program. Professor Porter also developed and taught "Jazz in American Culture," 343/543 and "African American Cultural Studies," 357/557. Student interest in all Professor Porter's offerings is high as reflected in solid enrollment numbers across the board. Professor Porter is scheduled to co-teach the proseminar for entering graduate students in the fall of 2000.

Professor Porter's article, "Dizzy Atmosphere': The Challenge of Bebop," appeared in the winter issue of *American Music*, a peer-reviewed journal known in the field of American popular culture and music studies. This year Professor Porter has given three

scholarly presentations at regional and national meetings in his field, including a paper he presented at the annual meeting of the American Studies Association in Quebec in October, 1999. Professor Porter's two additional presentations this year were given in support of the Cultural Studies Colloquium Series and the English Department's "Age of Aquarius Series," two well-advertised lecture series on the UNM campus. Professor Porter continues to make progress on his monograph, "Out of the Blue": African American Musicians and the Idea of Jazz, which is under review at the University of California Press. During the past academic year he has also prepared a second article for publication in a scholarly journal. Professor Porter extended the reach of his research by branching out into a new area of scholarship. He is in the preliminary stages of research for a second book on the subject of black popular science for which he received a RAC grant in October.

Professor Bazán Romero held the position of Lecturer II during the 1999-2000 academic year. In addition to completing his doctoral studies at Bowling Green State University in the Program in America Culture, Professor Romero collaborated with Dr. Randall Norris on "Pickers," a co-authored study of migrant labor in the Tennessee Valley. Professor Romero organized the Francisco "Kiko" Martinez Lecture for the University of New Mexico Law School and a lecture by José Angel Gutiérrez for the Center for Regional Studies Colloquia Series. Professor Romero served on the Graduate Fellowship Committee for the Office of Graduate Studies.

Professor Ruth Salvaggio continues to teach and research in the area of Gender and Cultural Studies. Professor Salvaggio was on sabbatical in the spring of 1999. Upon returning to the classroom in the fall she offered "Language and Representation," a graduate seminar and Am. St. 310/510 "The Essay and Culture." In the spring she taught a graduate seminar "Gender and Aesthetics." Professor Salvaggio chairs (7) PhD dissertation committees and co-chairs (2) in American Studies.

Professor Salvaggio's latest book, *The Sounds of Feminist Theory*, was published by the State University of New York Press in 1999. She has several research essays under

review at appropriate scholarly publications. She continues her work on a series of new essays for a collection she has tentatively titled *Desert Gardens: On Beauty, Culture and Gender*.

Professor Salvaggio served as the department's Undergraduate Advisor for the 1999-2000 year and will become Graduate Director in the fall. In addition, this past year she has served on tenure and promotion committees for General Honors and the Media Arts. She is a vital member of the Arts and Sciences faculty and contributes broadly to the mission and goals of American Studies and the University.

Professor James Treat co-taught American Studies 500, the pro-seminar in "American Culture Studies," along with Beth Bailey in the fall of 1999. In addition, he offered Am. St. 514, "Religion in American Life" and Am. St. 353/564 "Native American Essayists."

At the invitation of noted scholar, Vine Deloria, Professor Treat wrote the introduction to an edited volume of essays by Deloria. Treat's introduction, "An American Critique of Religion," appeared in *For This Land: Writings on Religion in American* published by Vine Deloria in 1999. In the fall of 1999, Professor Treat was invited to deliver a series of lectures in Taiwan. The series included talks to the Taiwan Institute of Theology and Culture, the Yu-Shan Theological College and Seminary and the Association of Christian Institutes for Social Concern in Asia.

Professor M. Jane Young is Regents' Lecturer in American Studies. Her on-going teaching and research areas continue to be Gender Studies, Ethnoastronomy, American Foodways and Rituals/Festivals in the Southwest. In the fall of 1999, Prof. Young offered a graduate seminar, Am. St. 515.001 "Theories and Methods in Folklore," and Am. St. 333/533.001 "Gender and Tradition." In the spring of 2000 she offered "American Folklore and Folklife, an undergraduate course and Am. St. 600.001 "Research Methods". Professor Young continues to chair a large number of dissertations, fifteen alone in American Studies, and she is a member on 8 more dissertation committees.

Professor Young had three chapter-length articles accepted or soon-to-be-published in scholarly publications. She is co-editing Songs From the Sky: Indigenous Astronomical and Cosmological Traditions of the World, which is slated for publication at the University of Maryland's Center for Archaeoastronomy in 2000. She is also researching three additional book projects and is co-editing The Multicultural Southwest: A Contemporary Reader with A. Gabriel Meléndez, Patrick Pynes and Patricia Moore. In October, Professor Young delivered a talk at the Annual Meeting of the American Folklore Society entitled, "'Puro Ollas': Anglo-American Influence on the Potters of Mata Ortiz, Northern Mexico." Professor Young was active this year as a consultant to an NEH/NSF funded project to create a portable planetarium show about Native American Sky Traditions and has been a consulting editor to Archaeoastronomy, the journal of the Center for Archaeoastronomy and to the University of Illinois Press.

B. Strength of the Curriculum

The curriculum of the Department of American Studies at the undergraduate and graduate level is academically sound and diverse. The scope of the Department's curriculum is readily seen in the following overview:

	Fall, 1999	Spring, 2000	Summer, 2000	Total
Undergraduate courses offere	d: 26	24	4	54
Graduate courses offered	12	10	0	22
Individual Problems*	14	22	11	47
Number of Students:	623	596	86	1,305
Student Credit Hours:	1,974	1,886	261	4,121

American Studies continues to enhance the visibility of its regular course offerings through cross-listing and other inter-departmental scheduling arrangements with other academic units on campus. In the 1999-2000 academic year American Studies maintained

^{*}Includes Undergraduate Problems, Individual Graduate Problems, Theses and Dissertation Hours.

cooperative course scheduling arrangements with African-American Studies, Chicano Studies, Engineering, English, Music, Native American Studies, Political Science and Women Studies.

In the spring of 2000, the Office of the Registrar reported that American Studies had 43 officially declared undergraduate majors[†]. The number of graduate students in the program stood at 64. In May, American Studies graduated the following six doctoral students from the program: Kristan Cockerill, "Words and Deeds Assessing Print Media Language Influences on Public Perceptions and Water Management;" Sarah Kotchian, "Converting to Spiritual Profits: CEO Faith and Corporate Environmentalism Performance;" Cara Mariana, "Abortion Narratives: Mapping the Terrain of a Collective Story;" Patrick Pynes, "Erosion, Extraction, Reciprocation: An Ethno/Environmental History of the Navajo Nation's Ponderosa Pine Forests;" and Yolanda Retter, "On the Side of the Angeles: Lesbian Activism in Los Angeles, 1970-1999." In addition, four American Studies students completed their degree requirements for the Master's and ten students graduated with the BA in American Studies.

American Studies continues to see growth in the number of undergraduate majors and minors, and, importantly, in an era of declining numbers of students seeking graduate admission, American Studies continues to attract a sizable pool of qualified applicants for the MA and PhD degrees. This year the department received 58 applications from students seeking admission to our graduate degree program. After rigorous examination 15 students were admitted to graduate study.

II. Significant Plans and Recommendations for the Future

The foremost and critical need in American Studies in the 2000-2001 academic year is to restore faculty size to 8 FTE. With the approval of the Dean of Arts and Sciences, the department will carry out a national search for a tenure-track faculty member to fill the appointment left vacant by Professor James Treat. We will seek to appoint a candidate with

[†] Source: Office of the Registrar Report for February 22, 2000. Minors are not included in the total above.

a specialty in Native American Studies as well as a wide-ranging interdisciplinary interests in comparative cultural studies at the Associate or Assistant level.

As a consequence of the Treat vacancy, American Studies worked with the chair of English, Scott Sanders during the summer of 2000 to conduct a "limited competitive search" for a Visiting Scholar in English and American Studies to teach the undergraduate and graduate courses left unstaffed with the departure of James Treat in American Studies and Louis Owens in English. This effort led to the appointment of Professor James Ruppert. A noted Native American scholar on leave from the University of Alaska at Fairbanks, Professor Ruppert will hold an appointment as Visiting Associate Professor in English and American Studies for the 2000-2001 academic year.

In the upcoming year American Studies will spend considerable energy addressing the problem of declining graduate admissions which is already full-blown in other graduate programs on campus. American Studies plans to increase its efforts to increase student applications to graduate study. Our efforts in this regard will be especially concerned with attracting and recruiting students who have been traditionally underrepresented in graduate study in Arts and Sciences. In the spring semester the department will also begin to plan and prepare for a review of its graduate program. This review is scheduled to be completed in the spring of 2002.

III. Appointments, Departures, etc.

James Treat (PhD), resigned from faculty, effective May 31, 2000

Bazán Romero (PhD), reassigned to Assistant Professor I, effective August 1, 2000

James Ruppert (PhD), appointed Visiting Associate Professor in English and American Studies, effective August 1, 2000.

DEPARTMENT OF ANTHROPOLOGY

COLLEGE OF ARTS & SCIENCES

UNIVERSITY OF NEW MEXICO

ANNUAL REPORT

July 1, 1999 - June 30, 2000

MARTA WEIGLE

CHAIR

Significant Developments during the Academic Year, 1999-2000

The major development of the 1999-2000 academic year was the award of a \$500,000 National Endowment for the Humanities Challenge Grant to establish and endow the Alfonso Ortiz Center for Intercultural Studies, a joint venture of the Department of Anthropology and the Maxwell Museum of Anthropology. Although the grant was \$250,000 less than the \$750,000 originally requested, the sum was the highest awarded nationally to the nine universities and institutions of higher education as challenges. It requires a match of \$1.5 million to be raised between January 1, 2000, and January 1, 2003.

On March 3, 2000, there was an AnthroMax planning session and celebratory reception to assess progress since the January 1999 strategic planning and to generate ideas for the Ortiz Center. Like the January sessions, this one was facilitated by consultants Kate Hildebrand and Ric Richardson. Also in attendance was Lawrence Walsh, newly hired UNM Foundation development specialist whose duties included participation in Ortiz Center fund raising.

Until a director was hired, direction of the Ortiz Center was in the hands of a committee composed of Professors Marta Weigle, Mari Lyn Salvador and Garth Bawden, Walsh, UNM Foundation major gifts officer Leslie Elgood, and College of Arts and Sciences Constituency Development Officer Eric Sedillos. In April 2000 they interviewed Dr. Beverly R. Singer (Department of American Studies doctorate, University of New Mexico, 1996) for the position of director. After completing her Native American programs work at the American Museum of Natural History and teaching at the Parsons School of Design, New School, in New York City, Singer began work as Director of the Ortiz Center on May 31, 2000.

Hiring matters remain of grave concern. Because there were to be no new positions, no hiring request was submitted for 1999-2000. After the NEH Challenge Grant award, a special request for the Native American position approved on May 7, 1999, was submitted to Dean Fischer. The hiring plan submitted to the Dean for 2000-01 requested three positions: (1) Two positions of equal importance: an assistant or associate level Native American anthropologist in any (sub)field and an associate level biological anthropologist; and (2) a cultural resource management anthropologist, likely an archaeologist.

Department integration continues to be facilitated by the work of the three Academic Committees:

The *Graduate Committee* headed by Graduate Director Patricia Crown devoted considerable time to nominating candidates for extra-departmental awards, primarily through OGS, and selecting recipients for departmental awards. As part of committee/department concern for graduate student professionalization, Professor Crown inaugurated a valuable course entitled "Teaching Anthropology," intended "to introduce Anthropology graduate students to three aspects of teaching: organizing a course, technology, and pedagogy." Significant committee time was also devoted to guidelines, policies, and procedures for assigning the all-too-inadequate monies for graduate/teaching/research assistantships. The second outcomes assessment was completed at the end of Professor Crown's commendable two-year term.

The *Undergraduate Committee* headed by Undergraduate Director Les Field continued to focus on the introductory department and subfield courses, especially Anth 101. Professor Robert Leonard pioneered the first UNM Internet class, Anth101, and Professor Kim Hill used computer technology in his 101 class in Fall 1999. Most successful was the issue-oriented 101 first taught in Spring 2000 by Professor Field. It was organized around food and hunger, and several undergraduate students curated small exhibits on related topics for display in Maxwell Museum of Anthropology. The committee

developed a rotation for the department honors course. Outcomes assessment was once again completed. When he returns from his sabbatical in 2000-01, Professor Field will resume his notable work as Undergraduate Director.

The *Instructional Resources Committee*, ably chaired by Professor Robert Leonard, continued to coordinate, oversee, and plan all matters related to the instructional use of computers, media (audio-visual, CD-ROM, renewable and permanent laboratory supplies, etc.), and space. Among its notable accomplishments was the establishment of a multimedia station in Anthropology Patio 106, now available to faculty and students working on Internet instruction and other research and teaching projects.

The Advisory Council, the Department's administrative committee, continued to consider personnel, policy, budget, and procedural matters. Refinements to the department's merit/productivity point system and new criteria for tenure and promotion, post-tenure review, and promotion-in-research-title were considered and adopted by the faculty in Spring 2000. The Department Chair, in consultation with the Advisory Council and other senior faculty, finalized handbooks for annual reviews, mid-probationary reviews, tenure and promotion reviews, post-tenure reviews, and promotion-in-research-title reviews.

From the beginning of her tenure, new Department Administrator Susan Pinter has admirably succeeded in revamping department administration and refurbishing space throughout the facilities, notably in the main office and the Annex. She and the Chair worked throughout the Fall and early Spring semesters on new procedures and a new publisher for the *Journal of Anthropological Research*, which is now fully under the Department's aegis rather than the College office's.

At noon on May 13, 2000, the Department of Anthropology convened its second annual convocation in Anthropology 163 with the subsequent reception held in Maxwell Museum of Anthropology. Thanks to tremendous work on the part of the staff and good faculty support, this was again a successful and memorable occasion.

The 2000 Summer Field School in Archaeological Research was headed by Associate Professor Ann Ramenofsky and headquartered at the James Young Ranch, UNM's research property between Bandelier National Monument and the Pueblo of Cochiti. Its excavation site was at San Marcos Pueblo on the western edge of the Galisteo Basin and purportedly the largest pueblo in the Southwest. The 33rd Annual Bioarcheological Field School, the fifth under the aegis of UNM, was led by Professor Jane Buikstra at the Center for American Archeology, Kampsville, Illinois, in the lower Illinois River Valley.

Assistant Professor Les Field received a Gunter Starkey Teaching Award for excellence from the College of Arts and Sciences. Two graduate students received university awards: an Office of Graduate Studies Graduate Dean's Dissertation Fellowship to Bobbi Hohmann and a Regents' Endowed Fellowship to Joseph Kinsella.

Significant Plans and Recommendations for the Near Future

The Department remains focused on hiring needs, especially an Alfonso Ortiz Native American position; better diversity among faculty and students; the integration and articulation of the four subfields; the development of undergraduate instruction, especially at the introductory level; facilitating laboratory instruction; and the summer field schools. Strong support for the Ortiz Center will continue.

Appointments

■Faculty

Assistant Professor Osbjorn Magnus Pearson, a biological anthropologist with a State University of New York, Stony Brook Ph.D., joined the faculty in August 1999.

■Staff

Susan Pinter was hired as Department Administrator on July 19, 1999.

Erika Gerety became a full-time (from .75) Administrator II effective January 29, 2000.

Separations

≖ Faculty		
None.		
■Staff		
None.	,	

. . ? 1

Sabbatical and Other Leaves

Associate Professors Ana Magdalena Hurtado and Carole Nagengast were on sabbatical leave for the 1999-2000 academic year. Assistant Professor Suzanne Oakdale was on maternity leave during the Fall 1999 semester. Assistant Professor Joseph Powell was on medical leave from the latter part of the Fall 1999 through the Spring 2000 semesters. Professor Robert Santley was on sabbatical leave during the Spring 2000 semester. Professor Hillard Kaplan was on leave without pay during the Spring 2000 semester.

Publications

There were neither Department nor staff publications during this time, but the faculty continued its good productivity. In the 1999 reporting period, eighteen different tenure-stream faculty members (among the twenty-five of twenty-eight returning biographical supplements) produced two books, one edited volume, one videodocumentary, and forty-five book chapters/journal articles.

The 1999 books, edited volumes, and videodocumentary follow:

Les Field, The Grimace of Macho Ratón: Artisans, Identity and Nation in Late Twentieth-Century Western Nicaragua, Duke University Press

Lawrence G. Straus, J. M. Léotard, and M. Otte, L'Abri du Pape, Université de Liège, Belgium

Jane E. Buikstra, ed., Never Anything So Solemn: The Bioarchaeology of the 19th- Century Burial Ground for Grafton, Illinois, Center for American Archeology, Kampsville, Illinois, Studies in Archeology and History

Sylvia Rodríguez, writer and senior producer, "'This Town is Not for Sale!': The 1994 Santa Fe Mayoral Election," 55-minute videodocumentary produced by KNME-TV as part of the Colores series

Outside Professional Activities

During the 1999 reporting period, among the twenty-five (of twenty-eight) reporting tenure-stream faculty members, fourteen gave one or more meeting papers and/or posters, two participated in one or more international symposia, and eight gave one or more invited lectures. Professor Jane B. Lancaster organized a symposium on "Life

History Theory, Parental Investment, and Child Development" for the Society for Cross-Cultural Research and one on "Evolutionary and Cross-Cultural Perspectives on Male Parental Investment" for the Society for Research in Child Development. Associate Professor Sylvia Rodríguez organized and served as discussant at two sessions, "Reconceptualizing Ethnic Relations in the Southwest" and "Tourism and Emerging Geographies of Identity," for the American Ethnological Society. Professor Mari Lyn Salvador chaired the program for the Council of Museum Anthropology at the American Anthropological Association. Professor Lawrence Straus organized and chaired a symposium on "Out of Africa in the Pleistocene" at the XV INQUA (International Union for Quaternary Research) Congress in Durban, South Africa. No staff members were professionally active outside the University.

Other reported faculty professional activities (excluding editorial boards and reviewing) off-campus include:

Bawden: Vice President for Programs, G. L. Bruno (Charitable) Foundation, Fresno, California

Buikstra: Member, Board of Directors, Ethics Committee, Committee to Review Application Standards,
American Board of Forensic Anthropologists; member, Reorganization Committee,
Paleopathology Association; President of Board of Directors and Acting Executive Director,
Center for American Archeology; member, Laboratory Committee of the Managing Committee,
Wiener Laboratory of the American School of Classical Studies, Athens; member, chair of
Human Sciences Committee and member of Integrated Review Committee, United States
Museum of Natural History

Crown: Selection Committee for the Excellence in Ceramic Research Award, Society for American Archaeology; chair-elect, Archaeology Division, American Anthropological Association; member, Archaeology Panel, National Endowment for the Humanities

Dinwoodie: Member, Nominating Committee, Society for Linguistic Anthropology

Field: Consultant for Esselen Nation of Costanoan Indians

Froehlich: Adjunct Curator of Paleontology, New Mexico Museum of Natural History and Science; member, Primate Specialist Group, I.U.C.N.

Hill: Advisor, Ache tribe of Paraguay; advisor, Fundacion Moises Bertoni, Paraguay

Kaplan: Consultant for Ministry of Education, Western Cape Province, South Africa; panelist, Scientific Review Committee, National Institute on Aging; panelist, Scientific Review Committee, National Institute on Child Health and Human Development

Lamphere: President, American Anthropological Association

Lancaster: Board of Directors, Society for the Study of Social Biology; member, Board of Directors, Publications Committee, Human Behavior and Evolution Society

- Ramenofsky: Member, Cultural Properties Review Board, Office of Cultural Affairs, State of New Mexico
- Rodríguez: Consultant, Taos Valley Acequia Association; member, Advisory Board, "A Qualitative Study of the Influence of Religious and Cultural Traditions of Hispanic Communities in Northern New Mexico and Southern Colorado on Decisions about Medical Genetics Services and Related Ethical Concerns," Regis University
- Salvador: Vice President, Council on Museum Anthropology
- Straus: President, Committee on Human Evolution and Paleoecology, Chair, Working Group on Archeology of the Pleistocene-Holocene Transition, member, Working Group on Isoptope Stages 3 & 2, International Union for Quaternary Research (INQUA); elected member, Commission on the Upper Paleolithic of Europe, member, Commission on History of Prehistory, International Union of Prehistoric Sciences (UISPP)

Outside Sponsored Research

- Total active awards for Anthropology, 1999-2000 (14): \$676,309
- Buikstra, Jane, and Gordon Rakita, National Science Foundation: Doctoral Dissertation Improvement, "Social Complexity, Organization, and Mortuary Ritual A, the Prehispanic Site of Paquime, Chihuahua, Mexico," \$8,022
- Crown, Patricia, National Endowment for the Humanities: "Becoming a Potter: Situated Learning in the Prehistoric American Southwest," \$130,000
- Crown, Patricia, and Marit Munson, National Science Foundation: Doctoral Dissertation Improvement, "Prehistoric Imagery and Ethnicity on the Pajarito Plateau, New Mexico," \$11,998
- Field, Les, Wenner-Gren Foundation: "The Abalone Zone: The Centrality of Abalone in California," \$18,000
- Field, Les, and Mariela Nuñez-Janes, American Educational Research Association:
 Doctoral Dissertation Improvement, "Education, Culture, and Ethnic Identity:
 Constructing Hispanic Ethnicity in Bilingual Education Classrooms," \$14,319
- Kaplan, Hillard, National Institute on Aging: "Evolutionary Approaches to the Biodemography of Aging," \$174,343

- Lamphere, Louise, and Tresa Thomas, Soros Foundation: Doctoral Dissertation Improvement, "The Impacts of Drugs and Militarization on Bisbee, Arizona," \$22,500
- Leonard, Robert, New Mexico Cultural Affairs Office: "Paleoenvironmental and Remote Sensing of Galeana, Chihuahua, Mexico," \$40,000
- Powell, Joseph, and Anne Weaver, Leakey (L.S.B.) Foundation: Doctoral Dissertation Improvement, "Cerebellar Volume in Pleistocene and Modern Humans," \$10,000
- Ramenofsky, Ann, Valley Improvement Association: "Comanche Springs Archaeological Project," \$21,400
- Rapaport, Lisa, National Institute of Mental Health: "Development of Golden Lion Tamarin Foraging Behavior," \$331,029
- Stone, Anne, National Science Foundation: "The Evolutionary History of the Genus Pan: A Molecular Investigation Using the Y Chromosome," \$15,242
- Straus, Lawrence, National Science Foundation: "Tardiglacial Human Adaptations in the Cantabrian Cordillera, Spain," \$100,284
- Straus, Lawrence, National Science Foundation: "Tardiglacial Human Adaptations in the Cantabrian Cordillera, Spain," \$10,500

Attachments

■Public Lectures

Journal of Anthropological Research Distinguished Lecture Series:

- William Douglass (University of Nevada at Reno), "In Search of Juan de Oñate: Confessions of a Crypto Essentialist," November 11, 1999
- William Longacre (University of Arizona), "Exploring Prehistoric Social and Political Organization in the American Southwest," February 24, 2000
- Frieda D. Butler Memorial Lecture (Master's student):
 - Michael Gurven, "From Subsistence to Sociality: The Role of Food Sharing among Hunter-Gatherers," November 22, 1999

Ruth E. Kennedy Memorial Lecture (Doctoral student):

Gordon Rakita, "Dead Reckoning: Ritual Behavior in Prehispanic Chihuahua, Mexico," May 10, 2000

New Mexico Folklore Scholar in Anthropology Lecture (Graduate student):

Sarah Horton, "Ritual and Return: Narratives of 'Home-coming' and Loss in the Santa Fe Fiesta." April 13, 2000

Conferences

Third Annual Graduate Student Symposium, sponsored by the Anthropology Graduate Student Union, UNM Student Union Building, March 3-4, 2000:

Keynote Address: Raymond Hames, "Sibling Set Characteristics and Fertility among a Traditional Society"

Papers by: Bettina Behrens, Cecil M. Lewis, Kenneth C. Nystrom, William A. Dodge, Rebecca H. Schwendler, Erik G. Ozolins, Wes Niewoehner, Heath A. Fire, Tanya M. Mueller, Karen Stocker, Garnett P. McMillan, Robert Walker, Lavinia M. Nicolae, E. Ann Carson, Joe Kinsella, John Y. Anderson, Darbi M. Gill, Belisa Gonzalez, Michelle Cristiani, Jodie Johnson, Christopher Larkin, Sarah Soliz, Michael Gurven, Calvin Blackwell, Tad McIlwraith, Seamus O'Sullivan, Wesley Allen-Arave, Jose Esteban Hernandez, Lisa O'Grady, Leslie Lopez, Alyssa Cymene Howe, Nancy J. Burke, Betsy Erbaugh, Christina Durán

Posters: Robert Walker, Charles Egeland, Bettina Behrens

■Bachelor of Arts Degrees Conferred

Forty-three B.A. degrees were awarded in 1999-00. (Those graduating with honors are indicated by an asterisk.)

Andrea Arellanes, Hanaa Benhalim, Melissa Brenner, Daniel Buffington, Kristi Catanach, Hector Collazo, Jessica Dalton, Anton Daughters, Anthony Diaz, Hannah Fernandez, *Renée Gokey, Ian Grocki, Jeffrey Grupp, Jodi Hedderig, Susan Henningsen, Kayla Hill, Orval Hinkle, Erica Huebner, May Hussain, *Suzanne Landon, *Mona Lester, Mary McLaughlin, Lovie Millican, James Moffitt, Mirtza Nuñez, Jonathan Nunnery, Cheri Parent, Irene Riley, Susannah Rodee, Juan Routon, Apryl Sandoval, Mary Schildt, Caroyl Scott, Emily Severson, David Sowar, Adam Sullins, William Taylor, Hilary Thaler, Sarah Tiberi, *Anna Tison, Edward Washer, Liza Yonker

■Bachelor of Science Degrees Conferred

Twenty-five B.S. degrees were awarded in 1999-00. (Those graduating with honors are indicated by an asterisk.)

Gurjeet Bajwa, *Daniel Barr, Isaiah Blake, Aaron Blecha, Joseph Boese, *Judy Brockman, Natasha Cochran, Kris Crawford, Erin Gonzales, Elizabeth Gwiazdowski, Garth Hayden, Reeves

144

Hoskie, Dave Justice, Erin Knox, George Krueger, Stephanie Lopez, Lisa Markworth, Dorothy Moore, Jo Mounger, Wendy Myers, Eric Nocerino, Debra Reschke, Damion Terrall, *Jessica Thompson, Lindsay Zanno

■Master of Arts Degrees Conferred

Sixteen M.A. degrees were awarded in 1999-00.

Veronica M. Arias, Silvia Clemares-Roca, Hannah M. Dodd, Cheryl K. Fogle, Susan M. Gallagher, C. Kathy Helton, Joseph M. Horton, Lars E. Kuelling, Katie J. Larsen, Cecil M. Lewis, Jr., Lavinia M. Nicolae, Robert P. Powers, Heather M. Richards, Kari L. Schleher, Sarah E. Soliz, Marianne R. Tyndall

■Master of Science Degrees Conferred

One M.S. degree (with distinction) was awarded in 1999-00.

*Tanva M. Mueller

■Doctor of Philosophy Degrees Conferred

Six Ph.D. degrees were awarded in 1999-00. (The one graduating with distinction is indicated by an asterisk.)

Aaron M. Allen, "Making Whiteness: Contested White Hegemony in Late Twentieth-Century Madison, Wisconsin" (Sylvia Rodríguez, Chair)

Thomas F. Carter, "Playing Hardball: Constructions of Cuban Identity" (Karl Schwerin, Chair)

Timothy D. Maxwell, "Looking for Adaptation: A Comparative and Engineering Analysis of Prehistoric Agricultural Technologies and Techniques in the Southwest (Robert Leonard, Chair)

- Wesley A. Niewoehner, "The Functional Anatomy of Late Pleistocene and Recent Human Carpometacarpal and Metacarpophalangeal Articulations" (Joseph Powell and Erik Trinkaus, Co-Chairs)
- *Ariane Oberling Pinson, "Foraging in Uncertain Times: The Effects of Risk on Subsistence Behavior during the Pleistocene-Holocene Transition in the Oregon Basin" (Ann Ramenofsky, Chair)
- Vincent H. Stefan, "Craniometric Variation and Biological Affinity of the Prehistoric Rapanui (Easter Islanders): Their Origin, Evolution, and Place in Polynesian Prehistory" (Joseph Powell, Chair)

■l etters of Academic Title

Affiliated Faculty

- Richard C. Chapman, Part-time Associate Professor of Anthropology; Acting Director, Office of Contract Archeology (Archaeology subfield and faculty voting rights; no presumption of tenure)
- Brian L. Foster, Professor of Anthropology; Provost and Vice President for Academic Affairs (no voting rights; tenured)
- Patrick F. Hogan, Part-time Assistant Professor of Anthropology; Associate Director, Office of Contract Archeology (no voting rights; no presumption of tenure)
- Bruce B. Huckell, Research Associate Professor of Anthropology; Senior Research Coordinator, Maxwell Museum of Anthropology (Archaeology subfield and faculty voting rights; no presumption of tenure)
- Beverly R. Singer, Part-time Assistant Professor of Anthropology; Director, Alfonso Ortiz Center for Intercultural Studies (no voting rights; no presumption of tenure)
- David E. Stuart, Part-time Professor of Anthropology; Associate Provost for Academic Affairs

Adjunct Faculty

- Adjunct Professors: Ines Arenas de Hurtado, Erik Trinkaus
- Adjunct Associate Professors: Christopher Boehm, Douglas K. Charles, Paula K. Ivey, Grace E. Kissling, David A. Phillips, Jr., Vernon Lee Scarborough
- Adjunct Assistant Professors: John A. Bock, Steven N. Byers, Anthony B. Falsetti, David Jefferson Froehlich, Charles E. Hilton, Karen L. Kramer, Christopher Musello, Nancy L. Nelson, Sharon T. Pochron, Willow Roberts Powers, Lisa Gail Rapaport, Richard M. Reycraft, Michael Robertson, Lynne Sebastian, William Troy Tucker, David C. Waynforth

Adjunct Research Associate: Lisa W. Huckell

JOURNAL OF ANTHROPOLOGICAL RESEARCH ANNUAL REPORT FOR 1999/00

In calendar year 1999 JAR received and reviewed 60 manuscripts, (and 42 in 2000 just through June).

We have a total of 1,213 subscribers,

Subscribers are in all 50 states, Washington DC, Puerto Rico, Guam, plus 42 foreign countries, (mostly libraries).

Printed 634pp. (Volume 55, nos. 1-4) in 1999: 17 articles, I preface and 92 book reviews.

Volume 56, no 1 and no. 2 are already published for 2000, with no. 3 being prepared for printer in summer. No. 4 is currently being filled. We are ahead of schedule, despite complete change in composition, printing, and distribution arrangements, now handled outside Albuquerque.

Editorial Board Members

Jane E. Buikstra, Louise Lamphere, Carole Nagengast, Robert Santley

Associate Editors:

John Comaroff (University of Chicago), Raymond DeMallie, (Indiana University), Jane Hill (University of Arizona), Mary Moran (Colgate University), Jeremy A. Sabloff (University of Pennsylvania), Bruce Smith (Smithsonian, National Museum of Natural History), Marc J. Swartz (University of California, San Diego), Stephen A. Tyler (Rice University).

Book Review Editors:

Ethnology and Linguistic Anthropology: Philip K. Bock Archaeology and Paleoanthropology: Lawrence G. Straus Physical and Biological Anthropology: Joseph Powell

Copy Editor: Patricia L. Nietfeld

Employees:

Business Manager: Margaret Colclough Manuscript Specialist: Mary Kay Day Book Review - Student Assistant: Hannah Dodd

Web Page - upgraded in 1999

The University of New Mexico Press represented JAR at the meetings of the Society of American Archaeologists and the American Anthropological Association. Dr. Straus represented JAR at the American Anthropological Association, Society for American Archaeology, Paleoanthropology Society, and Congresso de Arqueologia Peninsular meetings.

Outsourcing of composition, printing, binding, and distribution is saving the Journal of Anthropological Research c. 40% vis a vis UNM Printing Services.

Professional Composition: Anthropological Consulting and Editing, Albuquerque, New Mexico Printing and Binding: Thomson-Shore of Dexter, MI Distribution: Unit Packaging of Ann Arbor, MI

The Journal of Anthropological Research is the oldest (and one of very few) remaining University-published serial journals of anthropology in the USA. It is independent, not owned by a for-profit company nor by a professional society, and is one of very few journals in the world that published in all areas of anthropology. It has one of the largest circulation bases of any anthropological journal not owned by a professional society.

Subscription rates remain unchanged for 2000.

The budget from Arts and Science for 1999-2000 was \$53,739.00, we have collected, \$56,493.11 and have returned, \$2,754.11 to A&S, reprints, \$6,227.86, single-issues, \$992.75, subscriptions, \$49,272.50.

Lawrence G. Straus, Editor

RECEIVED

SEP 1 1 2000 4:22

COLLEGE OF ARTS & SCIENCES

MAXWELL MUSEUM OF ANTHROPOLOGY

ANNUAL REPORT
[July 1st 1999-June 30th 2000]

Garth Bawden Director

A. GENERAL

In terms of major initiatives the past year has experienced one of its most active years in recent times. On the most important infra-structural level, we completed the re-definition and consolidation of the museum's overall administrative structure, a process vital for effective operation and growth in the specific museum departments and programs. A number of initiatives that will have long-term effect on the ability of the museum to fulfill its mission of education and public service accompanied this vital consolidation at the center. First, the decade-long series of contributions of Dr. Frank Hibben to the Maxwell (already including many important research collection and archives, a moderate research endowment, and the gift of his home for future museum educational activities) moved a stage further with his gift of funds to build a new archaeological storage and research center adjacent to the existing museum. Second, late in 1999 the Maxwell Museum of Anthropology, in partnership with its sister department of Anthropology, was awarded a major NEH Challenge Grant to create a center for applied anthropology and research, the Alfonso Ortiz Center for Intercultural Studies. This center will stimulate the development of partnerships between community cultural specialists and university professionals to create practical applications for anthropology in the greater community, an initiative that has been recognized by the American Anthropology Association as a top priority for anthropology in this century. Third, the organizational restructure and programmatic revitalization of the newly acquired Office of Contract Archaeology (merged with the Maxwell Museum in February 1999) continued with growing success. The department has made great strides towards the twin goals set forth by the Dean of the College of Arts and Sciences at the outset of the new arrangement - financial viability and improved educational quality. Fourth, the re-organization of the Maxwell's Laboratory of Human Osteology, necessitated by the illness of its Curator, Joseph Powell, resulted in greater integration of the program with the mission of its partner the State Office of the Medical Investigator (OMI), an infusion of financial support from OMI, and expansion of forensic and educational activity. Finally, the long period of reorganization of the Museum Store was largely completed, resulting in a higher degree of managerial efficiency and financial health than has been the case for many years. The following sections describe these moves in somewhat greater detail and summarize the rest of the museum's progress during the past year.

B. HIBBEN CENTER

In mid 1999 Dr.Frank Hibben, Professor Emeritus and founding Director of the Maxwell Museum of Anthropology, pledged a sum of \$3-4, 000,000 to construct a center for the storage of the Maxwell Museum's archaeological storage and for the teaching of archaeology to UNM anthropology students. Following approval by the Regents an architect - Patrick McClernon (Albuquerque) - was selected in late 1999 and architectural planning commenced. At this juncture the design phase is complete and construction drawings are being developed. The actual construction phase is scheduled to begin this coming winter. The center will hold all storage, archival, and photographic facilities required for an archaeological facility together with teaching laboratories, graduate student space, and a large auditorium for class teaching and public programs. It will be connected to the existing museum by a sub-surface passageway. In addition, the Hibben Trust, the agency created to manage the benefactor's planned endowment

bequest, will have its executive office in the new building. The Center will transform our ability to care for our extensive and growing archaeological collections and to make them accessible for research and teaching.

C. THE ORTIZ CENTER FOR INTERCULTURAL STUDY

The Maxwell Museum of Anthropology and Department of Anthropology jointly submitted a Challenge Grant proposal for three million dollars to the National Endowment for the Humanities in early 1999. This grant was awarded in late 1999. The funds generated from this grant will provide for creation of an innovative center for anthropological research and its related programs. The Center is the first of its kind in the United States. Named after Dr. Alfonso Ortiz, long-term member of the UNM anthropology faculty and native of San Juan Pueblo, the center will provide support for professional UNM museum and department anthropologists to develop partnerships with community cultural leaders. Resulting programs will be based either at UNM or in local centers around the world as appropriate. These partnerships will generate valuable information on cultural and social issues and point the way to community/university programs that will be of practical benefit to the wider community. The Ortiz Center has the unprecedented potential to be an international leader in applied anthropology, responding to the growing social issues of the 21st century and exhortations of national professional anthropological organizations for greater social participation between the academy and its public constituency.

D. OFFICE OF CONTRACT ARCHAEOLOGY

The efforts, commenced in early 1999, to integrate the UNM Office of Contract Archaeology into the structure and educational mission of the Maxwell Museum of Anthropology, continued through the year with significant success. In addition to expanding employment and training opportunities for UNM students, we have developed two major initiatives with long-term implications in the educational area. First, the Museum created a partnership with the Albuquerque Academy to conduct an archaeological field excavation at a Bernalillo archaic residential site as part of the Academy's summer curriculum. Over 20 middle and high school students took this course which was supervised by the OCA director and anthropology senior graduate student, David Kilby, and used OCA and museum laboratory facilities and teaching galleries. In addition planning is now under way in concert with the Department of Anthropology to create an internship in Public Archaeology to train an appropriate graduate student in the practice and legal aspects of the sub-discipline. Thus there have been significant moves to integrate OCA more fully into both public and university educational missions of UNM.

On the organizational and business levels the OCA administrative and financial organizational structure is now fully integrated with the central Maxwell Museum administration. The museum accountant oversees financial procedures while the Museum Director oversees the overall development of the department. The impending retirement of the OCA director has brought Dr. Richard Chapman to the head of the department with accompanying major improvement in leadership and programmatic efficiency. The result of

these moves has been steady improvement in the department's ability to gain grants, heightened staff morale, and greatly improved administrative efficiency.

E. LABORATORY OF HUMAN OSTEOLOGY

In December Dr. Joseph Powell, Curator of Biological Anthropology, was forced to take indefinite leave of absence from his museum duties because of the need to treat a brain tumor. Deliberations between the Museum Director, the Chair of the Department of Anthropology and the Dean of the College of Arts and Sciences, resulted in the museum obtaining permission to hire a temporary (one year renewable) full-time Research Assistant Professor to assume the directorship of the museum's Laboratory of Human Osteology and to direct the Forensic Anthropology program, operated in conjunction with the state Office of the Medical Investigator (OMI). During the time between Dr. Powell leaving and the successful hire of a laboratory director in June 2000 the Museum Director assumed direct management responsibilities for the department. During this time he conducted conversations with Dr. Ross Zumwalt, Director of the OMI with the intention of strengthening the collaborative forensic program. This positive process resulted in the OMI contributing to the cost of the program, supporting the cost of sending forensic anthropology students to professional meetings, and including them in the formal case reviews and teaching sessions of the OMI in the UNM Medical School. In return the new laboratory director is committed to train OMI forensic fellows and to expand the laboratory's case recovery and identification coverage. In June 2000 Dr. Debra Komar a forensic anthropologist with field experience in Bosnia and Kosovo arrived at UNM to take over the laboratory directorship. She will also occasionally teach, furthering the close collaboration the teaching department that marks the history of this museum division. In general the potential of the museum's Laboratory of Human Osteology to instruct UNM students in classroom and applied forensic anthropology had been significantly increased by these moves.

F. MAXWELL MUSEUM STORE

The 4-year period of reorganization of the museum store was essentially completed during the past year. The final phase of re-structure included the elimination of all regular staff positions in the store together with the major salary pressures that they represented. The chief museum administrative officer, Ms. Peggy Esquibel, and the Museum Accountant, Ms. Judith Davis have assumed managerial and financial duties, helped by a group of part-time student employees. Largely due to the efforts of these two administrative officers the museum store's inventory content and control procedures and its financial controls have been completely changed to ensure a positive financial income while at the same time bringing the department into greater compliance with its public educational mission. The current year will show the benefits of this long and challenging process of restructure.

G. OTHER DEVELOPMENTS

1. Hires: The Maxwell has had singular success in making three excellent senior personnel hires during the past year. In June Dr. Beverly Singer, a social anthropologist with PhD degree from UNM, considerable experience working in New York City at the American Museum of Natural

History and the National Museum of the American Indian, arrived to direct the Ortiz Center of Intercultural Study. She is an internationally acknowledged specialist in ethnographic video and public museum education. In July Dr. Michael Lewis, an archaeologist with over 2 decades of field and museum experience assumed his position as archaeological curator. He has conducted extensive field research in the Arctic and Southwest and is eminently qualified to manage the Maxwell's collections during a period of planning preparatory to their move to the new Hibben Center. Finally, also in July, Dr. Debra Komar, began her tenure as Research Assistant Professor in charge of the Maxwell's Laboratory of Human Osteology and its Forensic Anthropology program. She holds the PhD degree from the University of Toronto and, prior to coming to UNM, has worked in the former Yugoslavia on war victim identification as well as on medicolegal cases in Canada. While the latter two scholars did not officially take on their duties until the beginning of the 2000-2001 year, their hires were completed well before the end of the reporting year, thus they are included in this section. In aggregate these three individuals will further enhance the Maxwell Museum's reputation as a leader in museum anthropological research and education.

- 2. Collections Organization and Data Base: We are in the process of creating a new computer database for the museum's collections. This project, partially funded by the US Army Corps of Engineers and the Maxwell Museum Association, will replace our ARGUS program with a more effective, more cost efficient system that is more easily maintained at UNM. The work is especially important given the upcoming transfer of the archaeology collections to the new Hibben Center and the need to have a complete inventory catalogue to use in this move. In addition Mr. Alan Shalette, head of the Maxwell's Clark Field Library, working with Dr. Lewis, Curator of Archaeology is preparing an inventory of the paper archives preparatory to the impending move. These curatorial projects should be completed in the current year.
- 3. While the regular gallery display program continues, one exhibit deserves special mention. This is the exhibit of traditional New Mexican woodcarving *Cuando Hablan los Santos*, which has been traveling for several years. The exhibit was transported to Madrid, Spain early this year where it will be displayed at the Museo de America. Museum staff worked with the office of the US Ambassador to Spain, Eduardo Romero, to conclude the agreement that sent the collection to Spain where it will at the same time enhance the reputation of the Maxwell and inform the Spanish public of the achievements of New Mexican traditional hispanic artists.

H. CHIEF FUTURE PLANS

- 1. Complete plans for building the Hibben Center and commence construction. This involves completion of the database project, creating a complete inventory of all collections to be moved, assessing and allowing for impact on the existing building and establishing a staging area for the affected collections in the existing space.
- 2. Plan and conduct major fund-raising for the matching portion of the NEH Grant that is supporting the Ortiz Center. This will be achieved in conjunction with an outside consultant and the UNM Foundation. Also prioritize and develop the initial programs.

- 3. Complete Office of Contract Archaeology restructure in collaboration with the College of Arts and Sciences and Human Resources. Continue to develop the educational and financial health of the department. Explore the possibility of expanding the pilot summer school program next year to other public and/or private schools.
- 4. Create a high quality web site to replace the existing site.
- 5. Develop an internal program to support the generation of grant proposals by museum personnel.

I. INSTRUCTION AND SPONSORED RESEARCH

Instruction

- 1. Anthropology 324. South American Archaeology (Bawden).
- 2. Anthropology 328. Near Eastern Archaeology (Bawden).
- 3. Anthropology 482/582. Geoarchaeology (Huckell).
- 4. Anthropology 373. Lithic Analysis (Huckell).
- 5. Anthropology 101. Introduction to Anthropology (Salvador and Field).
- 6. Anthropology 436. Expressive Culture (Salvador).
- 7. Museum personnel are cumulatively Chairing 12 Dissertation Committees and acting as committee members on 25 others.

Sponsored Research and Education

Archaeology

- 1. Geo-archaeological investigation and field research at the Rio Ranch Folsom Site. Funding from the National Geographic Society 1999-2000: \$12,000 (Huckell)
- 2. Excavations at the Galiana Site, Nuevo Cases Grandes, Chihuaha, Mexico. New Mexico Office of Cultural Affairs and Maxwell Museum 1999: \$32,000 (Leonard).
- 3. Continuing test investigations at the Boca Negra Folsom Folsom Site, Albuquerque. Maxwell Museum Hibben Research Endowment: \$2,500 (Huckell).
- 4. Archaeological Survey to evaluate Palaeoindian settlement on the West Mesa of Albuquerque. Funding from the New Mexico Office of Cultural Affairs, Historic Preservation Division 2000-2002: \$5,000 (Huckell).

- 5. The Ilo Project. Ongoing multi-institution archaeological project in southern Peru funded by Southern Peru Copper Corporation and Programa Contisuyu. Funds \$460,000 to date (Bawden).
- 6. Continued organization and analysis of the archaeological collections from Pottery Mound. Funded by Maxwell Museum Hibben Research Endowment: \$2,500 (Dorr, Huckell).
- 7. NAGPRA (Native American Graves Protection and Repatriation Act) Project: Continuing the Dialogue. Department of the Interior Grant 997-2000; \$127,000 (Dorr, Bawden)
- 8. Preparation for Publication of Folsom Monograph Illustrations. Maxwell Museum Association 1999-2000: \$2500 (Huckell).

Office of Contract Archaeology

- 1. PATHNET Fibre Optic Line. Burns and McDonnell: \$69,000.
- 2. Camel Tracks Survey. New Mexico National Guard: \$202,000.
- 3. Alamogordo Testing Supplement. US Army Corps of Engineers (USACE): \$27,000.
- 4. NM Route 44 Analysis/Reporting. Museum of New Mexico: \$56,000.
- 5. New Mexico Route 22 Analysis/Reporting Museum of New Mexico: \$50,000
- 6. New Mexico Route 117 Analysis/Reporting. Museum of New Mexico: \$12,000
- 7. Isleta Irrigation Drain Study. USACE: \$\$8,000
- 8. La Cienega Dam. USACE: \$66,000.
- 9. FEMA Survey, Los Alamos Fire. USACE: \$10,000.
- 10. Remediation of Site Damage at Laguna. US West: \$20,000.
- 11. Emergency Data Recovery, Trinidad Lake. USACE: \$4,000.
- 12. FEMA Monitoring, Los Alamos Fire. USACE: \$3,000.
- 13. Supplemental FEMA Monitoring. USACE: \$9,000.
- 14. Abiquiu Campground Expansion. USACE: \$9,000
- 15. US Route 550 Supplemental Reporting. NM State Highway and Transportation Dept: \$10,000.
- 16. PATHNET Testing and Monitoring. Burns and McDonnell: \$59,000.

1.1

- 17. PATHNET Reroute Survey. Burns and McDonnell: \$7,000.
- 18. US Route 380 Analysis/Reporting. NM State Highway and Transportation Dept: \$88,000.
- 19. NM Route 165 Right-of-Way Survey. Blue Earth Ecological: \$10,000.
- 20. Trinidad Lake Excavation/Analysis. USACE: \$75,000.

Ethnology

- 1. Two archival Grants to Prepare the John Collier Ethnological Photo Collections for transfer to the Maxwell Museum. Wenner Gren Foundation 1999-2001: \$25,000 (Collier, Bawden)
- 2. Azores Ethnoaesthetic Research Project. UNM RAC and LAII Grants 2000: \$7,800 (Salvador).
- 3. Acoma Pottery research and systematic collection project. Maxwell Museum Association 1999-2001: \$5,000 (Olsen, Salvador)

Human Osteology

1. Biological Variation in Early Human Remains from South America. Fundação de Amparo a Perquisa do Estado de Sao Paulo, Brazil 1999-2000: \$4,000 (Powell)

Other Sponsored Programs

- 1. National Endowment for the Humanities Challenge Grant to Establish the Alfonso Ortiz Center for Intercultural Study in Maxwell Museum of Anthropology and Department of Anthropology 1999-2002: \$750,000 (Bawden and Weigle)
- 2. Upgrade of museum's computerized archaeological catalogue: Army Corps of Engineers1999-2000: \$30,000 (Kneebone, Bawden).
- 3. Education Division APS K-12 Classroom Teaching Program. APS and Maxwell Museum Association 2000: \$5,000 (Cyman).

Public Educational Programs

Exhibits

- 1. State Fair Exhibit. September 1999.
- 2. Fiction Writers of New Mexico (Zimmerman Library). September 1999
- 3. Celebrate Thailand. October 1999.

- 4. Faces, Places, Sacred Spaces: Photography of Lee Marmon (Zimmerman Library). January 2000.
- 5. Anthropology 101 Teaching Exhibit. May 2000.
- 6. Cuando Hablan los Santos (Museo de America, Madrid, Spain). June 2000

Public Education

- 1. Over 350 classes in the Albuquerque Public School System.
- 2. Elderhostel teaching program in Maxwell Galleries.
- 3. Archaeology Fair organized by the New Mexico Office of Cultural Affairs. Albuquerque.

Public Programs

- 1. Continuing Ethnology Brown Bag Luncheon Series.
- 2. New Human Origins Ancestors Lecture Series.
- 3. New Ethnic Luncheon Program.
- 4. New Night Music at the Maxwell Series.
- 5. Continuing Monthly Ethnic Arts and Crafts Demonstration Series. Sponsored by City of Albuquerque Urban Enhancement Trust Funs \$7,200.

J. PERSONNEL APPOINTMENTS AND SEPARATIONS

Ap	poi	ntm	ents
		_	

Carol Anne Brannon:	Administrative Assistant II.	7.31.1999
Michael Lewis:	Curator III.	(7.17.2000)
Debra Komar	Research Assistant Professor	(8.01.2000)

Separations

Patricia Berry	Sales Representative	08.13.1999
Brenda Dorr	Curator III	08.16.1999
Amy Jameson	Store Manager	12.10.1999
Joseph Powell (leave)	Curator of Human Osteology	11.01.1999
Marian Rodee	Curator III	06.01.2000

K, PERSONNEL PROFESSIONAL ACTIVITIES AND PUBLICATIONS

Individual

G.Bawden (Director and Professor)

- 1. Book Review: Mummies and Mortuary Monuments: A Postprocessual Prehistory of Central Andean Social Organization. William Isbell. University of Texas Press. Current Anthropology 41 (1): 145-147.
- 2. The Symbolism of Late Moche Social Transformation. Invited Lecture. International Symposium: Moche Art and Political Representation in Ancient Peru. Center for Advanced Study in the Visual Arts, National Gallery of Art. Washington D.C.
- 3. Revisiting the Question of Collapse in the Moche Society of Northern Peru. Paper presented at 65th Annual Meeting of the Society for American Archaeology, Philadelphia.
- 4. Co-Director of the Ortiz Center for Intercultural Studies, University of New Mexico. October 1999.
- 5. Vice-President for Research Programs. The Bruno Charitable Foundation, Fresno California

J.M. Campbell (Research Professor)

1. Telecom Teacher for Point Barrow College, Alaska. Developed an innovative distance teaching college course on Arctic Anthropology, Spring 1999.

A. Carson (Research Assistant in Human Osteology)

- 1. "Skeletal Manifestations of Bear Scavenging." Journal of Forensic Sciences 45(1) 32-39.
- 2. A preliminary Analysis of the Relationship between Osteoarthritic Lesions and Crosssectional Geometry as a Determination of Activity Patterns Among the Prehistoric Agriculturalists of Arroyo Hondo Pueblo. Paper presented at the 69th Annual Meeting of the American Association of Physical Anthropologists.

R.Chapman (Acting Director, Office of Contract Archaeology & Research Associate Professor)

- 1. Prehistoric and Historic Use of Fort Stanton: The Sierra Blanca Airport Archaeological project. Office of Contract Archaeology, UNM.
- 2. Searching for Piros near the Old Socorro Mission: Phase IIB Excavation at 41EP2986 and the Phase III Monitoring Program. Office of Contract Archaeology, UNM.
- 3. Archaeological Survey of a Materials Storage Area in Cuba, New Mexico. Office of Contract Archaeology, UNM..

T.Cyman (Education Curator)

- 1. Attended American Association Museum Education Meetings, Bozeman, Montana.
- 2. Participant in Interpretive Planning Session hosted by the National Park Service to explore educational programs relating to the Petroglyph National Monument.

W.Doleman (Senior Archaeologist, Office of Contract Archaeology)

- 1. Treasurer, New Mexico Archaeological Council (2-year term).
- 2. Prehistoric and Historic Use of Fort Stanton Mesa: the Sierra Blanca Airport Archaeological Project. Office of Contract Archaeology Cultural Resource Management Report.
- 3. Impacts Assessment at Mesa del Sol: the 1999 Survey. Report submitted to State of New Mexico Land Office.
- 4. Synopsis of Archaeological Testing in the Vicinity of Mockingbird Gap Site, Socorro County, NM. Archaeology Southwest, March 2000.
- 5. Test Excavations Results and data Recovery Plan for Eight Prehistoric Archaeological Sites Along Highway US 380 East of San Antonio, New Mexico. Report 185-655C Office of Contract Archaeology, UNM.
- 6. 1998-1999 Class III Survey and Site Revisitation at Galisteo Reservoir, Santa Fe County, New Mexico. Report 185-634. Office of Contract Archaeology, UNM.

J. Elyea (Senior Archaeologist, Office of Contract Archaeology)

- 1. Black Mountain: A Class III Inventory of the NMARNG Training and Rifle Range area, Luna County, New Mexico. Office of Contract Archaeology, UNM.
- 2. Good Roswell Hunting: A Class III Inventory of the NMARNG WETS Area, Chaves County, New Mexico. Office of Contract Archaeology, UNM.

P. Esquibel (Museum Administrator)

1. Treasurer, Albuquerque Museum Council.

P. Gerow (Senior Archaeologist, Office of Contract Archaeology)

- 1. Ceramic Analysis. In Prehistoric and Historical Use of Fort Stanton Mesa: The Sierra Blanca Airport Archaeological Project. Office of Contract Archaeology, UNM. Cultural Resource Management Report.
- 2. Good Roswell Hunting: A Class III Inventory of the NMARNG WETS Area, Chaves County, New Mexico. Office of Contract Archaeology, UNM.

3. American Indian Livestock Operations on Tribal Lands in Arizona and New Mexico. In Livestock Management in the American Southwest: Ecology, Society, and Economics. Edited by R.Jemison and C.Raish, pp. 234-256. Amsterdam, Elsevier Press.

P.D.Harrison (Research Professor)

- 1. The Lords of Tikal: Rulers of an Ancient Maya City. Book Published by Thames and Hudson, London.
- 2. Executive Director of the Ahua Foundation, Albuquerque (Private Foundation for the Support of Maya Archaeology).

B. Huckell (Senior Research Coordinator and Research Associate Professor)

- 1. Promoted to Research Associate Professor, December 1999.
- 2. Seven Chapters in *Tonto Creek Archaeological Project: Archaeological Investigations along Tonto Creek*, Volume 1. Edited by J.Clark and J.Vint, pp. 161-200. *Anthropological Papers* 22. Center for Desert Archaeology, Tucson:

The Boatvard Site

Introduction to the Sycamore Creek Section.

The Sliver Site

The Middle-of -the- Road Site

Secondary and Tertiary Sites in the Sycamore Creek Section

Introduction to the Slate Creek Section

Secondary Sites in the Slate Creek Section

- 3. Book Review: Clovis Revisited: New Perspectives on Palaeoindian Adaptations from Blackwater Draw, New Mexico. Journal of Anthropological Research 56:351-252.
- 4. Co-organizer of a festschrift conference in honor of C.Vance Haynes. September 24-25, 1999 and presented a paper: Camps, Kills, and Caches: Reconstructing Clovis Lithic Technological Organization in the Western United States.
- 5. The Boca Negra Wash Folsom Site. Paper presented at 1999 Pecos Conference at Forestdale, Arizona.
- 6. Clovis in the Southwestern United States. Paper presented at the Clovis Conference, Santa Fe, January 2000.
- 7. Maize Agriculture and the Rise of Mixed Farming-Foraging Economies in Southeastern Arizona during the 2nd Millennium B.C. Paper presented at the 2000 Southwest Symposium, January 2000, Phoenix.
- 8. Folsom Point Production at the Rio Rancho Site, New Mexico. Paper presented at the 65th Annual Meeting of the Society for American Archaeology, Philadelphia.

9. Palaeoindians and Playas. Paper presented at the US Geological Survey-organized Paleoclimate and People Workshop. Albuquerque, June 2000.

K. Liden (Public Program Coordinator)

- 1. Board Member of the Heritage Council (City-sponsored group charged with developing programs celebrating Albuquerque multicultural heritage).
- 2. Board Member of Scandinavian Club of Albuquerque.

W.Potter (Osteological Assistant)

1. Evidence of Degenerative Disc Disease in Meroitic Nubians from Semna, South Sudan. Poster presented at the 69th Annual Meeting of the American Association of Physical Anthropologists.

J. Powell (Curator of Biological Anthropology and Assistant Professor).

- 1. Consultant for the Department of the Interior on the examination and analysis of the Kennewick Skeleton.
- 2. Craniofacial Morphology of the First Americans: Patterns and Process in the Peopling of the New World. Invited Chapter in the 1999 Yearbook of Physical Anthropology.
- 3. History, Population Structure, and Time: New Approaches for Understanding Biological Change in the Americas. Paper presented at the 69th Annual Meeting of the American Association of Physical Anthropologists.

M. Rhoads (Osteological Assistant)

1. Marquesan Intra-archipelago Cranial Variation. Paper presented at the 69th Annual Meeting of the American Association of Physical Anthropologists.

M.L.Salvador (Chief Curator and Professor)

- 1. Curator of exhibit Cuando Hablan los Santos, Museo de America, Madrid, Spain
- 2. Vice-President, Museum Anthropology Section, American Anthropological Association.

J. Schutt (Senior Archaeologist, Office of Contract Archaeology

- 1. Cultural Resources Inventory of Placitas Open Space: From the Northern Boundary to the MAPCO Pipeline. Report submitted to the Archaeological Historical Research Institute.
- 2. Historical Preservation Management Plan for Cultural resources in the Placitas Open Space. Management Report submitted to the Archaeological Historical Research Institute.

9. Palaeoindians and Playas. Paper presented at the US Geological Survey-organized Paleoclimate and People Workshop. Albuquerque, June 2000.

K. Liden (Public Program Coordinator)

- 1. Board Member of the Heritage Council (City-sponsored group charged with developing programs celebrating Albuquerque multicultural heritage).
- 2. Board Member of Scandinavian Club of Albuquerque.

W.Potter (Osteological Assistant)

1. Evidence of Degenerative Disc Disease in Meroitic Nubians from Semna, South Sudan. Poster presented at the 69th Annual Meeting of the American Association of Physical Anthropologists.

J. Powell (Curator of Biological Anthropology and Assistant Professor).

- 1. Consultant for the Department of the Interior on the examination and analysis of the Kennewick Skeleton.
- 2. Craniofacial Morphology of the First Americans: Patterns and Process in the Peopling of the New World. Invited Chapter in the 1999 Yearbook of Physical Anthropology.
- 3. History, Population Structure, and Time: New Approaches for Understanding Biological Change in the Americas. Paper presented at the 69th Annual Meeting of the American Association of Physical Anthropologists.

M. Rhoads (Osteological Assistant)

1. Marquesan Intra-archipelago Cranial Variation. Paper presented at the 69th Annual Meeting of the American Association of Physical Anthropologists.

M.L.Salvador (Chief Curator and Professor)

- 1. Curator of exhibit Cuando Hablan los Santos, Museo de America, Madrid, Spain
- 2. Vice-President, Museum Anthropology Section, American Anthropological Association.

J. Schutt (Senior Archaeologist, Office of Contract Archaeology

- 1. Cultural Resources Inventory of Placitas Open Space: From the Northern Boundary to the MAPCO Pipeline. Report submitted to the Archaeological Historical Research Institute.
- 2. Historical Preservation Management Plan for Cultural resources in the Placitas Open Space. Management Report submitted to the Archaeological Historical Research Institute.

V. Steffan (Research Assistant in Human Osteology)

1. Craniometric Variation and Homogeneity in Prehistoric / Protohistoric Rapa Nui (Easter Island) Populations. Paper presented at the 69 th Annual Meeting of the American association of Physical Anthropologists

Office of Contract Archaeology Published Reports

1. K.Brown

July 1999. Volume 4: Data Recovery Along the 1995 MAPCO Four Corners Pipeline: Artifact Analysis for Sites in the Jemez and Las Huertas Drainages, Sandoval County, New Mexico. OCO/UNM Report No. 185-547D

2. J.B.Vierra, J.R.Chapman and J Piper

July 1999. Searching for Piros Near the Old Sicorro Mission: Phase IIB Excavation at 41EP2986 and the Phase II/IIB Monitoring Program. OCA/UNM Report No. 185-549.

3. J. Elyea and P.Gerow

November 1999. Black Mountain: A Class III Inventory of the NMARNG Deming Training and Rifle Range Area, Luna County, New Mexico. OCA/UNM Report No. 185-629.

4. P. Gerow and J. Elyea

November 1999. Good Roswell Hunting: A Class III Inventory of the NMARNG WETS Area, Chaves County, New Mexico. OCA/UNM Report No. 185-629.

5. T.NcEnany

December 1999. An Archaeological Inspection of a Missile Impact Location on the Cibola National Forest Lands in Catron County, New Mexico. OCA/UNM Report No. 185-661A.

6. J. Elvea

January 2000. An Archaeological Survey of 15 Acres in Placitas, New Mexico. OCA/UNM Report No. OCA-058.

7. W.Doleman

February 2000. Impacts Assessment at Mesa del Sol: The 1999 Survey. OCA/UNM Report No. 185-641.

8. T.McEnany and R. Chapman

March 2000. Archaeological Report of a Materials Storage Area in Cuba, New Mexico. OCA/UNM Report No. OCA-059.

9. J.Schutt

April 2000. Open Burning and Open Detonation Area Fence Corridor Monitoring: Fort Wingate Depot Activity, Near Gallup, New Mexico. OCA/UNM Report No. 185-561.

10. T.NcEnany

June 2000. Archaeological Survey of the Proposed Vistas La Madera Subdivision, Sandoval County, New Mexico. OCA/UNM Report No. OCA-061.

ANNUAL REPORT of the DEPARTMENT of BIOLOGY



FY 1999–00 Annual Report by:

Kathryn G. Vogel, Chair Department of Biology The University of New Mexico

TABLE OF CONTENTS

STU	DENTS	1
	Undergraduate Program	1
	Biology Department Statistics	2
	Graduate Program	4
FAC	ULTY	5
	Faculty Hired in Fall 1999	5
	Faculty Hired in Spring 2000	5
	Faculty Recruited in 1999-00	5
	Mid-probationary Review	5
	On Leave during 1999-00	
	Retired during 1999-00	6
	Deceased	-
	Scholarly Publications	
	ponsored Research	6
	Prof. Molles Named to Potter Chair	7
MU	SEUM OF SOUTHWESTERN BIOLOGY	7
STA	FF	8
BUI	LDINGS	8
APP	ENDICES	
	L. Faculty List, Fall 1999-Spring 2000	
	B. Honor's Program	
	2. Masters and Ph.D. Degrees, Fall 1999–Summer 2000	
2	D. Annual Reports: Museum of Southwestern Biology & U.S. Geological Survey	
	A. MSB—Amphibians and Reptiles	
	B. MSB—Arthropods	
	C. MSB—Biological Materials	
	D. MSB—Birds	
	E. MSB—Fishes	
	F. MSB—Herbarium	
	G. MSB—Mammals	
	H. U.S. Geological Survey	
]	. Annual Report: Molecular Biology Facility	
I	,,,	
	I. Teaching	
	A. Graduate Education	1
	Masters degrees awarded	1

•	\sim	0
	h	×
Ł	u	u

-		2. Doctoral degrees awarded	2
		3. Graduate courses taught	3
		4. Service on graduate student committees	5
		5. Professional accomplishments of graduate students	7
	B.	Undergraduate Education—undergraduate courses taught	10
	C.	Teaching Awards	13
		Curriculum Development/Production of Teaching Materials	
	E.	Museum Curator, Advisor, Assistant Chair, EM Director, etc.	15
	F.		
II.	Pul	blications	19
	A.	Books Authored	19
	В.	Books Edited	
	C.	Chapters in Books, Major Synthetic Reviews	19
	D.	Articles in Refereed Journals	23
	E.	Book Reviews	29
		Articles, Non-scholarly Journals	
		Quasi-public Reports	
	H.	Abstracts (refereed or invited)	32
	I.	Abstracts (contributed)	
		Other	
III.		search Projects or Other Creative Work	
	A.	Grants	
		1. Submitted to all agencies	
		2. Awarded with 1999 start date	
		3. In force from previous years	
		Other 5	
IV.		ivities in Learned and Professional Societies	
		Invited and Plenary Talks §	
		Contributed Talks	
		Attendance at Professional Meetings	
		Service as Editor of Scholarly Journal	
		Service on Editorial Board of Scholarly Journal	
	F.	Service as Officer in Professional Organization	71
		Other	
V.		er Professionar Activities	
	A.	Colloquium Presentations	73
		Seminar Presentations	
		Testimony in a Scholarly Capacity	
	D.	Presentations to General Audiences	76
	E.	Service in a Scholarly Capacity	77

		F.	Pap	ers Refereed in Professional Journals	7
	VI.	No	n-te	aching University, College and Department Service	82
		A.	Syn	nposia, Workshops, Etc., Hosted	82
		В.	Dis	tinguished Visitors Hosted	83
		C.	Co	nmittee Service	85
			1.	Departmental committees	85
			2.	College/University committees	88
		D.	Otł	ner	89
	VII.	Ad	vanc	ed Study and New Scholastic Honors, Fellowships	91
	VIII.	Sat	bati	cals, Leaves of Absence, Summer Teaching Elsewhere, Travel	93
	IX.	Pul	olic S	Service	93
G.	Profess	siona	d and	1 Technical Support Staff	
H.	Ancilla	ry F	acul	у	
I.	Gradua	ation	Sur	vey, Retention Survey	
J.	All Co	urse	Offe	rings, Biology, FY 1999–00	
K.	Depart	men	tal S	eminar Series	
L.	Gradua	ate S	tude	nts and Faculty Advisors, Biology, FY 1999-00	
M.	Baseme	ent I	Remo	odel Proposal	
N.	Nihth .	Ann	ual F	Lesearch Day Program (in dept. copy only)	
O.	Depart	men	tal C	Graduation Program, May 2000 (in dept. copy only)	
P.	Depart	men	t Ph	oto and BSNM Newsletter (in dept. copy only)	

THE UNIVERSITY OF NEW MEXICO

DEPARTMENT OF BIOLOGY

FY 1999-2000

EXECUTIVE SUMMARY

STUDENTS

Undergraduate Program

The undergraduate program in the Department of Biology remains attractive to UNM students. In the 1999-00 academic year, the department generated 21,882 student credit hours, of which about 94% were in undergraduate courses. As shown on Table 1, the total student credit hours (SCH) in Biology has been remarkably steady for twenty years. Table 2 points out that these hours are spread quite equally between fall and spring semesters. The total number of undergraduate SCH in the College of Arts and Sciences in Fall 1999 was 135,657. Biology contributed 7.4% of these SCH.

The number of students who declared a major in Biology grew substantially a few years ago and is now holding steady (see Table 3). In Fall 1999, there were 1,120 undergraduate students who declared a major in Biology. The number of students graduating with bachelor's degrees in Biology continues high (Table 4), having risen more that 2.5-fold in the last 20 years. During the 1999/ 2000 academic year, there were 254 B.S. and B.A. degrees awarded. In an attempt to predict future enrollment pressures, we are following the number of students taking the core courses required of all majors (Table 5). There were 415 students enrolled in Genetics (Biol. 221) during the 99/00 year. The number of students in this fourth course of our core curriculum should be a good indicator of the number of students planning to complete a major in biology over the next 2-4 years. This figure suggests that strong demand for upper-division courses will continue over the next several years. Our academic assessment module consists of an exam given to students at the end of Biol. 221. It consists of 34 questions that test a broad range of content from all four of the core courses. In 1999-2000, this test was taken by 257 students. The average score was 19.5, with range from 9-31 (maximum possible = 34). This is the fourth year that this same exam has been administered. The average score rose significantly during the previous three years; this year was exactly the same as the year before. A more complete analysis of the testing this year has not been carried out yet.

Table 5 shows the number of students enrolled in the four core courses that each Biology major is required to complete. We urge students to take Biol. 121 and 122 in the first year and Biol. 219 and 221 the second year. For the current reporting period, 1,646 students were enrolled in the first two courses of our core series: 1,075 in Biol. 121 and 571 in Biol. 122. During the same period, 866 students were enrolled in the third and fourth courses of the series: 451 in 219 (Cell Biology) and 415 in 221 (Genetics). Over the last three years, there has been growth in the number of students taking the first two courses. However, the pattern showing that only about half of the students in the first course go on to the second course is long standing. We believe this reflects at least

172

two things. First, a number of students take Biol. 121 as their first college biology class in order to proceed to other programs on campus—particularly in Allied Health areas. These students are not interested in taking the next course of the series. Second, a large number of students do poorly in the first course and do not continue in the biology (or the university) curriculum. This latter hypothesis was confirmed in a study performed by advisors in the department, which is summarize below and further described in Appendix I.

Biology Department Statistics

Table 1: Total Student Credit Hours (SCH)

YEAR	SCH
1979–80	20,596
1989–90	17,527
1991–92	20,944
1993–94	22,135
1995–96	23,360
1997–98	21,627
1999–00	21,882

Table 2: Student Credit Hours by Semester And Undergraduate (UG) Vs. Graduate Student (G)

1998-99				1999-2	000		
Semester	UG	G	Total	Semester	UG	G	Total
Summer 98	594	97	691	Summer 99	745	72	817
Fall 98	10,026	783	10,809	Fall 99	10,094	641	10,735
Spring 99	9,007	809	9,816	Spring 00	9,707	623	10,330
	19,627	1,689	21,316		20,546	1,336	21,882
	92.17%	7.97%		•	93.9%	6.1%	

Table 3: Number of Students With a Declared Major in Biology

	Fall 1998	Fall 1999
Undergraduate:		
A&S	815	805
University College	266	304
Second Major	21	11
Graduate:	106	100
Total:	1,208	1,220

Table 4: Degrees Awarded in Biology (unofficial count obtained at May graduation)

	1979-80	1994-95	1998-99	1999-00
B.S.	88	156	220	230
B.A.	_	17	19	24
M.S.	n.d.	10	9	9
Ph.D.	n.d.	17	17	8

Table 5: Number of Students Registered in Undergraduate Core Courses For Biology
Majors

COURSES	1997-98	1998-99	1999-2000
121 & 122	1,428	1,520	1,646
219 & 221	855	799	866

174

Insights into the Retention and Persistence of Science Majors: An Example from the Biology Department at UNM. Presented by Carol Brandt, Amy Marion and Vickie Peck, in February 2000 at the New Mexico Higher Education Persistence/Retention Conference in Las Cruces.

Methods:

Of 744 students who took Biol. 121 in Fall 1997, a total of 621 completed the course. In this study the investigators randomly chose 30 students who received each grade in the course (A, B, C, D, F, W). They then looked at the student records of all 180 students as of Fall 1999, paying particular attention to H.S. record, ACT scores, and subsequent UNM academic record.

Results:

- Students who receive a D or F in Biol. 121 are failing all their classes at UNM, and do not
 persist. Most are on academic suspension.
- Students who had a H.S. GPA < 2.9 have a lower chance of passing Biol. 121. Is this H.S. grade inflation?! Note: UNM currently accepts students with a GPA of 2.25.
- Students who had taken only one lab science in H.S. had a lower chance of succeeding at Biol. 121. This suggests a lack of academic preparedness.
- Students who had not taken Math 121 (college algebra) or its equivalent have a lower chance of success of Biol. 121. Again, this refers to academic preparedness.

Analysis: An interesting observation from the departmental enrollment and graduation figures is that the number of SCH in Biology has held quite steady during a period when the number of declared majors and degrees awarded in Biology has more than doubled. Although it is very hard to separate cause and effect, I believe this change is consistent with the gradual transition of our department from one that was training large numbers of students for careers in the health sciences to one that is focused on educating career biologists. Correlated with this change is our need for more space, as faculty who were primarily teachers retire and faculty with strong involvement in research are hired. Evidence of this change also emerged from the survey of 175 students near graduation (Appendix I). More than 30% of these students had already participated in a Biology research project that was not part of their classroom experience and another 15% said they planned to participate in such a project during the next year. Finding the time and resources to allow nearly 50% of our students to participate in research while they are undergraduates is a huge undertaking for the faculty. The resources for this undertaking come almost entirely from outside the university (such as through funding for the REU and Neurospora Genome projects from the National Science Foundation and the MBRS program funded by NIH).

Graduate Program

According to Fall 1999 enrollment data, there were 100 graduate students in the Dept. of Biology. The names of 96 students active during 99/00 are listed in Appendix L. Graduate student credit hours accounted for only 6.1% of the total SCH for the year. During the year, nine students

completed M.S. degrees and eight Ph.D. degrees were awarded. A list of students completing degrees and the title of their thesis or dissertation is shown in Appendix C.

More and more, graduate studies is becoming the area of strength for the Dept. of Biology. One of the most tangible ways this can be expressed is in the report from the Chairman of the Graduate Student Selection Committee, Ric Charnov. He reports that there were about 90 applicants this year. About % of the people who received offers accepted and came to UNM. Most important, we attracted nearly every applicant who had been rated as "excellent" and received an offer, whereas no candidate rated as "marginal" received an offer. In total, 24 new graduate students were accepted into the program to begin in August 2000. One reason for this very large group is the start of a \$1.2 million NSF-funded program called IGERT: Freshwater graduate studies link fundamental science with applications through integration of ecology, hydrology and geochemistry in regions with contrasting climates. This program involves faculty from Depts. of Earth and Planetary Sciences as well as Biology and will be carried out as a joint program with the University of Alabama. Cliff Dahm is leader of the UNM subcontract.

FACULTY

During the Fall semester, we had 31 tenure-track faculty in the department; five of these people were on sabbatical. In the Spring semester, we had 32 tenure-track faculty, with three people still on sabbatical leave and two others absent for other reasons. One Lecturer was hired in the Spring, bringing the number of lecturers to three. Lists of faculty, visiting assistant professors and part-time instructors for each semester are in Appendix A. In addition, eight faculty in other UNM units have joint appointments in Biology, approximately 75 individuals have appointments as adjunct faculty (not on UNM payroll), and there are 35 individuals with appointments as Research Assistant, Associate or Full Professor. There are 11 emeritus faculty members. The data in this annual report is based primarily on activities of the tenure-track faculty.

Hired in Fall 1999:

• David Faguy, Assistant Professor

Hired in Spring 2000:

William Pockman, Assistant Professor

Recruited in 1999-2000:

- · Steven Poe-will begin Fall 2002;
- Blair Wolf—will begin Fall 2000;

Mid-Probationary Review:

Bai–Lian (Larry) Li

On Leave During 1999-2000:

James Brown—sabbatical Fall '99;

- Astrid Kodric-Brown—sabbatical Fall '99;
- Sam Loker—sabbatical '99-00;
- Diane Marshall—sabbatical '99-00;
- Bruce Milne—sabbatical '99-00;
- Fritz Taylor—on medical leave, Spring '00;
- Terry Yates—on leave to NSF, Washington, D.C., Spring '00;

Retired During 1999-00:

· Gordon Johnson, Professor

Deceased:

Marvin "Bud" Riedesel, Professor Emeritus, July 16, 2000

Scholarly Publications:

Three books with 1999 publication dates were authored by Biology faculty. These include *The Bats of the United States* by Harvey, Scott Altenbach and Best; *The Evolution of Avian Breeding Systems* by David Ligon; and *Ecology: Concepts and Applications*, by Manuel Molles. In addition, a book titled *Scaling in Biology* was edited by Jim Brown and West. A book titled *A Natural History of Rape: Biological Bases of Sexual Coercion*, by Randy Thornhill and Palmer, was published in Spring 2000; it received large amounts of publicity and media attention during the spring, mostly focused on the misperception that Thornhill was saying rape is acceptable because it has a biological basis in natural selection.

As reported in the 1999 biographical data, faculty members published 75 refereed articles in 1999 for an average of 2.5 publications per reporting faculty member (75/30). In fact, the 75 articles were published by only 22 individuals. The remarkable productivity of some individuals deserves special mention: James Brown and Randy Thornhill both published nine articles, Donald Duszynski published eight articles, and Rob Miller seven. The articles were published in such prestigious journals as *Ecology, Nature*, and *Proceeding of the National Academy of Sciences*. In addition, 24 review articles authored by members of the faculty were published in 1999.

Sponsored Research:

The Dept. of Biology is totally involved in research, most of which is supported by national funding agencies. During fiscal year 1999, the awards to Biology totaled more that \$8.2 million. These projects range from very large, collaborative endeavors (such as the Packard Foundation award, IGERT, the LTER, the LTER Network Office, and the NIH Hantavirus program) to individual efforts under the direction of one faculty member. The list appears in the Contract & Grant Awards Report, FY 99, and will not be repeated in this document.

One additional bit of data: during FY 1999, awards to the Dept. of Biology made up 23% of the total award dollars brought to the College of Arts and Sciences.

Professor Manuel C. Molles, Jr. Named to Potter Chair:

An endowment was established to honor Prof. Loren Potter at the time of his retirement in 1986. Potter was Chairman of the Dept. of Biology from 1958–1972. The funds for this endowment were generated primarily by selling two parcels of donated land, and thus it is known as the Ross–Brown Endowment. By terms of the endowment, the principle is allowed to grow (it now stands at \$237,000) while a certain amount is put into a spending account each year to be used by the recipient. The recipient is to be a faculty member in the Dept. of Biology who works in the area of Plant Ecology as it is broadly defined. Diane Marshall was holder of this endowment from 1991–1997. After a process to nominate and select the next recipient, Manuel Molles was named to this chair in 1999.

A ceremony to make this award to Molles was held in a filled Room 100 on October 28, 1999. At this time, Dr. Loren Potter was the special guest speaker, telling "Stories from the Potter Years." The ceremony concluded with Molles telling a story about how he began to incorporate trees into his riparian biologist's view of the world while falling into a river (you had to be there . . .). The event concluded with a reception in the greenhouse.

MUSEUM OF SOUTHWESTERN BIOLOGY

The remodeling process to convert the Old Bookstore into the new Museum of Southwestern Biology really did start this year! Although it is now years behind the schedule that was initially put forward, and significantly over budget, the building is taking shape and excitement is growing. All curators and collections managers are focused on the impending move of the collections, which is now projected for early 2001. Only Phase I of the project can be completed at this time. This means the collections will move before the necessary office space and working areas for people are completed. In order to acquire funds to complete some offices, it was necessary to agree that organizations displaced by the impending remodel of the Student Union Building would be allowed to occupy the Museum for two years.

Funds for completion of the Museum and remodeling of vacated space in the Biology building are not yet secured. In the absence of a private donor, we are now trying to get funds from the state legislature. During this year, the departmental Space Committee has generated a plan to remodel about 20,500 square feet in the basement of the building (Appendix M). This plan was endorsed by the A&S Science Chairs, who agreed to withdraw support from the never-funded plan to build a Science and Technology Building and put their support behind completion of the Museum, remodel of Biology, and remodel of Chemistry and Earth and Planetary Sciences. This plan has been endorsed by the Dean of A&S and is expected to have a high position on the list of Major Capital Projects to be presented to the legislature in 2001. The total cost of both projects for Biology is projected to be \$7 million.

STAFF

There are 80 professional and technical support staff members in the Dept. of Biology. Eleven are supported by departmental funds; the rest are supported by grants. The staff in our Main Office have been working under difficult and crowded conditions for many years. It could not be tolerated. A plan was carefully drawn and approved that would have incorporated the small conference room into the Main Office area; however, the remodel section of Physical Plant killed this plan by insisting that it must be done by a licensed contrctor (at high cost), but could not be done until the ceiling clean-out was finished (at some undetermined date in the future—see Buildings below). Therefore, an alternative plan was developed and initiated. In August 2000, the entire accounting group (Theresa, Lupe, Renee, Melissa and Peter) moved from the Main Office to a series of three rooms located below ground level, under Room 100. In order for this to happen, two Visiting Assistant Professor had to vacate one office and Nancy Davis, Systems Administrator, moved the servers and herself to the Main Office area. A third office was created by clearing out a storage area. The result is good and the rest of us stuck in the Main Office without any windows are jealous!

BUILDINGS

Castetter Hall. The main Biology building continues to show its age and construction weaknesses. The biggest repair this year was the project to remove and replace all of the cold and hot water pipes in the western ("new") wing of the building. This was necessary because of continuing leaks that would simply sprout at a new location once repaired. This task was complicated by the discovery of surprisingly high levels of lead in mixing boxes and in dust above the plenum. The decision was made to remove all ceiling tiles in areas where plumbing existed. Because of the potential hazard, this removal had to be done by contractors in haz/mat suits on a room-by-room basis after sealing the room with plastic. For months there were no ceiling tiles in this part of the building. We quickly discovered how much soundproofing is provided by such tiles—closing the door no longer afforded the possibility of a private conversation! The plumbers then went through to install new piping, and then again to remove the old pipes. Finally, the new ceiling tiles were installed. All in all, it made for a difficult and noisy Fall semester in the offices, labs and classrooms.

In addition to the plumbing project, Fall 1999 was complicated by efforts to install a back-up generator of sufficient power to provide alternative electricity to the entire building. This project had been conceived as a Y2K requirement, but for many reasons it was not possible to complete the project before the turn of the millenium. As the new wiring was installed and tested, the building suffered numerous power outages ranging from seconds to hours. There was a period when the Chairman and Departmental Administrator both kept flashlights on their desks (having discovered that it is very dark in windowless offices without electricity). One of the biggest issues with all of the power outages was the computers and ~70°F freezers. Because it can be damaging for these freezers to go off and come back on within a few seconds, we would always try to unplug the freezer before a scheduled power outage and be on hand to power it back up when power was back on. It was a team-building effort that we would have gladly done without. In fact, the new millennium came to Albuquerque without any of the disruptions that were foreseen. The building was quiet, the hospitals were quiet, the power continued, and everyone returned safely in January 2000.

Annex. Heating and cooling remained problems in the Annex. The heating unit exploded in the summer and was not replaced until the coldest days of winter. In summer 2000, the new swamp cooler was so inadequate that temperatures of 95°F were recorded in the organic lab.

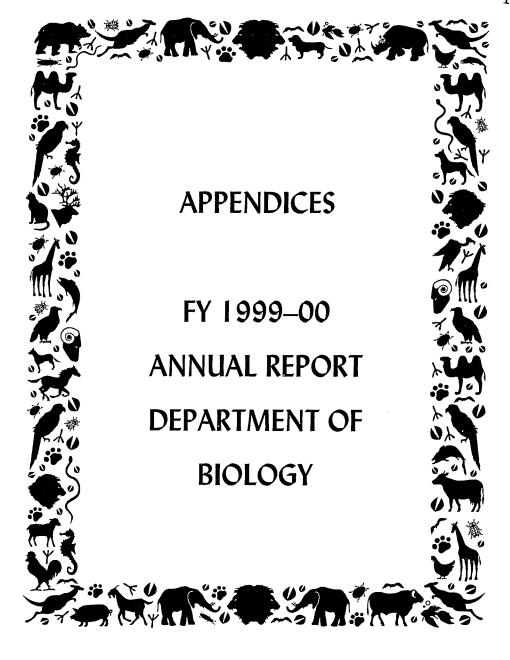
Marron Hall. Most graduate students and many research faculty and emeritus faculty have office space in Marron Hall. This venerable old building has many faults, but it plays a very important role in housing our growing department. Best of all for its residents—the offices have windows!

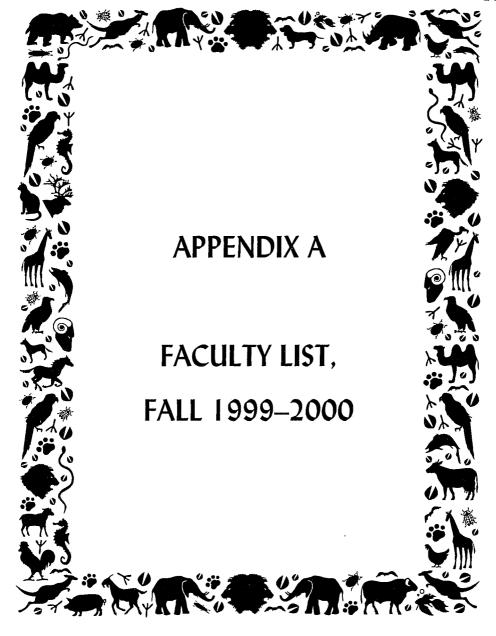
During the Spring, space on the west end of both floors of Marron Hall was remodeled as the new home of the New Mexico Natural Heritage Program. The move of this group from its South campus location to Main campus is expected to increase interactions with the department as well as oppportunities for students to work with NMNHP projects. The relationship between NMNHP and the Dept. of Biology remains somewhat loose. Although NMNHP is located at UNM and it runs its contracts through the Biology department, its core funding comes directly from the state legislature.

Kathryn G. Vogel, Chair

September 12, 2000

• 4:





Faculty list - Fail 1999

Scott Altenbach

Larry Barton

James Brown (sabb)

Eric Charnov Richard Cripps

Cliff Dahm

Donald Duszynski

David Faguy

James Gosz

Gordon Johnson

Astrid Kodric-Brown (sabb) Larry Li

David Ligon

Sam Loker (sabb)

Tim Lowrey

Diane Marshall (sabb)

Bruce Milne (sabb)

Rob Miller

Manuel Molles

Don Natvig

Mary Anne Nelson

Howard Snell

Steve Stricker

Fritz Taylor

Randy Thornhill

Eric Toolson

Tom Turner

Kathryn Vogel

Andreas Wagner

Maggie Werner-Washburne

Terry Yates

Instructors

Sandy Ligon

Lyle Berger (on leave)

Visiting Assistant Professor

Amy Marion (121)

Vicky Peck (121)

Ken Sylvester (428, 429)

Part-time Instructors

Lee Couch (239)

Jim Swan (237, 238)

Patty Wilbur (122)

Randy Thornhill Faculty list - Spring 2000 Eric Toolson Scott Altenbach Tom Turner Larry Barton Kathryn Vogel James Brown Andreas Wagner Eric Charnov Maggie Werner-Washburne Richard Cripps Terry Yates (on leave) Cliff Dahm Donald Duszynski Instructor/Lecturer David Faguy Lyle Berger James Gosz Bruce Hofkin Gordon Johnson Sandy Ligon Astrid Kodric-Brown Larry Li Visiting Assistant Professor David Ligon Vicky Peck (219, 425) Sam Loker (sabb) Ken Sylvester (221, 449) Tim Lowrey Diane Marshall (sabb) Part-time Instructors Bruce Milne (sabb) Lee Couch (239) Rob Miller Bill Kuipers (136)

Manuel Molles

David Lightfoot (475)

Don Natvig

Mary Anne Nelson Kelly Sullivan (360)

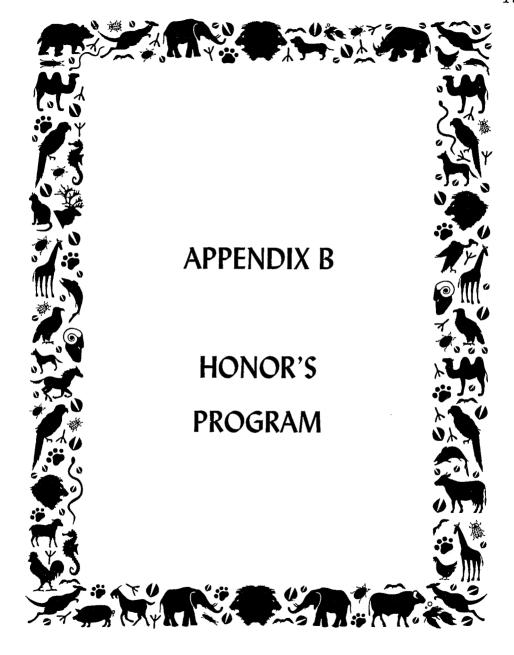
Jim Swan (237, 238)
Will Pockman

Howard Snell Patty Wilbur (123)

ioward Sneii

Steve Stricker

Fritz Taylor (on leave)



BIOLOGY DEPARTMENT HONORS PROGRAM, 1999-2000

Honors Program Advisor: Robert D. Miller, Associate Professor

During the 1999–2000 academic year, there were approximately twenty undergraduate Biology majors working on honors projects. The majority of these students worked with faculty or adjunct faculty mentors in the Biology Department, however, several students worked in the laboratories of faculty in the School of Medicine as well. One of the requirements for honors in the Biology Program is a public presentation, in oral or poster format, of the work performed while an Honors student.

Thirteen students were awarded honors at graduation during the past year and many of these students presented their work at the Biology Department's 2000 Annual Research Day. Some students presented their work at regional and national conferences, including the Annual Meeting of the American Association for the Advancement of Science.

Summa Cum Laude

Spring 2000:

NIKKI L. JERNIGAN

Thesis title: "Onset and Reversal of Hypoxia-Induced Vasoconstrictor Hyporeactivity Correlates with Heme Oxygenase Expression." Thesis Advisor: Dr. B. Walker

Magna Cum Laude

Spring 2000:

MARK W. HORNER

Thesis title: "A Molecular Phylogeny of *Pygoscelis* spp. and *Spheniscus* spp. Penguins Based on mtDNA *Cytochrome-b* Sequences. Thesis Advisor: Dr. G. Miller

CHRISTOPHER M. KERWIN

Thesis title: "Localization of Scleraxis mRNA Transcripts within the Developing Tendon and Skeletal Elements of Murine Limbs." Thesis Advisor: Dr. K, Vogel

CHARITY T. MELGAARD

Thesis title: "Food Web Elemental Stoichiometry in a Montane Stream." Thesis Advisor: Dr. C. Dahm.

Summer 2000:

DOMINIQUE ALÓ

Thesis title: "Patterns of Evolution of the Orangebelly Darter (*Etheostoma radiosum*)." Thesis Advisor: Dr. T. Turner

NIELS KLITGORD

Thesis title: "The Function and Regulation of Mef2 During Adult Drosophila Myogenesis."

Thesis Advisor: Dr. R. Cripps

Cum Laude

Spring 2000:

YVONNE M. BISHOP

Thesis title: "The Effect of Light and Iron Deficiency on Ferric Chelate Reductase Activity in Bean Leaves." Thesis Advisor: Dr. G. Johnson

LEANN A. CHAVEZ

Thesis title: "Molecular Basis of Pseudo Vitamin D-Deficiency Rickets (PDDR) in the Hannover Pig Model." Thesis Advisor: Dr. J. Omdahl.

CRISTAL R. ORTIZ

Thesis title: "The Effect of Prenatal Ethanol Exposure on Metabotropic Glutamate Receptor 5 (MgluR-5) Mediated Excitatory Amino Acid Release." Thesis Advisor: Dr. R. Cripps.

HEATHER L. SIMPSON

Thesis title: "Assessing the Development of Inbreeding in a Selection Experiment Using Wild Radish." Thesis Advisor: Dr. D. Marshall.

Fall 1999:

LETTIA LANSING

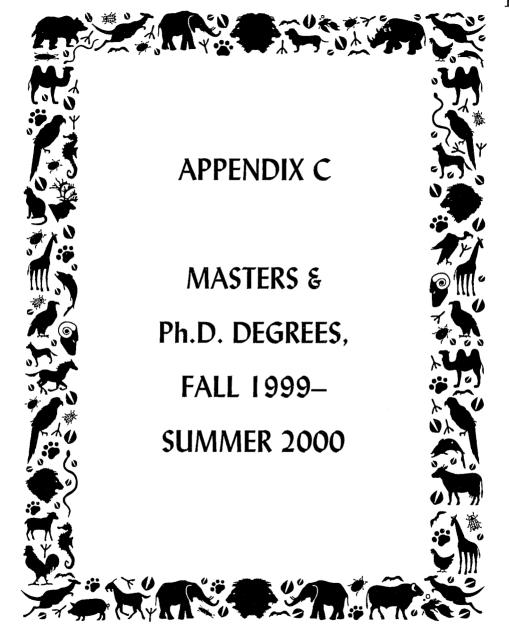
Thesis title: "Expression of Recombinant Rat Cytochrome P450C24 in E. coli." Thesis Advisor: Dr. J. Omdahl.

ELEANOR LISA LAVADIE

Thesis title: "Pseudo Vitamin D-Deficiency Rickets Expression of Wild-type Pig Cytochrome P450C1 and Mutant PDDR Clones in COS-7 Cells." Thesis Advisor: Dr. J. Omdahl

CHRISTY A. TARLETON

Thesis title: "Application of the Theory of Island Biogeography to Microarthropods on Cryptobiotic Crusts." Thesis Advisor: Dr. U. Shepherd



Master and Ph.D. Degrees Awarded in Biology F'99-Sum '2000

<u>Degree</u>	Thesis/Dissertation	<u>Major</u> Professor
<u>Fall 1999</u> MS I		A F GACOSOT
Barnes, William	Cottonwood Performance and the Role of Stream Flow in the Riparian Forests of the Middle Rio Grande.	Dahm, C/Molles, M.
Decker, Kimberly H.	The Endoparasites of <i>Dipodomys</i> and <i>Perognathus</i> species on the Sevilleta National Wildlife Refuge, 1989-1998.	Duszynski, D.
Earp, Andrea	The Role of abiotic factors in regulating nitrogen fixation by microbiotic crust from the Sevilleta Long Term Ecological Research site, New Mexico.	Johnson, G.
Grogan, Sterling	MS Plan II	Milne, B.
Skartvedt, Pete	Response of Woody Riparian Vegetation to the Release of Grazing Pressure in the Upper Mimbre Watershed, Southwestern New Mexico.	Molles, M.
Ph.D.		
Crawford, Matthew	Characterization of a Complex that Forms in Stationary-Phase Saccharomyces cerevisiae Containing the Regulatory Subunit of the cAMP-Dependent Protein Kinase.	Werner-Washburne, M
Salazar-Bravo, Jorge Antonio	Systamics and Biogeography of the Rodent Genus <i>Calomys</i> inferred from Mitochondial DNA Sequence Data.	Yates, T.

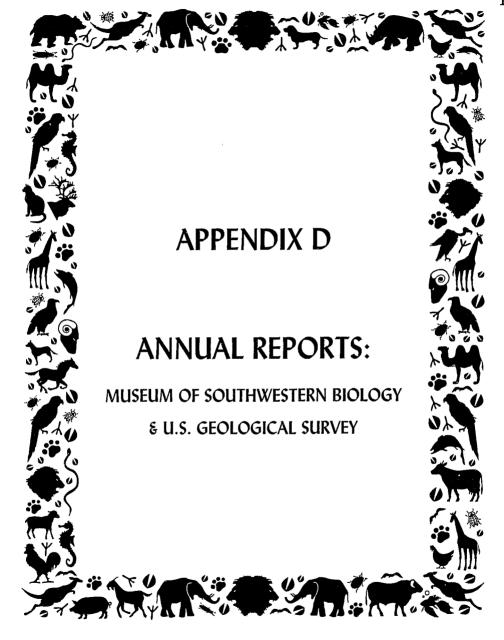
•	\mathbf{a}	
	u	л
	. 1	

Degree	Thesis/Dissertation	Major Professor
Taylor, Robert	Population, Community, and Biogeographic Ecology of Avian Species.	Brown, J.
Spring 2000 PhD		
Brown, Gary Stephen	Chemical Oxidation of Polycyclic Aromic Hydrocarbons.	Barton, L.
Summer 2000 MS I		
Earsom, Stephan Dean	Nesting Ecology of the Giant Tortoise (<i>Geochelone Vicina</i>) During the 1997-1998 El Nino.	Snell, H
Errett-Golden, Allison	Chararcterization of a Saccharomyces Cerevisiae Stationary-Phase Mutant, bcy 1- 100: Implications for cAMP Dependent Protein Kinase Function.	Werner-Washburne, M.
Garcia, Joslyn Melanie	Prehistoric and Historic Ecosystem Management of the Sevilleta Wildlife Refuge.	Gosz, J.
Ph.D		
Dolan, Patricia L.	From Genome to Proteome: High- Through Put Analysis of Expressed Genes in <i>Neurispora</i> <i>Crassa</i> .	Nelson, M.
Fellows, Christine Susan	Ecosystem Metabolism and Nitrate Retention in Headwater Streams: Influence of the Hyporheic Zone.	Dahm, C.
Perry, Travis William	Comunity Ecology of the Neotropical Canopy Fruit Bat Guild, Specifically Morphological Character Displacement and Macroecology of New World Bats.	Yates, T.

Tull, Debra Sue

Drilling and Crushing Frequencies in Turritella in the Gulf of California: Effects of Morphology and Location.

Kodric-Brown, A.



MUSEUM OF SOUTHWESTERN BIOLOGY DEPARTMENT OF BIOLOGY FISCAL YEAR 1999-2000 DIVISION OF AMPHIBIANS AND REPTILES

1. DIVISION HIGHLIGHTS

The number of specimens of amphibians and reptiles is now nearly 62,000. A backlog of previously unprocessed or accessioned specimens was prepared and catalogued with assistance of a work-study student and two volunteers over the course of the year.

Computerization of specimen records continued, the electronic database now having over 37,500 records of complete specimen information. In addition, species names for all specimens have been computerized, thus enabling quicker access and listing of particular species in the collection.

The complete listing of species in the collection is now accessible for querying through the California Academy of Sciences Herpetology Combined Museum Collections Index (http://research.calacademy.org/herpetology/Comb_Herp_Index.html), which lists holdings of over 20 institutions. A divisional web page (http://www.unm.edu/~msbherp/) now provides a complete description of the division, including email addresses for division personnel, background information, and collection use guidelines and receives heavy use mainly from educational institutions.

2. TABLE OF COLLECTION USE

Collection Growth	Loans (outgoing)	Loans Visitors (incoming)					Publications citing MSB
			Para Diengan		specimens		
590	10	9	4	109	3		

Internet-accessible information:

Unique visitors	Total visits	Average	Dominant	Number of countries
to website	to website	visits per day	visiting domain	represented
253	1188	6.6	Educational	7
			.EDU (80%)	

3. COURSES USING THE COLLECTIONS

BIOL 386 General Vertebrate Zoology / Lab

Total students enrolled (both semesters): 82

4. COLLECTION MANAGEMENT

Division staff catalogued nearly 500 specimens into the collection and processed 24 accessions. Much of the backlog from previous years was organized and efforts are now concentrated on processing accessions from the past months and correctly arranging different stages for processing and cataloguing. Complete data from approximately 37,500 specimens are now in the computer database (BIOTA), while, genus and species names have been entered for ALL specimens, thus enabling

quicker responses to queries. Efforts will continue, focusing on entering information into the database about the localities of each specimen.

A purchase of nearly 1,000 small skeleton boxes has allowed for the proper storage of the division's osteological collections, while continuing to standardize jar sizes and seal methods in the wet collection. Nearly 70% of the main collection's 6300 jars have been checked for leaks and their alcohol levels have been restored. In preparation for the move of the museum, cabinets were relabeled, correctly reflecting the contents of each cabinet at the genus level.

With the addition of a Windows-based computer, the database is being backed up periodically on two different platforms and two people can now do computer entry at the same time. Extended computer access has also allowed the division to improve its Internet communications, on which it relies heavily. Most communications are handled via e-mail and by creating personalized web pages when returning queries. This method has received good comments from outside researchers. The completion of the listing of all specimens by genus and species allowed for the division to become part of a Herpetology Combined Museum Collections Index (http://research.calacademy.org/herpetology/Comb_Herp_Index.html), hosted by the California Academy of Sciences. This important index is a growing medium for querying herpetological collections nationwide and the division expects a higher demand for information on its collections.

5. AWARDS, GRANTS, AND CONTRACTS

Faculty:

Control and Eradication of Invasive Species: A Necessary Condition for Conserving Endemic Biodiversity of Galapagos World Heritage Site. Howard L. Snell, Robert Bensted-Smith, Alan Tye, Joaquin Hernandez. United Nations Foundation via UNESCO World Heritage Center. \$3,000,000. March 1, 2000; March 1 2004; \$750,000.

Control Total de Especies Introducidas en Las Islas Galapagos. Marc Patry, Howard L. Snell, Robert Bensted-Smith, Alan Tye, Joaquin Hernandez, Eliecer Cruz, Fernando Espinoza. Global Enivornmental Fund (GEF). \$18,000,000. September 2000; September 2006; \$3,000,000.

Participatory Ecological Monitoring of the Galápagos Archipelago: A Role for Tourism and Management Vessels. Howard L. Snell, Roz Cameron and Robert Bensted-Smith. CONADROS. \$25,000. April 1, 2000; April 1, 2001; \$25,000.

Expansion of Edifico Thomas Fisher Bloque 1: Necessary Space for Vertebrate Ecology and Ecological Monitoring. Howard L. Snell. Charles Darwin Foundation. \$40,000. June 1, 2000; June 1, 2001; \$40,000.

Conservation Research on Flightless Sea Birds – Galapagos Penguins and Flightless Cormorants. Howard L. Snell and Hernan Vargas. Swiss Friends of Galapagos. \$257,000. January 1, 2000; January 1, 2002; \$128,500.

Ecología de Restauración para la Diversidad Biológica en Galápagos: Recuperación de los Reptiles Endémicos. Howard L. Snell and Cruz Marquez. \$100,000. FUNDACYT (Ecuador's NSF). January 1, 1999; January 1, 2001; \$50,000.

Monitoreo Ecológico en las islas Galápagos. Howard L. Snell, Alan Tye, Rodrigo Bustamante. Fundación Natura. \$425,000. April 1, 1999; April 1, 2003; \$108,000.

Ecological Monitoring for the Galapags Archipielago: A Productive Program for the Conservation of Biological Diversity. Howard L. Snell, Charlotte Causton. UNESCO. \$92,000. June 1, 1999; June 1, 2000; \$92,000.

- Pata Pegada Conservation Project. Howard L. Snell, Hernan Vargas. Worthington Foundation. \$17,000. January 1, 1999; January 1, 2001; \$17,000.
- Villamil Tortoise Centre Construction of a Laboratory. Howard L. Snell. British Chelonial Group and the Galapagos Conservation Trust. \$24,000. January 1, 1999. June 30, 2001. \$24,000.
- Conservation of Galapagos Reptiles. Howard L. Snell. Ernst Klienwort Charitable Trust. \$40,000. January 1, 1999; January 1, 2001; \$20,000.
- Conservation of Galapagos Birds. Hernan Vargas, Robert Bensted-Smith, Howard L. Snell. \$180,000. November 1999; November 2002; \$60,000.
- Renovation of the UNM Bookstore for MSB (I don't have exact title available Tim Lowrey, Terry Yates, Bob Parmenter, or Sharon will have it). Terry Yates, Howard L. Snell, Robert Parmenter. National Science Foundation. \$975,000. 1997; 2001; \$975,000.
- Collaborations in Conservation Biology of the Galapagos Archipelago (may not be exact title). Howard L. Snell. Charles Darwin Foundation. \$160,000. June 1, 1997; May 30, 2001; \$40,000.
- Protección de Biodiversidad en el Volcán Alcedo (Isla Isabela), y en la Isla Santiago, Galápagos. Marc Patry, Howard L. Snell, Alan Tye, Robert Bensted-Smith. Fondo PL-480 (USAID). \$200,000. January 1, 1998; January 1, 2001; \$63,000.
- Control of Introduced Predators in Galápagos. Howard L. Snell, Robert-Bensted Smith. Frankfurt Zoological Society. \$165,000. January 1, 1998; January 1, 20001; \$55,000.
- Protection of the Mangrove Finch. Hernan Vargas, Howard L. Snell. Frankfurt Zoological Society. \$45,000. January 1, 1998; January 1, 2001; \$15,000.
- Conservation of Galapagos Vertebrates. Howard L. Snell, Robert Bensted-Smith.. Charles Darwin Foundation, Inc. \$180,000. January 1, 1998; January 1, 2001; \$60,000.
- Pinzon de Manglar. Hernan Vargas, Howard Snell. Swiss Friends of Galapagos. \$60,000. January 1, 1998; January 1, 2001; \$20,000.
- Ecological Restoration of Santiago Island. Marc Patry, Howard L. Snell, Alan Tye. Special Expeditions Galapagos Fund. January 1, 1998; January 1, 2001. \$70,000.

6. PUBLICATIONS

B. Publications by museum staff, students and associates.

Newsletters: None

Books: None

Reports:

- Snell, H.L. y S. Rea. 2000. Was there a La Niña Event in the Galápagos during 1998-1999? Informe de Galapagos 1999-2000. WWF y Fundación Natura.
- Snell, H.L, C. Márquez, M. Altamirano, X. Salazar y M. Torres. 2000. Ecología de restauración para la diversidad biológica en Galápagos: recuperación de los reptiles endémicos: informe técnico semestral I-VI 2000. Proyecto FUNDACYT CDF. Presentado a FCD, FUNDACYT y SPNG.

Journal Articles:

- Fritts T. H.; H. L. Snell, L. Cayot, C. MacFarland, S. Earsom, C. Marquez, W. Llerena, & F. Llerena. 2000. Progress and priorities in research for the conservation of reptiles. In: N. Sitwell, L. Baert and G. Cuppois (eds). Proceedings of the Symposium Science and Conservation in Galapagos. Bulletin de l'Institut Royal des Siences Naturalles de Belgique. Vol. 70: 39-45.
- Henderson, S., T.D. Dawson, y H.L. Snell. In press. Monitoring vegetation impacts of feral goat depredation in the Galápagos islands using AVRR. Proceedings of 25th Annual Technical Conference and Exhibition of the Remote Sensing Society.
- Marquez, C., H. Vargas, H. Snell, A Mauchamp, J Gibbs. y W. Tapia. En prensa ¿Por que tan pocas Opuntia en la isla Española. Revista de Ecología Latinoamericana de Mérida Venezuela.
- Mouginis-Mark, P.J., H. L. Snell, y R. Ellisor. En prensa. GOES satellite observations of Volcán Cerro Azul, Galápagos, Bulletin of Volcanology.
- Snell, H.L. y S. Rea. 1999. The 1997 1998 El Niño en Galápagos: Can 34 years of data estimate 120 years of pattern?. Noticias de Galápagos. 60:11-20.
- Seidel, M.E., J.N. Stuart, and W.G. Degenhardt. 1999. Variation and species status of slider turtles (Emydidae: Trachemys) in the southwestern United States and adjacent Mexico. Herpetologica 55:470-487.

Web-based:

Galapagos Frog Report. Web posting - http://www.naturalist.net/news/Galfrog.html

Snell, H. L. 1999. A New Class of Vertebrates Established in Galapagos. *The Cold-Blooded News* The Newsletter of the Colorado Herpetological Society 26 (7): 1-3. Also posted on web at: http://coloherp.org/cb-news/cbn-9907/GalapFrog.html

B. Publications and reports based on museum specimens by researchers excluding Museum staff, students and Associates.

Korky, J.K. 1999. *Bufo punctatus*. Catalogue of American Amphibians and Reptiles 689.1 Society for the Study of Amphibians and Reptiles.

Holycross, A.T. and M.E. Douglas. 1996. Distribution, abundance, and ecology of the desert massasauga rattlesnake, *Sistrurus catenatus edwardsi*. Final report submitted to the Arizona Game and Fish Commission.

7. ACTIVITIES IN LEARNED SOCIETIES

- D. Invited or plenary talks.
- Snell, H.L. 1999. La diversidad biológica de Galápagos. Invited Symposium presentation. Ciencia y Conservación en Galápagos en Quito. July.
- Snell, H.L. 1999. The realities and distribution of biological diversity in the Galápagos. Symposium presentation – Galápagos: Ecology, Evolution, and Conservation in Darwin's Islands.

t.

- American Association for the Advancement of Science, Pacific Division 80th Annual Meeting, San Francisco, California. June.
- Snell, H. L., and S. Rea. 1999. El Niño 1997-1998 en Las Islas Galapagos. Invited symposium presentation. Guayaquil, Ecuador. September.
- E. Contributed talks or posters. None
- F. Attendance at professional meetings.
- Marco Altamirano traveled to Uruguay to present 2 papers at the International Congress of Latin American Herpetology.
- Marco Altamirano spent 1999 in the Galapagos Islands as a research fellow of FUNDACYT, the Ecuadorian equivalent of the US NSF.
- J. Tomasz Giermakowski attended a national meeting on environmental uses of GIS systems in Utah.
- F. Service as editor or on editorial board of a journal.
- Snell, H.L. Editorial board. Noticias de Galápagos.

8. OTHER PROFESSIONAL ACTIVITIES.

- D. Seminar or colloquium presentations.
- Snell, H. L. 1999. Conservation Biology of Galapagos: The Collision of Research, Management and Development. Biology Department Seminar, November 1999.
- E. Presentations in a scholarly capacity at hearings, workshops, legislative committees, etc. None
- F. Presentation to general audience in a scholarly capacity. None
- D. Service in a scholarly capacity as a member of a local, state, regional or national committee, panel.
- Snell, H.L. Member of New Mexico Department of Game and Fish Non-Game Review Panel.
- F. Journal referee. List journals and number of papers refereed by each division member in alphabetical order. None.

9. SERVICE.

- A. Symposia, workshops, conferences, etc. sponsored, organized, held etc.
- Snell H. L. y W. Llerena. 2000. Curso teórico-práctico de ArcView para el Personal de ciencias de la ECChD y PNG. 3-7 enero.
- Giermakowski J. T. y W. Llerena. 2000. Curso Teórico-practico de ArcView para el personal del PNG y ECChD. 8-23 junio.
- 11. ADVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC.

11. DONATIONS AND GIFTS RECEIVED.

12. CURRENT STAFF. List faculty, staff, students and volunteers

Faculty and Staff
Howard L Snell, Curator and Professor
William G Degenhardt, Curator Emeritus
J Tom Giermakowski, Graduate Curatorial Assistant
Leland Pierce, Staff

Graduate students
Marco Altamirano
J Tom Giermakowski
R Brand Phillips
Anne Schultz
Don Sias

<u>Undergraduate student workers</u> Ruba Elmaoued (work-study employee)

Volunteer student employees Melissa Edgar Gilbert Quintana

13. MUSEUM ASSOCIATES

Curatorial Associates Charles W Painter Norman J Scott James N Stuart

Research Associates
Roger Conant
Lee A Fitzgerald
Thomas H Fritts

MUSEUM OF SOUTHWESTERN BIOLOGY UNM DEPARTMENT OF BIOLOGY FISCAL YEAR 1999/00 ARTHROPODS

1. DIVISION HIGHLIGHTS.

The focus of this year's museum activity was to prepare for the move to the new museum. Cataloging specimens continued through 1999. Organization of the collection has been the highest priority. The library of books has been catalogued and databased. This year we continued giving tours of the museum for public and private schools as well as talks about the museum in the schools, but this has been discontinued until the collection is properly organized.

2. TABLE OF COLLECTION USE. Fill in the blanks with the correct statistics. Collection growth should be the number of cataloged specimens added to the division. Loans (outgoing) should include the number of loans and the number of lots or specimens separated by a "/". Loans (incoming) same format as for Loans (outgoing). # of Visitors should include the number of researchers and general public separated by a "/".

Collection	Loans	Loans	#	# Data	Publications*
Growth	(outgoing)	(incoming)	Visitors	Requests	
N/A	0	0	6+/19	N/A	2

N/A -- due to lack of regular staff, records are estimates; number of data requests are numerous, but uncatalogued.

Number of visitors has not been recorded consistently.

3. COURSES USING THE COLLECTIONS.

BIOL 402/502 Insect Taxonomy and Systematics. Dick Fagerlund and Bruce Noll. Loan of specimens to students for training and presentations.

BIOL 402/502 Bosque Ecological Monitoring Program Interns. Cliff Crawford and Mary Stuever. Loan of specimens to students for training and presentations.

4. COLLECTION MANAGEMENT.

The Museum TAs continued incorporating specimens into BIOTA, a relational electronic database. To date, over 1,700 records have been created. In addition, TA's expanded the collection into new drawers, labeled specimens within series, updated synonymies and incorporated recent acquisitions into the collection. Books have been catalogued and entered into a database. Preparation for the move has included securing specimens and organizing the collection.

5. AWARDS, GRANTS, AND CONTRACTS.

GRANTS SUBMITTED, FACULTY

GRANTS RECEIVED AND IN FORCE FROM PREVIOUS YEARS

Biohydrology of the Gila, Mimbres and Rio Grande Rivers, P. Jacobson and M. C. Molles, Jr., C. N. Dahm, H. M. Valett, C. S. Crawford, P. V. Unnikirishna. NSF Ecosystems. 1999-2002. \$492,000.

Bosque Ecological Monitoring Program. C. S. Crawford, M. Stuever, D. Shaw, L. Ellis, K. D. Eichhorst. NSF / LTER Schoolyard Habitat Program, 1998-1999, \$ 30,000, \$15,000.

Bosque Ecological Monitoring Program. C.S. Crawford, M. Stuever. National Science Foundation, \$35,000

Riparian ecosystem restoration: effects of flooding and vegetation type on annual evapotranspiration in a semi-arid landscape. C. N. Dahm, T. Mulhern, P. V. Unnikrishna, H. M. Valett, M. C. Molles, Jr., and C. S. Crawford. NASA/EPA 1997 –2000, \$715,000.

Flooding regime and restoration of riparian ecosystem integrity. M. C. Molles, Jr., C. N. Dahm, H. M. Valett, C. S. Crawford, P. V. Unnidrishna. NSF Ecosystems. 1999-2002, \$492.000.

Habitat requirements of Bell's Vireo. J. M. Parody, NM Department of Game and Fish, Share with Wildlife 1997-1998, \$9,000; \$3,000 approved for 1999-2000

CONTRACTS

6. PUBLICATIONS.

A. Publications by Museum staff, students and Associates.

BOOKS

Molles, M. C., Jr. 1999. Ecology: Concepts and Applications. McGraw Hill

JOURNAL ARTICLES

Fagerlund, R. 2000. A preliminary catalog of the beetles of New Mexico. New Mexico Naturalist's Notes 2 (1):.

ARTICLES IN EDITED VOLUME

- B. Publications and reports based on museum specimens by researchers excluding Museum staff, students and Associates.
- 7. ACTIVITIES IN LEARNED SOCIETIES.

7

- A. Invited or plenary talks.
- B. Contributed talks or posters.
- C. Attendance at professional meetings.
- M. C. Molles. Ecological Society of America. August 2000.
- M. C. Molles, NABS, June 2000.
- D. Service as editor or on editorial board of a journal.
- E. Service as officer of professional society or organization.

Manuel Molles, Trustee for The Nature Conservancy of New Mexico Manuel Molles, Volunteer Training, Rio Grande Nature Center

- 8. OTHER PROFESSIONAL ACTIVITIES. List alphabetically under each category.
- A. Seminar or colloquium presentations.
- B. Presentations in a scholarly capacity at hearings, workshops, legislative committees, etc. Richard Fagerlund, 6 hantavirus training seminars at UNM main and Valencia campuses.
- C. Presentation to general audience in a scholarly capacity.

Dick Fagerlund –arthropod lecture at Rio Grande Nature Center for Summer Wings Festival and El Paso Natural Gas

Dick Fagerlund – weekly bug column in the Albuquerque Tribune on Tuesdays

Dick Fagerlund – segments on KKOB AM (770) – talking about pests and answering arthropod questions from the public.

Dick Fagerlund – radio show on "bugs" from March 18, 1999 to July 22, 1999.

Dick Fagerlund - KRQE channel 13 monthly TV spot

Dick Fagerlund – syndicated "bug column" appearing in over 65 papers throughout the U.S. and Canada.

D. Service in a scholarly capacity as a member of a local, state, regional or national committee, panel etc.

Manuel Molles, National Research Council Expert Committee Member, Riparian Zones: Functioning and Strategies for Management, 1999-2001.

Manuel Molles, National Center for Ecological Analysis and Synthesis Working Group Member, Scientific Evidence Project, 1999-2001, University of California, Santa Barbara.

Manuel Molles, Invited by the National Science Foundation to attend workshop and write white paper for NSF on "Frontiers in Ecology". December 1999.

E. Journal referee.

Manuel Molles - Oecologia, 1 paper

9. SERVICE.

A. Symposia, workshops, conferences, etc. sponsored, organized, held etc.

B. Public Service.

Volunteer Training, Rio Grande Nature Center

Kim Eichhorst - Visits to Albuquerque public schools to talk about insects and biodiversity.

Dick Fagerlund – Maintenance of web page on basic arthropods of New Mexico information, pest control, beneficial aspects to insects, etc. and addition of species lists

Dick Fagerlund – talks to child care groups, Medical groups, and custodians at UNM about bugs and hantavirus

Dick Fagerlund – conducted training seminars for the City of Albuquerque, City of Santa Fe, State of New Mexico (at the governor's request), the Albuquerque School District, the Rio Rancho School District, Kirtland AFB and several seminars for the pest control industry.

10. ADVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC.

Manuel Molles: Named to Potter Chair of Plant Ecology.

Manuel Molles: awarded sabbatical support by Ministry of Education, Spain.

11. DONATIONS AND GIFTS RECEIVED.

Dick Fagerlund, List of beetles in New Mexico

Sevilleta LTER and Bosque del Apache, more arthropod specimens from ongoing research

12. CURRENT STAFF. List faculty, staff, students and volunteers.

Manuel Molles, Ph.D., Professor, Curator. Riparian ecology

Cliff Crawford, Ph.D., Emeritus Professor, Emeritus Curator. Riparian ecology, desert ecology

David Lightfoot, Ph.D., Research Associate, Associate Curator. Arthropod ecology, grasshopper

systematics, desert ecology

Robert Parmenter, Ph.D., Program Director Sevilleta LTER, Associate Curator. Desert ecology

Kim Eichhorst, Ph.D., student. Museum Teaching Assistant Summer 1999- Fall 2000. Riparian ecology

Luis Guzman, M.S. student, Museum Teaching Assistant - Spring 2000.

13. MUSEUM ASSOCIATES.

Sandra Brantley, Post-doctoral Associate. Arthropod communities Richard Fagerlund, UNM staff, Environmental Services. NM arthropods, particularly beetle taxonomy.

MUSEUM OF SOUTHWESTERN BIOLOGY DATA REPORTING FORM UNM DEPARTMENT OF BIOLOGY FISCAL YEAR 1999/2000 DIVISION of BIOLOGICAL MATERIALS

1. DIVISION HIGHLIGHTS.

The Division of Biological Materials' focus this fiscal year has been on (1) sample reorganization within the array of freezers, (2) re-labeling all sample vials with scanner labels, and (3) complete computerization of all NK data.

To date, we have finished programming our new Access database, and entered 60 000+ NK

To date, we have finished programming our new Access database, and entered 60,000+ NK records into the new database.

Ongoing projects include the CDC/Hantavirus research program in the Southwest and a new Hantavirus project in Chile, the Long Term Ecological Research Program at the Sevilleta, and the NIH project to study rodent/virus interactions in a closed natural ecosystem.

2. TABLE OF COLLECTION USE.

Collection	Loans	Loans (incoming)	#	# Data	# of
Growth	(outgoing)		Visitors	Requests	Publications
~10,000 samples	53/9,446	47/9,834	2,896/25	62	13

3. COURSES USING THE COLLECTIONS. List the courses including; course number, approximate number of students enrolled, type of use (specimens, facilities, staff participation, etc.).

Biology 402 fall	Special Topics		nts, specimens, facility, staff
Biology 502 fall	Systematics		ents, specimens, facility, staff
Biology 523 fall	Systematics	9 stude	nts, specimens, facility, and staff
			participation
Biology 551 fall	Graduate Research -Proble	ems	2 students, specimens, facility, and staff participation
Biology 599 fall	Master's Thesis		3 students, specimens, facility, and staff participation
Biology 651 fall	Advanced Field Biolo	gy	2 students, facility
Biology 699 fall	Dissertation		3 students, specimens, facility, and staff participation

4. COLLECTION MANAGEMENT.

Our new Access database has been developed and we are now entering all NK number data, from NK number 1 to 105,800 into this database.

To date we have added ~40,000 records to our new database, and re-labeled over 60,000 vials.

5. AWARDS, GRANTS, AND CONTRACTS.

Faculty

Terry L. Yates-PI:

A Genetic Resource for the $21^{\rm st}$ Century: Computerization of the Division of Biological Materials, MSB.

NSF

1 July 1999-December 31st 2000

\$89,000

Long Term Ecological Research: *The Sevilleta LTER, Cycle II* NSF October 1994- September 2000 \$3,800,000.00

Hantavirus Infections: Ecology, Immunity and Treatment NIAID/NIH
September 1 1996- August 31, 2000
\$1,569,666

Longitudinal Studies of Hantavirus in SW US Rodent Populations Indian Health Service September 1996- May 2000 \$599,661

Longitudinal Studies of Hantavirus in SW US Rodent Populations CDC September 30 1996- August 31, 2000 \$1,039,886

Relocation/Consolidation of the Research and Training Facility of the Department of Biology NSF March 1997- May 31 2000 \$313,200

Ecology of Hantavirus Enzootics: Immune Interventions NIAID August 1997- July 2002 \$1,569,666

ICIDR Hantavirus Ecology and Disease in Chile NIH/NIAID June 1 1999-May 31 2004 \$3,200,008

Portable flow-through Amperometric Immunosensor Device for Fast Field Immunoanalysis of Rodent Virus

NSF

January 1998-December 2001

\$240,000

Response of SW Montane Mammal Communities to Global Climate Change US Fish/Wildlife Service September 1998- September 2000 \$264,000

Knowledge Networking of Biodiversity Information KDI/KN

NSF

September 1 1998- August 31 2001

\$2,731,876

Inspection and Decontamination of File Boxes Potentially Infected with Hantavirus. Department of the Interior. December 10th 1998-December 10th 2000 229,789

Biology of Infectious Diseases and Inflammation. Public Health Services September 1st 1998-September 1st 2003 466,042

Associates:

6. PUBLICATIONS.

A. Publications by Museum staff, students and Associates.

Journal articles:

Parmenter, R.R., C.A. Parmenter, Ekta Pratrap Yadav, Paul Ettestadt, Kenneth Gage. Bubonic Plague and Climate Dynamics: Associations Between El Niño Related Precipitation and the Incidence of Bubonic Plague in New Mexico, American Journal of Tropical Medicine and Hygene, 1999

Cook, J.A., S.L. Gardner, and T.L. Yates. 2000. The genus Ctenomys in Bolivia. In, Mammals of South America, A.

- Gardner, S. Anderson, and J.L. Patton eds. Univ. of Chicago Press. In Press.
- Salazar, Jorge, T.L. Yates, and M. Zalles, 2000. *Biodiversity and conservation of Bolivian Mammals*, In,
- Mammalian diversity in Latin America (H. Ceballos, ed.) UNAM Press. In Press Glass, G.E., J.E. Childs and T.L. Yates. 2000. Ecology of hantavirus rodent hosts. Virology. 28p. In press.
- Anderson, S., and T.L. Yates. 2000. A New Genus and species of Phyllotine Rodent from Bolivia. Journal of Mammalogy, 81(1): 18-36.
- Calisher, C. and T.L. Yates. 1999. On naming a new viral species. American Journal of Tropical Medicine and Hygiene, 61(6)L 863-864.
- Bayard, V., E. Ortega, A. Garcia L. Caceres, Z. Castillo, E. Quiroz, B. Armien, F. Garcia, J. Serrano, G. Guerrero, R. Kant, E. Pinifla, L. Bravo, C. Munoz, I.B. deMosca, A. Rodriguez, C. Campos, M.A. Diaz, Castellanos, L. Ruedas, D. Tinnin, and T.L. Yates. 2000. *Hantavirus pulmonary syndrome: Panama*, 1999-2000. Journal of the American Medical Association, 283(17): 2232-2233.
- Botten, J., R. Nofchissey, H. Kirkendoll-Ahern, P. Rodriguez-Moran, I.A. Wortman, D. Goade, T.L. Yates, and B. Hjelle. 20000. Outdoor facility for quarantine of wild rodents infected with hantavirus. Journal of Mammalogy, 81(1): 250-259.

Reports:

- Yates, T.L., J.L. Dunnum, C.A. Parmenter, B.D. Frank, P.J. Polechla, D.S. Tinnin, and Dusty Wells. Biannual Report-Longitudinal Studies of Hantavirus in Rodent Populations of the American Southwest. 1December 1999-30th May 2000.
- Yates, T.L., J.L. Dunnum, C.A. Parmenter, B.D. Frank, P.J. Polechla, D.S. Tinnin and Dusty Wells. Biannual Report-Longitudinal Studies of Hantavirus in Rodent Populations of the American Southwest. 1June 1999-30th November 1999.

 Books:
- Yates, Terry L. 1999. American Shrew Mole/Neurotrichus gibbsii. Pp. 56-58 In, Smithsonian Book of North
- American Mammals (D.E. Wilson and S. Ruff, Eds.). Smithsonian Institution Press, Washington, D.C. 750pp.
- Yates, Terry L. 1999. Broad-footed mole/Scapanus latimanus. Pp. 57-58 In, Smithsonian Book of North American
- Mammals (D.E. Wilson and S. Ruff, Eds.). Smithsonian Institution Press, Washington, D.C. 750pp.

- Yates, Terry L. 1999. Townsend's Mole/Scapanus townsendii.. Pp. 60-61 In, Smithsonian Book of North American
- Mammals (D.E. Wilson and S. Ruff, Eds.). Smithsonian Institution Press, Washington, D.C. 750pp.
- Yates, Terry L. 1999. Eastern Mole/Scalopus aquaticus. Pp. 63-64. In, Smithsonian Book of North American
- Mammals (D.E. Wilson and S. Ruff, Eds.). Smithsonian Institution Press, Washington, D.C. 750pp.
- B. Publications and reports based on museum specimens by researchers excluding Museum staff, students and Associates.
- 7. ACTIVITIES IN LEARNED SOCIETIES. List alphabetically (by division member) under each category.

A. Invited or plenary talks.

Parmenter: Hantavirus meeting for Chilean Collaboration March 4th-March 16th, 2000 Temuco Chile Data management.

Yates: Hantavirus meeting for Chilean Collaboration March 4th-March 16th, 2000 Temuco Chile *Predicting Hantavirus outbreaks*.

B. Contributed talks or posters.

Talks:

Parmenter: Association of Systematics Collections Meeting May 13th-May 15th 2000 Baltimore Maryland. On the Board of Genetic Resources: Management, Ethics and Use.

Division Of Biological Materials, at the Museum of Southwestern Biology.

Parmenter: 80th American Society of Mammalogists Annual Meeting Durham, New Hampshire June 17th-21st 2000. Evidence for El Nino Driven Rodent Population Increases and Hantavirus Outbreaks in the Western Hemisphere.

Yates: American Tropical Medicine and Hygiene Annual Conference November 30th 1999-December 2nd 1999. *The Ecology of Hantavirus Outbreaks*.

Yates: Genetics, Pathogenesis and Ecology of Emerging Viral Diseases. January 24-30, 2000. Taos,

New Mexico. Ecological Dynamics of Hantavirus Outbreaks: A Trophic Cascade

Yates: Association of Systematics Collections Meeting May 13th-May 15th 2000 Baltimore Maryland

Funding Opportunities for Biodiversity Research in the New Millenium.

Yates: 80th American Society of Mammalogists Annual Meeting Durham, New Hampshire

June 17th-21st 2000. Molecular Systematics of the Phyllotini.

C. Attendance at professional meetings,

Parmenter: American Tropical Medicine and Hygiene Annual Conference November 30th 1999-December 2nd 1999.

Parmenter: ICIDER Hantavirus meeting for Chilean Collaboration March 4th-March 16th, 2000 Santiago Chile. *Data management*

Parmenter: Association of Systematics Collections Meeting May 13th-May 15th 2000 Baltimore Maryland
On the Board of Genetic Resources: Management, Ethics and Use.

Parmenter: 80th American Society of Mammalogists Annual Meeting Durham, New Hampshire

June 17th-21st 2000. Evidence for El Nino Driven Rodent Population Increases and Hantavirus Outbreaks in the Western Hemisphere.

Yates: American Tropical Medicine and Hygiene Annual Conference November 30th 1999-December 2nd 1999.

Yates: Genetics, Pathogenesis and Ecology of Emerging Viral Diseases. January 24-30, 2000. Taos, New Mexico. *Ecological Dynamics of Hantavirus Outbreaks: A Trophic Cascade*.

Yates: ICIDER Hantavirus meeting for Chilean Collaboration March 4th-March 16th, 2000. Santiago Chile.

Yates: Association of Systematics Collections Meeting May 13th-May 15th 2000 Baltimore Maryland

Yates: 80th American Society of Mammalogists Annual Meeting Durham, New Hampshire June 17th-21st 2000. *Molecular Systematics of the Phyllotini*.

D. Service as editor or on editorial board of a journal.

Yates:

Managing Editor, Publications of the Museum of Southwestern Biology. Review Editor, American Society of Mammalogists, *Journal of Mammalogy*

E. Service as officer of professional society or organization.

Terry Yates:

Board of Directors: The America Society of Mammalogists, 1999-present.

The Society of Systematic biology, 1999-present.

The Association of Systematic Collections

The Peromyscus Stock Center

The Southwestern Association of Naturalists

Chairman of the Board of Trustees for the American Society of Mammalogists

Member of the board of trustees for the SWAN

Chairman of the board of trustees for the pooled income fund of ASM

Cheryl Parmenter:

Saftey Officer

Member of the UNM Campus Biosafety Committee

8. OTHER PROFESSIONAL ACTIVITIES. List alphabetically under each category.

A. Seminar or colloquium presentations.

Yates: Colorado State University, May 2000, Bio-complexity and Zoonotic Disease

Yates: University of Nebraska-Lincoln. The Ecology of Outbreaks: The Central Role of Research Collections and Systematics.

B. Presentations in a scholarly capacity at hearings, workshops, legislative committees, etc.

Yates: Biology Department Board of Directors and Council. Albuquerque, NM. *The Value of Basic Research to the Educational Enterprise*.

C. Presentation to general audience in a scholarly capacity.

D. Service in a scholarly capacity as a member of a local, state, regional or national committee, panel etc.

Yates: American Society of Mammalogists Committee

Systematic Biology Committee

Sub-committee- Weapons of Mass Destruction

E. Journal referee. List journals and number of papers refereed by each division member in alphabetical order.

Journal of Virology Journal of Mammalogy Southwestern Naturalist Bioscience

9. SERVICE.

A. Symposia, workshops, conferences, etc. sponsored, organized, held etc.

B. Public Service

Visitors:

CDC-Data Manager Chileans Collaborators Photographers-Albuquerque Magazine September 17, 1999

10. ADVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC. List alphabetically under each division member.

Yates:

Chair, Board of Trustees, American Society of Mammalogists Elected Trustee, Southwestern Association of Naturalists. Chair, Main Campus Animal Care and Use Committee, UNM

- 11. DONATIONS AND GIFTS RECEIVED. List source and type (e.g., specimens, money, equipment, books, etc.)
- 12. CURRENT STAFF. List faculty, staff, students and volunteers.

Terry L. Yates, Curator, Division of Biological Materials

Cheryl Parmenter, Interim Collection Manager, Division of Biological Materials, Hantavirus Data Manager Safety Officer (Room 159)

Gabor Racz, Scott Burt and Andreas Garcia- Ph.D. Graduate student-RA Mary Jane Gosz- Curatorial Assistant Maria Rubio- Divisional Work-study Christy Garcia- Student Assistant

Phd. Students:

Andreas Garcia Gabor Racz Jorge Salazar-Bravo M. Scott Burt Kate Thibault Gerardo Suzan Travis Perry

13. MUSEUM ASSOCIATES.

Research Associates:

J. Scott Altenbach UNM Department of Biology

Sydney Anderson American Museum of Natural History, New York Robert J. Baker The Museum, Texas Tech University, Lubbock, TX

Mike Bogan National Biological Survey

Troy L. Best Department of Biology, Auburn University

Joseph A. Cook Natural History Museum, University of Alaska, Fairbanks

Jerry Dragoo UNM Department of Biology Bill Gannon UNM Department of Biology

Scott L. Gardner Dept. Nematology, Curator, University Nebraska.

Sarah B. George Director, Utah State Museum.
Gary L. Graham Bat Conservation International
David J. Hafner New Mexico Museum Nat, History

Bruce J. Hayward Department of Biology, Western New Mexico University

Edward J. Heske Illinois Biological Survey

R. Dewitt Ivey Retired. Active in Botany, mammals Clyde Jones The Museum Texas Tech University

Dwight W. Moore Emporia State University
Cindy Ramotnik National Biological Survey

Robert Parmenter Department Biology, LTER coordinator

James L. Patton Museum of Vertebrate Zoology, University of California

Richard A. Smartt New Mexico Museum of Natural History.

BIRDS

1. DIVISION HIGHLIGHTS

The value of the collection was once again proven as it provided material for another new technique that provided an approximation of the latitude (or altitude) at which a bird nested. It appears that the stable isotopes of hydrogen (H2/H1) occur in a gradient with latitude, and they are incorporated into the growing feathers. Thus museum specimens retain the latitudinal signature for those birds that molt prior to migration, and for immature birds!

Dr Eleonora Trotter is in the processes of preparing a teaching collection for the Sevilleta LTER field station.

Our series of known aged Whooping Cranes now consists of 12 birds ranging in age from one day to 2 1/5 years.

2. TABLE OF COLLECTIONS USE

Collections Growth	Loans (outgoing)	Loans (incoming)	Visitors	Info	Publicat.
615	20	6	27	15	0

3. COURSES USING THE COLLECTION

- 110 Biology for Non-majors
- 379 Conservation Biology
- 386 General Vertebrate Zoology
- 455 Ethology
- 486 Ornithology

4. COLLECTIONS MANAGEMENT

We are current with calatoging and computerization of the collection. A major push was made to work on our backlog of uncleaned skeletons, and the freezer is 75% enpty!

5. AWARDS AND GRANTS

Graduate Students:

Julie Hagelin

PhD. "Sexual selection, plumage ornamentation and behaviour of Gambel's and Scaled Quail" Spring 1999. J.D. Ligon advisor.

Timothy H. Parker

Inheritance of parental condition separated from differential maternal investment in Red Junglefowl. American Ornithologists' Union, Research Award. \$1,900

Inheritance of parental conditon separated from differential maternal investment in the Red Junglefowl. Sigma Xi, Alexander Bache Fund (??) \$700

Staff ,

Robert W. Dickernam

Received one of six awards given by the Neotropical Ornithological Congress and conservationists and ornithologists of Mexico for his contributions to Mexican ornithology (October 1999).

Received a "Museum Appreciation Award" from the University of Alaska Museum (June 2000).

J. D. Ligon.

Inheritance of paternal condition separated from differential maternal investment in Red Junglefowl. Dissertation Research (for Timothy H. Parker) National Science Foundation IBN-0073995. \$6,750

6. PUBLICATIONS

Hubbard, J.P. 1999. A critique of Wang Yong and Finck's field-identification of Willow Flycatcher subspecies in New Mexico. Wilson Bull. 111:585-588.

Johnson, R.R., L.T. Haight, and J.D. Ligon. 1999. Strickland's Woodpecker (<u>Picoides stricklandi</u>). In 'The Birds of North America", No. 474. 16pp. (A.Poole and F.Gill eds.) The Birds of NorthAmerica, Inc. Phidelphia

Kimball, R.T. and J.D. Jigon. 1999. Evolution of avain plumage dichromatism from a proximate perspective. Amer. Natularists154:182-193.

Kimball, R.T., E.L. Braun, P.W. Zwartjes, T.M. Crowe and J.D. Ligon. 1999. A molecular phylogeny of the pheasants and partridges suggests that there lineages are not monophyletic. Molecular Phylogenies and Evolution 11:38-54.

Parker, T.H. 1999. Responses of Bell's Vireo to brood parasitism by the Brown-headed Cowbird in Kansas. Wilson Bull. 111:499-504.

Zwartjes, P.W. 1999. Genetic variability in the endemic vireos of Puerto Rico and Jamaica contrasted with the continental White-eyed Vireo. Auk 116:964-975.

7. ACTIVITIES IN LEARNED SOCITIES

Dickerman, R.W. attended the annual meeting of the American Ornithologists' Union in Ithaca, New York (August 1999), and the VI Neotropical Ornithological Congress in Monterrey, Mexico (October 1999).

Hagelin, Julie, and J.D. Ligon presented a paper at the annual meeting of the American Ornithologist's Union in Ithaca, New York (August 1999).

8. OTHER PROFESSIONAL ACTIVITIES

Papers refereed:

Dickerman, R.W. Ornithologia Neotropical (1)

Ligon, J. D. Behavioral Ecology and Sociobiology 1; Behavioral Ecology 1; Wilson Bull. 1; and Biological Conservation 1.

Other:

Dickerman, R.W.

Participated with personnel from the University of Alaska Museum in collecting birds On Kodiak Island (May), and in the Queen Charlotte Islands (British Columbia), June, 1999. Recent unreported previous trips were to Attu, September 1997, and August/September 1998.

Ligon, J. D.

Peer Review Panel for NM Dept. Game and Fish: Report on recommendation to list the Lesser Prairie Chicken a State endangered species.

Talk: UNM Valencia Campus: "Sexual selection and mating systems in birds."

Workshop: Santa Fe school teachers, "Teaching about birds/natural history to kids."

9. DONATIONS AND GIFTS RECEIVED

10. CURRENT STAFF

Dr. J. David Ligon, Curator of Ornithology
Ms. Jennifer A. Hill, Graduate Student, Curatorial Ass.

Mr. Timothy H. Parher, Graduate Student,

Ms. Lee Harley, Work Study Mr. Richard Immell, Work Study

11. MUSEUM ASSOCIATES

Dr. Robert W. Dickerman, Curatorial Associate and Co-Curator Dr. John P. Hubbard, Curatorial Associate Dr. Eleomora H. Trotter, Research Associate Mr. Richard S. Crossin, Research Associate

MUSEUM OF SOUTHWESTERN BIOLOGY FISCAL YEAR 1999/2000 DIVISION OF FISHES

1. DIVISION HIGHLIGHTS.

The MSB Division of Fishes currently has 45,134 catalogued lots of fishes, a total of 2,248,516 specimens. Adult fishes, eggs and larvae were acquired from the ongoing projects of Thomas F. Turner, Curator and Steven P. Platania, Associate Curator. Turner's projects include: comparative study of the life history and demographics on the ratio of genetic effective population size to census size in Rio Grande fishes, the *Procheilodus* complex of the Venezuelan Los Llanos, a stable isotope study (with Melanie Edwards) of Rio Grande fish communities using museum collections, hybridization study (with Megan McPhee) of the Rio Grande sucker, *Pantosteus plebeius*, and studies (with Dominique Alo) on the *Etheostoma* (darter) complex.

Platania's projects include: Hybognathus amarus or the Rio Grande silvery minnow population monitoring, a habitat study of the Chama River fishes which included large collections of fish tissues for the Environmental Protection Agency monitoring program (vouchers held by the MSB), population monitoring and drift studies of Ptychocheilus lucius (Colorado pike minnow) and Xyrauchen texanus (razorback sucker) of the San Juan River.

A National Science Foundation Biological Research Collections grant of \$172,000 was awarded in March 2000 to Thomas F. Turner, PI and Steven P. Platania and Alexandra M. Snyder, Co-PIs. This grant will be used to reorganize, improve and relocate the collection of fishes. The NSF also provided funds for three summer REU students, one Curatorial Assistant position and a half-time project/program manager position dedicated to moving the collection.

2. TABLE OF COLLECTION USE

4. IADUL	OF COLLECTION	USE			
Collection Growth	Outgoing Transactions (Loans, gifts, transfers)	Incoming Transactions (Loans, gifts, transfers)	Researchers visiting the	Requests for information &	Publications citing MSB Division of
(Gifts, Exchanges, Expeditions)			collection	collection data	Fishes
2,209 lots	12 transactions	3 transactions	12	32	4
126,200	603 specimens	118 specimens		}	Ì
specimens					L

^{*} Numbers based on cataloged specimens only. Current Backlog: 1245 lots 47,321 specimens

3. COURSES USING THE COLLECTIONS.

BIOL 386. General Vertebrate Zoology. Fall 1999 and Spring 2000 T.F. Turner, Assistant Professor. Total of 80 students. Collection Manager assisted in labs on fishes by helping TA select appropriate teaching collection examples and explaining basic fish phylogeny.

4. COLLECTION MANAGEMENT. The Division of Fishes "processed" 126,200 specimens of New Mexico fishes this year. "Processing" means that the specimens were collected in the field, fixed in formalin and transferred through a series of ethanol concentrations, sorted and identified to species in the lab, recorded in the electronic

catalogue/database, labeled and shelved in the fish collection room. One seine haul or collection of fishes, taken from the field to the collection room, takes an average of 4 staff persons to process and an investment of \$5.00 in supplies (jars, lids, chemicals, field equipment, field vehicle) per collection. Based on last year's work (2,209 lots or 126,200 specimens) it cost approximately \$11,045 to provide supplies and equipment to process these specimens.

Three undergraduate students were employed as part of the NSF Research Experiences for Undergraduate Students program, awarded to the Division in March 2000. These students were instrumental in preparing the collection for relocation to the new facility in December. The following tasks were accomplished: organizing, cleaning, realcoholing and boxing up 9,000 screw top jars of specimens; reorganizing, cleaning, realcoholing and replacing all gaskets on jars for approximately 27,000 lots of fishes (lots of fish eggs and larvae or 9,000 more lots were already curated); tagging, labeling and reorganizing all tank specimens (oversized specimens of fishes stored in old crocks) into new tanks for relocation to new facility; relabeling and realcoholing the collection of fishes in the MSB Teaching Collection (approximately 200 jars); assisted in field work by collecting fishes for two studies in population monitoring of threatened species of fishes (Rio Grande and San Juan River).

National Science Foundation A comparative study of life history and

5. AWARDS, GRANTS, AND CONTRACTS.

Thomas	F.	Turner.	Curator	of Fishes

Pending

rending	demographic effects on the ratio of genetic effective population size to census size in Rio Grande fishes. \$375,182
2000	US Forest Service. Conservation Genetics of Gila and Apache Trout. \$50,000.
2000	National Science Foundation. Biological Research Collections: Improvements to the Museum of Southwestern Biology (MSB) Fish Collection, Phase I: Relocation and Reorganization: REU supplement. \$10,000
2000	National Science Foundation. Biological Research Collections: Improvements to the Museum of Southwestern Biology (MSB) Fish Collection, Phase I: Relocation and Reorganization. T. F. Turner PI/PD, S. P. Platania, and A. M.Snyder Co-PIs \$162,077
2000	National Geographic Society. Genetic studies of highly migratory fishes of the llanos in Venezuela. K. Winemiller PI/PD, T. Turner (one of five Co-PIs) \$16,000
1999	New Mexico Dept. Game and Fish. Temporal genetic variation and the

Steven P. Platania, Assoc. Curator and Alexandra M. Snyder, Collection Manager

effective population size of the silvery minnow. \$7,000.

1992/01 U.S. Bureau of Reclamation Cooperative agreement for San Juan River recovery implementation program seven year research plan (No.2-FC-40-12140) \$798,238

- 1999/01 New Mexico Department of Game and Fish .<u>Pecos pupfish life history study</u> \$80.000
- 2000/02 National Science Foundation. Biological Research Collections: improvements to the Museum of Southwestern Biology(MSB) Fish Collection, Phase I: Relocation and Reorganization. T.F. Turner, PI/PD \$162,077

6. PUBLICATIONS.

A. Publications by Museum staff, students and associates.

Altenbach, C. S., R. K. Dudley and S. P. Platania. 2000. A new device for collecting drifting fish eggs. Transactions of the American Fisheries Society 129:296-300.

Brandenburg, W. Howard (Illustrations) in D.L. Propst 1999. Threatened and endangered Fishes of New Mexico. Technical Report No. 1, New Mexico Department of Game and Fish, Santa Fe NM 84pp.

Dudley, R. K., and W. J. Matter. 1998. Effects of small green sunfish (<u>Lepomis cyanellus</u>) on recruitment of Gila chub (<u>Gila intermedia</u>) in Sabino Creek, Arizona. Southwestern Naturalist 45:24-29.

Dudley, R. K., and S. P. Platania. 1999. Imitating the physical properties of drifting semibuoyant fish (Cyprinidae) eggs with artificial eggs. Journal of Freshwater Ecology 14:423-430.

Propst, David L. 1999. Threatened and endangered Fishes of New Mexico. Technical Report No. 1, New Mexico Department of Game and Fish, Santa Fe NM 84pp. Illustrated by

Lee, D.W., T.F. Turner, K. Baskaran, M. Mansor, H. Mohamad, S.K. Yap, and S. Dayandan. 2000. Tropical Asian rain forest tree seedlings: light responses and developmental plasticity. *in press*. Biotropica

Turner, T.F., and J.R. Gold. 2000. Temporal method estimates of N_e from highly polymorphic mitochondrial and microsatellite DNA loci: a case study. *in press*. Conservation Genetics

Turner, T.F. 2000A comparative study of larval transport and gene flow in darters. in press. Copeia

Turner T.F., J.C. Trexler, J.L. Harris, and J.L. Haynes. 2000. Nested cladistic analysis indicates population fragmentation shapes genetic diversity in a freshwater mussel. Genetics 154:777-785.

Turner, T.F., L.R. Richardson, and J.R. Gold. 1999. Temporal genetic variation of mtDNA and effective female population size of red drum in the northern Gulf of Mexico. Molecular Ecology 8:1223-1230

B. Publications and reports based on museum specimens by researchers excluding Museum staff, students and associates.

Burr, Brooks M. and R.L. Mayden. 1999. A new species of *Cycleptus* (Cypriniformes: Catostomidae) from Gulf slope drainages of Alabama, Mississippi, and Louisiana, with a review of the distribution, biology and conservation status of the genus. Bulletin of the Alabama Museum of Natural History 20:19-57

Eisenhour, David J. 1999. Systematics of *Macrhybopsis tetranema* (Cypriniformes: Cyprinidae) Copeia 4:969-980

Hoagstrom, Christopher and J.E. Brooks. 1999. Distribution, status and abundance of the Pecos pupfish, *Cyprinodon pecosensis*. Technical Report No. 2, New Mexico Department of Game and Fish, Santa Fe NM 76 pp.

Luttrell, Geffery R., A.A. Echelle, W.L. Fisher, and D.J. Eisenhour. 1999. Declining status of two species of the *Macrhybopsis aestivalis* complex (Teleostei: Cyprinidae) in the Arkansas river Basin and related effects of reservoirs as barriers to dispersal. Copeia 4: 981-989

7. ACTIVITIES IN LEARNED SOCIETIES.

A. Invited or plenary talks

Thomas F. Turner, Curator

March 2000 at the University of Oregon, Eugene Life history, demography, and the genetic effective population size in fishes.

May 2000 at Ohio University, Athens Is there a simple relationship of life history, demography, and genetic diversity in fishes?

B. Contributed talks or posters.

80th Annual Meeting of the American Society of Ichthyologists and Herpetologists (ASIH) 14 to 21 June 2000 Universidad Autonoma de Baja California Sur, La Paz B.C.S. Mexico

T.F. Turner, J.C. Trexler, and H.W. Robison. Congruent patterns of genetic divergence in sympatric Ouachita-endemic fishes.

9th Annual UNM Department of Biology Research Day, Albquerque New Mexico 7 April 2000 Alo, D. and **T.F. Turner**, Patterns of evolution in the orangebelly darter, <u>Etheostoma radiosum</u>.

7

C. Attendance at professional meetings.

80th Annual Meeting of the American Society of Ichthyologists and Herpetologists (ASIH) 14 to 21 June 2000 Universidad Autonoma de Baja California Sur, La Paz B.C.S. Mexico

Alexandra M. Snyder Thomas F. Turner

D. Service as editor or on editorial board of a journal. NONE

E. Service as officer of professional society or organization.

Alexandra M. Snyder Chair for Subcommittee on Curatorial Supplies and Practices, American Society of Ichthyologists and Herpetologists (ASIH)

8. OTHER PROFESSIONAL ACTIVITIES.

A. Seminar or colloquium presentations. NONE

B. Presentations in a scholarly capacity at hearings, workshops, legislative committees, etc. Robert K. Dudley and Steven P. Platania

U.S. Army Corps of Engineers: status report Rio Grande silvery minnow

- U.S. Bureau of Reclamation: status report Colorado pike minnow and razorback sucker
- U.S. Fish and Wildlife Service: status Rio Grande silvery minnow and Pecos pupfish

C. Presentation to general audience in a scholarly capacity. NONE

D. Service in a scholarly capacity as a member of a local, state, regional or national committee, panel etc.

Thomas F. Turner

Panelist. U.S. Bureau of Reclamation, Grand Canyon Monitoring and Research Center, Flagstaff, AZ, October 1999. Evaluated proposals related to genetic work on endangered fishes of the Colorado River drainage.

Reviewer. National Science Foundation, Systematics Program 2 proposals

E. Journal referee. List journals and number of papers refereed by each division member in alphabetical order.

Steven P. Platania 3 papers Copeia, Journal of the American Society of Ichthyologists and Herpetologists	3 papers
Thomas F. Turner 13 papers Copeia, Journal of the American Society of Ichthyologists and Herpetologists	5 papers
Journal of Heredity	2 papers
Marine Ecology Progress Series	2 papers
Canadian Journal of Fisheries and Aquatic Sciences	3 papers

Bioscience 1 paper

9. SERVICE.

A. Symposia, workshops, conferences, etc. sponsored, organized, held etc.NONE

B. Public Service.

Steven P. Platania

Inquires regarding New Mexico fish species distributions and life history

Alexandra M. Snyder_

Data manager for American Society of Ichthyologists and Herpetologists database on Supplies and Practices; responsible for all inquiries regarding curatorial practices and supplies for collections of fishes, amphibians and reptiles (12 questions, average of 30 minutes each); inquiries regarding animal identification, care and behavior (31 questions, average 20 minutes each); provided photocopies of relevant articles on fishes for APS teachers and 50 ½ liter jars and gaskets (gratis) for the New Mexico Museum of Natural History. Estimated cost for supplies and photocopies: \$100.00

10. ADVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC.

NONE

11. DONATIONS AND GIFTS RECEIVED. (lots/specimens)

ACC2000-IV:19 New Mexico Department of Game and Fish Pantosteus discobolus yarrowi (3/46) ACC2000-VI:27 G. Schiffmiller, Department of Environment NM Santa Fe River fishes (4/12)

12. FY98/99 MSB Division of Fishes Staff

Thomas F. Turner, Curator of Fishes

Steven P. Platania, Associate Curator of Fishes

Alexandra M. Snyder, 0.50 FTE Collection Manager, San Juan River Research Assistant, and Program Manager for NSF grant

Sara J. Gottlieb, Data Manager for San Juan River Research and MSB Division of Fishes Robert K. Dudley, Biostatistics and Project Leader

W. Howard Brandenburg, Taxonomic Services and Museum Assistant

Michael A. Farrington, Field Crew Leader (Pecos pupfish study) and Taxonomic Services

Don E. Gibson, Field Crew Leader (San Juan River drift study) and Museum Assistant

Joshua R. Walters, Field Crew member for all projects and Museum Assistant

Conner McBride, San Juan River Field Crew member

Roman Romero, San Juan River Field Crew member

Joash Schumpelt, Undergraduate Curatorial Assistant

Kari L. Torres, REU Curatorial Assistant

Brian Tonhika, REU Curatorial Assistant

Justin Martin, REU Curatorial Assistant

T.F. Turner Students:

Melanie Edwards, Graduate Student PhD Dominique Alo, Graduate Student, MS Megan McPhee. Graduate Student. PhD

13. MUSEUM ASSOCIATES.

Brooks M. Burr, Professor of Zoology, Southern Illinois University, Carbondale Astrid Kodric-Brown, Professor of Biology, University of New Mexico, Albuquerque David L. Propst, Ph.D. Endangered Species Program, New Mexico Department of Game and Fish, Santa Fe

MUSEUM OF SOUTHWESTERN BIOLOGY DEPARTMENT OF BIOLOGY FISCAL YEAR 1998-1999 HERBARUM

1. DIVISION HIGHLIGHTS

The vascular plant holdings of the herbarium now exceed 97,300 specimens. Funding from the Native Plant Society of New Mexico was used to hire a student for continuing database computerization. Efforts are concentrating on data-basing and nomenclatural updates. There are now more than 43,800 specimens cataloged in FileMaker Pro 4.0 (~45%).

Herbarium faculty and staff are continuing work on a Checklist of the Flora of the Sevilleta National Wildlife Refuge. Collecting, identification and processing continue on this project.

Herbarium staff, students, and museum associates are pleased to be major contributors in the New Mexico Rare Plant Technical Council's web site New Mexico Rare Plants. New Mexico Rare Plants (http://nmrareplants.unm.edu) is an online publication that provides land managers and botanists in the state with current and accurate information about rare plants. Approximately 70% of reports have made final editing and the remaining 30% should be completed by the end of summer.

The NMRP web site has made major gains this year in producing more than 600 web pages, which include species descriptions, photos, illustrations and distribution maps for 190 rare plant taxa. Most of the photographs have been scanned and linked to the reports. About 30% of the distribution maps have been created and linked to the reports. The herbarium houses the server and herbarium staff and students oversee web site creation and administration. In addition, herbarium staff have created and maintain the web site for the Native Plant Society of New Mexico (http://npspm.unm.edu).

TABLE OF COLLECTION USE

Collection Growth	Loans (outgoing)	Loans (incoming)	Visitors (researcher/ public)	Info Requests	Publications
1,700	25/740	12/439	259/105	~175	11

3. COURSES USING THE COLLECTIONS

BIOL 463L Flora of New Mexico (48 students) specimens, facilities and staff participation BIOL 360L General Botany/Lab (~30 students) specimens from teaching collection are used BIOL 461 Introduction to Tropical Biology (18 students) facilities, staff participation

4. COLLECTION MANAGEMENT

Herbarium staff processed more than 1700 specimens into the collection. Specimen processing now concentrates on accessions from the 1999 and 2000 calendar year. A small grant from the Native Plant Society of New Mexico aided efforts to computerize the collection. Work continues in data processing and more than 6,200 records were entered during the past fiscal year. Data from approximately 43,800 specimens are now in the computer database, approximately 45% of the holdings. Several large plant families along with 25 smaller families have been entered in the database.

As data-basing proceeds, efforts continue on updating the nomenclature as specimens are entered. To insure the long-term preservation of the collections, we continue to replace worn and acidic genus folders in the collection. Worn gaskets were replaced with archival quality silicon sponge stripping in 10 herbarium cabinets.

A significant donation from the LTER program included three long-arm Nikon dissecting scopes and 29 herbarium cabinets.

The entire LTER herbarium collection (~800 specimens) came to UNM to be processed and cataloged in the UNM database then subsequently returned in labeled acid-free folders. This is an ongoing project to ensure that herbarium specimens collected by Sevilleta students and staff meet adequate standards of collections care and preservation.

A web version of Collection Managers Online (CMO), an international directory of museum personnel was created and is maintained by Herbarium staff. The CMO contains the names, addresses, and linked e-mails and URLs for more than 300 collection managers.

5. AWARDS, GRANTS, AND CONTRACTS. List grants applied for and received. Include PI(s), grant title, agency, duration, and award amount. List alphabetically by PI. Please categorize under the following headings: Students, Staff, Faculty, Post-docs, Associates

Students:

Staff:

Mygatt, J.E.

Computerization of the University of New Mexico Herbarium. J. Mygatt, PI. Native Plant Society of New Mexico, February 2000, \$1000.

Employee and Organizational Development. Requested funds to attend the Society for the Preservation of Natural History Collections annual meeting in Halifax, Nova Scotia for July 2000. \$300.

Faculty:

Lowrey, T.K.

A Virtual Museum of New Mexico Natural History: a joint project of the Museum of Southwestern Biology and the Centennial Science & Engineering Library. T.K. Lowrey, PI, B. Neville, et al. co-PI. 2000 IMLS National Leadership Grants. 1 December 2000- 30 November 2002. \$211,430. (Applied)

Relocation and Compactorization of the Museum of Southwestern Biology T.K. Lowrey, PI. National Science Foundation August 1, 1997-present. \$313,000.

NSF-REU: Sevilleta LTER Summer REU Program. R. Parmenter, PI. Co-PI's: T.Lowrey, B. Lee, D. Lightfoot. National Science Foundation. June 1, 1999-June 30 2001. \$150,000.

6. PUBLICATIONS

A. Publications by museum staff, students and associates.

Newsletters:

Frazier, C.K. 1999. A Taxonomic Study of *Philadelphus* (Hydrangeaceae) as it occurs in New Mexico. (13):1-6.

Mygatt, J. 2000. Citing Use of Herbaria. The New Mexico Botanist (14):2.

Sivinski, R.C. 2000. Something old and something new. Flora Neomexicana 25(1):10-11.

Books:

Reports:

Journal Articles:

Barlow-Irick, P. 1999. Cirsium ochrocentrum ssp. martinii (Asteraceae), a new subspecies of the Santa Fe Thistle from the Gila River region of Arizona and New Mexico, Novon 9:318-322.

Okada M., T.K. Lowrey, and R. Whitkus. 2000. Quantitative morphological variation in *Tetramolopium* (Asteraceae) in Hawaii and the Cook Islands Plant Systematics and Evolution. 221(1-2):1-13.

WHITKUS, R., H. DOAN, AND T. K. LOWREY. 2000. Genetics of sex expression in Hawaiian Tetramolopium (Asteraceae). Journal of Heredity. 85: 37-43.

Pedicino, L.C., S.W. Leavitt, J.L. Betancourt and P.K. Van de Water. 2000. Is δ^{13} C_{leaf} from herbarium specimens useful for detecting trends in atmospheric chemistry and ecophysiological response? Global Change Biology. (In Review)

Web Publications:

Mygatt, J.E.

New Mexico Rare Plants web site (http://nmrareplants.unm.edu)

Native Plant Society of New Mexico web site (http://npsnm.unm.edu)

Collection Managers Online (CMO). International e-mail directory of more than 350 collection managers throughout the world, available on the UNM Herbarium homepage (http://www.unm.edu/~museum/herb/cmo.htm)

UNM Herbarium web site (http://www.unm.edu/~museum/herb/herb.htm)

Museum of Southwestern Biology home page (http://www.unm.edu/~museum)

- B. Publications and reports based on museum specimens by researchers excluding museum staff, students and associates.
- Forbes, A.C. and K.W. Allred. 1999. An Investigation of Salsola L. (Chenopodiaceae) in New Mexico. The New Mexican Botanist (12):4-7.
- Hartman, R.L. 2000. A new species of Cymopterus (Apiaceae) from the Rocky Mountain region, U.S.A. Brittonia 52: 136-141.
- Hubbard, J.P. 1999. *Penstemon spinulosus* Wooton & Standley: New Mexico endemic, error, or introduction? The New Mexican Botanist (12):1-4.
- Pinkava, D.J. 1999. Vascular Plants of Arizona: Cactaceae *Grusonia*. Journal of the Arizona-Nevada Academy of Science 32(1):48-52.
- Pinkava, D.J. 1999. Vascular Plants of Arizona: Cactaceae Cylindropuntia. Journal of the Arizona-Nevada Academy of Science 32(1):32-47.

7. ACTIVITIES IN LEARNED SOCIETIES

- A. Invited or plenary talks.
- B. Contributed talks or posters.
- C. Attendance at professional meetings.

The New Mexico Rare Plant Technical Council: UNM Herbarium. November 1999 and March 2000.

Carter, Jack L.

Lowrey, Timothy K.

Mygatt, Jane

Sivinski, Robert C., President

Tonne, Phil

- D. Service as editor or on editorial board of a journal.
- E. Service as officer of professional society or organization.

Mygatt, J.E.

Web editor. New Mexico Rare Plants. Authored 9 rare plant reports for the NMRPTC.

Web editor. Native Plant Society of New Mexico.

Publications Committee. Native Plant Society of New Mexico.

Lowrey, Timothy K.

President-Elect, International Organization of Plant Biosystematists.

Sivinski, R.C.

Vice-President of the Native Plant Society of NM

Chair of the New Mexico Rare Plant Technical Council: Organized the annual meeting of the NM Rare Plant Technical Council, March 2000; Authored 40 rare plant reports for the NMRPTC.

8. OTHER PROFESSIONAL ACTIVITIES.

- A. Seminar or colloquium presentations.
- B. Presentations in a scholarly capacity at hearings, workshops, legislative committees, etc.
- C. Presentation to general audience in a scholarly capacity.
- Service in a scholarly capacity as a member of a local, state, regional or national committee, panel.

The New Mexico Rare Plant Technical Council
Lowrey, Timothy K.
Mygatt, Jane

E. Journal referee. List journals and number of papers refereed by each division member in alphabetical order.

9. SERVICE.

- A. Symposia, workshops, conferences, etc. sponsored, organized, held etc.
- B. Public Service.

Lowrey, Timothy K.

Department Committees: Salary, Staff Advisory, Greenhouse, Associate Chair of Biology, Director, Museum of Southwestern Biology

Departmental committees: Space, Staff Advisory, Greenhouse, Faculty Search Committee: Ichthylogist/Curator of Fishes, Faculty Search Committee: Systematist/Phylogeneticist, Museum Administration Committee

University committees: Academic Freedom and Tenure, Investigative sub-committee, Vice-President for Research Committee on Libraries

Mygatt, Jane

Web editor of Collection Managers Online (CMO) an international directory for collection managers of natural history collections.

Web editor of the Native Plant Society of New Mexico

Web editor New Mexico Rare Plants web sites.

Departmental Committees: Greenhouse

Science Fair Judge. NWNM Regional Science and Engineering Fair. March 2000.

10. ÄDVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC.

11. DONATIONS AND GIFTS RECEIVED.

1999.02 B. Sivinski 4 specimens 1999.12 J. Carter gift 54 specimens 1999.15 J. Hubbard gift 13 specimens

1999.16 NMC gift 13 specimens 1999.17 T.K. Lowrey gift 10 specimens 1999.18 NNHP D. Roth gift 1 specimen 1999.20 J.M. Stewart gift 2 specimens 1999.21 LTER existing herbarium 1999.22 I. Bezpalko gift 1 specimen 1999.23 DeWitt Ivey gift 229 specimens 1999.24 P. Barlow-Irick gift 1 isotype specimen 1999.25 MSB P. Polechla gift 25 specimens 1999.26 C. Keller gift 1 specimen 1999.27 TRC N. Kastning 150 specimens 1999.28 LTER new accessions 1999.29 T.K. Lowrey/C. Quinn gift 2 specimens 1999.30 Morton Arboretum gift 3 specimens 2000.01 P. Tonne & B. Sivinski gift 5 specimens 2000.02 UTEP gift 1 specimen 2000.03 Louis Berger Inc. D. Kennemore gift 57 specimens 2000.04 ISTC S. O'Kane gift 1 isotype 2000.05 NMNHP Y. Chauvin gift 20 specimens 2000.06 J. Ladyman gift 35 specimens 2000.07 B. Sivinski gift 10 specimens 2000.08 B. Hevron gift 4 specimens 2000.09 NMNHP S. Wood gift 300 specimens

12. CURRENT STAFF. List faculty, staff, students and volunteers

Faculty and Staff

Timothy K. Lowrey, Curator and MSB Director Jane Mygatt, Collection manager

Graduate students

Patricia Barlow-Irick

Laura Boykin

Christopher Frazier

Paula Hall (graduate herbarium assistant)

Student employees

Jennifer Agosta (work-study employee)

13. MUSEUM ASSOCIATES

Curatorial Associates

David L. Bleakly, M.S. Botanical Consultant. NM floristics.
William Dunmire, M.S. Author, Ethnobotany of the Southwest.
Robert DeWitt Ivey, M.S. APS (retired): Botanical Author, NM floristics.
Robert C. Sivinski, M.S. Botanist, Forestry & Resources Conservation Division.

Research Associates

Jack L. Carter, Ph.D. Professor Emeritus of Biology, The Colorado College Daniel J. Crawford, Ph.D. Professor of Plant Biology, Ohio State University

William Hevron, M.S. Botanical Consultant. NM floristics
Denis M. Kearns, Ph.D. Plant ecologist, consultant
Charles Keller, Ph.D. Director, Institute of Astrophysics, Los Alamos Scientific Labs
Paul Knight, M.S. Marron and Associates. NM floristics, T&E species
Juanita Ladyman, Ph.D. Botanical Consultant
Louise Lewis. Ph.D., Department of Biology, UCONN
Paul O. Lewis, Ph.D., Department of Biology, UCONN.
Esteban Muldavin, Ph.D. Ecologist, New Mexico Natural Heritage Program
Christopher Quinn, Ph.D. University of New South Wales
Phil Tonne, M.S. Botanical Consultant. NM floristics
Alan Tye, Ph.D. Charles Darwin Research Station

MUSEUM OF SOUTHWESTERN BIOLOGY Division of Mammals Annual Report, 1999-2000 Compiled by W. L. Gannon, Ph. D.

1. DIVISION HIGHLIGHTS.

The Curator, Dr. Terry Yates, took an assignment as Division Chief at the National Science Foundation, in Washington, D.C., that it is hoped will last only until March 2001. After this term is completed, it is hoped that Dr. Yates will return to the Division.

We have also endured a cramped and declining collection facility long enough! After numerous "move-in" dates, it seems that 10 December will be moving day where we will be moving the over 300 packed museum cases over to the new museum facility. The division is moving the entire collection (dry and wet) and occupying office space for the collection managers. A new library room will house the Kirkland collection as well as the numerous journals and books already owned by the division. Preparation, storage, chemical, and other areas of the division will be completed during Phase II of the renovation.

We received approximately 3000 volumes of books and journal from the estate of Gordon Kirkland. Gordie, a curator at Shippensburgh University in Pennsylvania, was a long-time friend of many in the division and we were saddened by his death to cancer this year. The library of material that he donated will be prominent in the new building space.

The division spent much of the time this year planning - mostly waiting - for the move to occur. Despite this thumb-twirling, we managed to catalog 4100 specimens, published 23 papers, submit 24 grants for ca. \$4 million (\$3.8 million for Yates, about \$300,000 for the rest of us) and teach classes and train/mentor students. As in past years, the projects driving this activity included the *Hantavirus* research (and other, related emerging viruses projects to Mongolia, Bolivia, and Panama -see below), the Long-term Ecological Research Project at the Sevilleta (Mike Friggens managed two 4 person field crews), and the New Mexico Bat Project. Several major grants were awarded (see Grants and Awards below), and the number of grantfunded staff increased. The web site was re-vamped and moved to a new server (http://talpa.unm.edu/).

Several grants sponsored student activity in the division including the NASA funded mentorship program (four students) and McNeil Program that assisted three minority undergraduates. All these students strived to present their studies at a scientific meeting and to publish their work in a peer-reviewed journal.

Current and planned research within the Division:

As curator and directing the progress of the division, Dr. Yates' research program is multi-disciplinary in nature but has been focused primarily on systematics, emerging diseases, and biological diversity. Much of his most recent work has been centered within questions involving the mammalian diversity, in particular centered on systematics and ecology of South American rodents and in emerging viruses globally. As a co-PI with the LTER project, his research group on the Sevilleta is focusing on climate and productivity driven controls on mammalian populations and the degree to which fluctuations in population density affect levels of infection by *Hantavirus*. Additional support for the latter research has been awarded to his

program by the CDC, NIH, and NSF. A separate grant from the National Biological Service to examine the effects of climate change on small mammal populations on mountain tops has continued this year and has allowed the addition of an altitudinal component to this research. Other projects include bat surveys (using echolocation detectors), fur-bearer study, and a revised Mammals of New Mexico book.

The Mongolia trip: Sponsored by the NSF, this trip had several goals but the main objective of setting the stage for developing a Long Term Ecological system in the country. Mongolia, because it central location at the very heart of mainland Asia would be a very welcomed addition to the ILTER (International Long Term Ecological Research sites) initiative. The trip (June – July 1999) was in collaboration with the National University of Mongolia (NUM) at Ulaan Baatar where two senior scientist acted as our direct national counterparts: Dr. Sumiya Ganzorig and M.Sc. Nyumsureg Batsaikhan. Our main objective was to establish a set of rodent monitoring webs (modeled after our own at the Sevilleta and the Longitudinal Studies of hantavirus). Our counterparts choose a National Park just north of UlaanBaatar, near to a Field Station that belongs to NUM's for the establishment of the first set of webs. At least 30 undergraduate and 2 graduate students from NUM participated of this activity. After this task was accomplished, several other localities in the country were visited and surveyed for small mammals. This was accomplished so alternative and potential sites were identified with the idea of developing a large scale set of ILTER sites.

The trip to Panama (Dec 99-Jan00)was in response to a HPS (Hantaviral Pulmonary Syndrome) outbreak that killed three people and threatened several thousand more. The UNM team, was part of a larger contingent of the CDC – Atlanta and left in charge of rodent trapping both around case-houses and natural habitats. Specimens were brought to New Mexico and cleaned, identified and cataloged. Our studies show that two different rodent groups carry two different sets of hantavirus but only of them is a human pathogen.

The Bolivia field trip (May – June 00) was an activity whose objective was to finely determine the distribution ranges of the two species of *Calomys* that have been involved in the harborage and transmission of Bolivian haemorraghic Fever. Some 500 specimens were collected along the road that connects the capital cities of Beni and Santa Cruz departments in Bolivia. Genetic data shows that the Beni species is different from the one in Santa Cruz and the limits are to be better understood with the data we collected in this trip.

2. TABLE OF COLLECTION USE.

4.54		4 + 4 + 1 + 1 + 1			# Data	
Collection	in the second second	Loans	Loans	#	Reques	# of
Growth	Accessions	(outgoing)	(incoming)	Visitors	ts	Publications
4102	51	31/612	5/215	143/702	800	23

The collection grew less this year than last (4102 cataloged specimens versus 5350 in 1998-1999) and the number of incoming loans was very much less. This sort of reduction in activity is due to our preparation for the move. Staff have been spending much more time cleaning holdup specimens and installing cataloged material than actually cataloging or requesting loans of material here for examination. However, the number of visitors and data requests increased. Visitors ranged from the usual researcher examining a specific group or

species of mammal (Neotoma cranial variation) to archaeofaunal analyses, to science classes and other educational groups.

3. UNM COURSES USING THE COLLECTIONS. List the courses including; course number, approximate number of students enrolled, type of use (specimens, facilities, staff participation, etc.).

Biology 121: Principles of biology
Biology 386: Principles of biology
General vertebrate zoology
Biology 402/502: Adv Vertebrate Biology

Biology 489: Mammalogy

Biology 554 Advanced Mammalogy
Art 412: Museum management

Anthro 449: Paleontology

The following courses used the collection extensively as part of their course work:

Biology 489: Mammalogy - 21 students (2000; 8 are graduate students)

Biology 502: Advanced vertebrate biology - 20 students Biology 502: Topics in Chromosomal Evolution - 6 students

Biology 651: Advanced Field Biology - 3 students Biology 512: Population Biology - 14 students

Biology 554: Mammalian Ecology and Behavior - 14 students

4. COLLECTION MANAGEMENT.

The Division manages its 130,000 specimen records using Microsoft® Access©. After a major re-write of the database management system the Access© program has now set the stage to expand to web site posting or network information transfers between divisions of the MSB or among mammal collections at other institutions. We have participated in a proposal to link 18 mammal collections (MaNIS) which has been re-submitted for funding this month. We also benefit from being a participant in the KDI initiative that will allow distributed queries to be sent to participant collaborators for cross-cutting ecological questions.

Interesting accessions included wolves from the captive-release program on the AZ-NM border. The division is the depository for all wolf mortalities. One such accession was an animal that had been shot, another was apparently hit-by-care. We have noted to the USFWS that we mortalities occur it is imperative that they provide us with the specimen as quickly as possible and with all possible data. In the past we have received specimens in poor to rotten condition that make them useful only for a skeleton; foregoing all genetic and ecological data. They have responded to our needs.

We continue to accept material from the Rio Grande Zoo and NM Department of Game and Fish. With the NMDGF, Dr. Greg Schmitt has been collecting foxes and mountain lions as part of an on-going management study. Aside from generating specimens, Greg is also working with Dr. Jerry Dragoo in examining genetic relationships. Dr. Paul Polechla's fur-bearer study generated some interesting diversity of specimens from northen New Mexico. Dr. Bill Gannon's

five years of surveying bats in New Mexico closed with some new county records among the vouchers. Specimens generated from the mammalogy class (Fall 1998) have been cataloged and installed. We also accepted a final accession of mounted heads and other wildlife exhibits from Gloria Longley. We hope to use some of this bulky material around the new collection space.

In response to a request by WLG, the USFWS awarded \$5600 to provide new cases to the division to better house wolf specimens. We are trying to hold off on accepting these cases until we move to the new building. We did receive 10 new Delta Designs cases (white, with drawers) as part of a supplement we wrote to the LTER grant. Another 5 cases were delivered in September 1999.

5. AWARDS, GRANTS, AND CONTRACTS. List grants applied for and received. Include PI(s), grant title, agency, duration, and award amount. List alphabetically by PI. Please categorize under the following headings: Students, Faculty, Post-docs, Associates.

Faculty:

Terry L. Yates- PI:

Improvement of the Museum of Southwestern Biology's Biological Materials Collections: A Genetic Resource for the 21st Century. NSF 1 July 1999-June 30th 2000

Relocation and compactorization of the Museum of Southwestern Biology. Co-PI. National Science Foundation, 15 August 1996 31 July 1998, \$313,200.

The Sevilleta LTER, Cycle II NSF October 1994- September 2000 \$580,000

Hantavirus Infections: Ecology, Immunity and Treatment NIAID/NIH September 1 1996-August 31, 2000 \$281,977

Longitudinal Studies of Hantavirus in SW US Rodent Populations Indian Health Service September 1996- May 1999 \$101,800

Longitudinal Studies of Hantavirus in SW US Rodent Populations CDC September 30 1996-August 31, 1999 \$191,500

Relocation/Consolidation of the Research and Training Facility of the Department of Biology NSF

March 1997- May 31 1999 \$960,000

Ecology of Hantavirus Enzootics: Immune Interventions NIAID August 1997-July 2002 \$176,365

Hantavirus Ecology and Disease in Chile NIH/NIAID June 1 1999-May 31 2004 \$621,840

ICIDR Portable flow-through Amperometric Immunosensor Device for Fast Field Immunoanalysis of Rodent Virus, NSF January 1998-December 2001 \$167,500

Response of SW Mammal Communities to Global Climate Change US Fish/Wildlife Service September 1998- September 2000 \$50,000

Knowledge Networking of Biodiversity Information KDI/KN NSF September 1 1998- August 31 2001 \$660,000

Post-Docs:

Jerry W. Dragoo:

Examine the genetics and speciation questions with foxes (Genus Vulpes) in New Mexico. Costshare project with the US Fish and Wildlife Service and the New Mexico Department of Fish and Game. 1997-1999. \$20,000

Ted Turner Endangered Species Fund (\$5025) to DNA fingerprint Mountain Lions from scat samples, 1997-1998. With Eric M. Rominger and Terry L. Yates.

New Mexico Game and Fish (\$20000) to study population genetics of swift and kit foxes in New Mexico, using Microsatellite DNA analysis, 1998.

Luis A. Ruedas

National Institute of Health, \$85,000. Examination of the differences in survival among *Peromyscus* survival. June 1999 - May 2000.

National Geographic Society and Lubee Foundation: Mammal surveys of Sulawesi - \$40,000

Jorge Salazar Bravo

Awards; elected student member of the Board of Directors (1999-2001)

Grants awarded (OGS, 1,000 to study specimens at Field Museum)

Pending (2000) – ca. 2 Million w/ Gosz, and Ricco-Hesse, Human influence to Machupo Virus dispersion. NSF-NIH Ecology of Infectious Diseases initiative.

Students:

M. Scott Burt: Graduate research allocations (GRAC) and travel grant, department of Biology, UNM, 1998, \$400 Morphological and genetic variation in the subspecies of *Thomomys bottae* in New Mexico, Student research allocations (SRAC), UNM 1998, \$650

GRAC funding, \$350.00; SRAC funding, \$500.00; VPGRF award, \$150.00

New Mexico Department of Game and Fish, Share with Wildlife, Morphological and genetic variation in the subspecies of *Thomomys bottae*, \$4800, 1 June 1999 - 2000

Gabor Racz - Funded research to Hungary, summer 1999 and 2000

Staff::

William L. Gannon:

Awarded. 2000. REU supplement to DEB 9876826 award, "Improvement of the Museum of Southwestern Biology's Biological Materials Collections: A genetic Resource for the 21st Century" \$26,000.

Awarded 2000. Bat species inventory and habitat assessment on the properties of the United States Military Academy, West Point, New York. \$22,500.

Awarded 1999. Wolf (Canis lupus baileyi) specimen management and housing. U. S. Fish and Wildlife Service, \$10,000

Awarded 1999. Mammals of New Mexico, Second Edition, setup and supplies. New Mexico Department of Game and Fish, Share with Wildlife Program. \$2,000.

Awarded 1999. Improvement of the Museum of Southwestern Biology's Biological Materials Collections: a genetic resource for the 21st century. (With T. L. Yates and L. A. Ruedas), \$86,987 National Science Foundation, Collection Improvement announcement.

Paul Polechla:

Bureau of Land Management Grant, \$20,000, I am conducting a survey of the distribution and occupied habitat of the river otter and other wetland furbearers in the upper Rio Grande drainage. July 1998 to September 1999.

GRANTS PENDING

Pending (Gannon). 2000. Population dynamics, movements and relatedness of Townsend's Big-eared Bat (*Corynorhinus townsendii*) seasonally inhabiting the Idaho National Engineering and Environmental Laboratory (INEEL) and nearby public lands. \$27,400 US Forest Service and National Energy Labs

PUBLICATIONS. Categorize under the following headings: Books, Journal articles, Reports. List the entries alphabetically by author with the relevant museum personnel in bold if a multi-authored publication. NOTE: Publications listed below are only those that used specimens from the collection to prepare the paper. This listing does not represent the total number of papers published by division staff.

In Press:

Bogan, M.A. and P.M. Cryan. (In press) The bats of Wyoming. In Fort Hays studies in biology (J.R. Choate, ed.).

Cryan, P.M. and M.A. Bogan. (In press) The affect of elevation on the distribution of female bats in the Black Hills, South Dakota. Journal of Mammalogy.

Gannon, W. L., M. J. O'Farrell, and W. Bogdanowicz (eds). (In press) Echolocation detectors in field studies of bats, American Society of Mammalogists, Annual Meeting, Seattle, WA. Acta Chiropterologica.

.77

Gannon, W. L., M. J. O'Farrell, C. Corben, and E. J. Bedrick. (In press) Call character lexicon and analysis of field recorded bat echolocation calls. In Echolocation in bats and dolphins (J. Thomas and C. Moss, eds.) University of Chicago Press, Chicago, IL.

O'Farrell, M. J., C. Corben, and W. L. Gannon. (In press) Comments on the geographic variation in the echolocation calls of bats. In Echolocation detectors in field studies of bats, (Gannon, W.L., M. J. O'Farrell, and W. Bogdanowicz, eds). Acta Chiropterologica.

Ruedas, L A., J. Salazar-Bravo, J. W. Dragoo and T. L. Yates. What if anything is an specimen examined. Molecular Phylogenetics and Evolution (2000)

Sherwin, R. A., W. L. Gannon, J. S. Altenbach, D. Stricklan. 2000. Roost fidelity of Townsend's big-eared bat in Utah and Nevada. Journal of Wildlife Management

Journals:

Bogan, M.A. (1999) Family Vespertilionidae. Pp. 139_181 in Mamferos del noroeste de Mxico (S.T. Alvarez Castaeda and J.L. Patton, eds.)

Bogan, M.A. (1999) Myotis californicus. Pp. 85_86 in The Smithsonian book of North American mammals (D.E. Wilson and S. Ruff, eds.). Smithsonian Institution Press, Washington, DC.

Bogan, M.A. (1999) Myotis ciliolabrum. Pp. 87_88 in The Smithsonian book of North American mammals (D.E. Wilson and S. Ruff, eds.). Smithsonian Institution Press, Washington, DC.

Bogan, M.A. (1999) Myotis evotis. Pp. 88_90 in The Smithsonian book of North American mammals (D.E. Wilson and S. Ruff, eds.). Smithsonian Institution Press, Washington, DC.

Bogan, M.A. (1999) Myotis griscesens. Pp. 90_92 in The Smithsonian book of North American mammals (D.E. Wilson and S. Ruff, eds.). Smithsonian Institution Press, Washington, DC.

Bogan, M.A. (1999) Myotis leibii. Pp. 93_94 in The Smithsonian book of North American mammals (D.E. Wilson and S. Ruff, eds.). Smithsonian Institution Press, Washington, DC.

Bogan, M.A. and C.A. Ramotnik. (1999) Mammalian species diversity of the Grand Staircase_Escalante National Monument. Pp. 153_159 in Proceedings of the Grand Staircase_Escalante National Monument Science Symposium, November 4_5 1997, Southern Utah University.

Burt, M.S. and R.C. Dowler. (1999) Biochemical systematics of Geomys breviceps and two chromosomal races of Geomys attwateri in eastern Texas. Journal of Mammalogy 80:799_809.

Dragoo, J. W. and R. L. Honeycutt. (1999) Eastern Spotted Skunk / Spilogale putorius. Pp.185_186, in The Smithsonian Book of North American Mammals (D. E. Wilson and S. Ruff, eds.). Smithsonian Institution Press, Washington, D. C., 750 pp.

- Dragoo, J. W. and R. L. Honeycutt. (1999) Eastern Hog_nosed Skunk/ Conepatus leuconotus. Pp.190_191, in The Smithsonian Book of North American Mammals (D. E. Wilson and S. Ruff, eds.). Smithsonian Institution Press, Washington, D. C., 750 pp.
- Dragoo, J. W. and R. L. Honeycutt. (1999) Western Hog_nosed Skunk/ Conepatus mesoleucus. Pp.185_186, in The Smithsonian Book of North American Mammals (D. E. Wilson and S. Ruff, eds.). Smithsonian Institution Press, Washington, D. C., 750 pp.
- Gannon, W.L. (1999) Tamias alpinus. Pp. 357_358 in The Smithsonian book of North American mammals (D.E. Wilson and S. Ruff, eds.). Smithsonian Institution Press, Washington, DC.
- Gannon, W.L. (1999) Tamias ochrogenys. Pp. 370_372 in The Smithsonian book of North American mammals (D.E. Wilson and S. Ruff, eds.). Smithsonian Institution Press, Washington, DC.
- Gannon, W.L. 1999. Tamias siskiyou. Pp. 383_385 in The Smithsonian book of North American mammals (D.E. Wilson and S. Ruff, eds.). Smithsonian Institution Press, Washington, DC.
- Gannon, W.L. 1999. Zapus trinotatus. Pp. 669_670 in The Smithsonian book of North American mammals (D.E. Wilson and S. Ruff, eds.). Smithsonian Institution Press, Washington, DC.
- Kirkland, G. L., Jr., G. W. Barrett, M. A. Bogan, J. E. Childs, G. Glass, A. Krevitz, L. R. Heaney, T. H. Horton, T. H. Kunz, T. J. McIntyre, G. R. Michener, J. N. Mills, R. R. Parmenter, A. J. Pinter, J. H. Shaw, S. D. Thompson, B. A. Wunder, and T. L. Yates. 1999. Guidelines for the capture, handling, and care of mammals as approved by the American Society of Mammalogists. Journal of Mammalogy, 79:1416 1431.
- Mills, J.N., T.L. Yates, T.G. Ksiazek, C.J. Peters, and J.E. Childs. (1999) Long_term studies of hantavirus reservoir populations in the southwestern United States: rationale, potential, and methods. Emerging Infectious Diseases 5:95_101.
- O'Farrell, M. J., and W. L. Gannon. (1999) A comparison of acoustic versus capture techniques for the inventory of bats. Journal of Mammalogy 80:24_30.
- O'Farrell, M. J., B. W. Miller, and W. L. Gannon. (1999) Qualitative identification of free_flying bats using the Anabat detector. Journal of Mammalogy 80:11 23.
- O'Farrell, M. J., C. Corben, W. L. Gannon, and B. W. Miller. (1999) Confronting the dogma: a reply. Journal of Mammalogy 80:297_302.
- Parmenter, C.A., T.L. Yates, R.R. Parmenter, and J.L. Dunnum. (1999) Statistical sensitivity for detection of spatial and temporal patterns in rodent population densities. Emerging Infectious Diseases 5:118 125.
- Valdez, E.W., J.N. Stuart, and M.A. Bogan. (1999) Additional records of bats from the Middle Rio Grande Valley, New Mexico. The Southwestern Naturalist 44:398_400.

Valdez, E. W., J.R. Choate, M.A. Bogan, and T.L. Yates. (1999) Taxonomic status of Myotis occultus. Journal of Mammalogy 80:545 552.

Technical Reports

Parmenter, R. R., D. C. Lightfoot, and W. L. Gannon. 2000. Capulin Volcano National Monument: Listed and category species inventory. Final Report to the United States Department of the Interior, National Park Service, Cooperative agreement No. CA7029-1-0012, subagreement No. 13, 17 pages

- 7. ACTIVITIES IN LEARNED SOCIETIES.
- A. Invited or plenary talks.
- J. **Dragoo**. Molecular Systematics of the Phyllotini: Preliminary Results. Presented at the Southwestern Association of Naturalists Annual Meeting in Monterrey Mexico on 23 April 1999.
- J. **Dragoo**. Systematics of Calomys and Epidemiology of Bolivian Hemorrhagic Fever. Presented at the Southwestern Association of Naturalists Annual Meeting in Monterrey Mexico on 23 April 1999 by Jorge Salazar Bravo.
- J. **Dragoo**. Microsatellite Variation in Swift/Kit foxes in New Mexico. Presented at the Southwestern Association of Naturalists Annual Meeting in Monterrey Mexico on 22 April 1999 by Kelby D. Willoughby.
- J. **Dragoo**. Genetic Variability of the Alaskan Kenai Peninsula Lynx Seen Through Microsatellite Analyses. Presented at the Southwestern Association of Naturalists Annual Meeting in Monterrey Mexico on 23 April 1999 by Lisa J.M. Roberts.
- J. **Dragoo.** Systematics of Calomys and Epidemiology of Bolivian Hemorrhagic Fever. Presented at the American Society of Mammalogists annual meeting in Seattle, Washington, June 1999 by Jorge Salazar Bravo.

Gannon, William L.(symposium organizer). Using acoustics for the survey of bats. The American Society of Mammalogists annual meeting, Seattle, WA, 20 June 1999.

Gannon, W. L., M. J. O'Farrell, C. Corben, and E. J. Bedrick. Analysis and interpretation of field recorded bat echolocation calls using Analook. Paper to be presented at the American Society of Mammalogists annual meeting, Seattle, WA, 20 June 1999

O'Farrell, M. J., C. Corben, and W. L. Gannon. Standardization: The critical aspect for a quantitative approach to the analysis of echolocation calls of bats. Symposium paper to be presented at the American Society of Mammalogists annual meeting, Seattle, WA, 20 June 1999.

D. Service as editor or on editorial board of a journal.

Bogan: Managing Editor, Publications of the Museum of Southwestern Biology

Gannon: Editorial Committee - Series Editor, Publications of the Museum of Southwestern

Biology

Gannon: Editorial Committee, - Acta Chiropterologica (June 2000)

E. Activities—service as officer of professional organization

Burt:

Member of Web committee, ASM
Organizing Committee, Southwestern Naturalists, April 1998

Gannon:

Chair, Systematic Collections Committee (American Soc. of Mammalogists), 1996 - present Board Member, At-Large, Society for the Preservation of Natural History Collections, 2000 - member, Systematic Collections Committee (American Soc. of Mammalogists), 1992 - 1998 member, International Regulations Committee (Amer Soc. of Mammalogists), 1996 - present member, Informatics Committee, (American Soc of Mammalogists), 1988 - present Member, Main Campus Animal Care and Use Committee, UNM, 1990 - present Organizing Committee, Southwestern Naturalists, April 1998

Ruedas:

International Relations Committee, American Society of Mammalogists
Committee for the Conservation of Land Mammals, American Society of Mammalogists
Program Committee, American Society of Mammalogists
Ad hoc Web subcommittee of the Information Retrieval Committee (ASM)
Organizing Committee (Co-chairman), Joint American Society of Mammalogists — European
Mammal Society — Spanish Society of Mammalogy Meeting; June 1998, Santiago de
Compostela, Spain.

Organizing Committee, Southwestern Naturalists, April 1998

Salazar-Bravo:

Board of Directors, ASM
Board of Directors, Soc. para el estudio de Ecologia en Bolivia.
International Relations Comm., Am. Soc. Mamm.
Systematic Collection Comm., ASM
Organizing Comm. SWAN 1998
Member, Argentine Soc. of Mammalogy
Member, Brazilian Soc. Mammalogy
Assoc. Editor, Ecologia en Bolivia

Yates:

Trustee, Southwestern Association of Naturalists, 1992 - present. Trustee, American Society of Mammalogists, 1996 - present.

Research Assistant, Department of Wildlife and Fisheries Sciences, Texas A & M University, January 1973-May 1975.

Global Environmental Facility - World Bank - Biodiversity Subcommittee.

Latin American Biodiversity Committee - Smithsonian Institution.

Bio Task Force on Environmental Biology, The NSF.

Research Needs Committee - Ecological Society of America.

International Relations Committee, Chair, ASM.

Coordinating Committee for Latin American Exchanges Land use Committee

International Policy Committee

Grants Committee Latin American Institute

Academic Freedom and Tenure Committee

Council on the Americas

Main Campus Animal Care and Use Committee, Chair

Organizing Committee, Southwestern Naturalists, April 1998

- 8. OTHER PROFESSIONAL ACTIVITIES. List alphabetically under each category.
- A. Seminar or colloquium presentations.
- B. Presentations in a scholarly capacity at hearings, workshops, legislative committees, etc.
- C. Presentation to general audience in a scholarly capacity.
- D. Service in a scholarly capacity as a member of a local, state, regional or national committee, panel etc.
- E. Journal referee. List journals and number of papers refereed by each division member in alphabetical order.

Gannon:

Journal of Mammalogy Bat Research News Southwestern Naturalist Acta Chiropterologica

Ruedas:

Fieldiana (Zoology), New Series
Journal of Mammalogy
Proceedings of the Biological Society of Washington
Salazar-Brayo:

Acta Chiropterologica

Journal of Biogeography
Journal of Mammalogy

Occ. Papers of the Oklahoma Mus of nat. History

Ecologia en Bolivia

Mastozoologia Neotropical

- 9. SERVICE.
- A. Symposia, workshops, conferences, etc. sponsored, organized, held etc
- Gannon Workshop on Collection Management. 1999. Presented to the American Association of Nature Center Administrators at the Nature Center, Albuquerque, New Mexico
- Gannon Workshop on the operation of the Anabat bat detector system (with Chris Corben and Mike O'Farrell), Portal, AZ, May 2000
- Gannon Bats of New Mexico, State Working Group. State Meeting 7 August 1999. Bandelier National Park.
- B. Public Service.

Gannon - Board of Directors, The Rio Grande Nature Center State Park (located at 2901 Candelaria, promotes education, appreciation and on-hands experiences of and in the Rio Grande Bosque Biome). Appointed 1995.

Judge, Regional Science Fair, 1988- present Lecturer, Biology in a Nutshell, Rio Grande Zoo, talk to docents in training, June 2000

Yates

Appointed Research Associate, National Museum of Natural History, 1991 - present. Elected Trustee, Southwestern Association of Naturalists. Editor for Reviews, Journal of Mammalogy, 1993 - present. Chair, Main Campus Animal Care and Use Committee, UNM Chair, Department of Biology, University of New Mexico - 1 Aug 1995- 31 July 1999.

- 10. ADVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC. List alphabetically under each division member.
- 11. DONATIONS AND GIFTS RECEIVED. List source and type (e.g., specimens, money, equipment, books, etc.)

700 rodent specimens from Dr. Troy Best, Auburn University; 300 head mounts from Gloria Longley, Albuquerque, NM 3000 books donated by the estate of Dr. Gordon Kirkland

12. CURRENT STAFF. List faculty, staff, students and volunteers.

Terry L. Yates Students:

Current graduate students:

Burt, M. Scott (for Ph.D.)

Cheng, Yi-ju (for Masters)

Dunnum, Jon (for Masters)

Friggins, Michael T. (for Masters) Garcia, Andres (for Ph. D.) Perry, Travis W. (for Ph.D.) Racz, Gabor R. (for Ph.D.) Suzan, Gerardo (for Ph. D.) Tinnin, Dave S. (for Masters) Thibault, Katherine (for Ph. D.)

Current Postdoctoral Associates:

Dragoo, Jerry W. Ruedas, Luis A. Salazar Bravo, Jorge

13. MUSEUM ASSOCIATES AND STAFF.

Curatorial Staff, Division of Mammals Professional Staff

> Terry L. Yates Curator - 1978 - present Mike Bogan (Curator of Vertebrates, USGS) -James S. Findley - Curator Emeritus William L. Gannon - Collections Mgr, 1986 - present Cindy Ramotnik-(Collection Manager, USGS)

Additional Staff (1999)

Leif Bang - WS-mammals
Anne Brown -(RGZ volunteer)
Aubony Burns - WS, bat project
Scott Burt, (Graduate Assistant Curator, Mammals)
Polly Campbell - GC Grant -

Peggy Case -(RGZ volunteer)

Roni (Yi-ju) Chen (MS student, Yates)

Jerry W. Dragoo (Res Asst Professor; Mephitologist, Genetics),

Jon Dunnum, (Hanta Crew Chief) -

Brian Frank (Hanta Crew)

Mike Friggens -, (LTER field Coordinator)

Andrés Garcia, (Ph.D. student, Yates)

Andrea Gunderson - (WS, mammalogy),

Erin Jackson - (WS - mammalogy)

Erin McGwinn - WS, mammalogy

Marcia Piñeda (WS - mammalogy)

Carrie Pippin - (USGS)

Cheryl Parmenter (HV Data / intrmCM Biol Mat)

Paul Polechla -(Ph. D.; Hanta Crew),

Gábor Rácz - (PhD student - mammalogy, Yates)

JC Richardson - (Secretary, USGS),

254

Luis, Ruedas -(Post-Doc, Mammalogy)

Ryan Schwarz -(Hanta Crew)

Gerardo Suzan (Ph. D. student, mammalogy, Yates)

Amaris Swann - (WS - mammalogy),

Jorge Salazar (PhD student, Yates)

Jackie Salazar- (GC Grant -)

Timothy Sanchez-Brown (Web Meister & GIS)

Rick Sherwin (Ph.D. student, Altenbach),

Kate Thibault; (Ph. D. Student, Mammalogy - Yates

Dave Tinnin - (Hanta crew)

Ernest W. Valdez (USGS)

Dusty Wells (Hanta Crew)

Curatorial Associates:

James H. Brown

UNM Department of Biology

Richard B. Forbes

Department of Biology, Portland State University,

Research Associates:

J. Scott Altenbach UNM Department of Biology

Sydney Anderson American Museum of Natural History, New York Robert J. Baker The Museum, Texas Tech University, Lubbock, TX

Troy L. Best Department of Biology, Auburn University

Joseph A. Cook Natural History Museum, University of Alaska, Fairbanks

Scott L. Gardner Dept. Nematology, Curator, University Nebraska

Sarah B. George Director, Utah State Museum

Gary L. Graham Texas Parks and Recreation Division
David J. Hafner New Mexico Museum Nat, History

Edward J. Heske Illinois Biological Survey

R. Dewitt Ivey Retired. Active in Botany, mammals Clyde Jones The Museum Texas Tech University

Dwight W. Moore Emporia State University

Robert Parmenter Department Biology, LTER coordinator

James L. Patton Museum of Vertebrate Zoology, University of California

Richard A. Smartt New Mexico Museum of Natural History

ODD PHENOMENON

Jerry Dragoo's Postscript: "The popular media has picked up my research on skunks. I have been featured in local newspapers, radio stations, and television around the country and Canada. I have been featured nationally on NPR, ABC's webpage (twice - once a poll was taken to determine if I was Mad or Rad; 80% voted Rad!), People Weekly, Outside Magazine (twice), Discover Magazine, and Current Science (a science journal for children). Internationally, I have been featured in Nature Canada and have appeared on the television program Scientia in Brazil." Everyone's 15 mins of fame..

MUSEUM OF SOUTHWESTERN BIOLOGY DATA REPORTING FORM UNM DEPARTMENT OF BIOLOGY FISCAL YEAR 1999/2000

DIVISION: U.S. Geological Survey

1. DIVISION HIGHLIGHTS.

Activities of the Arid Lands Field Station of the Midcontinent Ecological Science Center, Museum of Southwestern Biology, continued in three general areas: field studies, museum collections management, and reporting. Field studies included roosting habits of the big free-tailed bat in southeastern Utah (Bogan), mammals of the Henry Mountains, Utah (Bogan and Mollhagen), and continued baseline surveys for bats at Chaco Canyon and El Malpais national parks in New Mexico (Valdez). There was a significant increase in activities related to New Mexico's two endemic lungless salamanders as a result of fires during early summer 2000. Ramotnik assisted in design and implementation of post-fire studies of the Jemez Mountain salamander, implemented a similar post-fire program on Sacramento Mountain salamander, and assessed populations of the Sacramento Mountain salamander in areas of the Scott Able burn in the Lincoln National Forest. In the area of Collections Management, Ramotnik continued to provide assistance and oversight of specimen preparation in Mammals and, with Pippin's assistance, helped eliminate the backlog of USGS specimens awaiting cleaning and numbering and completing computerized specimen data entry for all USGS collections. Ramotnik also spent considerable time training and assisting work-study students and volunteers in improving their skills in skeletal processing, numbering, and maintenance of the beetle colony. Report writing included publication of 7 original articles in books and journals, completion of two final reports on Mexican long-tongued bats and salamanders and two annual reports on bat studies. Three websites were updated and maintained. Several staff attended scientific meetings and some made presentations on their work.

2. TABLE OF COLLECTION USE.

Collection	Loans	Loans	#	# Data	# of
Growth	outgoing	incoming	Visitors	Request s	Publication
165 catalogued*	5/16	7/47	see MSB	22	7

^{*} plus 25/380 accessioned

3. COURSES USING THE COLLECTIONS.

Conservation Biology
 25 students
 staff participation/lecture

4. COLLECTION MANAGEMENT.

- Continued to eliminate backlog in skeletal cleaning and numbering in USGS collections;
- current with specimen data entry for USGS collections;

256

- Collection Manager trained work-study students and volunteers (N = 11) in Divisions of Mammals and Birds in skeletal processing and numbering, maintenance of dermestid beetle colony; integrated pest management procedures, and replacement of case gaskets;
- managed the two dermestid bugging facilities (indoor and outdoor);
- continued work with university colleagues in development of guidelines and written protocols for procedures in the mammal collections;

5. AWARDS, GRANTS, AND CONTRACTS.

Faculty and Staff:

Baseline inventory of mammals and birds at Crescent Lake and North Platte national wildlife refuges. Michael A. Bogan Principal Investigators. Fish and Wildlife Service, Region 6, Denver. 100K, FY99-03.

Baseline inventory of amphibians, reptiles, and mammals at Aztec Ruins National Monument. **Michael A. Bogan**, Principal Investigator. Reimbursable agreement, National Park Service, \$14K. FY00-02.

Baseline inventory of bats at Yucca House National Monument. Michael A. Bogan, Principal Investigator. Reimbursable agreement, National Park Service, \$5K, FY00-01.

Mammals on 35 national parks on the Colorado Plateau. Michael A. Bogan, Principal Investigator. Reimbursable agreement, National Park Service, \$17.5K, FY00-01.

Bat species of concern: an ecological synthesis for resource managers in the United States and territories. Thomas J. O'Shea and Michael A. Bogan, Co-principal Investigators. USGS Species at Risk Competitive Grants Program, \$67.3K, FY96-00.

Status survey of the Arizona water shrew, *Sorex palustris*. **Michael A. Bogan**, Principal Investigator. USGS Species at Risk Competitive Grants Program, \$20K, FY98-00.

Status survey of the White-sided jackrabbit, Lepus callotis gaillardi. Michael A. Bogan, Principal Investigator. USGS Species at Risk Competitive Grants Program, \$47K, FY99-2001.

Impacts of global climate change on Chihuahuan Desert vegetation. Laura Huenneke, Principal Investigator, New Mexico State University. USGS Global Climate Change Program, \$450K, FY92-99.

Predicted response of southwestern montane mammal communities to global climate change. Terry L. Yates, Principal Investigator, University of New Mexico. USGS Global Climate Change Program, \$263K, FY94-00.

Studies of the effects of forest management practices on the Sacramento Mountain salamander, *Aneides hardii*. Cindy A. Ramotnik, Principal Investigator. U.S. Forest Service, Alamogordo, \$4K, FY00.

Studies of the effects of wildfires on endemic salamanders in New Mexico. Cindy A. Ramotnik, Principal Investigator. U.S. Geological Survey, Reston, VA, \$7K, FY00.

Curatorial upgrade of the U. S. Geological Survey biological collections at the University of New Mexico. Cindy A. Ramotnik, Principal Investigator. USGS, Midcontinent Ecological Science Center, Internal competition for redirected funds. \$75K, FY98-02.

Post-doctoral Affiliates:

Predicted response of southwestern montane mammal communities to global climate change, Jennifer Frey, Postdoctoral Affiliate, University of New Mexico. USGS Global Climate Change Program, \$263K, FY94-99.

6. PUBLICATIONS.

A. Publications by Museum staff, students and associates.

Book Chapters:

Bogan, M.A. 1999. *Myotis californicus*. In North American mammals, D.E. Wilson and S. Ruff, eds. Smithsonian Institution Press, Washington, DC.

Bogan, M.A. 1999. *Myotis ciliolabrum*. In North American mammals, D.E. Wilson and S. Ruff, eds. Smithsonian Institution Press, Washington, DC.

Bogan, M.A. 1999. Myotis evotis. In North American mammals, D. E. Wilson and S. Ruff, eds. Smithsonian Institution Press, Washington, DC.

Bogan, M.A. 1999. *Myotis griscesens*. In North American mammals, D.E. Wilson and S. Ruff, eds. Smithsonian Institution Press, Washington, DC.

Bogan, M.A. 1999. *Myotis leibii*. In North American mammals, D.E. Wilson and S. Ruff, eds. Smithsonian Institution Press, Washington, DC.

Bogan, M.A. and **P.M.** Cryan. 2000. The bats of Wyoming. Pp. 71-94 *in* Reflections of a naturalist: Papers honoring Professor Eugene D. Fleharty (J.R. Choate, ed.). Fort Hays Studies, Special Issue 1, 2000. 241 pp.

Journals:

Cryan, P. M., M.A. Bogan, and J.S. Altenbach. 2000. The effect of elevation on the distribution of female bats in the Black Hills, South Dakota. Journal of Mammalogy, 81:719-725.

Reports:

Cryan, P.M. and M.A. Bogan. 2000. Recurrence of the Mexican long-tongued bat (*Choeronycteris mexicana*) at historical sites in Arizona and New Mexico. Final Report to Cooperators, U.S. Geological Survey, Albuquerque, NM. 21pp. + appendices.

Ramotnik, C. A. 2000. Studies of the effects of forest management practices on the Sacramento Mountain salamander, *Aneides hardii*. 1999 annual report to Lincoln National Forest, U.S. Forest Service, Alamogordo, NM. 10 pp.

Valdez, E. W., S. Haymond, M. A. Bogan, P. Campbell, and T. Koontz. 1999. Bat population study and monitoring program at Chaco Culture National Historic Park, New Mexico, 1999. FY99 annual report prepared for Chaco Culture National Historic Park, 25pp.

Valdez, E. W., M. A. Bogan, S. Haymond, P. Campbell, and T. Koontz. 1999. Bat survey of El Malpais National Monument and adjacent areas, New Mexico, 1999. FY99 annual report prepared for El Malpais National Monument, 22pp.

Websites:

Bogan, M. A. The potential effects of global change on bats. Electronic presentation in: Impact of climate change and land use in the southwestern United States, a workshop with comments. U. S. Global Change Research Program (http://geochange.er.usgs.gov/sw/)

Bogan, M. A., C. A. Ramotnik, and J. C. Richardson. Arid Lands Field Station Home Page (http://www.mesc.nbs.gov/southwes/arid_lands.html).

Mollhagen, T. R. and M. A. Bogan. The Henry Mountains Home Page (http://www.coe.ttu.edu/ce/trm/henhome.html).

B. Publications and reports based on museum specimens by researchers excluding Museum staff, students and associates.

DeRosier, S.M. 2000. Results of analyzed Mexican spotted owl pellets collected from the Jemez Mountains. Final report to U.S. Geological Survey, Midcontinent Ecological Science Center, Ft. Collins, CO.

Priday, J. and B. Luce. 1999. New distributional records for spotted bat (*Euderma maculatum*) in Wyoming. Great Basin Naturalist 59(1):97-101.

7. ACTIVITIES IN LEARNED SOCIETIES.

- A. Invited or plenary talks.
- B. Contributed talks or posters.

Bogan: Southwestern Association of Naturalists Annual Meeting, Denton, TX. "Status of the Arizona water shrew in the White Mountains of Arizona."

Cryan and Bogan: Southwestern Association of Naturalists Annual Meeting, Denton, TX. "Recurrence of the Mexican long-tongued bat at historical sites in Arizona and New Mexico."

Valdez: North American Bat Research Symposium, Annual Meeting, Madison, WI. "Confirmation of allozyme distinctness between *Myotis lucifugus* and *Myotis yumanensis* in the Pacific northwest." (with Piaggio, Bogan, and Spicer).

C. Attendance at professional meetings.

Bogan: Southwestern Association of Naturalist, Denton, TX.

Cryan: North American Bat Research Symposium, Madison, WI.

Ramotnik: Society for the Preservation of Natural History Collections, Halifax, N.S.

Valdez: North American Bat Research Symposium, Madison, WI.

D. Service as editor or on editorial board of a journal.

Bogan: Editorial Board, Occasional Publications and Special Publications, Museum of Southwestern Biology, University of New Mexico.

Ramotnik: Associate Editor, Collection Forum (Society for the Preservation of Natural History Collections).

E. Service as officer of professional society or organization.

Bogan: Colorado Bat Society: Regional representative; American Society of Mammalogists: Scientific Collections Committee.

Ramotnik: Society for the Preservation of Natural History Collections (SPNHC): Conservation Committee (Chair, Resources Subcommittee); Membership Committee; Publication Committee; Long-Range Planning Sessional Committee; SPNHC Council; and Member-at-Large.

8. OTHER PROFESSIONAL ACTIVITIES.

- A. Seminar or colloquium presentations.

 Bogan: Research in the US Geological Survey. UNM Conservation Biology Class.
- B. Presentations in a scholarly capacity at hearings and workshops. N/A
- C. Presentation to general audience in a scholarly capacity. N/A
- D. Service as a member of a local, state, regional or national committee, panel etc.
 Bogan: Member, New Mexico Black-tailed prairie dog management team.
 Bogan: Member, USDA-DOI pollinator team.
- E. Journal referee.
 Bogan: Great Basin Nat. (3); Southwestern Nat. (3); Journal of Mammalogy (3)
 Ramotnik: Collection Forum (2).

9. SERVICE.

- A. Symposia, workshops, conferences, etc. sponsored, organized, held etc. N/A
- B. Public Service, N/A

10. ADVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC. N/A

11. DONATIONS AND GIFTS RECEIVED.

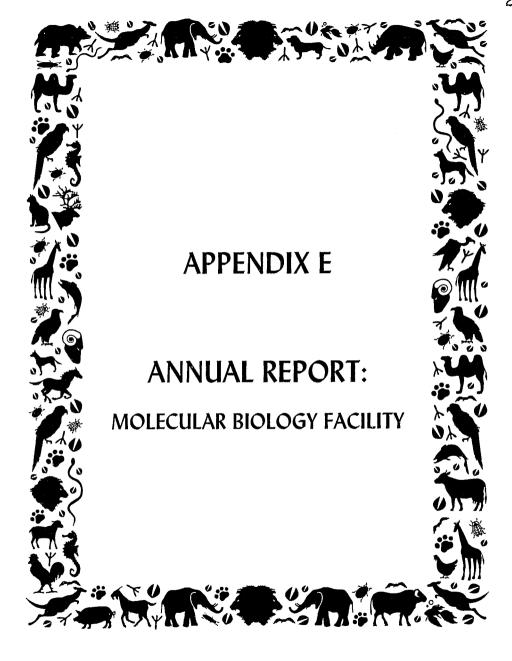
Colorado State University: mammal specimens U.S Forest Service: mammal and bird specimens National Park Service: mammal and bird specimens New Mexico Department of Game & Fish: mammal specimens

12. CURRENT STAFF (99-00).

Michael A. Bogan – Project Leader Paul M. Cryan – Wildlife Biologist Shauna Haymond – Wildlife Biologist Carrie Pippin – Museum Technician Cindy A. Ramotnik – Collections Manager J.C. Richardson – Office Manager Ernest W. Valdez – Wildlife Biologist

13. MUSEUM ASSOCIATES.

Robert B. Finley, Ph.D., Boulder, CO.



MOLECULAR BIOLOGY FACILITY

Department of Biology Fiscal Year 1999-2000 Director's Report Robert D. Miller

The Molecular Biology Facility (MBF) at the UNM Department of Biology provides three principal areas of support. First, it is a common equipment facility for faculty and students who routinely use the tools of molecular biology in their research. Second, it is a support facility for faculty and students who do not have laboratory space of their own suitable for conducting research that uses the techniques of molecular biology. Third, the MBF provides support for several classes with teaching equipment, student training, and outreach to non-UNM organizations. All three roles are equally important and interdependent. The MBF is also utilized by faculty and students for both research and training from other College of Arts &Sciences Departments including Anthropology and Earth & Planetary Sciences and by investigators from the School of Medicine. Based on the data contained in this report, the MBF is arguably among the most heavily utilized units within the Biology Department outside of the main office.

Research highlights for the 1999-2000 fiscal year include:

- Based on data from the Office of Research Services, there are currently 26 active grants which utilize or depend on the MBF at UNM, totaling more than 5.45 million dollars.
- Based on a search of the SciSearch database maintained at the Los Alamos National Laboratory, there were 14 peer reviewed manuscripts published between July 1, 1999 and June 30, 2000 which reported research which was generated using the MBF.

The MBF's role in education and training in the Department and the community also continues to grow. Four courses taught within Biology (Biol. 220, 439, 446, and 478), one course taught in Anthropology (450/550) used the facility. The MBF also hosted visits from Albuquerque area high school science classes and teachers and MBF personnel visited local high schools. The most critical role in training which the MBF plays however remains direct, hands-on research experience for graduate students and undergraduates working on independent projects with faculty mentors.

MOLECULAR BIOLOGY FACILITY AT THE UNM DEPARTMENT OF BIOLOGY STAFF

Director: Robert D. Miller

Research Scientist/Manager: George H. Rosenberg

Teaching Assistants:

Kate Miska (Fall 1999, half time, Summer 2000) Kathleen Kelly (Spring 2000)

Other:

Wade Wilson (Research Technician)
Janice Salazar (Work Study, Summer 2000)
Mark Horner (Work Study, Spring 2000)
Angela Costenza (Research Assistant Fall 1999)
August Goodman (Research Assistant, Fall 1999)

MAJOR EQUIPMENT ACQUISITIONS

Macintosh G4 Computer (purchased by funds from University Equipment Bond Fund) iMAC Computer (purchased by funds from University Equipment Bond Fund) Dell Precision 410 Workstation (purchased by funds from University Equipment Bond Fund) HP 4500N Color Printer (purchased by funds from University Equipment Bond Fund)

USERS:

Faculty (21):

Barton, Cripps, Dahm, Duszynski, Faguy, Hofkin, Johnson, Kodric-Brown, Ligon, Loker, Lowrey, R. Miller, Natvig, Nelson, Stone (Anthropology), Thornhill, Turner, Vogel, Wagner, Werner-Washburne, Yates.

Adjunct or Part-time Faculty (6):

Coen Adema, Wendy Fuge, Gary Miller, Vickie Peck, Ana Perez, Peter Stacey

Postdoctoral Fellows (8)

Jerry Dragoo, Greg Saenz, Anne Hall, Ana Perez, Anna Colina, Michelle Baker, Siming Zhang, Jess Morgan.

Graduate Students (26):

Dianna Northup, Claire Carpenter, Ken Barber, Pascale Leonard, Randy DeJong, Jerusha Reynolds, Laura Boykin, Kate Miska, Sergio Flores, Amy Powell, Bill Dvorachek, Suzanne Shoup, Harriet Plater, Hyojeong Kim, Kelly Howe, Pat Dolan, Dominque Alo, Megan McPhee, Gavin Conant, Allison Errett-Gold, Jorge Salazar-Bravo, Xiaomin Zhao, Kathleen Kelly, Christina Fridrick, Melissa Franklin, Cory Fincher.

Undergraduates (32)

Marco Molina, Mula Akbar, Phill Baker, Stryder Meadows, Megan Armstrong, Angela Costanzo, Mark Horner, Jose Weber, Brauer Tramwell, Christine Lovato, Cory Hillyer, Diego Martinez, Katie Grushalla, Nazario Young-Trujillo, Nick Brainhardt, Charles Keller, Joanna Bernacik, April Wright, Rachel Lundgren, Robert McCleese, Paula Lucero, Polly Campbell, Michael Perrine, Carolyn Hastings, Kelly Chavez, Erin Gonzales, Paul Romo, Gabriel Quinones, Jamie Reif, Julie Knight, Daniell Mignaco, Marta Strzyzski.

Visiting Scientists Using the Facility (3)

Jim Gayle (UNM School of Medicine, Dept. of Cell Biology and Physiology) Mary E. Shaw (NM Highlands University) Scott Synder, (University of Wisconsin, Oshkosh)

Research Staff (7)

Richard Plunkett, Tyanna Lovato, Sean Place, Lynn Hertel, Jenny Brown, Nick Barnhardt, Jenny Brown.

INSTRUCTION AND TRAINING

Formal Courses which used the MBF

Biol 220, Cell Biology Problems

Biol 446/546, Molecular Methods (Natvig and Cripps)

Biol 428, Human Heredity (Ken Sylvester)

Biol 478, Plant Physiology (Gordon Johnson)

Anthro 450 (550), Molecular Anthropology (Ann Stone)

Visitors:

- 1. Victor Peres-Luna, Post-doc, Chemical Engineering UNM
- 2. Jennifer Jacobs, Ph.D. student in Nuclear Engineering UNM, working with Dr. Faguy and is a Sandia Intern with Sandia scientist Bob Turman
- 3. Kim Luu, undergraduate from Pugent Sound University, working as a summer intern with Sandia scientist Richard Griffiths and Jennifer Jacobs
- Dr. Mary E. Shaw, Sandra Diaz DeLeon, Levi Maes, and Jules Rir-sima-ah NM Highlands University.

Public Outreach

- Demonstration for Highland High School, Teacher Oni Leach and 18 students, at MBF on 4/25/00.
- M. Horner and G. Rosenberg visited Highland High School, arranged by Oni Leach, 5/9/00.

Other Training Programs

- NASA PURSUE Program (Gordon Johnson)
- NGP at UNM (Mary Anne Nelson)

SPONSORED PROJECTS WHICH USE THE MBF

Principal Investigator(s): Adema, Coenraad

Title: REU Supplement: Function and Diversity of Molluscan FREPs

Sponsor: National Science Foundation

Amount: \$4,063

Project Period: 3/21/00-7/31/01

Principal Investigator(s): Adema, Coenraad

Title: Function and Diversity of Molluscan FREPs

Sponsor: National Science Foundation

Amount: \$215,161

Project Period: 8/1/99-7/31/01

Principal Investigator(s): Cripps, Richard

Title: Genetic Analysis of Muscle Remodeling in Drosophilh Melanogasner

Sponsor: Muscular Dystrophy Association

Amount: \$110,084

Project Period: 1/1/99-12/31/00

Principal Investigator(s): Cripps, Richard

Kelly, Kathleen

Title: Regulation and Function of the Act 57B Gene in Drosphila

Sponsor: American Heart Association

Amount: \$36,000

Project Period: 7/1/00-6/30/02

Principal Investigator(s): Cripps, Richard

Title: Molecular Genetic Analysis of Myogenesis in Drosophila

Sponsor: American Heart Association

Amount: \$60,000

Project Period: 7/1/99-6/30/01

Principal Investigator(s): Duszynski, Donald

Title: The Coccidia of the World Sponsor: National Science Foundation

Amount: \$690,738

Project Period: 8/1/95-8/31/00

Principal Investigator(s): Loker, Eric

Title: Evolution of Schistosoma mansoni and its Snail Hosts Sponsor: National Institute of Allergy & Infectious Disease

Amount: \$488,969

Project Period: 4/1/99-3/31/01

Principal Investigator(s): Loker, Eric

Title: Evolution of Schistosoma mansoni and its snail hosts Sponsor: National Institute of Allergy & Infectious Disease

Amount: \$244,600

Project Period: 2/15/00-1/31/01

Principal Investigator(s): Miller, Robert

Title: REU Supplement: Immunoglobulin Genetics in Non-eutherian Mammals

Sponsor: National Science Foundation

Amount: \$5,000

Project Period: 5/19/00-4/30/01

Principal Investigator(s): Miller, Robert

Title: Immunoglobulin Genetics in Non-eutherian Mammals

Sponsor: National Science Foundation

Amount: \$110,000

Project Period: 5/1/00-4/30/01

Principal Investigator(s): Miller, Robert

Title: Research Opportunity Award (ROA) Supplement

Sponsor: National Science Foundation

Amount: \$15,647

Project Period: 10/1/96-9/30/00

Principal Investigator(s): Miller, Robert Title: REU Supplement to CAREER Award. Sponsor: National Science Foundation

Amount: \$5,000

Project Period: 12/31/97-9/30/00

Principal Investigator(s): Miller, Robert

Title: Immunological Development in a Marsupial -- Faculty Early Career

Development (CAREER) Program Sponsor: National Science Foundation

Amount: \$322,585

Project Period: 10/1/96-9/30/00

Principal Investigator(s): Natvig, Donald

Title: Reproductive Genetics of Neurospora tetrasperma

Sponsor: National Science Foundation

Amount: \$183,838

Project Period: 6/1/97-11/30/00

Principal Investigator(s): Natvig, Donald

Title: REU Supplement: Reproductive Genetics of Neurospora tetrasperma

Sponsor: National Science Foundation

Amount: \$5,000

Project Period: 8/27/99-5/31/00

Principal Investigator(s): Nelson, Mary Anne

Title: REU Supplement: Neurospora Genome Project at UNM: Expressed

Sequence Analyses

Sponsor: National Science Foundation

Amount: \$24,600

Project Period: 2/1/99-1/30/01

Principal Investigator(s): Nelson, Mary Anne

Title: REU support: Developmental Regulation of Signal Transduction: Bcylp

in Stationary-Phase Yeast

Sponsor: National Science Foundation

Amount: \$8,750

Project Period: 6/1/98-8/31/00

Principal Investigator(s): Nelson, Mary Anne

Title: The Neurospora Genome Project at UNM: Expressed Sequence

Analyses

Sponsor: National Science Foundation

Amount: \$338,124

Project Period: 2/1/99-1/31/01

Principal Investigator(s): Nelson, Mary Anne

Title: Developmental Regulation of Signal Transduction: Bcy1p in Stationary-

Phase Yeast

Sponsor: National Science Foundation

Amount: \$260,786

Project Period: 9/1/96-2/28/01

Principal Investigator(s): Thornhill, Randy

Gangestad, Steven (Psychology)

Title: The Scent of Symmetry Sponsor: Olfactory Research Fund, Ltd.

Amount: \$42,808

Project Period: 5/1/98-10/30/00

Principal Investigator(s): Werner-Washburne, Margaret

Title: Study of Gene Expression in Non-Developing Yeast Cells

Sponsor: Sandia National Laboratories

Amount: \$13,000

Project Period: 5/3/00-9/30/00

Principal Investigator(s): Werner-Washburne, Margaret

Title: The Role of Snz and Sno Proteins in the Yeast Saccharomyces cerevisiae

Sponsor: National Science Foundation

Amount: \$110,000

Project Period: 9/1/98-8/31/01

Principal Investigator(s): Vogel, Kathryn

Title: Proteogylcan Structure, Metabolism and Role in Tendon Sponsor: National Inst. of Arthrit./Musculoskel./Skin Dis.

Amount: \$741,127

Project Period: 1/1/95-12/31/00

Principal Investigator(s): Yates, Terry, Koster, Frederick (Medicine) Title: Hantavirus Infections: Ecology, Immunity and Treatment Sponsor: National Institute of Allergy & Infectious Disease

Amount: \$1,399,643

Project Period: 8/15/96-7/31/00

Principal Investigator(s): Yates, Terry

Title: Hantavirus Infections - Ecology, Immunity and Treatment Sponsor: National Institute of Allergy & Infectious Disease

Amount: \$93,419

Project Period: 8/1/99-7/31/00

Principal Investigator(s): Stone, Anne

Title: The Evolutionary History of the Genus Pan: A Molecular Investigation Using the Y

Chromosome

Sponsor: National Science Foundation

Amount: \$15,242

Project Period: 3/15/99-8/31/00

PEER REVIEWED JOURNAL PUBLICATIONS WHICH UTILIZED THE FACILITY

- 1. Adema CM, Hertel LA, Loker ES. 1999 Evidence from two planorbid snails of a complex and dedicated response to digenean (echinostome) infection. PARASITOLOGY 119:395-404
- Adema CM, Leonard PM, DeJong RJ, Day HL, Edwards DJ, Burgett G, Hertel LA, Loker ES. 2000 Analysis of messages expressed by *Echinostoma paraensei* miracidia and sporocysts, obtained by random EST sequencing. JOURNAL OF PARASITOLOGY 86:60-65
- 3. Belov K, Harrison GA, Miller RD, Cooper DW. 1999 Isolation and sequence of a cDNA coding for the heavy chain constant region of IgG from the Australian brushtail possum, *Trichosurus vulpecula*. MOLECULAR IMMUNOLOGY 36: 535-541
- Belov K, Harrison GA, Miller RD, Cooper DW. 1999 Molecular cloning of the brushtail possum (*Trichosurus vulpecula*) immunglobulin E heavy chain constant region. MOLECULAR IMMUNOLOGY 36:1255-1261
- Belov K, Harrison GA, Rosenberg GH, Miller RD, Cooper DW. 1999 Isolation and comparison of the IgM heavy chain constant regions from Australian (*Trichosurus* vulpecula) and American (*Monodelphis domestica*) marsupials. DEVELOPMENTAL AND COMPARATIVE IMMUNOLOGY 23:649-656
- Bieszke JA, Braun EL, Bean LE, Kang SC, Natvig DO, Borkovich KA. 1999 The nop-1 gene
 of Neurospora crassa encodes a seven transmembrane helix retinal-binding protein
 homologous to archaeal rhodopsins. PROCEEDINGS OF THE NATIONAL ACADEMY
 OF SCIENCES OF THE UNITED STATES OF AMERICA 96:8034-8039
- Braun EL, Halpern AL, Nelson MA, Natvig DO. 2000 Large-scale comparison of fungal sequence information: Mechanisms of innovation in neurospora crassa and gene loss in Saccharomyces cerevisiae. GENOME RESEARCH 10:416-430

- FloresRamirez S, UrbanRamirez J, Miller RD. 2000 Major histocompatibility complex class I loci from the gray whale (Eschrichtius robustus). JOURNAL OF HEREDITY 91:279-282
- Gallegos A, Jacobson DJ, Raju NB, Skupski MP, Natvig DO. 2000 Suppressed recombination and a pairing anomaly on the mating-type chromosome of *Neurospora* tetrasperma. GENETICS 154:623-633
- 10. Hnida JA, Duszynski DW. 1999 Taxonomy and phylogeny of some Eimeria (Apicomplexa: Eimeriidae) species of rodents as determined by polymerase chain reaction/restriction-fragment-length polymorphism analysis of 18S rDNA. PARASITOLOGY RESEARCH 85:887-894
- Hnida JA, Duszynski DW. 1999 Taxonomy and systematics of some Eimeria species of murid rodents as determined by the ITS1 region of the ribosomal gene complex. PARASITOLOGY 119:349-357
- 12. Miller RD, Bergemann ER, Rosenberg GH. 1999 Marsupial light chains: IGK with four V families in the opossum *Monodelphis domestica*. IMMUNOGENETICS 50:329-335
- Miska KB, Miller RD. 1999 Marsupial Mhc class I: classical sequences from the opossum, Monodelphis domestica. IMMUNOGENETICS 50:89-93
- Snyder SD, Loker ES. 2000 Evolutionary relationships among the schistosomatidae (Platyhelminthes: Digenea) and an Asian origin for Schistosoma. JOURNAL OF PARASITOLOGY 86:283-288



FACULTY
SCHOLARLY &
PROFESSIONAL
ACTIVITIES,
CY 1999

UNM DEPARTMENT OF BIOLOGY FACULTY SCHOLARLY ACTIVITIES & PUBLICATIONS

CY 1999

I. TEACHING.

A. Graduate Education.

1. Masters degrees awarded.

BROWN, J.H.

Summer: Kevin M. Rich (non-thesis)

DAHM, C.N.

Fall: WILLIAM S. BARNES, "Senescence in the Bosque: Cottonwood Performance

and the Role of Stream Flow in the Riparian Forests of the Middle Rio

Grande." (Co-advised with Manuel Molles.)

PETER H. SKARTVEDT, "Response of Woody Riparian Vegetation to the Removal of Livestock in the Upper Mimbres Watershed, Southwestern New

Mexico." (Co-advised with Manuel Molles.)

DUSZYNSKI, D.W.

Fall: KIM HECKSCHER, "Endoparasitic Infection of Dipodomys and Perognathus

Species on the Sevilleta National Wildlife Refuge, 1989-1998."

LOKER, E.S.

Spring: KIRSTEN MEYER, "Characterization of Expressed Sequence Tags (ESTs) from

the Colonial Tunicate, Botryllus schlosseri."

LOWREY, T.K.

Spring: PHILLIP TONNE, "Morphometric Analysis of Taxonomic Boundaries Between

Erigeron pulcherrimus and E. bistiensis."

MILNE, B.T.

Fall: Sterling Grogan, M.S. II (non-thesis).

MOLLES, M.C., JR.

Summer: WILLIAM BARNES, "Senescence in the Bosque: Cottonwood Performance and

the Role of Stream Flow in the Riparian Forests of the Middle Rio Grande."

Spring: Peter H. Skartvedt, "Response of Woody Riparian Vegetation to the

Removal of Livestock in the Upper Mimbres Watershed, Southwestern New

Mexico."

SNELL, H.L.

Spring: Jennifer Brown, M.S. II (non-thesis).

2. Doctors degrees awarded.

BROWN, J.H.

Fall: ROBERT V. TAYLOR, "Population, Community and Biogeograpic Ecology of

Avian Species."

Spring: DOV F. SAX, "Native and Exotic Species Distributions: Implications for General

Models of Diversity, From Community to Biogeographic Scales."

KODRIC-BROWN, A.

Spring: MOSHE KIFLAWI, "Developmental Instability in the Study of Macro-Ecological

Phenomenon and Life-History Trade-Offs."

LI, B.-L.

Summer: STEFANIE HÁRI, "Spatio-temporal Heterogeneity and Scales of Forest Eco-

system Processes." Co-Chair with O. Fränzle, Kiel, Germany.

LIGON, J.D.

Spring: JULIE HAGELIN, "Sexual Selection, Plumage Ornamentation and Behavior of

Gambel's and Scaled Quail."

LOKER, E.S.

Spring: Kelli Sapp, "Mechanisms Underlying Digenean-Snail Specificity: A Compara-

tive Approach."

MOLLES, M.C., JR.

Summer: LISA M. ELLIS, "Floods and Fire along the Rio Grande: The Role of Disturb-

ance in the Riparian Forest."

NATVIG, D.O.

Summer: WILLIAM H. DVORACHEK, JR., "Characterization of Manganese Superoxide

Dismutase in Neurospora crassa."

SNELL, H.L.

Spring: Mark Jordan, "Phenotypic Plasticity in the Reproduction of Galápagos Lava

Lizards (Microlophus delanonis)."

WERNER-WASHBURNE, M.

Spring: MATTHEW CRAWFORD, "Characterization of a Complex That Forms in

Stationary-phase Saccharomyces cerevisiae Containing the Regulatory Subunit of

the cAMP-dependent Protein Kinase."

YATES, T.L.

Fall:

Jorge Salazar-Bravo, "Systematics and Biogeography of the Genus Calomys:

Inference from MtDNA."

3. Bona fide graduate courses and number of students enrolled. Indicate new courses (for you) with an asterisk.

BARTON, L.L.

Spring:

Biol. 460, Microbial Physiology, 34 students

Fall:

Biol. 502, ST/Bioremediation, 2 students

BROWN, J.H.

Spring:

Biol. 515F, Field Research in Biology, 8 students

Biol. 502, ST/Ecological Complexity Seminar, 12 students

CHARNOV. E.L.

Spring:

Biol. 402/502, ST/Evolutionary Ecology, approx. 24 students

Fail:

Biol. 502, ST/Population & Behavioral Ecology, approx. 14 students

CRIPPS, R.M.

Fall:

*Biol. 402/502, ST/Gene Expression, 3 students

*Biol. 446/546, Laboratory Methods in Molecular Biology, 8 students *Biol. 501, New Graduate Student Orientation, about 25 students

*Biol. 551, Graduate Problems, 1 student

DAHM, C.N.

Spring:

Biol. 495, Limnology, 4 graduate students of 12 students

Biol. 496L, Limnology Lab, 1 graduate student of 3 students

*Biol. 402/502, ST/Geomicrobiology, 6 graduate students of 12 students

Fall:

Biol. 451, Microbial Ecology, 3 graduate students of 9 students

Biol. 514, Ecosystem Studies, 22 graduate students

DUSZYNSKI, D.W.

Spring:

Biol. 599, Masters Thesis, 1 student

Biol. 699, Dissertation, 1 student

Fall:

Biol. 551, Problems, 1 student

Biol. 599, Masters Thesis, 1 student Biol. 699, Dissertation, 1 student GOSZ, J.R.

Spring: Biol. 551, Problems, 2 students

Fall: Biol. 514, Ecosystems Studies, 22 students

KODRIC-BROWN, A.

Spring: Biol. 515F, Research in Field Biology, 12 students.

LI. B.-L.

Summer: Biol. 551-013, Problems, 2 students

Fall: Biol. 500-001, New Graduate Student Seminar (with R. Cripps), 19 students

*Biol. 502-018, ST/Ecological Complexity, 12 students

LIGON, J.D.

Fall: Biol. 502, ST/Avian Social Systems, 5 students

LOKER, E.S.

Spring: Biol. 502, ST/Parasites and Hosts, 2 students

LOWREY, T.K.

Spring: Biol. 563, Advanced Plant Taxonomy, 6 students

Fall: Biol. 402/502, ST/Systematics, 12 students

MARSHALL, D.L.

Spring: Biol. 567, Evolutionary Plant Ecology, 7 students

Spring: Biol. 576, Landscape Ecology, 7 students.

(In anticipation of my sabbatical, I taught this course two springs in a row.)

MILNE, B.T.

Biol. 502, ST/Ecological Complexity Seminar, 9 students (Although J. Brown is the instructor of record, I am co-PI on the Complexity RTG from

NSF. I attend all the class sessions and am completely involved with the course.)

MOLLES, M.C., JR.

Spring: Biol. 507, Bosque Biology, 5 students

Biol. 507, Bosque Biology, 6 students

NATVIG, D.O.

Fall:

Fall: Biol. 546, Laboratory Methods in Molecular Biology, 8 students

Biol. 502, ST/Topics in Fungal Molecular Biology, 6 students

NELSON, M.A.

Fall: Biol. 402/502, ST/Fungal Molecular Biology, 7 students

STRICKER, S.A.

Spring: Biol. 547, Advanced Techniques in Light Microscopy, 6 students

THORNHILL, R.

Spring: Biol. 502, Applied Darwinism, 15 students

TURNER, T.F.

Spring:

*Biol. 502, ST/Stable Isotopes in Ecology Seminar, 8 students

Fall: *Biol. 502, ST/Ecology Seminar, 7 students

WAGNER, A.

Spring:

*Biol. 437/537, Evolutionary Genetics, 22 students

YATES, T.L.

Spring:

Biology 502, ST/Advanced Topics in Systematics and Ecology, 5 students.

Biology 551, Problems, 1 student Biology 699, Dissertation, 2 students

Fall:

Biology 502, ST/In Systematics, 6 graduate students. (First three ICES

question scores 5.8, 5.6, 5.5.) Biology 551, Problems, 6 students Biology 599, Thesis, 1 student

Biology 651, Advanced Field Biology, 2 students

Biology 699, Dissertation, 2 students

 Your service on graduate student committees, not as chair, in semester oral exam was given.

BROWN, J.H.

Moshe Kiflawi

DAHM, C.N.

Summer:

Andrea Earp (Gordon Johnson, advisor)

Fall:

Howard Passell, Ph.D. Comprehensive Exam, November 22 (Larry Li, co-

advisor)

KODRIC-BROWN, A.

Spring: Jennifer Hill

LI, B.-L.

Summer:

Kimberly H. Decker, degree awarded (Chair: D. Duszynski).

LOKER, E.S.

Spring:

William Dvorachek, Ph.D. defense, April 8; I served as a late replacement on

his committee and read his dissertation and participated in the final defense.

Kate Miska, Ph.D. exam, May 3

LOWREY, T.K.

Spring:

Robert Taylor, Dov Sax, Brian Enquist.

MARSHALL, D.L.

Spring:

Josh Leffler, dissertation defense Mark Jordan, dissertation defense

Kim Eichhorst, thesis defense

Johnny Snyder, dissertation defense, Math Department

MILLER, R.D.

Spring:

Hyojeong Kim (M.A. Nelson), Oral Exam for Ph.D. candidacy

MOLLES, M.C., JR.

Spring:

Jennifer Parody, Comprehensive Exam

Claire Carpenter, Master's Exam

NATVIG, D.O.

Spring: Fall: Matthew Crawford, Ph.D. defense

Amy Ditto, comprehensive exam

NELSON, M.A.

Spring: Fall: William Dvorachek, Ph.D. defense

Amy Powell, Comprehensive exam

STRICKER, S.A.

Kate Miska

THORNHILL, R.

Alita Cousins, Ph.D. Candidate, UNM Psychology Dept.

TOOLSON, E.C.

Spring:

Mark Jordan

VOGEL, K.G.

Fall:

Ihab Abdel-Hamid, Ph.D. exam, Dept. of Chemical and Nuclear Engineering,

UNM

WERNER-WASHBURNE, M.

Patricia Dolan, comprehensive exams

Hyojeong Kim

YATES, T.L.

Amy Ditto, Oral exam, Biology Susan Stratton, Ph.D. Defense, Antropology Jason Bottom, Oral exam, Pathology

Professional accomplishments and awards of your graduate students, exclusive of those on which you were a co-author or participant (e.g., foreign travel, papers presented, papers published, awards and grants received, etc.).

ALTENBACH, J.S.

RICK SHERWIN, Ph.D. student: paper in press. PAUL CRYAN, Ph.D. student: paper in press.

BARTON, L.L.

GARY BROWN, doctoral student, received one of three awards given at Sandia National Laboratories to pursue graduate studies at UNM. The award paid for tuition plus half of his salary as release time.

BROWN, J.H.

ANDREW KERKHOFF: Kerkhoff, A.J., B.T. Milne and D.S. Maehr. 2000. Toward a panther-centered view of the forests of South Florida. *Consevation Ecology* 4:1. Also published online at URL:http://www.consecol.org/Journal/vol4/iss1/art1

ALLEN HURLBERT: Awarded an NSF Graduate Research Fellowship, which fully supports him for three years.

MORGAN ERNEST: Awarded a 1999 University of New Mexico Regents' Fellow and a 1999 Ecological Society of America Travel Award.

CRIPPS, R.M.

KATHLEEN KELLY: Grove Research Scholar. "Regulation and Function of the Actin57B Gene in *Drosophila*," predoctoral research fellowship, submitted to American Heart Association, Desert/Mountain Affiliate, pending approval. K. Kelly, PI, R. Cripps, sponsor; \$18,000 per year for two years.

DAHM, C.N.

MICHELLE BAKER: participant in the DIALOG II workshop in Barbados, Bahamas. This workshop brings together 15 top, recent (last three years) Ph.D. students in freshwater sciences with 15 top, recent Ph.D. students in oceanography. She also accepted a tenure-track faculty position in the fall of 1999 in the Department of Biology at Utah State University.

DUSZYNSKI, D.W.

INGRID ASMUNDSSON:

- Foreign Travel: Guatemala, May-July 1999, to collect parasites from amphibians and reptiles on an NSF-sponsored Survey & Inventory grant to Dr. Jon Campbell, University of Texas-Arlington.
- Publications: Hollick, J.B., G.I. Patterson, I.M. Asmundsson and V.L. Chandler. 2000. Paramutation alters regulatory control of the maize pl locus. Genetics. In press.
- > Funding: GRAC Travel Grant, \$100; SRAC Travel Grant, \$240.

KIM DECKER:

Job: Science faculty member and mid-school Soccer and Track Coach, Sandia Preparatory School, Albuquerque.

MEGAN RYAN:

Job: Teaching Assistantship, 1999-2000, Biology, UNM.

XIAOMIN ZHAO:

Funding: GRAC: \$250; SRAC: \$400; RPT: \$800; Grove Research Scholarship: \$800

LIGON, J.D.

JULIE HAGELIN, employed by University of Connecticut as Visiting Assistant Professor.

PATRICK W. ZWARTJES, postdoctoral position in the Department of Genetics, Southwest Foundation for Biomedical Research, San Antonio TX. Publication: ZWARTJES, P.W. 1999. Genetic variability in the endemic vireos of Puerto Rico and Jamaica contrasted with the continental white-eyed vireo. *Auk* 116:964-975.

LOWREY, T.K.

LAURA BOYKIN:

- > Karling Graduate Student Research Award, Botanical Society of America.
- > Poster presented, International Botanical Congress, St. Louis MO, August.

TERUSHA REYNOLDS:

Poster presented, International Botanical Congress, St. Louis MO, August.

MILNE, B.T.

ETHAN DECKER:

- Oral presentation at the Annual Meeting of the International Association for Landscape Ecology.
- UNM GRAC funding
- > President, Biology Graduate Student Association

DREW KERKHOFF:

- Oral presentation at the Annual Meeting of the International Association of Landscape Ecology, Snowmass CO, August.
- UNM GRAC funding

IEN PARODY:

Oral presentation at the Annual Meeting of the International Association of Landscape Ecology, Snowmass CO, August.

DREW ALLEN:

Oral presentation at the Annual Meeting of the International Association of Landscape Ecology, Snowmass CO, August.

NELSON, M.A.

KELLY HOWE, graduate student, awarded a Grove Research Scholarship.

SNELL, H.L.

MARK JORDAN:

- > Received a postdoctoral appointment in Great Britain.
- > Traveled to Great Britain and gave three invited seminars.
- Traveled to San Fransico to present a paper at an International American Association for the Advancement of Science (AAAS) Symposium on the Galápagos Islands.

STEPHEN EARSOM:

- Employeed by the U.S. Fish and Wildlife Service in Puerto Rico to design and implement an ecological monitoring program for U.S. Wildlife Refuges in the Caribbean region.
- > Traveled to San Francisco to present a paper at an International AAAS Symposium on the Galápagos Islands.

MARCO ALTAMIRANO:

- Traveled to Uraguay to present two papers at the International Congress of Latin American Herpetology.
- Spent 1999 in the Galápagos Islands as a research fellow of FUNDACYT, the Ecuadorian equivalent of the U.S. NSE

J. Tomas Griermakowski:

Attended a national meeting on environmental uses of GIS systems in Utah.

NOTE: As part of a collaborative agreement between the Department of Biology and the Charles Darwin Research Station, I am assigned to spend two-thirds of the academic year at the CDRS in the Galápagos. Therefore, much of my professional activity involves students and staff of that institution who aren't directly related to UNM. Since this is a UNM sanctioned reassignment, I will report those activities here. To distinguish them from the direct UNM activities that I do during the remaining one-third of the academic year, they will be prefaced with "**".

** Sandra Landazuri and Patrica Polo traveled from Galápagos to San Francisco to participate in an International AAAS Symposium on the Galápagos Islands.

- ** Hernan Vargas traveled to Mexico to present three papers at an International Conference on Ornithology, and traveled to Lima, Peru to present two papers on the biological effects of the 1997–98 El Niño Event in the Galápagos Islands.
- ** Cruz Marquez traveled to Uraguay to present two papers at the International Congress of Latin American Herpetology.
- ** Maria Loudres Torres and Xavier Salazar spent 1999 in the Galápagos as a research fellow of FUNDACYT, the Ecuadorian equivalent of the U.S. NSF.
- ** Sandra Landazuri spent 1999 in the Galápagos as a research fellow of IOGTOA (International Organization of Galápagos Tour Operators Association).
- ** Wacho Llerena travelled to Quito, Ecuador, for a week-long traning course in ArView GIS software.

TURNER, T.F.

MEGAN V. MCPHEE:

- Grant awarded: "Comparative Dynamics Between the Native Rio Grande Sucker and the Introduced White Sucker"; M.V. McPhee, PI; New Mexico Dept. of Game and Fish; \$2,700, start July 1, 2000—June 30, 2001.
- ➤ Alvin R. and Caroline G. Grove Research Scholarship Recipient, Spring 2000.
- > Fellowship proposal to the EPA STAR program, 1-3 years of funding possible.

WERNER-WASHBURNE, M.

PAMELA PADILLA and MATTHEW CRAWFORD, Sigma Xi membership

YATES, T.L.

SWAN Meetings, Monterey, Mexico, six of my students attended and gave papers.

National Mammal Meetings, two student papers given without my name.

Travel to Mongolia, five students attended five weeks of training and assistance establishing an LTER network for Mongolia.

B. Undergraduate Education. Bona fide undergraduate courses taught each semester and number of students enrolled. Indicate new course (for you) with an asterisk.

ALTENBACH, J.S.

Spring:

Biol. 386L, General Vertebrate Zoology, 38 students (please notice ICES

scores).

Fall:

No teaching because of double load (Biol. 121, Principles of Biology, and 435,

Animal Physiology) in Fall 1998.

BARTON, L.L.

Spring:

Biol. 351/352, General Microbiology, 86 students

Fall:

Biol. 351/352, General Microbiology, 72 students

Biol, 402, ST/Bioremediation, 5 students

BROWN, J.H.

Spring:

Biol. 494, Biogeography, 37 students

CRIPPS, R.M.

Spring: Fall: *Biol. 221, Introduction to Genetics, 93 students.

*Biol. 400, Senior Honors Thesis, 1 student.

*Biol. 402, ST/Gene Expression, 2 students.
*Biol. 446, Laboratory Methods in Molecular Biology, 5 students.

*Biol. 499, Undergraduate Problems, 4 students (each of these students worked in my laboratory under my supervision for more than 10 hours per week during

the semester).

DAHM, C.N.

Fall:

Biol. 451, Microbial Ecology, 6 undergraduate students of 9 students

Spring:

Biol. 495, Limnology, 8 undergraduate students of 12 students Biol. 496L, Limnology Lab, 2 undergraduate students of 3 students

*Biol. 402/502, Geomicrobiology, 6 undergraduate students of 12 students

DUSZYNSKI, D.W.

Spring:

Biol. 402, ST/Tropical Ecology, 1 student Biol. 461L, Tropical Biology, 12 students

Fall:

*Biol. 371L, Invertebrate Biology, 20 students

GOSZ, J.R.

Spring:

Biol. 403, Ecosystem Ecology, 27 students

KODRIC-BROWN, A.

Spring:

Biol. 455, Animal Behavior/Ethology, 32 students.

Biol. 499, Undergraduate Problems, 1 student, 3 credit hours. Biol. 499, Undergraduate Problems, 1 student, 1 credit hour.

LI. B.-L.

Spring:

*Biol. 122-001 & -002, Principles of Biology (with Eric Toolson), ~ 370

students

Fall: *

*Biol. 310, Principles of Ecology, 30 students

LIGON, J.D.

Spring: Fall:

Biol. 379, Conservation Biology, 45 students Biol. 379, Conservation Biology, 46 students LOKER, E.S.

Spring:

Biol. 382L, Introductory Parasitology, 11 students

LOWREY, T.K.

Spring: Fall:

Biol. 461, Tropical Biology, 15 students Biol. 463, Flora of New Mexico, 30 Students

MARSHALL, D.L.

Spring: I

Biol. 467, Evolutionary Plant Ecology, 4 students (6.0 on ICES "Rate the

Instructor")

MILLER, R.D.

Spring:

*Biol. 450, General Virology, 55 students Biol. 402/502, ST/Immunogenetics, 3 students

Fall:

Biol. 456, Immunology, 92 students

Biol. 402/502, ST/Immunogenetics, 4 students

MOLLES, M.C., JR.

Spring:

Biol. 407, Bosque Biology, 15 students

Summer:

Biol. 407, Bosque Biology, 8 students (in Costa Rica).

Fall:

Biol. 407, Bosque Biology, 14 students

NATVIG, D.O.

Fall:

Biol. 446, Laboratory Methods in Molecular Biology, 6 students

NELSON, M.A.

Fall:

Biol. 221, Introductory Genetics, two sections with 70 and 85 students,

respectively (I taught half of each section)

Biol. 402/502, ST/Fungal Molecular Biology, 7 students

SNELL, H.L.

Spring:

Biol. 488L, Herpetology, 13 students

Fall:

Biol. 386L, General Vertebrate Zoology, 30 Students.

STRICKER, S.A.

Fall:

Biol. 416L, Histology, 35 students

TAYLOR, F.

Spring:

Bio

Biol. 136, Human Anatomy & Physiology for Non-majors, 35 students

Fall:

Biol. 136, Human Anatomy & Physiology for Non-majors, 17 students

THORNHILL, R.

Spring:

Biol. 402, Applied Darwinism, 5 students

Biol. 365, Evolution of Human Sexuality, 100 students

Fall:

Biol. 300, Evolution, 90 students

TOOLSON, F.C.

Spring:

Biology 122, Principles of Biology, 420 students *Biology 402, ST/Ecology Seminar, 6 students

Fall:

Biology 435, Animal Physiology, 25 students

TURNER, T.F.

Spring:

Fall:

*Biol. 487L, Ichthyology, 11 students

*Biol.

*Biol. 402, ST/Stable Isotopes in Ecology Seminar, 3 students enrolled *Biol. 386, General Vertebrate Zoology, 35 students enrolled

*Biol. 402, ST/Ecology Seminar, 12 students

VOGEL, K.G.

Spring:

Biol. 456, Immunology (3), 50 students Biol. 402, ST/Proteoglycans (1), 4 students

Fall:

Biol. 219, Principles of Cell Biology (3), two sections, 240 students, co-taught

with M. Werner-Washburne

Biol. 400, James Shannon, Lisa Lavadie, Letitia Lansing, Chris Kerwin

WAGNER, A.

Spring:

*Biol. 437/537, Evolutionary Genetics, 22 students

Fali:

*Biol. 221, Introductory Genetics, co-taught with M.A. Nelson, 170 students

WERNER-WASHBURNE, M.

Fall:

Biol. 219, Introductory Cell Biology, approx. 240 students

YATES, T.L.

Spring: Fall: Biol. 402, ST/Advanced Topics in Systematics and Ecology, 3 student

Biol. 402, ST/In Systematics, 1 student

C. Teaching Awards.

BROWN, J.H.

UNM Annual Research Lecturer, 1999.

DAHM, C.N.

Received an outstanding mentor award from the NASA PURSUE program for mentoring of undergraduate students David Gilroy, Kathy Dotson and Rachel Schelble.

DUSZYNSKI, D.W.

Great ICES evaluations in Biol. 371L (Invertebrate Biology)!

College of A&S Excellence in Undergraduate Education award for Biol. 461L (Tropical Biology), \$2,000.

MARSHALL, D.L.

Spring:

Rated 6.0 on ICES "Rate the Instructor," Biol. 467, Evolutionary Plant Ecology, 4 students.

SNELL, H.L.

The ICES evaluation process no longer automatically recognizes recipients of scores above a specific level as outstanding. However, my scores for the Spring Herpetology class were above the level that was previously recognized.

TURNER, T.F.

Teaching Allocations Award for purchasing Catalog of Fish Slides for Biol. 487L (Ichthyology) and Biol. 386 (General Vertebrate Zoology).

D. Curriculum Development/Production of Teaching Materials.

BARTON, L.L.

Developed, established and used three new laboratory experiments in the Biol. 352, Microbiology, teaching lab.

DAHM, C.N.

Developed curriculum for the new Geomicrobiology class taught for the first time in Spring 1999. This course will be one of the required courses in the new NSF IGERT-supported interinstitutional and interdisciplinary Ph.D. program. The class will be taught again with distance learning links to the University of Alabama in Fall 2001.

LOKER, E.S.

Fall:

Working on notes for development of new course, The Biology of Infectious Diseases.

MILNE, B.T.

Completely rewrote the lecture notes for my Biol. 576 course (Landscape Ecology) and reorganized the laboratory part of the course. Used Simms Park on the east side of Albuquerque as an outdoor laboratory. This involved more than 30 hours of field work with the students and about 60 hours of computer programming (by me) to implement a geographic information system, global positioning system support, and biophysical models for the site and parts of New Mexico.

Applied for funds through the department to bring global positioning system technology into the classroom.

STRICKER, S.A.

New laboratory material for Biol. 547 (Advanced Techniques in Light Microscopy) and Biol. 416 (Histology).

TURNER, T.F.

Development of Web Page for Biol. 487L (Ichthyology)

Development of Web Page for Biol. 386L (General Vertebrate Zoology)

Purchase of Catalog of Fish Slides funded by Teaching Allocation Award (UNM)

TOOLSON, E.C.

Developed several computer simulations of classic organ-systems physiology lab exercises.

Established a web page for Biology 435, Animal Physiology

WAGNER, A.

Biol. 437/537, Evolutionary Genetics

E. Museum Curator, Advisor, Assistant Chair, EM Director, etc.

ALTENBACH, J.S.

Fall:

Department Associate Chair

BARTON, L.L.

Supervisor of Media Preparation for Microbiology

Supervisor of Bacterial Culture System for Teaching

DUSZYNSKI, D.W.

Secretary-Treasurer, Biological Society of New Mexico

Spring:

Pre-veterinary Medicine Advisor

LIGON, J.D.

Curator, Bird Division, Museum of Southwestern Biology

LOWREY, T.K.

Director, Museum of Southwestern Biology

Curator, Division of Herbarium, Museum of Southwestern Biology

MILLER, R.D.

Director, Molecular Biology Facility

MOLLES, M.C., JR.

Spring:

Department Associate Chair

Curator, Division of Arthropods, Museum of Southwestern Biology

SNELL, H.L.

Curator, Herpetology Divison, Museum of Southwestern Biology

Program Leader of Vertebrate Restoration Ecology and Ecological Monitoring at the Charles Darwin Research Station, Galápagos Islands, Ecuador

STRICKER, S.A.

Director, Electron Microscopy Facility Director, Confocal Microscopy Facility

TURNER, T.F.

Curator, Fishes Division, Museum of Southwestern Biology

VOGEL, K.G.

Fall:

Chair, Department of Biology

YATES, T.L.

Curator, Division of Mammals, Museum of Southwestern Biology Curator, Division of Biological Materials, Museum of Southwestern Biology Chair, Biology Department, January–July Special Assistant, Government Relations Associate Provost Research/Dean A&S

F. Other Teaching Activities.

ALTENBACH, J.S.

Guest Lecture in Biology 379, Conservation Biology, for Dr. David Ligon

CRIPPS, R.M.

Summer:

Supervisor for one Honors Student

Honors committee, James Shannon Honors committee, Crystal Ortiz

DAHM. C.N.

Supervised a NASA SHARP program high school student, Ms. J'Mill Smith, to do research on the detritivore communities of the Rio Grande bosque. This summer program is a NASA program to expose high school students from underrepresented groups to science research.

Supervised Maceo Carillo Martinet during the Summer of 1999 with support from the NSF REU program. Maceo is an undergraduate majoring in Natural Sciences at Cornell University.

Supervising Charity Melgaard as she completes her senior honors thesis in biology at the University of New Mexico.

DUSZYNSKI, D.W.

March: Took our Tropical Biology class (Biol. 461L) to Possum Point and Wee Wee Caye field stations, Belize, Central America, 11 days, 22 students and faculty from UNM and Albuquerque TVI.

LI. B.-L.

Advisor:

- > Martha L. Ennis (Co-Chair with J. Gosz)
- ➤ Mike Fuller (Chair, 1998–99, now with A. Wagner)
- > Stefanie Hári (Co-Chair with O. Fränzle, Kiel, Germany)
- > Howard Passell (Co-Chair with C. Dahm)
- Xuefei Wang (Chair)
- > Igor Nazarov (Dept. Math. & Stat.) (Chair)

Member of the committees:

- > Andrew P. Allen (Chair: B. Milne)
- > Ford Ballantyne (Chair: J. Brown)
- > Ethan Decker (Chair: B. Milne)
- > Andrew J. Kerkhoff (Chair: B. Milne)
- > Kimberly H. Decker (Chair: D. Duszynski)
- > William LaRue (Chair: R. Thornhill)

LOKER, E.S.

Spring:

Directed Senior Honors Thesis for Danny Molina and Angela Costanzo Directed Biol. 499, Undergradutae Problems, course for Angela Costanzo Directed Biol. 551, Problems, for Randy DeJong and Kirsten Meyer Biol. 699, Dissertation, for Ken Barber, Pascale Leonard and Kelli Sapp

Fall:

Biol. 551, Problems, for Randy DeJong

Biol. 699, Dissertation, for Ken Barber and Pascale Leonard

MARSHALL, D.L.

Advisor, one honors thesis

MILLER, R.D.

Biol. 699, Dissertation, 2 students

NATVIG. D.O.

Biol. 551, 599 and 699 students supervised:

Fall: Judith Galbraith, Biol. 551 (2 cr)

Amy Powell, Biol. 551 (3 cr)

Spring: Amy Ditto, Biol. 551 (3 cr)

Judith Galbraith, Biol. 551 (2 cr) Suzanne Shoup, Biol. 551 (2 cr)

William Dvorachek, Biol. 699 (12 cr)

Biol. 400 and 499 students supervised:

Spring: Jose Weber, Biol. 499 (3 cr).

Mentored two undergraduate students, Diego Martinez and Jose Weber, in the Minorities in Biomedical Research Support (MBRS) Program.

MILNE, B.T.

Guest lectures in the classrooms at other universities:

- > Colorado State University, Fractal Geometry and Ecological Complexity, October
- ➤ University of Colorado, CIRES: Stability Theory in Ecology

NELSON, M.A.

Summer:

Biol. 551, Problems, 1 student

Fall:

Biol. 400, Senior Honors Thesis, 3 students

Biol. 551, Problems, 2 students Biol. 699, Dissertation, 3 students

SNELL, H.L.

Week-long field trip to Sonora, Mexico as part of my Herpetology class.

Produced and presented a week-long course in ArcView (GIS software) at the Charles Darwin Research Station, Galápagos Islands, Ecuador.

STRICKER, S.A.

June-July:

Zoology 536B, Comparative Invertebrate Embryology, University of Washing-

ton, 11 students

Spring: Fall: Biol. 499, Undergraduate Problems, 4 students

Biol. 499, Undergraduate Problems, 3 students

TURNER, T.F.

Supervised Graduate research of two Ph.D. students (Megan McPhee and Melanie Edwards).

Served on graduate committees of six Ph.D. students.

Supervised senior honors thesis research (Dominique Alo).

Reader for two Senior Honors Theses.

Submitted NASA Pursue grant for undergraduate participation in research.

Served on organizational committee for NSF- IGERT award.

293

VOGEL, K.G.

Honors' theses completed:

Spring:

James Shannon (co-mentor with Richard Larson, Dept. of Pathology)

Fall: Lisa Lavadie (co-mentor with Jack Omdahl, Dept. of Biochemistry) Letitia Lansing (co-mentor with Jack Omdahl, Dept. of Biochemistry)

YATES, T.I.

Taught special course on ecological epidemiology, Johns Hopkins University Graduate Class; special trial to explore the possibility of a joint program in this area where students from UNM can take classes at Hopkins and theirs here for credit (graduate students only).

II. PUBLICATIONS.

A. Books Authored.

ALTENBACH, J.S.

Harvey, M.J., J.S. Altenbach and T. Best. 1999. The Bats of the United States. Arkansas Game and Fish Commisssion. 65 pp. This book features the photographs of J. S. Altenbach.

LIGON, J.D.

Ligon, J.D. 1999. The Evolution of Avian Breeding Systems. London: Oxford University Press, 504 pp.

MOLLES, M.C., JR.

Molles, M.C., Jr. 1999. Ecology: Concepts and Applications. Dubuque, IA: WCB/McGraw-Hill. 509 pp.

B. Books Edited.

BROWN, J.H.

Brown, J.H. and G.B. West, eds. 1999. Scaling in Biology. New York, NY: Oxford University

C. Chapters in Books or Major Synthetic Reviews.

ALTENBACH, J.S.

Kiser, M. and J.S. Altenbach. 1999. Underwood's mastiff bat, Eumops underwoodi. Pp. 294-296 in The Smithsonian Book of North American Mammals, D.E. Wilson and S. Ruff, Eds. Washington D.C.: Smithsonian Institution Press, 750 pp.

Altenbach, J.S. 1999. Photographs of 26 species of North American bats. Pp. 294-296 in The Smithsonian Book of North American Mammals, D.E. Wilson and S. Ruff, Eds. Washington D.C.: Smithsonian Institution Press, 750 pp.

BROWN, J.H.

Kelt, D.A. and J.H. Brown. 1999. Diversification of body sizes: Patterns and processes in the assembly of terrestrial mammal faunas. In *Biodiversity Dynamics*, M. McKinney and J. Drake, Eds. New York, NY: Columbia University Press.

Kelt, D.A. and J.H. Brown. 1999. Community structure and assembly rules: Confronting conceptual and statistical issues with data on desert rodents. In *The Search for Assembly Rules in Ecological Communities*, E. Weiher and P.A. Keddy, Eds, Cambridge University Press.

CRIPPS, R.M.

Cripps, R.M. and S.I. Bernstein. In press, 2000. Generation of transgenic *Drosophila melano-gaster* via P-element mediated germline transformation. Invited chapter in *Introduction of DNA into Living Cells and Organisms*, Steel and Norton, Eds. Natick MA: Biotechniques Books.

DUSZYNSKI, D.W.

Duszynski, D.W. 1999. Eimeria. In Embryonic Encyclopedia of Life Sciences. London: Nature Publishing Group; www.els.net.

GOSZ, J.R.

Holland, E.A., G.P. Robertson, J. Greenberg, P.M. Groffman, R.D. Boone and J.R. Gosz. 1999. Soil CO₂, N₂O, and CH₄ Exchange. Pp. 185-201 in *Standard Soil Methods for Long-term Ecological Research*, G.P. Robertson, D.C. Coleman, C.S. Bledsoe and P. Sollins, Eds. New York, NY: Oxford University Press.

Gosz, J.R., J. Asher, B. Holder, R. Knight, R. Naiman, G. Raines, P. Stine and T.B. Wigley. 1999. An ecosystem approach for understanding landscape diversity. Pp. 157-194 in *Ecological Stewardship: A Common Reference for Ecosystem Management*, N. Johnson et al., Eds. Elsevier Science.

Gosz, J.R. 1999. International long term ecological research: Collaboration among national networks of research sites for a global understanding. Pp. 9-18 in *Long Term Ecological Research Examples, Methods, Perspectives for Central Europe*, P. Bijok, M. Prus, Eds. Warsaw, Poland: International Centre of Ecology, Polish Academy of Sciences.

Gosz, J.R. 1999. International long term ecological research: Collaboration among national networks of research sites for a global understanding. Pp. 59-68 in *Nature and Culture in Landscape Ecology* (Experiences for the 3rd Millenium), P. Kovar, Ed. Prague, Czech Republic: The Karolinum Press.

LI, B.-L.

Li, B.-L. 1999. Applications of fractal geometry and percolation theory to landscape analysis and assessment. Chapter 14 in *Integrated Ecological Assessment Guidebook*, P. Bourgeron and M. Jensen, Eds. New York, NY: Springer-Verlag.

Li, B.-L. 1999. Fuzzy statistical and modeling approach to ecological assessments. Chapter 15 in Integrated Ecological Assessment Guidebook, P. Bourgeron and M. Jensen, Eds. Springer-Verlag.

LIGON, J.D.

Johnson, R.R., L.T. Haight and J.D. Ligon. 1999. Strickland's Woodpecker (*Picoides stricklandi*). In *The Birds of North America*, No. 474, A. Poole and F. Gill, Eds. Philadelphia, PA: The Birds of North America, Inc., 16 pp.

LOKER, E.S.

Adema, C.M., K.K.Sapp and E.S. Loker. 2000. Immunobiology of the relationship of echinostomes with snail intermediate hosts. In *Echinostomes as Experimental Models for Biological Research*. T.K. Graczyk and B. Fried, eds. Kluvyer, in press.

Loker, E.S. and C.J. Bayne. 2000. Molecular studies of the molluscan response to digenean infection. Invited chapter for symposium proceedings, *Phylogenetic Perspectives on the Vertebrate Immune Response*, Federation of American Societies for Experimental Biology (FASEB) summer research conference. Kluyver, in press.

MARSHALL, D.L.

Miller, E.E., K.M. Morrow, A. Tyler, C.A. Morita and D.L. Marshall. 1999. By what mechanisms are pollen competition and pollen tube growth affected by the presence of competing pollen? Pp. 102-105 in *Proceedings of the ACE-PURSUE Student Conference: Advances in Research and Education in Science, Mathematics and Engineering,* Volume 2, M. Jamshidi, D. Kauffman and N. Vadiee, Eds. Albuquerque NM: ACE-PURSUE.

MILLER, R.D.

Miller R. D. and K. Belov, In press. Marsupial immunglobulin genetics. *Developmental and Comparative Immunology*.

MILNE, B.T.

Milne, B.T., A.R. Johnson and S. Matyk. 1999. ClaraT: Instructional software for fractal pattern generation and analysis. Pp. 304-332 in *Landscape Ecological Analysis: Issues and Applications*, J.M. Klopatek and R.H. Gardner, Eds. New York, NY: Springer-Verlag.

NELSON, M.A.

Nelson, M.A. and D.O. Natvig. Accepted, awaiting publication, 2000. Appendix 3: Data for RFLP Mapping. In *Chromosomal Loci of* Neurospora crassa, D.D. Perkins, A. Radford and M.S. Sachs, Eds. San Diego, CA: Academic Press.

Nelson, M.A., P.L. Dolan and D.O. Natvig. Accepted, awaiting publication, 2000. Appendix 7: Expressed Sequences from Different Stages of the *Neurospora* Life Cycle: Putative Identification of cDNAs. In *Chromosomal Loci of* Neurospora crassa, D.D. Perkins, A. Radford and M.S. Sachs, Eds. San Diego, CA: Academic Press.

SNELL. H.L.

Gibbs, J., H.L. Snell and C. Causton. 1999. Effective monitoring for adaptive wildlife management: Lessons from the Galápagos archipelago. *Journal of Wildlife Management* 63(4):1055-1065.

Snell, H.L. and S. Rea. 1999. The 1997–1998 El Niño en Galápagos: Can you estimate 120 years of pattern with 34 years of data? *Noticias de Galápagos* 60:11-20.

Snell, H.L. and S. Rea. 1999. El Niño 1997–1998 en Galápagos: ¿Se puede estimar 120 años de variaciones climáticos con estadisticas de 34? Pp. 65-71 in *Informe Galápagos 1998 –1999*, P. Ospina and E. Muñoz, Eds. Quito, Ecuador: Fundación Natura. Note: this is a slightly diferent version, in Spanish, of the previous paper.

THORNHILL, R.

Thornhill, R. and S.W. Gangestad. 1999. Facial attractiveness. *Trends in Cognitive Sciences* 3:452-460.

Thornhill, R. 1999. Sexual attraction, the evolutionary psychology of. Pp. 751-753 in *The MIT Encyclopedia of the Cognitive Sciences*, R.A. Wilson and F.C. Keil, Eds. Boston, MA: MIT Press.

VOGEL, K.G.

Vogel, K.G., S.P. Evanko and J.R. Robbins. 1999. What proteoglycan content says about the mechanical history of tendon. Pp 301-313 in *Biology of the Synovial Joint*, C. Archer, B. Caterson, M. Benjamin and J. Ralphs, Eds. The Netherlands: Harwood Academic Publishers.

YATES, T.L.

Yates, T.L. 1999. American Shrew Mole/Neurotrichus gibbsii. Pp. 56-57 in The Smithonian Book of North American Mammals, D.E. Wilson and S. Ruff, Eds. Washington DC: Smithonian Institution Press, 750 pp.

Yates, T.L. 1999. Broad-footed Mole/Scapanus latimanus. Pp. 57-58 in The Smithonian Book of North American Mammals, D.E. Wilson and S. Ruff, Eds. Washington DC: Smithonian Institution Press, 750 pp.

Yates, T.L. 1999. Townsend's Mole/Scapanus townsendii. Pp. 60-61 The Smithonian Book of North American Mammals, D.E. Wilson and S. Ruff, Eds. Washington DC: Smithonian Institution Press, 750 pp.

Yates, T.L. 1999. Eastern Mole/Scalopus aquaticus. Pp 63-64 The Smithonian Book of North American Mammals, D.E. Wilson and S. Ruff, Eds. Washington DC: Smithonian Institution Press, 750 pp.

D. Articles in Refereed Journals.

BARTON, L.L.

Tucker, M.D., L.L. Barton, B.M. Thomson, B.M. Wagener and A. Aragon. 1999. Treatment of waste containing EDTA by chemical oxidation. *Waste Management* 19:477-482.

Barton, L.L., B.M. Thomson and M.D. Tucker. 1999. Assessment of a chemical/biological treatment of mixed waste: Phase II. International Journal of Environmentally Conscious Design & Manufacturing 8:1-10.

Xu, H., Y. Wang and L.L. Barton. 1999. Application of a linear free energy relationship to crystalline solids of MO₂ and M(OH)₄. Journal of Nuclear Materials 273:343-346.

Schaeffer, D.J., P.B. Malpas and L.L. Barton. Risk assessment of microcystin in dietary Aphanizomenon flos-aquae. *Ecotoxicology and Environmental Safety* 44:73-80.

Shelton, P.S. and L.L. Barton. In press. Ferric citrate reductase activity in *Laccaria laccata*, an ectomycorrhizal fungus. *Journal of Plant Nutrition*.

Barton, L.L., G.V. Johnson, A.G. O'Nan and B.M. Wagener. In press. Inhibition of ferric chelate reductase in alfalfa roots by cobalt, nickel, chromium and copper. *Journal of Plant Nutrition*.

BROWN, J.H.

West, G.B., J.H. Brown and B.J. Enquist. 1999. The fourth dimension of life: Fractal geometry and allometric scaling of organisms. *Science* 284:167-169.

Brown, J.H. 1999. Macroecology: Progress and prospect. An invited mini-review. Oikos 87:3-14.

Guo, Q., J.H. Brown, T.J. Valone and S.D. Kachman. 1999. Constraints of seed size on plant distribution and abundance. *Ecology* 80(8): 2149-2155.

Kelt, D.A., K. Rogovin, G. Shenbrot and J.H. Brown. 1999. Patterns in the structure of Asian and North American desert small mammal communities. *Journal of Biogeography* 26:825-841.

Gido, K.B. and J.H. Brown. 1999. Invastion of North American drainages by alien fish species. Freshwater Biology 42:387-399.

Siemann, E. and J.H. Brown. 1999. Gaps in mammalian body size distribution reexamined. *Ecology* 80(8):2788-2792.

Enquist, B.J., J.H. Brown and G.B. West. 1999. Plant energetics and population density: Reply. *Nature* 398:573-573.

West, G.B., J.H. Brown and B.J. Enquist. 1999. A general model for the structure of plant vascular systems. *Nature* 400:664-667.

Brown, J.H. The legacy of Robert MacArthur: From geographical ecology to macroecology. *Journal of Mammaology* 80(2):333-344.

CHARNOV, E.L.

Parker, G.A., L.W. Simmons, P. Stockley, D.M. McChristie and E.L. Charnov. 1999. Optimal copula duration in yellow dungflies: Effects on female size and egg content. *Animal Behaviour* 57:795-805.

Charnoy, E.L. and G.A. Packer. 1999. Knowledge-independent invariance rules for copula duration in dungflies. *Journal of Bioeconomics* 1:189-201.

Enquist, B.J., G.B. West, E.L. Charnov and J.H. Brown. 1999. Allometric scaling of production and life-history variation in vascular plants. *Nature* 401:907-911.

CRIPPS, R.M.

Hodges, D., R.M. Cripps, M.E. O'Connor and S.I. Bernstein. 1999. The role of evolutionarily conserved sequences in alternative splicing at the 3' end of the *Drosophila melanogaster* myosin heavy chain RNA. *Genetics* 151:263-276.

Cripps, R.M., J.A. Suggs and S.I. Bernstein. 1999. Assembly of thick filaments and myofibrils occurs in the absence of the myosin head. *EMBO Journal* 18:1793-1804.

Cripps, R.M., B. Zhao and E.N. Olson. 1999. Transcription of the myogenic regulatory gene *Mef2* in cardiac, somatic and visceral muscle cell lineages is regulated by a Tinman-dependent core enhancer. *Developmental Biology* 215:420-430.

DAHM, C.N.

Baker, M.A., C.N. Dahm and H.M. Valett. 1999. Acetate retention and metabolism in the hyporheic zone of a mountain stream. *Limnology and Oceanography* 44:1530-1539.

DUSZYNSKI, D.W.

Duszynski, D.W. 1999. Revisiting the code: Clarifying name-bearing types for photomicrographs of Protozoa. Invited Critical Comment. *Journal of Parasitology* 85:769-770.

Duszynski, D.W., D.T. Scott and X. Zhao. 1999. Eimeria from bats of Bolivia: Two new species from vespertilionid bats. *Journal of Parasitology* 85:504-507.

Duszynski, D.W., D.T. Scott, J. Aragon, A. Leach and T. Perry. 1999. Six new Eimeria species from vespertilionid bats of North America. *Journal of Parasitology* 85:496-503.

Duszynski, D.W., W.D. Wilson, S.J. Upton and N.D. Levine. 1999. Coccidia (Apicomplexa: Eimeriidae) in the Primates and Scandentia. *International Journal of Primatology* 20:761-797.

Heckscher, S.K., B.A. Wickesberg, D.W. Duszynski and S.L. Gardner. 1999. Three new species of *Eimeria* from Bolivian marsupials. *International Journal for Parasitology* 29:275-284.

Hnida, J.A. and D.W. Duszynski. 1999. Cross-transmission studies with *Eimeria arizonensis*, *E. arizonensis*-like oocysts and *Eimeria langebarteli*: Host specificity at the genus and species level within the Muridae. *Journal of Parasitology* 85:873-877.

Hnida, J.A. and D.W. Duszynski. 1999. Taxonomy and phylogeny of some *Eimeria* (Apicomplexa: Eimeriidae) species of rodents as determined by polymerase chain reaction/restriction-fragment-length polymorphism analysis of 18S rDNA. *Parasitology Research* 85:887-894.

Hnida, J.A. and D.W. Duszynski. 1999. Taxonomy and systematics of some *Eimeria* species of murid rodents as determined by the ITS1 region of the ribosomal gene complex. *Parasitology* 119:349-357.

GOSZ, J.R.

Gosz, J.R. 1999. Ecology challenged? Who? Why? Where is this headed? Ecosystems 2:475-481.

Fields, M.J., D.P.Coffin and J.R. Gosz. 1999. The role of kangaroo rats (*Dipodomys spectabilis*) in determining patterns in plant species dominance at an ecotonal boundary. *Journal of Vegetation Science*. 10:123-130.

Davidson, A.D., R.R. Parmenter and J.R. Gosz. 1999. Responses of vegetation and small mammals to a reintroduction of Gunnison's prairie dogs. *Journal of Mammalogy* 80:1311-1324.

KODRIC-BROWN, A.

Strecker, U. and A. Kodric-Brown. 1999. Mate recognition systems in a species flock of Mexican pupfish (Cyprinodon). Journal of Evolutionary Biology 12:927-935.

Nicoletto, P.F. and A. Kodric-Brown. 1999. The use of digitally modified videos to study the function of ornamentation and courtship in the guppy, *Peocilia reticulata*. *Environmental Biology of Fishes* 56:333-341.

Kodric-Brown, A. 1999. Video animation techniques to study fish behavior. Preface to the video and animation techniques. *Environmental Biology of Fishes* 56:283-284.

Nicoletto, P.F. and A. Kodric-Brown. 1999. The relationship among swimming performance, courtship behavior, and carotenoid pigmentation of guppies in four rivers of Trinidad. *Environmental Biology of Fishes* 55:227-235.

LIGON, J.D.

Kimball, R.T., E.L. Braun, P.W. Zwartjes, T.M. Crowe and J.D. Ligon. 1999. A molecular phylogeny of the pheasants and partridges suggests that these lineages are not monophyletic. *Molecular Phylogenetics and Evolution* 11:38-54.

Kimball, R.T. and J.D. Ligon. 1999. Evolution of avian plumage dichromatism from a proximate perspective. *American Naturalist* 154:182-193.

LOKER, E.S.

Mkoji, G.M., T.G. Boyce, B.N. Mungai, R.S. Copeland and E.S. Loker, E.S. 1999. Predation of aquatic stages of *Anopheles gambiae* by the Louisiana red swamp crayfish *Procambarus clarkii*. *Journal of the American Mosquito Control Association* 15:69-71.

Loker, E.S., C. Coustau, G.L. Ataev and J. Jourdane. 1999. In vitro culture of rediae of Echinostoma caproni. Parasite 6:169-174.

Adema, C.M., L.A. Hertel and E.S. Loker. 1999. Evidence from two planorbid snails of a complex and dedicated response to digenean (echinostome) infection. *Parasitology* 119:395-404.

Mkoji, G.M., B.V. Hofkin, A.M. Kuris, A. Stewert-Oaten, B.N. Mungai, J.H. Kihara, F. Mungai, J. Mbui, J.R. Rashid, C.H. Kariuki, J.H. Ouma, D.K. Koech and E.S. Loker. 1999. Impact of the crayfish *Procambarus clarkii* on *Schistosoma haematobium* transmission in Kenya. *American Journal of Tropical Medicine and Hygiene* 61:751-759.

LOWREY, T.K.

Okada, M., T.K. Lowrey and R. Whitkus. In press. Quantitative morphological variation in *Tetramolopium* (Asteraceae) in Hawaii and the Cook Islands. *Plant Systematics and Evolution*.

Whitkus, R., H. Doan and T.K. Lowrey. In Press. Genetics of sex expression in Hawaiian Tetra-molopium (Asteraceae). Journal of Heredity.

MILLER, R.D.

Lucero, J.E., G.H. Rosenberg, and R.D. Miller. 1998. Marsupial light chains: Complexity and conservation of lambda in the opossum *Monodelphis domestica*. *Journal of Immunology* 161:6724-6732.

Kusewitt, D.E., T.E. Sherburn, K.B. Miska, G.B. Tafoya, J.M. Gale and R.D. Miller. 1999. Mutations of the p53 tumor suppressor gene in ultraviolet radiation-induced corneal sarcomas of the marsupial *Monodelphis domestica*. *Carcinogenesis* 20:963-968.

Lund, J., B. Roe, F. Chen, M. Budarf, N. Galili, R. Riblet, R.D. Miller, B.S. Emanuel and R.H. Reeves. 1999. Sequence-ready physical map of the mouse chromosome 16 region with conserved synteny to the human velocardiofacial syndrome region on 22q11.2. *Mammalian Genome* 10:438-443.

Belov, K., G.A. Harrison, R.D. Miller and D.W. Cooper. 1999. Isolation and sequence of a cDNA coding for the heavy chain constant region of IgG from the Australian brushtail possum, *Trichosurus vulpecula*. *Molecular Immunology* 36:535-541.

Miller, R.D., E.R. Bergemann and G.H. Rosenberg. 1999. Marsupial light chains: IGK with four V families in the opossum *Monodelphis domestica*. *Immunogenetics* 50:329-335.

Miska, K.B. and R.D. Miller. 1999. Marsupial Mhc class I: Classical sequences from the opossum Monodelphis domestica. Immunogenetics 50:89-93

Belov, K., G.A. Harrison, G.H. Rosenberg, R.D. Miller and D.W. Cooper. 1999. Isolation and comparison of the IgM heavy chain constant region from Australian (*Trichosurus vulpecula*) and American (*Monodelphis domestica*) marsupials. *Developmental and Comparative Immunology* 23:649-656

Belov, K., G.A. Harrison, R.D. Miller and D.W. Cooper. In press. Molecular cloning of the brushtail possum (*Trichosurus vulpecula*) immunglobulin E heavy chain constant region *Molecular Immunology*.

MILNE, B.T.

Milne, B.T. and W. B. Cohen. 1999. Multiscale assessment of binary and continuous landcover variables for MODIS validation, mapping and modeling applications. *Rem. Sens. Env.* 70:82-98.

MOLLES, M.C., JR.

Ellis, L.M., M.C. Molles, Jr. and C.S. Crawford. 1999. Influence of experimental flooding on litter dynamics in a Rio Grande riparian forest, New Mexico. *Restoration Ecology* 7:193-204.

NATVIG, D.O.

Bieszke, J.A., E.L. Braun, L.E. Bean, S. Kang, D.O. Natvig and K.A. Borkovich. 1999. The NOP-1 gene of *Neurospora crassa* encodes a seven transmembrane helix retinal-binding protein homologous to archaeal rhodopsins. *Proceedings of the National Academy of Sciences USA* 96:8034-8039.

NELSON, M.A.

Braun, E.L., A.L. Halpern, M.A. Nelson and D.O. Natvig. In press. Large scale comparison of fungal sequence information: Mechanisms of innovation in *Neurospora crassa* and gene loss in *Saccharomyces cerevisiae*. Genome Research.

STRICKER, S.A.

Stricker, S.A. 1999. Comparative calcium signaling during fertilization and egg activation in animals. *Developmental Biology* 211:157-176.

Stricker, S.A. and M. Whitaker. 1999. Confocal laser scanning microscopy of calcium dynamics in living cells. *Microscopy Research and Technique* 46:356-369.

THORNHILL, R.

Thornhill, R. 1999. The biology of human rape. Jurimetrics 39:137-147.

Thornhill, R. and K. Grammer. 1999. The body and face of woman: One ornament that signals quality? *Evolution and Human Behavior* 20:105-120.

Thornhill, R. and S.W. Gangestad. 1999. The scent of symmetry: A human sex pheromone that signals fitness? *Evolution and Human Behavior* 20:175-201.

Thornhill, R., A.P. Møller and S.W. Gangestad. 1999. The biological significance of fluctuating asymmetry and sexual selection: A reply to Palmer. *American Naturalist* 154:234-241.

Møller, A.P., S.W. Gangestad and R. Thornhill. 1999. Nonlinearity and the importance of fluctuating asymmetry as a predictor of fitness. *Oikos* 86:366-368.

Scheib, J.E., S.W. Gangestad and R. Thornhill. 1999. Facial attractiveness, symmetry and cues of good genes. *Proceedings of the Royal Society of London B* 266:1913-1918.

Manning, J., R. Trivers, D. Singh and R. Thornhill. 1999. The mystery of female beauty. *Nature* 399:214-215.

Gangestad, S.W. and R. Thornhill. 1999. Individual differences in developmental precision and fluctuating asymmetry: A model and its implications. Journal of Evolutionary Biology 12:402-416.

Trivers, R., J. Manning, R. Thornhill, D. Singh and M. McGuire. 1999. The Jamaican asymmetry project: Long-term study of fluctuating asymmetry in rural Jamaican children. *Human Biology* 71:417-430.

TURNER, T.F.

Turner, T.F., L.R. Richardson and J.R. Gold. 1999. Temporal genetic variation of mtDNA and effective female population size of red drum in the northern Gulf of Mexico. *Molecular Ecology* 8:1223-1230.

Gold, J.R., L.R. Richardson and T.F. Turner. 1999. Temporal stability and spatial divergence of mitochondrial DNA haplotype frequencies in red drum (*Sciaenops ocellatus*) from coastal regions of the western Atlantic Ocean and Gulf of Mexico. *Marine Biology* 133:593-602.

VOGEL, K.G.

Perez-Castro, A.V. and K.G. Vogel. 1999. *In situ* expression of collagen and proteoglycan genes during development of fibrocartilage in bovine deep flexor tendon. *J. Orthopaedic Research* 17:139-148.

Vogel, K.G. and A.B. Meyers. 1999. Proteins in the tensile region of adult bovine deep flexor tendon. Clinical Orthopaedic and Related Research 367S:S344-S355.

Vogel, K.G. 1999. Breakout Session 5: Tendon and Ligament. Clinical Orthopaedic and Related Research 367S:S371-S374.

WAGNER, A.

Wagner, A. 1999. Redundant gene functions and natural selection. *Journal of Evolutionary Biology* 12:1-16.

Wagner, A. 1999. Causality in complex systems. Biology and Philosophy 14:83-101.

Wagner, A. and P. Stadler. 1999. Evolved mutational robustness. *Journal of Experimental Zoology* 285:119-127.

Dudgeon, S., A. Wagner, J.R. Vaisnys and L.W. Buss. 1999. Dynamics of gastrovascular circulation in the hydrozoan Podocoryne carnea: The one-polyp case. *Biological Bulletin* 196:1-17.

YATES, T.L.

Mills, J.N., T.L. Yates, T.G. Ksiazek, C.J. Peters and J.E. Childs. 1999. Long-Term studies of hantavirus reservoir populations in the Southwestern United States: Ratinale, potential and methods. *Emerging Infectious Diseases* 5(1):95-101.

Parmenter, C.A., T.L. Yates, R.R. Parmenter and J.L. Dunnum. 1999. Statistical sensitivity for detection of spatial and temporal patterns in rodent population densities. *Emerging Infectious Diseases* 5(1):118-125.

Monroe, M.C., S.P. Morzunov, A.M. Johnson, M.D. Bowen, H. Artsob, T.L. Yates, C.J. Peters, P.E. Rollin, T.G. Ksiazek and S.T. Nichol. 1999. Genetic diversity and distribution of *Peromyscus*-borne Hantaviruses in North America. *Emerging Infectious Diseases* 5(1):75-86.

Two not reported from last year:

Baker, R.J. and T.L. Yates. 1998. Net-weilding anachronisms. Science 282:1048-1049.

Kirkland et al. and T.L Yates. 1998. Guidelines for capture, handling, and care of mammals as approved by the American Society of Mammalogists. *Journal of Mammalogy* 79(4):1416-1431.

E. Book Reviews.

GOSZ, J.R.

New Ecology Textbook by Joan Erhenfield, Oxford Press, New York.

THORNHILL, R.

R. Thornhill's 1999 review of J. Avise. 1998. The Genetic Gods. Harvard University Press. The Quarterly Review of Biology 74:223-224.

F. Articles in Non-scholarly Journals.

ALTENBACH, J.S.

Altenbach, J.S. In press. Abandoned mines as bat habitat: A prospective after a decade of mine surveys in the western United States. Proceedings of the 20th Annual Conference of Abandoned Mine Land Programs, R. Evetts, Ed., Albuquerque NM, 1998.

MILNE, B.T.

Johnson, A.R., B.T. Milne and P. Hraber. 1999. Analysis of change in piñon-juniper woodlands based on aerial photography, 1930s-1980s. Pp. 106-111 in Rio Grande Ecosystems: Linking Land, Water, and People. Toward a Sustainable Future for the Middle Rio Grande Basin, D.M. Finch, J.C. Whitney, J.F. Kelly and S.R. Loftin, Eds. Proc. RMRS-P-7, U.S. Dept. Agriculture, Forest Service, Rocky Mountain Research Station, Ogden UT.

SNELL, H.L.

Galápagos Frog Report. Web posting: http://www.naturalist.net/news/Galfrog.html.

Snell, H.L. 1999. A New Class of Vertebrates Established in Galápagos. The Cold-Blooded News. *The Newsletter of the Colorado Herpetological Society* 26(7):1-3. Also posted on web at: http://coloherp.org/cb-news/cbn-9907/GalapFrog.html.

WERNER-WASHBURNE, M.

Werner-Washburne, M. "Following the Coil of Life." Editorial article for the Albuquerque Tribune, December 31, 1999; http://www.abqtrib.com/opinions/011400_mill.shtml.

YATES, T.L.

Yates, T.L. and C.A. Parmenter. 1999. Hantavirus Pulmonary Syndrome Update. MMWR: CDC. March.

G. Quasi-public Reports for Internal/External Circulation.

ALTENBACH, J.S.

Altenbach, J.S. 1999. A report on the Bat Use and Bat Use Potential of the Abandoned Mines in the Gold Hill Mine Reclamation Project. Submitted to the NM Abandoned Mine Lands Bureau, New Mexico Energy, Minerals and Natural Resources Division (NMEMNRD).

Altenbach, J.S. 1999. A report on the Bat Use and Bat Use Potential of the Abandoned Mines in the Gore Canyon Mine Reclamation Project. Submitted to the NM Abandoned Mine Lands Bureau, NMEMNRD.

Altenbach, J.S. 1999. A report on the Bat Use and Bat Use Potential of the Abandoned Mines in the Spar group Mine Reclamation Project. Submitted to the NM Abandoned Mine Lands Bureau, NMEMNRD.

A Report on the Evaluation of Shaft Features at the Ruby Hill Mine Reclamation Project. Submitted to Brown Berry Biological Consulting, Bishop CA.

BARTON, L.L.

Thomson, B.M. and L.L. Barton. 1999. Stability of Metals Precipitated by Bacteria. Prepared for the U.S. Department of Energy, NABIR Project Office, Washington DC, 10 pp.

Barton, L.L., B.M. Thomson and M.D. Tucker. 1999. Chemical and Biological Treatment of Waste Containing Radioisotopes and Organic Compounds. Prepared for the U.S. Department of Energy, WERG Project Office, Las Cruces NM, 12 pp.

DAHM, C.N.

Middle Rio Grande Water Budget (Where Water Comes From, and Goes, and How Much): Averages for 1972–1997. Action Committee of the Middle Rio Grande Water Assembly. Technical Advisory Committee. 10 pp.

Report on the U.S.-E.C. Workshop on Contributions of Molecular Tools to Studies of Ecology and Ecosystem Dynamics in the Report of the Ninth Task Force Meeting of the U.S.-E.C. Task Force on Biotechnology Research, December 22, 1999. Martha B. Steinbock, U.S. Executive Secretary. 4 pp.

DUSZYNSKI, D.W.

Prepared and edited *The Program and Abstracts* booklet (175 pp.) for the 1999 Joint Meeting of the American Society of Parasitologists (ASP) and the Society of Nematologists (SON), held July 6-10, 1999, Monterey CA. Mailed by Allen Press to approximately 1,850 members of both societies.

Wrote and edited the camera-ready copy of the Call For Papers booklet announcing the 2000 Joint Meeting of the ASP and the Society of Protozoologists (SOP), scheduled to be held June 24-28, 2000, San Juan PR. Mailed by Allen Press to approximately 1,650 members of both societies.

LIGON, J.D.

Report on recommendation to N.M. Department of Game and Fish to list the Lesser Prairie Chicken as Endangered, as my responsibility as the member of a peer veview panel from UNM. Originally appointed by President Peck.

LOWREY, T.K.

Rare plant status report. Zaluzania grayi. New Mexico Rare Plant Technical Council report.

NELSON, M.A.

Nelson, M.A. and M. Werner-Washburne, Southwest Genomics and Biotechnology White Paper, July.

SNELL, H.L.

Marquez, C. and H.L. Snell. 1999. Ecología de Restauración para la Diversidad Biológica en Galápagos: Recuperación de los Reptiles Endémicos: Informe Técnico Semestral VII-XII-99 Proyecto FUNDACYT-CDE. Presented to FUNDACYT.

Snell, H.L. 1999. El Chato Report: Covers 12/viii/99 and 13/viii/99. Informe interno a FCD y SPNG.

Snell, H.L. 1999. Frankfurt Zoological Society: 1228/97 Control of Introduced Predators, Midyear Report 1999. Presentado a FZS y SPNG.

Snell, H.L. 1999. Ecología de restauración para la diversidad biológica en Galápagos: Recuperación de los reptiles endémicos: Informe técnico semestral I–VI 1999 Proyecto FUNDACYT–CDF. Presentado a FCD, FUNDACYT, y SPNG.

Snell, H.L. 1999. Mid-Year Report-Cerro Azul Tortoise Project. Presented to Swiss Friends of Galápagos, October.

Snell, H.L. 1999. Galápagos ecological monitoring 1998–99: Activities supported by the Worthington Foundation. Presentado a CDF, Inc. y la Worthington Foundation.

Snell, H.L. 1999. Suggested Management Policies to Reduce the Losses of Terrestrial Biological Diversity Resulting From Pepino del Mar Fishing. Presented to Galápagos National Park Service.

WERNER-WASHBURNE, M.

Nelson, M.A. and M. Werner-Washburne, Southwest Genomics and Biotechnology White Paper, July.

YATES, T.L.

Yates et al. 1999. Longitudinal studies of hantavirus in rodent populations in the American Southwest. Two biannual reports, May and December. CDC.

H. Abstracts (Refereed or Invited),

BARTON, L.L.

Tucker, M.D., L.L. Barton and B.M. Thomson. Dissimilatory reduction of molybdenum by *Desulforibrio desulfuricans*. Annual Meeting of American Society for Microbiology, Chicago IL, May 30–June 3. Q6.

Vigil, J.R. and L.L. Barton. Ferric reductase in bacteria is dependent on aerobic cultivation. Annual Meeting of American Society for Microbiology, Chicago IL, May 30–June 3. I36.

Xu, H. and L.L. Barton. Colloidal particles produced by sulfate-reducing bacteria and sulfideoxidizing bacteria: TEM study. International Meeting of Migration '99, Lake Tahoe NV, June 7-10.

Xu, H., Y.Wang and L.L. Barton. A linear free energy relationship for aqueous ions and crystalline solids of MO₂, M(OH)₄, Garnet and MZrTi₂ O₇. International Meeting of Migration '99, Lake Tahoe NV, June 7-10.

Brown, G.S., L.L. Barton, M.D. Tucker and B.M. Thomson. Polycyclic aromatic hydrocarbon degradation through chemical oxidative treatment. WERE Conference on the Environment, Albuquerque NM, April 26-28.

DAHM, C.N.

Dahm, C.N. 1999. Hydrogeology and biogeochemistry of the surface water and ground water interface of a mountain stream. EPA Symposium on the Ground Water/Surface Water Interactions, Denver CO. p. 18.

Dahm, C.N. 1999. Hydrogeology and biogeochemistry of the surface water and ground water interface of a small, perennial, montane stream. Annual Meeting of the Geological Society of America, Denver CO. A-329.

LI. B.-L.

Li, B.-L. 1999. Towards a synergetic view of landscape ecology. Fifth World Congress IALE Abstracts, Vol. II, p. 95.

NATVIG, D.O.

Bieszke, J.A., K.A. Borkovich, D.O. Natvig, L.E. Bean, E.L. Braun and S. Kang. Analysis of an opsin gene from *Neurospora crassa*. Abstract of invited talk presented by K. Borkovich at the 20th Fungal Genetics Conference, Asilomar CA, March.

Natvig, D.O. and M.A. Nelson. The *Neurospora* Genome Project at the University of New Mexico. Abstract of invited talk at the Annual Meeting of the Association of Biomedical Resource Facilities (ABRF), Durham NC, March.

Natvig, D.O. and M.A. Nelson. The *Neurospora* Genome Project reveals a wealth of fungal gene diversity. Abstract of invited talk at the Ninth International Congress of Bacteriology and Applied Microbiology of the International Union of Microbiological Societies, Sydney, Australia, August.

NELSON, M.A.

Natvig, D.O. and M.A. Nelson. The *Neurospora* Genome Project at the University of New Mexico. Talk presented by D.O. Natvig at ABRF '99: Bioinformatics and Biomolecular Technologies: Linking Genomes, Proteomes and Biochemistry, Durham NC, March 19-22.

Natvig, D.O. and M.A. Nelson, The *Neurospora* Genome Project Reveals a Wealth of Fungal Gene Diversity. Talk presented by D.O. Natvig at the Ninth International Congress of Bacteriology and Applied Microbiology of the International Union of Microbiological Societies, Sydney, Australia, August.

MILNE, B.T.

Milne, B.T., A. Kerkhoff and C. Restrepo. Multiscale assessment of species ranges. Ecological Society of America, Spokane WA, August. Invited Symposium.

Milne, B.T. Computation in ecological landscapes: Interactions between terrain and vegetation. International Association of Landscape Ecology, Snowmass CO, August.

Restrepo, C., D. Kerkhoff and B.T. Milne. Landslide size distribution and the role of diversity in tropical montane ecosystems: Deviations from power laws. International Association of Landscape Ecology, Snowmass CO, August.

VOGEL, K.G.

Carvalho, H.F. and K.G. Vogel. 1999. Identification, distribution and amount of type VI collagen in bovine tendon. *Trans. Orthopaedic Research Society* 45:1087.

Fallon, J.M., J.A. Trotter, K.G. Vogel and F.T. Blevins. 1999. Independent and parallel collagen fasicles within the supraspinatus tendon: Microanatomy and functional morphology. *Trans. Orthopaedic Research Society* 45:368.

Vogel, K.G., J.A. Peters and A.B. Meyers. 1999. Proteoglycans and proteins of cartilage are present in bovine tendon. Symposium on Molecular Biology of Cartilage Development, Lake Tahoe CA, June 2-5.

YATES, T.L.

Yates, T.L. 1999. Longitudinal Studies of Hantaviruses in New Mexico, 1994–1999. Supplement to *The American Journal of Tropical Medicine and Hygiene*. ASTMH annual meeting, Washington DC, December.

Yates, T.L. 1999. The ecology of an outbreak: Evidence for El Niño-driven hantavirus outbreaks in the United States. Ecological Society of America, Walla Walla WA, August.

Yates, T.L. 1999. Biodiversity and the health of ecosystems: Why should public health officials care? First Annual Edward and Nancy Dodge Lectureship, The Johns Hopkins University, Baltimore MD, April 7.

The following were all invited, but no abstracts were published except for publicity. Yates, T.L. 1999. Invited lectures at University of Nebraska; Catholic University, Santiago, Chile; Department of the Interior (two talks) national safety lectures; UNM presidential Kitchen Cabinet; Federal Occupational health talk sponsored by FBI; and the National Science Foundation.

1. Abstracts (Contributed) (including Research Day abstracts of your students).

CRIPPS, R.M.

Cripps, R.M. and E.N. Olson. Functions of twist and Mef2 in adult myogenesis. American Drosophila Research Conference, Seattle WA, March 24-28.

Cripps, R.M. and E.N. Olson. Functions of twist and Mef2 in adult Drosophila myogenesis. EMBO Workshop on Molecular Genetics of Muscle Development and Neuromuscular Diseases, Kloster Irsee, Germany, September 26–October 1.

DAHM, C.N.

Fellows, C.S., C.N. Dahm and H.M. Valett. 1999. Contribution of the hyporheic zone to ecosystem metabolism in two montane streams, New Mexico, USA. Aquatic Sciences Meeting of the American Society for Limnology and Oceanography, p. 64.

Fellows, C.S., C.N. Dahm and H.M. Valett. 1999. The importance of the surface water–ground water interface to stream ecosystem metabolism. Annual Meeting of the Geological Society of America, Denver CO, A-329.

Fellows, C.S., C.N. Dahm and H.M. Valett. 1999. Whole-stream metabolism in two montane streams using both dissolved oxygen and carbon dioxide. *Bulletin of the North American Benthological Society* 16:166-167.

Baker, M.A., C.N. Dahm and H.M. Valett. 1999. Microbial metabolism of acetate in the ground water–surface water interface of streams. Aquatic Sciences Meeting of the American Society for Limnology and Oceanography, p. 18.

Molles, M.C., C.N. Dahm, J. Cleverly, P. Jacobson, C.S. Crawford and P. Unnikrishna. 1999. Managing interflood interval for ecological integrity of riparian ecosystems along dryland rivers. *Bulletin of the North American Benthological Society* 16:125.

Peterson, C.G., H.M. Valett and C.N. Dahm. 1999. Interannual variation in snowmelt intensity and benthic microalgal dynamics in a montane headwater stream. *Bulletin of the North American Benthological Society* 16:185-186.

Thibault, J.R., C.N. Dahm, P.V. Unnikrishna, J.R. Cleverly, M.C. Molles, Jr., C.S. Crawford and H.M. Valett. 1999. Estimating rates of evapotranspiration from riparian ecosystems of riverine floodplains. *Bulletin of the North American Benthological Society* 16:232.

DUSZYNSKI, D.W.

Asmundsson, I.M., J.A. Campbell and D.W. Duszynski. A new coccidian from the Mexican caecilian *Dermophis mexicanus* (Amphibia: Gymnophiona) from Volcán Tajumulco, Department of San Marcos, Guatemala. 32nd Annual Meeting, Southwestern Association of Parasitologists (SWAP), Lake Texoma OK, April 15-17.

Asmundsson, I.M., J.A. Campbell and D.W. Duszynski. A new *Eimeria* species from the Guatemalan palm-pitviper, *Bothriechis bicolor* (Serpentes: Viperidae). 30th Annual Meeting, Rocky Mountain Conference of Parasitologists, Pocatello ID, May 6-8.

Asmundsson, I.M., J.A. Campbell and D.W. Duszynski. *Eimeria* (Apicomplexa: Eimeriidae) de culebras a la familia Colubridae de Guatemala, con descripciónes de 4 nuevas especies y un nuevo registro de hueste para Eimeria ondinae Carini, 1939. XIVth Congreso, Federacion Latinoamericana de Parasitologia, Acapulco, Mexico, October 14-16.

Decker, S.K. and D.W. Duszynski. Coccidian parasites of the rodents on the Sevilleta National Wildlife Refuge, 1989–1998. Second Sevilleta Research Symposium, UNM–LTER, Socorro NM, January 12-14.

Ryan, M.M., K.H. Decker and D.W. Duszynski. *Eimeria* (Apicomplexa: Eimeriidae) prevalence change in reintroduced Gunnison's prairie dogs (Cynomys gunnisoni). 32nd Annual Meeting, Southwestern Association of Parasitologists (SWAP), Lake Texoma OK, April 15-17.

Zhao, X. and D.W. Duszynski. Plastid DNA in rodent coccidia: Function and phylogenetic inference. 32nd Annual Meeting, SWAP, Lake Texoma OK, April 15-17.

Zhao, X. and D.W. Duszynski. Co-evolution of plastid and nuclear DNA in 10 *Eimeria* spp. from rodents. Joint meeting of the American Society of Parasitologists (74th Annual Meeting) and the Society of Nematologists (38th Annual Meeting), Monterey CA, July 6-9.

Duszynski, D.W., S.J. Upton and L. Couch. The Coccidia of the Insectivores, Scandentia and Primates. 19th Scandinavian Symposium of the Scandinavian Society of Parasitology, Reykjavik, Iceland, May 6-11.

LI. B.-L.

Li, B.-L. 1999. Multifractal and wavelet analysis of vegetation transect data in Sevilleta LTER site. Abstracts of the 84th Annual ESA Meeting, p. 134.

Fuller, M.M. and B.-L. Li. 1999. A new set of biodiversity indices that reveal the relative contribution of community type and environmental variability on diversity at Sevilleta LTER. Abstracts of the 84th Annual ESA Meeting, p. 90.

Kolasa, J. and B.-L. Li. 1999. The balance of nature may promote diversity: An empirical approach to testing new scaling relationships using natural microcosms. Abstracts of the 84th Annual ESA Meeting, p. 127.

Wu, H. and B.-L. Li. 1999. Self-thinning rule: A causal interpretation from the ecological field theory. Abstracts of the 84th Annual ESA Meeting, p. 215.

Li, B.-L. 1999. A non-equilibrium thermodynamic analysis of tree-grass patch dynamics in a subtropical savanna parkland, Texas, USA. Fifth World Congress IALE Abstracts, Vol. II, p. 95.

Li, B.-L. 1999. Self-thinning patterns formation and ecological field theory. Theory and Mathematics in Biology and Medicine, p. 313.

LOKER, E.S.

Leonard, P.M., D.C. Quintana, C.M. Adema and E.S. Loker. 1999. Characterization of a parasite-responsive Protein Family from the Snail Host of *Schistosoma mansoni* Featuring a Unique Combination of Fibrinogen and Ig V-type domains. Presented at the 48th Annual Meeting of the American Society of Tropical Medicine and Hygiene, Washington DC, November 28–December 2.

Leonard, P.M., D.C. Quintana, C.M. Adema and E.S. Loker. 1999. Characterization of a parasite-responsive Protein Family from *Biomphalaria glabrata*, Featuring a Unique Combination of Fibrinogen and Ig V-type domains. Presented at the 74th Annual Meeting of the American Society of Parasitologists, Monterey CA, July 6-9.

Adema, C.M., P.M. Leonard, R.J. DeJong, L.A. Hertel and E.S. Loker. 1999. Probing the intramolluscan biology of *Echinostoma paraensei* (Digenea): Molecular approaches. Presented at the 74th Annual Meeting of the American Society of Parasitologists, Monterey CA, July 6-9.

Molina, D., K.K. Sapp and E.S. Loker. 1999. Echinostomatiform flukes from New Mexico. Presented at the 74th Annual Meeting of the American Society of Parasitologists, Monterey CA, July 6-9.

Loker, E.S. and C.J. Bayne. Molecular studies of the molluscan response to digenean infection. Presented at the FASEB summer research conference on "Phylogenetic Perspectives on the Vertebrate Immune Response", Copper Mountain CO, July 11-16.

Loker, E.S., C.M. Adema, L.A. Hertel, P.M. Léonard, R.J. DeJong and G.M. Mkoji. 1999. Molecular studies of schistosome-transmitting snails. Presented at the Seventh International Symposium on Schistosomiasis, Rio de Janiero, Brazil, December 5-9.

D. Molina, K.K. Sapp and E.S. Loker. "Echinostomatiform flukes from New Mexico." Research Day poster presentation by D. Molina, April 16.

LOWREY, T.K.

Chan, R., T. Lowrey, D. Natvig, R. Kimball, R. Whitkus and C. Quinn. 1999. Molecular phylogeny of *Tetramolopium* (Asteraceae). XVI International Botanical Congress Abstracts (#3057), IBC, St. Louis MO, August.

MARSHALL, D.L.

Sher, A.A. and D.L. Marshall. 1999. Effect of soil textures and water regimes on competitive intensity between native *Populus deltoides* subsup. *wislezenii* and invasive, non-native, *Tamarix ramosissima*. *Bulletin of the Ecological Society of America*, Supplement to Volume 80.

MILLER, R.D.

Baker, M.L., R. Plunkett and R.D. Miller. Characterization of the beta chain of the T cell receptor from the American opossum, *Monodelphis domestica*. Phylogenic Perspectives on the Vertebrate Immune System, Copper Mountain CO, July 11-16, 1999.

Miska, K.B. and R.D. Miller. Isolation and characterization of classical Mhc I sequences from the South American opossum: *Monodelphis domestica*. Phylogenetic Perspectives on the Vertebrate Immune System, Copper Mountain CO, July 11-16, 1999.

MILNE, B.T.

Decker, E. Abstract for oral presentation at Annual Research Day, Department of Biology, UNM, April.

Parody, J., and E. Decker. Abstract for poster presentation at Annual Research Day, Department of Biology, UNM, April.

Oral presentation at the Annual Meeting of the International Association of Landscape Ecology, Snowmass CO, August:

- > Decker, E.
- Kerkhoff, D.
- > Parody, J.
- > Allen, A.
- Restrepo, C. (Post-doc)

NATVIG. D.O.

Michan, S., F. Lledías, J.D. Baldwin, D.O. Natvig, R.E. Navarro, J. Aguirre and W. Hansberg. Regulation of cat-1 during *Neurospora crassa* development and oxidative stress. Abstract of poster presentation at the 20th Fungal Genetics Conference, Asilomar CA, March.

Powell, A.J., G.S. Saenz, J.G. Stam, D.J. Jacobson and D.O. Natvig. Alleic diversity at the het-clocus in *Neurospora tetrasperma* poses an evolutionary dilemma. Abstract of poster presentation at the 20th Fungal Genetics Conference, Asilomar CA, March.

Bieszke, J.A., E.L. Braun, L.E. Bean, S. Kang, D.O. Natvig, E.N. Spudich, J.L. Spudich and K.A. Borkovich. Identification and characterization of the *Neurospora crassa* opsin, NOP-1. Abstract of talk presented by J. Bieszke at the 20th Fungal Genetics Conference, Asilomar CA, March.

Northup, D.E., L.E. Bean, M.N. Spilde, P.J. Boston, S.M. Barns, C.A. Connolly, M.P. Skupski, D.O. Natvig and C.N. Dahm. Geomicrobiological investigations of secondary mineral deposits in the subsurface environment of Lechuguilla cave, Carlsbad Caverns National Park, New Mexico. 1999 International Symposium on Subsurface Microbiology, Vail CO, August.

NELSON, M.A.

Kim, H. and M.A. Nelson, Two novel genes highly expressed in sexual tissues of *Neurospora crassa*. Poster presented at the 20th Fungal Genetics Conference, Asilomar CA, March 23-28.

Flores, S., D. Martinez, J. Weber, L. Bean, G. Rosenberg, M.A. Nelson and D.O. Natvig. Sequence analysis of three overlapping cosmids of linkage group I of *Neurospora crassa*. Poster presented at the UNM Department of Biology Eighth Annual Research Day, April 16.

Kim, H. and M.A. Nelson. Two novel and highly-expressed genes in *Neurospora crass*. Poster presented at the UNM Department of Biology Eighth Annual Research Day, April 16.

Platero, H.J.B. and M.A. Nelson. A novel bZip transcription factor expressed during sexual development in *Neurospora crass*. Poster presented at the UNM Department of Biology Eighth Annual Research Day, April 16.

TURNER, T.F.

Turner, T.F, L.R. Richardson and J.R. Gold. 1999. Genetic effective population size is much lower than census size in red drum from the northern Gulf of Mexico. American Society of

Ichthyologists and Herpetologists 79th Annual Meeting, Pennsylvania State University, State College PA, June 24-30.

WERNER-WASHBURNE, M.

Errett, A. Signal transduction in quiescent Saccharomyces cerevisiae Cells. Eighth Annual Research Day, Department of Biology, UNM, April.

J. Other.

DUSZYNSKI, D.W.

Traveled to San Juan, Puerto Rico to site-visit the facilities at the San Juan Hilton and to work with staff to prepare for the 2000 Joint Meeting of the ASP and the SOR October.

Research Affiliate, The Harold W. Manter Laboratory of Parasitology, University of Nebraska, Lincoln NE.

SNELL, H.L.

Two television specials:

- Aired on the Animal Planet in September 1999 and featured the restoration ecology work of Heidi and Howard Snell over the last 20 years for Galápagos Land Iguanas.
- Scientific Frontiers; aired in the fall and featured the Charles Darwin Rearch Station's efforts to preserve biological diversity.

STRICKER, S.A.

Pictures published in following books:

- Sheppard, C.J.R. and D.M. Shotton. Confocal Laser Scanning Microscopy. Bios Scientific Publishers.
- > Fenical, W.R. et al. From Monsoons to Microbes. National Research Council Publishers
- > Pechenik, J.A. Biology of Invertebrates, 4th Ed. McGraw-Hill Publishers.

WERNER-WASHBURNE, M.

M. Werner-Washburne (writer/coordinator and representatives from nine federal agencies). Federal Investment in Microbial Genomics, to be published by the National Science and Technology Council, 2000.

YATES, T.L.

Public items including television specials from PBS, BBC, two Canadian networks, Japan National Television, *Men's Journal*, *Stern Magazine*, *National Geographic*, all three national news networks plus CNN, and lots of newspapaers. UNM cited in all.

III. RESEARCH PROJECTS OR OTHER CREATIVE WORK IN PROGRESS OR COM-PLETED DURING PERIOD.

A. Grants and Contracts, Extramural and Intramural.

1. Submitted to all agencies in 1999.

BARTON, L.L.

"Dissimilatory Reduction by Halophilic Bacteria: An Integrated Microbiological and Geochemical Study"; L.L. Barton, PI; NSF; \$575,535, October 1, 1999–September 30, 2002.

"Interactive Visualization of Microbial Specimens"; L.L. Barton, PI; U.S. Army Research Office; \$186,000, June 1, 2000–December 31, 2001.

"Mechanisms of Bacterial Reduction of Arsenate, Molybdate, and Uranyl Ions"; L.L. Barton, PI; NSF; \$149,000, September 1, 1999-August 31, 2002.

BROWN, J.H.

"Biological Scaling Laws: Interdisciplinary Collaboration Between Physics and Biology"; J.H. Brown and G.B. West, co-PIs; David and Lucille Packard Foundation #99-8330; \$960,000, 1999–2003.

CRIPPS, R.M.

"Genetic Regulation of Muscle Fiber Diversity"; R.M. Cripps, PI; National Institutes of Health; \$1,322,000 over five years, direct and indirect costs, July 2000–June 2005.

"Genetic Analysis of Heart Muscle Remodeling"; R.M. Cripps, PI; Arnold and Mabel Beckman Foundation, Beckman Young Investigator Award; approximately \$200,000 over three years, direct costs only, July 2000–June 2003.

"Molecular Genetic Analysis of Heart Muscle Remodeling"; R.M. Cripps, PI; Searle Scholars Program; \$180,000 over three years, direct and indirect costs only, July 2000–June 2003.

DAHM, C.N.

"CRB: Flooding Regime and Restoration of Riparian Ecosystem Integrity"; M.C. Molles, Jr., C.N. Dahm and C.S. Crawford, co-PIs; National Science Foundation; \$492,049, September 1, 1999–August 31, 2002.

DUSZYNSKI, D.W.

"Diversity and Prevalence of Lumur Parasites in Madagascar Rain Forests;" P.C. Wright, PI, SUNY, Stony Brook NY (I will be a paid consultant); NSF-Physical Anthropology; \$159,766, resubmitted April 1999, pending.

"The Coccidia (Eimeriidae) of the World—II;" D.W. Duszynski, PI; NSF-Systematic Biology (DEB-9977951); \$760,975, September 1, 2000-August 31, 2005; not funded.

"Plastid-like DNAs and Their Phylogenetic Relationship Within the Protist Phylum Apicomplexa"; D.W. Duszynski, PI; RAC Large Grant proposal; \$7,500; not funded.

"Plastid-like DNAs in the Apicomplexa"; D.W. Duszynski, PI, Xiaomin Zhao, co-PI; NSF-Dissertation Improvement Grant (DEB-0002068); \$10,000, April 1, 1999-March 31, 2001; not funded.

"UNM Tropical Biology: A Hemispheric Initiative"; D.W. Duszynski, PI; UNM College of Arts & Sciences Excellence in Undergraduate Education; \$2,000, March 2000; funded.

KODRIC-BROWN, A.

Research Experience for Undergraduates stipend (for one student), A. Kodric-Brown, PI; NSF; Summer 1999.

LI. B.-L.

"1999-00 SURP: Developing Ecological Indicators of Sustainable Land Use for Arid and Semi-Arid Environments"; B.-L. Li, PI; DOE/Sandia National Laboratories; \$35,000, 100%, October 1, 1999-September 30, 2000.

"Developing a Non-equilibrium Thermodynamic Model and Landscape Indicators for Assessing the San Pedro River Basin Vegetation Changes"; B.-L. Li, PI; EPA Landscape Ecology Branch (Las Vegas); \$25,000, 100%, October 15, 1999–September 30, 2000.

"Biotic and Abiotic Factors Affecting the Spatio-Temporal Dynamics of Spatially Structured Aquatic Ecosystems"; B.-L. Li and Alexander B. Medvinsky, Co-PIs; U.S. Civilian Research and Development Foundation; \$59,200, 100%, May 1, 2000-April 30, 2001.

"Developing Space-Time Multifractal-based Nonequilibrium Thermodynamic Ecological Indicators to Assess Landscape Change and Sustainability"; B.-L. Li, PI; National Science Foundation; \$316,530, 33%, October 1, 1999–September 30, 2002.

LIGON, J.D.

"Inheritance of Paternal Condition and the Effects of Differential Maternal Investment in the Red Junglefowl"; J.D. Ligon, PI; NSF Dissertation Improvement Grant for Timothy Parker; \$6,850, June 1, 2000–May 31, 2002, Year 1: \$3,975, Year 2: \$2,875.

LOKER, E.S.

"Biology of Trematode-Snail Associations"; E.S. Loker, PI; NIH; \$1,032,435 direct costs; December 1, 1999-November 30, 2004, Year 1: \$210,690, Year 2: \$193,513, Year 3: \$201,252, Year 4: \$209,304, Year 5: \$217,676.

MARSHALL, D.L.

REU supplement to "Can Non-random Mating Result in Evolutionary Change: A Selection Experiment Using Wild Radish as a Model System, Phase II"; D.L. Marshall, PI; National Science Foundation; \$10,000, June 1, 1999–August 31, 2001.

ROA supplement to "Can Non-random Mating Result in Evolutionary Change: A Selection Experiment Using Wild Radish as a Model System, Phase II"; D.L. Marshall, PI; National Science Foundation; \$18,000, June 1, 1999–August 31, 2001.

"Undergraduate Research Program on Pollen Tube Growth"; D.L. Marshall, PI; NASA—PURSUE Program; \$10,000, February 1, 1999—December 21, 1999.

"Pollen Competition in Wild Radish: Effects of Variation in Pollen Load Size and Composition on Seed Paternity and Progeny Growth;" D.L. Marshall, PI; National Science Foundation; \$168,000, March 01, 2000–December 31, 2002.

MILLER, R.D.

"Immunoglobulin Genetics in Non-eutherian Mammals"; R.D. Miller, PI; NSF; \$647,041, March 1, 2000–February 28, 2004 (proposed).

MILNE, B.T.

"Self-organization of Semi-arid Landscapes: Tests of Optimality Principles"; B.T. Milne, C. Restrepo, D.A. Bader and W. Pockman, co-PIs; NSF; \$674,911, 2000–2002, (funded with January 2000 start date). (The program officer said that "this proposal rose to the top of the pile" and "generated a lot of excitement at NSF.")

"Collaborative Research: Scaling and Allometry in River Networks: Coupling Rainfall, Topography, and Vegetation with Hydrological Extremes"; V.K. Gupta, W. F. Krajewski and B.T. Milne, co-PIs; NASA; \$124,946, 2000–2002, submitted November, in review. (Note: the amount is the amount of my budget that I requested to come through UNM.)

"Dissertation Improvement Grant: Effects of Ecological Factors on Global Patterns of Urbanization"; B.T. Milne and E. Decker, co-PIs; NSF; \$6,426, duration 17 months, requested start date of January 1, 2000, submitted November.

"Dissertation Improvement Grant: Constraints and Drivers of Piñyon–Juniper Woodland Dynamics"; B.T. Milne and D. Kerkhoff, co-PIs; NSF; \$9,054, duration 17 months, requested start date of January 1, 2000, submitted November.

MOLLES, M.C., JR.

"Flooding Regime and Restoration of Riparian Ecosystem Integrity"; M.C. Molles, Jr., C.N. Dahm, H.M. Valett, C.S. Crawford and P.V. Unnikrishna, co-PIs; NSF Ecosystems; \$492,000, 1999–2002.

NATVIG. D.O.

"Medical Mycology: Phylogenetic Species and Recombination"; J. Taylor, PI, D.O. Narvig Co-PI; NIH; \$511,463 (Narvig portion only), September 1, 1999–August 31, 2004, \$102,000/yr.

"Reproductive Genetics of Neurospora tetrasperma"; D.O. Natvig, PI; NSF; \$388,851, May 1, 2000-April 30, 2004, \$96,000/yr.

"Initiative for Minority Student Development at UNM"; N. Ahmed, PI; NIH; \$2,285,329, February 1, 2000-January 31, 2004, \$570,000/yr.

NELSON, M.A.

"STC: National Science and Technology Center for Fungal Genomics"; M.A. Nelson, co-PI and Co-Director (other PIs: J. Arnold, University of Georgia; R. Aramayo, Texas A&M University; M. Cushion, University of Cincinnati; J. Dunlap, Dartmouth Medical School; D.O. Natvig, The University of New Mexico); National Science Foundation; total requested for all five universities: \$20,000,001, from January 1, 1999–December 31, 2003; total requested for the University of New Mexico, \$3,284,760: Year 1: \$656,952, Year 2: \$656,952, Year 3: \$656,952, Year 4: \$656,952, Year 5: \$656,952 (direct plus indirect costs). Preproposal submitted February 12, 1998; selected to submit full proposal; full proposal submitted September 3, 1998; selected as finalist; site visit February 16-17, 1999; grant was not funded.

"A Microbial Observatory for Long-Term Research in Desert Ecosystems: Linking Microbial Composition and Function at the Sevilleta LTER and GMNRS"; J.R. Gosz, PI, R.R. Parmenter, M.A. Nelson and B.-L. Li, co-PIs; National Science Foundation; \$586,242, September 1, 1999-August 31, 2004 (direct plus indirect costs). This grant was not funded.

"A Microarray Scanner for Functional Genomics"; S. Ruby, PI, Gabriel Lopez, M.A. Nelson, S. Ness and J. Nickoloff, co-PIs; National Science Foundation; \$130,602, July 1, 2000–June 30, 2001 (all direct costs; instrumentation proposal). This grant is pending.

SNELL, H.L.

NOTE: As part of a collaborative agreement between the Department of Biology and the Charles Darwin Research Station (CDRS), I am assigned to spend two-thirds of the academic year at the CDRS in the Galápagos. Therefore, much of my professional activity involves students and staff of that institution who aren't directly related to UNM. Since this is a UNM sanctioned reassignment, I will report those activities here. To distinguish them from the direct UNM activities that I do during the remaining one-third of the academic year, they will be prefaced with "**".

** "Control and Eradication of Invasive Species: A Necessary Condition for Conserving Endemic Biodiversity of Galapagos World Heritage Site"; H.L. Snell, R. Bensted-Smith, A. Tye and J. Hernandez, co-PIs; United Nations Foundation via UNESCO World Heritage Center; \$3,000,000, March 1, 2000–March 1 2004, \$750,000.

ü

- ** "Control Total de Especies Introducidas en Las Islas Galápagos"; M. Patry, H.L. Snell, R. Bensted-Smith, A. Tye, J. Hernandez, E. Cruz and F. Espinoza, co-PIs; Global Enivornmental Fund (GEF); \$18,000,000, September 2000-September 2006, \$3,000,000.
- ** "Participatory Ecological Monitoring of the Galápagos Archipelago: A Role for Tourism and Management Vessels"; H.L. Snell, R. Cameron and R.Bensted-Smith, co-PIs; CONADROS; \$25,000, April 1, 2000-April 1, 2001, \$25,000.
- ** "Expansion of Edifico Thomas Fisher Bloque 1: Necessary Space for Vertebrate Ecology and Ecological Monitoring"; H.L. Snell, PI; Charles Darwin Foundation; \$40,000; June 1, 2000–June 1, 2001, \$40,000.
- ** "Conservation Research on Flightless Sea Birds—Galapagos Penguins and Flightless Cormorants"; H.L. Snell and H. Vargas, co-PIs; Swiss Friends of Galápagos; \$257,000, January 1, 2000-January 1, 2002, \$128,500.

TURNER, T.F.

"Ecological and Genetic Factors That Cause Replacement of Native Species by Exotic Species"; M.V. McPhee, PI, and T.F. Turner, co-PI; NASA PURSUE program; \$5,720, January 18, 2000—May 15, 2000.

"Improvements to the Museum of Southwestern Biology (MSB) Fish Collection, Phase I: Relocation and Reorganization"; T.F. Turner, PI, S.P. Platania and A.M. Snyder, co-PIs; National Science Foundation—Biological Research Collections; \$162,077, March 1, 2000–February 1, 2002.

"A Comparative Study of Life History and Demographic Effects on the Ratio of Genetic Effective Population Size to Census Size in Rio Grande Fishes"; T.F. Turner, PI; National Science Foundation—DEB Population Biology Cluster; \$353,295, January 1, 2000–January 1, 2004.

"Conservation Genetics of the Rio Grande Silvery Minnow, an Endangered Member of the Middle Rio Grande Ecosystem"; T.F. Turner, PI; USDA Forest Service; \$15,409, January 1, 2000–December 31, 2000.

"Geographical Ecology of Migratory Fishes of the Rio Orinoco, Venezuela: A Population Genetic Analysis"; K.O. Winemiller, PI/PD, T.F. Turner, co-PI; National Geographic Society; \$16,720, January 1, 2000–December 31, 2000.

"Temporal Genetic Variation and the Effective Population Size of the Rio Grande Silvery Minnow"; T.F. Turner, PI; New Mexico Dept. Game and Fish; \$4,000, July 1, 2000–June 31, 2001.

"Reconstructing the Historical Rio Grande Ecosystem: A Stable Isotope Study of Fish Communities Using Museum Specimens"; T.F. Turner, PI; UNM Large Research Allocations Award; \$6,090, May 1, 1999–September 31, 1999.

VOGEL, K.G.

MARC Undergraduate Student Training in Academic Research; N. Ahmed, PI, K.G. Vogel, Program Director; National Institutes of Health; total costs for five years \$1,450,704.

WAGNER, A.

"In Silico Identification of Genes Regulated by Multiple Transcription Factors"; A. Wagner, PI; Burroughs Wellcome Fund, Innovation Awards in Functional Genomics; total direct cost: \$199,499, annual direct cost: \$70,960, no IDC; 2000–2003, pending.

"Design Principles and Robustness of Large Metabolic Networks"; A. Wagner, PI; Arnold and Mabel Beckman Foundation, Young Investigator Award; total direct cost: \$200,000, annual direct cost: \$66,666, no IDC; 2000–2003, pending.

"Genome-Wide Identification of Eukaryotic Promoters at Which Transcription Factors Bind Cooperatively"; A. Wagner, PI; NSF, Computational Biology Activities; \$310,846, 1999–2002, not funded (rated "fund if funds available").

WERNER-WASHBURNE, M.

"A Modified Two-hybrid System for Detection of Molecular Interactions, Including Those That Are Transient and/or That Occur in Non-dividing Cells"; M. Werner-Washburne, PI; Merck Research Foundation; \$300,000, May 2000, \$150,000/yr.

YATES, T.L.

"Hantavirus Ecology and Disease in Chile"; G. Mertz, T.L. Yates and B. Hjelle, Co-PIs; NIH; \$3,200,000 plus \$450,0000 Folgerty plus-up, June 1, 1999–May 31, 2004, ~\$750,000/year.

"A Genetic Resource for the 21" Century: Computerization of the Division of Biological Materials, MSB"; T.L. Yates, W. Gannon and L. Ruedas, Co-PIs; National Science Foundation; \$89,000, July 1, 1999–June 30, 2000.

"Inspection and Decontamination of File Boxes Potentially Infected with Hantavirus"; T.L. Yates, PI; DOI; \$194,480, January 1, 1999–January 31, 2000.

Awarded with 1999 initial start date.

ALTENBACH, J.S.

"Evaluation of Bat Habitat in Abandoned Mines in New Mexico"; J.S. Altenbach, PI; New Mexico Energy, Minerals and Natural Resources Division; \$14,000; July 1, 1999–June 30, 2000.

BROWN, J.H.

"Biological Scaling Laws: Interdisciplinary Collaboration Between Physics and Biology"; J.H. Brown and G.B. West, co-PIs; David and Lucille Packard Foundation #99-8330; \$960,000, 1999–2003.

CRIPPS, R.M.

"Genetic Control of Muscle Development in *Drosophila*"; R.M. Cripps, PI; American Heart Association Desert/Mountain Affiliate, Beginning Grant-in-Aid; \$60,000 over two years, direct costs only, July 1999–June 2001.

"Generic Analysis of Muscle Remodeling in *Drosophila melanogaster*"; R.M. Cripps, PI; Muscular Dystrophy Association, Scientific Advisory Committee Research Grant; \$157,997 over three years, direct and indirect costs, January 1999–December 2001.

DAHM, C.N.

"IGERT: Freshwater Graduate Studies Link Fundamental Science with Applications Through Integration of Ecology, Hydrology and Geochemistry in Regions with Contrasting Climates"; A.K. Ward, A.C. Benke, C.N. Dahm, W.B. Lyons, and R.G. Wetzel, co-PIs; National Science Foundation; \$2,699,289, January 1, 1999–December 31, 2003. I am the leader of the subcontract for \$1,242,500 to the University of New Mexico.

"Collaborative Research: NO₃-N Retention in Headwater Streams: Influences of Riparian Vegetation, Metabolism, and Subsurface Processes"; C.N Dahm, PI; National Science Foundation; \$220,000, March 1, 1999–February 28, 2002.

"CRB: Flooding Regime and Restoration of Riparian Ecosystem Integrity"; M.C. Molles, Jr., C.N. Dahm and C.S. Crawford, co-PIs; National Science Foundation; \$492,049, September 1, 1999–August 31, 2002.

"Dissertation Research: Ecosystem Metabolism and Nitrate Retention in Headwater Streams: Influence of the Hyporheic Zone"; C.N. Dahm and C.S. Fellows, Co-PIs; National Science Foundation; \$10,456, June 1, 1999–December 31, 2000.

DUSZYNSKI, D.W.

"UNM Tropical Biology: A Hemispheric Initiative"; D.W. Duszynski, PI; UNM College of Arts & Sciences Excellence in Undergraduate Education; \$2000, March 2000.

GOSZ, J.R.

"Research Experiences for Undergraduates Site Program with the Sevilleta LTER: Ecosystem Productivity, Biodiversity, and Systematics"; J.R. Gosz and R.R. Parmenter, co-PIs; NSF; \$120,000, May 1, 1999.

KODRIC-BROWN, A.

Research Experience for Undergraduates stipend (for one student), A. Kodric-Brown, PI; NSF; Summer 1999.

LI, B .- L.

"1999-00 SURP: Developing Ecological Indicators of Sustainable Land Use for Arid and Semi-Arid Environments"; B.-L. Li, PI; DOE/Sandia National Laboratories; \$35,000, 100%, October 1, 1999-September 30, 2000.

"Developing a Non-equilibrium Thermodynamic Model and Landscape Indicators for Assessing the San Pedro River Basin Vegetation Changes"; B.-L. Li, PI; EPA Landscape Ecology Branch (Las Vegas); \$25,000, 100%, October 15, 1999–September 30, 2000.

LOKER, E.S.

"Biology of Trematode–Snail Associations"; E.S. Loker, PI; NIH; \$1,032,435 direct costs, December 1, 1999–November 30, 2004, Year 1: \$210,690, Year 2: \$193,513, Year 3: \$201,252, Year 4: \$209,304, Year 5: \$217,676.

"Evolution of Schistosoma mansoni and its Snail Hosts"; E.S. Loker, PI; NIH; \$853,857 direct costs, April 1, 1999-March 31, 2004, Year 1: \$201,452, Year 2: \$174,032, Year 3: \$162,623, Year 4: \$157,265, Year 5: \$158,485.

LOWREY, T.K.

Research Experiences for Undergraduates-Sevilleta. Ecosystems Productivity, Biodiversity and Systematics"; T.K. Lowrey, Co-PI; National Science Foundation; \$120,000, May 1, 1999–August 1, 2002.

MARSHALL, D.L.

REU supplement to "Can Non-random Mating Result in Evolutionary Change: A Selection Experiment Using Wild Radish as a Model System, Phase IP'; D.L. Marshall, PI; National Science Foundation; \$10,000, June 1, 1999–August 31, 2001.

ROA supplement to "Can Non-random Mating Result in Evolutionary Change: A Selection Experiment Using Wild Radish as a Model System, Phase II"; D.L. Marshall, PI; National Science Foundation; \$18,000, June 1, 1999–August 31, 2001.

"Undergraduate Research Program on Pollen Tube Growth"; D.L. Marshall, PI; NASA—PURSUE Program; \$10,000, February 1, 1999—December 21, 1999.

MOLLES, M.C., JR.

"Flooding Regime and Restoration of Riparian Ecosystem Integrity"; M.C. Molles, Jr., C.N. Dahm, H.M. Valett, C.S. Crawford and P.V. Unnikrishna, co-PIs; , \$492,000, NSF Ecosystems; 1999–2002.

"Biohydrology of the Gila, Mimbres, and Rio Grande Rivers"; P. Jacobson and M.C. Molles, Jr., co-PIs; The Nature Conservancy Smith Conservation Fellowship; 1999–2001.

"University of New Mexico/University of Alabama Integrative Gradute Education and Research Training (IGERT): Freshwater Graduate Studies Link Fundamental Science with Applications through Integration of Ecology, Hydrology, and Geochemistry in Regions with Contrasting Climates"; one of eight Biology Dept. faculty mentors; NSF; \$2.8 million, 1999–2004.

NELSON, M.A.

"The Neurospora Genome Project at UNM: Expressed Sequence Analyses"; M.A. Nelson, PI; National Science Foundation; \$557,798, February 1, 1999–January 31, 2002, Year 1: \$176,938, Year 2: \$185,786, Year 3: \$195,073 (direct plus indirect costs). This grant was funded in full.

SNELL, H.L.

"Conservation of Galápagos Birds"; H. Vargas, R. Bensted-Smith, H.L. Snell, co-PIs; Galapagos Conservation Trust; \$180,000, November 1999-November 2002, \$60,000.

NOTE: As part of a collaborative agreement between the Department of Biology and the Charles Darwin Research Station (CDRS), I am assigned to spend two-thirds of the academic year at the CDRS in the Galápagos. Therefore, much of my professional activity involves students and staff of that institution who aren't directly related to UNM. Since this is a UNM sanctioned reassignment, I will report those activities here. To distinguish them from the direct UNM activities that I do during the remaining one-third of the academic year, they will be prefaced with "**".

- ** "Ecología de Restauración para la Diversidad Biológica en Galápagos: Recuperación de los Reptiles Endémicos"; H.L. Snell and C. Marquez, co-PIs; FUNDACYT (Ecuador's NSF); \$100,000, January 1, 1999–January 1, 2001, \$50,000.
- ** "Monitoreo Ecológico en las islas Galápagos"; H.L. Snell, A. Tye and R. Bustamante, co-PIs; Fundación Natura; \$425,000, April 1, 1999–April 1, 2003, \$108,000.
- ** "Ecological Monitoring for the Galápagos Archipielago: A Productive Program for the Conservation of Biological Diversity"; H.L. Snell and C. Causton, co-PIs; UNESCO; \$92,000, June 1, 1999–June 1, 2000, \$92,000.
- ** "Pata Pegada Conservation Project"; H.L. Snell and H. Vargas, co-PIs; Worthington Foundation; \$17,000, January 1, 1999–January 1, 2001, \$17,000.
- ** "Villamil Tortoise Centre-Construction of a Laboratory"; H.L. Snell, PI; British Chelonial Group and the Galápagos Conservation Trust; \$24,000, January 1, 1999–June 30, 2001, \$24,000.
- ** "Conservation of Galápagos Reptiles"; H.L. Snell, PI; Ernst Klienwort Charitable Trust; \$40,000, January 1, 1999-January 1, 2001, \$20,000.

TURNER, T.F.

"Freshwater Graduate Studies Link Fundamental Science with Applications Through Integration of Ecology, Hydrology, and Geochemistry in Regions with Contrasting Climates"; A. Ward, PI, C.N. Dahm, co-PI, T.F. Turner, one of 16 other participants; National Science Foundation—IGERT; \$2,687,181, January 1, 1999—December 31, 2004.

"Reconstructing the Historical Rio Grande Ecosystem: A Stable Isotope Study of Fish Communities Using Museum Specimens"; T.F. Turner, PI; UNM Large Research Allocations Award; \$6,090, May 1, 1999–September 31, 1999.

"Enhancement of General Ichthyology: a Slide Collection to Illustrate Comparative Ecology and Evolution of Fishes"; T.F. Turner, PI; UNM Teaching Allocations Award; \$2,460, January 1, 1999–September 31, 1999.

"Biological Survey of the Rio Pasimoni of Venezuela's Casiquiare Region"; K.O. Winemiller, PI, and T.F. Turner, co-PI; National Geographic Society; \$18,000, January 1, 1999–December 31, 1999.

WERNER-WASHBURNE, M.

"Microarray Analysis of Expression During Exit from Stationary Phase in Yeast"; M. Werner-Washburne, PI; Sandia National Laboratories; \$25,000, 1999.

YATES, T.L.

"Hantavirus Ecology and Disease in Chile"; G. Mertz, T.L. Yates and B. Hjelle, Co-PIs; NIH; \$3,200,000 plus \$450,0000 Folgerty plus-up, June 1, 1999–May 31, 2004, ~\$750,000/year.

"A Genetic Resource for the 21st Century: Computerization of the Division of Biological Materials, MSB"; T.L. Yates, W. Gannon and L. Ruedas, Co-PIs; National Science Foundation; \$89,000, July 1, 1999–June 30, 2000.

"Inspection and Decontamination of File Boxes Potentially Infected with Hantavirus"; T.L. Yates, PI; Department of Interior; \$194,480, January 1, 1999–January 31, 2000.

3. In force from previous years.

ALTENBACH, J.S.

"Evaluation of Bat Habitat in Abandoned Mines in New Mexico"; J.S. Altenbach, PI; New Mexico Energy, Minerals and Natural Resources Division; \$12,500, July 1, 1998–June 30, 1999.

BARTON, L.L.

"Determinatin of Long Term Stability of Metals Immobilized by *in Situ* Microbial Remediation Processes"; B.M. Thomson, PI, L.L. Barton, co-PI; DOE; \$749,755, October 1, 1998–September 30, 2001.

"Assessment of a Chemical/Biological Process to Treat Mixed Waste, Phase II"; L.L. Barton and B.M. Thomson, PIs; DOE/Waste-management Education & Research Consortium; \$60,000, May 15, 1997—August 14, 2000.

"Mechanisms of Metal Transformation by Bacteria"; L.L. Barton is one of 15 co-PIs; NIH; \$2,000,000, yearly rate to L.L. Barton = \$17,500, February 1, 1996–January 31, 2001.

BROWN, J.H.

"Graduate Research Training in Ecological Complexity"; J.H. Brown, PI; NSF Grant GER-953623; \$1,987,031, 1995–2001.

"History of vegetation change in the Malpai Borderlands"; J.H. Brown, PI; Thaw Charitable Trust Malpai Borderlands; \$55,150, 1997–99.

"Sevilleta Long Term Ecological Research"; J.H. Brown, PI; NSF Grant BSR-8811906; \$3,800,000, 1994–2000.

"Long term monitering and manipulation of the desert granivore in Portal, AZ"; J.H. Brown, PI; NSF Grant DEB-9707406; \$400,000, 1997–2000.

DAHM. C.N.

"IGERT: Freshwater Graduate Studies Link Fundamental Science with Applications Through Integration of Ecology, Hydrology and Geochemistry in Regions with Contrasting Climates"; A.K. Ward, A.C. Benke, C.N. Dahm, W.B. Lyons, and R.G. Wetzel, co-PIs; National Science Foundation; \$2,699,289, January 1, 1999–December 31, 2003. I am the leader of the subcontract for \$1,242,500 to the University of New Mexico.

"Collaborative Research: NO₃-N Retention in Headwater Streams: Influences of Riparian Vegetation, Metabolism, and Subsurface Processes"; C.N Dahm, PI; National Science Foundation; \$220,000, March 1, 1999-February 28, 2002.

"CRB: Flooding Regime and Restoration of Riparian Ecosystem Integrity"; M.C. Molles, Jr., C.N. Dahm and C.S. Crawford, co-PIs; National Science Foundation; \$492,049, September 1, 1999–August 31, 2002.

"Dissertation Research: Ecosystem Metabolism and Nitrate Retention in Headwater Streams: Influence of the Hyporheic Zone"; C.N. Dahm and C.S. Fellows, Co-PIs; National Science Foundation; \$10,456, June 1, 1999—December 31, 2000.

DUSZYNSKI, D.W.

"Historical biodiversity of the parasites of small mammals on the Sevilleta National Wildlife Refuge, Socorro, NM: 1989–2000"; D.W. Duszynski and M.D. Dailey, co-PIs; NSF-Survey and Inventory (DEB-9505025); \$367,244, August 31, 1995-August 31, 2000.

"Coccidia of the World"; D.W. Duszynski, PI; NSF-PEET Special Competition (DEB-9521687);\$690,737, September 1, 1995-August 31, 2000.

"Sevilleta LTER II: Biome-level constraints on population, community and ecosystem responses to climatic fluctuation," Parasite subproject; B. Milne, PI, and 10 co-PIs; NSF BSR-9411976;\$3,700,000, October 1, 1994–September 30, 2000.

"Parasites of Guatemala herpetofauna"; D.W. Duszynski, PI; NSF, attached as second supplement to DEB-9505025; \$11,454, summers of 1998, 1999 and 2000.

GOSZ, J.R.

"Sevilleta LTER II: Biome-level Constraints on Population, Community, and Ecosystem Responses to Climate Fluctuations"; J.R. Gosz et al., co-PIs; NSF; \$540,000.

"Replacement and Consolidation of Research and Research Training Facilities of the Department of Biology, University of New Mexico"; T.L. Yates et al., co-PIs; NSF; \$960,000.

KODRIC-BROWN, A.

"Introgression in Puplish: Role of Sexual and Natural Selection"; A. Kodric-Brown, PI; NSF; \$167,985, July 1988–June 2001, \$56,000.

"Forces Driving Rapid Introgression Between a Rare Pufish (*Cyprinodon pecosensis*) and its Close Congener (*C. variegatus*)"; A. Kodric-Brown, PI; Environmental Protection Agency (award to Jon Rosenfield); \$19,000, August 1998–August 2001, \$6,343.

LI. B.-L.

"1998–99 SURP: Developing Ecological Indicators of Sustainable Land Use for Arid and Semi-Arid Environments"; B.-L. Li, PI; Sandia National Laboratories; \$34,990, October 1, 1998–September 30, 1999, 100%.

"REU Site Program with the Sevilleta LTER: Ecosystem Productivity, Biodiversity, and Systematics"; R.R. Parmenter, J.R. Gosz, T.K. Lowrey, B.-L. Li and D.C. Lightfoot, Co-PIs; National Science Foundation; \$120,000, May 1, 1999–April 30, 2002, 33%

"Sevilleta LTER II"; J.R. Gosz, PI, B.-L. Li, Co-PI; NSF; \$3,780,000, October 15, 1994—October 14, 2000, 16%.

LOKER, E.S.

"Biology of Trematode-Snail Associations"; E.S. Loker, PI; NIH, Year 5 only, \$681,765 direct costs only; December 1, 1994-November 30, 1999; Year 1: \$137,986, Year 2: \$128,055, Year 3: \$133,176, Year 4: \$138,504, Year 5: \$144,044.

LOWREY, T.K.

4

"Supplement to: Relocation and Compactorization of the Museum of Southwestern Biology"; T.K Lowrey, PI; National Science Foundation; \$20,000, June 1, 1998–May 30, 1999.

"Relocation and Compactorization of the Museum of Southwestern Biology"; T.K. Lowrey, PI; National Science Foundation; \$313,000, August 1, 1997–present.

"New Mexico 130 Rare Plant Mitigation Project, Otero Co."; T.K. Lowrey, PI; N.M. State Highway and Transportation Department; \$19, 900, July 1, 1998–June 30, 2000.

MARSHALL, D.L.

"Can Non-random Mating Result in Evolutionary Change: A Selection Experiment Using Wild Radish as a Model System, Phase II"; D.L. Marshall, PI, A.S. Evans, Co-PI; National Science Foundations; \$193,000, September 1, 1998–August 31, 2001.

MILLER, R.D.

"CAREER Award: Immunological Development in a Marsupial"; R.D. Miller, PI; NSF; \$322,000, October 1, 1996—September 30, 2000.

"International Workshop on the Immunobiology of Marsupials"; R.D. Miller, PI; NSF International Programs; \$25,000, October 1, 1998–September 30, 1999.

MILNE, B.T.

"Sevilleta LTER II: Biome-level Constraints on Population, Community, and Ecosystem Responses to Climate Fluctuation"; B.T. Milne, PI 1994–97, co-PI 1998–present, 10 other co-PIs; National Science Foundation; \$3,780,000, 1994–2000, \$560,000/year.

"Multi-scaled Ecological Assessment Methods: Prototype Development Within the Interior Columbia Basin"; B.T. Milne; EPA subaward; \$120,000, 1997–99, \$40,000/year.

"A BIO Research Training Group in Ecological Complexity"; J.H. Brown, B.T. Milne, G. Stevens and S. Forrest, co-PIs; National Science Foundation; \$510,000 total, 1995–2000.

MOLLES, M.C., JR.

"Riparian Ecosystem Restoration: Effects of Flooding and Vegetation Type on Annual Evapotranspiration in a Semi-arid Landscape"; C.N. Dahm, T. Mulhern, P.V. Unnikrishna, H.M. Valett, M.C. Molles, Jr. and C.S. Crawford, co-PIs; NASA/EPA; \$700,000, 1998–2001.

NATVIG, D.O.

"Reproductive Genetics of Neurospora tetrasperma"; D.O. Natvig, PI; National Science Foundation; \$158,701, June 1, 1997-May 31, 2000.

"The Neurospora Genome Project at UNM: A Genome Characterization Training Grant"; D.O. Natvig, PI, M.A. Nelson, M. Werner-Washburne and R.D. Miller, co-PIs; National Science Foundation; \$322,142, June 1, 1995-May 31, 1998.

NELSON, M.A.

"The Neurospora Genome Project at UNM: A Genome Characterization Training Grant"; D.O. Natvig, PI, M.A. Nelson, M. Werner-Washburne and R.D. Miller, co-PIs; National Science Foundation; \$322,142 (direct plus indirect costs) plus \$248,025 in matching funds, June 1, 1995–May 31, 1998 (extended to May 31, 1999).

11.24

Renovation of the UNM Bookstore for MSB; T.L. Yates, H.L. Snell and R.R. Parmenter, co-PIs; National Science Foundation; \$975,000, 1997–2001.

"Collaborations in Conservation Biology of the Galápagos Archipelago"; H.L. Snell, PI; Charles Darwin Foundation; \$160,000, June 1, 1997–May 30, 2001, \$40,000.

NOTE: As part of a collaborative agreement between the Department of Biology and the Charles Darwin Research Station (CDRS), I am assigned to spend two-thirds of the academic year at the CDRS in the Galápagos. Therefore, much of my professional activity involves students and staff of that institution who aren't directly related to UNM. Since this is a UNM sanctioned reassignment, I will report those activities here. To distinguish them from the direct UNM activities that I do during the remaining one-third of the academic year, they will be prefaced with "**".

- ** "Protección de Biodiversidad en el Volcán Alcedo (Isla Isabela), y en la Isla Santiago, Galápagos"; M. Patry, H.L. Snell, A. Tye and R. Bensted–Smith, co-PIs; Fondo PL-480 (USAID); \$200,000, January 1, 1998–January 1, 2001, \$63,000.
- ** "Control of Introduced Predators in Galápagos"; H.L. Snell and R. Bensted-Smith, co-PIs; Frankfurt Zoological Society, \$165,000, January 1, 1998-January 1, 2001, \$55,000.
- ** "Protection of the Mangrove Finch"; H. Vargas and H.L. Snell, co-PIs; Frankfurt Zoological Society; \$45,000, January 1, 1998–January 1, 2001, \$15,000.
- ** "Conservation of Galápagos Vertebrates"; H.L. Snell and R. Bensted-Smith, co-PIs; Charles Darwin Foundation, Inc.; \$180,000, January 1, 1998-January 1, 2001, \$60,000.
- ** "Pinzon de Manglar"; H. Vargas and H. Snell, co-PIs; Swiss Friends of Galápagos; \$60,000, January 1, 1998–January 1, 2001, \$20,000.
- ** "Ecological Restoration of Santiago Island"; M. Patry, H.L. Snell and A. Type, co-PIs; Special Expeditions Galápagos Fund; \$70,000, January 1, 1998–January 1, 2001.

STRICKER, S.A.

"Roles of Serotonin and Calcium During Oocyte Maturation in Nemertean Worms"; S.A. Stricker, PI; Research Allocation Committee, UNM; \$2,900, October 1998.

THORNHILL, R.

"The Scent of Symmetry"; R. Thornhill and S.W. Gangestad, PIs; Olfactory Research Fund; \$46,000; July 1997–December 31, 1999, \$23,000/yr.

TURNER, T.F.

"Development of Genetic Markers for the Rio Grande Silvery Minnow as a First Step Toward an Integrative Conservation Plan for Rio Grande"; T.F. Turner, PI; UNM Research Allocations Award; \$2,960, November 30, 1998–September 31, 1999.

į.

VOGEL, K.G.

Howard Hughes Undergraduate Curriculum Education Initiative; K.G. Vogel, Program Director; Howard Hughes Medical Institute; total costs \$1,107,350, July 1, 1992–August 31, 1999.

"Proteoglycan Structure, Metabolism and Role in Tendon"; K.G. Vogel, PI; National Institutes of Health, NIAMS, AR36110; total costs \$741,127, January 1, 1995–December 31, 1998, (extended to December 31, 2000 without additional funds).

WAGNER, A.

"Robustness of Developmental Pathways to Mutations and the Evolution of Partially Redundant Gene Functions"; A. Wagner, PI; UNM Research Allocations Committee; \$3,000, 1998–1999.

"A Founding Program in Evolutionary Dynamics"; Erica Jen, PI, A. Wagner, co-PI (through the Santa Fe Institute); Keck Foundation; \$1,500,000, 1999–2002.

WERNER-WASHBURNE, M.

"The Role of SNZ and SNO Proteins in the Yeast Saccharomyces cerevisiae"; M. Werner-Washburne, PI; NSF; total \$110,000 (direct & indirect costs), September 1, 1998–August 31, 2000.

"Developmental Regulation of Signal Transduction: Bcy1p in Stationary-phase Yeast"; M. Werner-Washburne, PI; National Science Foundation; \$240,000 plus supplements, September 1996-August 2000.

YATES, T.L.

"Portable Flow-through Amperometric Immunosensor Device for Fast Field Immunoanalysis of Rodent Virus"; E. Wilkins and T.L. Yates, PIs; National Science Foundation; \$367,500, January 1998–May 2004.

"Biology of Infectious Diseases and Inflammation"; M. Lipscomb and T.L. Yates, PIs; Public Health Services; \$466,042, July 1, 1998–June 30, 2003.

"Inspection and Decontamination of File Boxes Potentially Infected with Hantavirus"; T.L. Yates, PI; Department of the Interior; \$194,480, December 10, 1998–January 31, 2000.

"Longitudinal Studies of Rodent Reservoirs of Hantaviruses in the Southwestern United States"; T.L. Yates, PI; Centers for Disease Control and Prevention; \$1,213,000, September 30, 1996–September 30, 2001, \$214,370.

"Relocation and Compactorization of the Museum of Southwestern Biology (MSB)"; T.K. Lowrey, and T.L. Yates, Co-PIs; National Science Foundation; \$313,200, August 15, 1996–September 15, 1999.

"Hantavirus Infections: Ecology, Immunity, and Treatment"; T.L. Yates, F. Koster, PIs; National Institute of Allergy and Infectious Diseases; \$1,098,649, August 15, 1996–July 31, 2000.

"Long-term Ecological Research: The Sevilleta II"; J.R. Gosz, T.L. Yates et al., co-PIs; National Science Foundation; \$3,8000,000 plus supplements, October 15, 1994–May 15, 2000.

"Ecology of Hantavirus in the Four Corners Region"; T.L. Yates, PI: Indian Health Services, \$594,114, May 14, 1996–May 14, 2001.

"Replacement and Consolidation of Research and Research Training Facilities of the Department of Biology, UNM"; T.L. Yates, PI; NSF; \$960,000, March 15, 1997–May 31, 2000.

"Ecology of Hantavirus Enzootics: Immune Interventions"; B. Hjelle and T.L. Yates, Co-PIs; NIH; \$630,000, August 1997–July 2002.

"Response of Southwestern Mammal Communities to Global Climate Change"; T.L. Yates, PI; U.S. Fish and Wildlife Service; \$267,000, September 1995–September 2000.

B. Other.

ALTENBACH, J.S.

Ongoing research on bats and abandoned mines.

CRIPPS, R.M.

Supervision of two full-time laboratory technicians and one work-study.

DUSZYNSKI, D.W.

Duszynski, D.W. and S.J. Upton. In press (August 2000). The common coccidia of wild mammals: *Cyclospora, Eimeria, Isospora* (Eimeriidae) and *Cryptosporidium* (Cryptosporidiidae) spp. In *Parasitic Diseases of Wild Mammals*, W.M. Samuel, M. Pybus and A.A. Kocan, Eds. Iowa State University Press, Ames IA. 151 ms. pp.

Duszynski, D.W. and S.J. Upton. Accepted. Coccidia (Apicomplexa: Eimeriidae) of the Mammalian Order Insectivora. Special Publication of the Museum of Southwestern Biology, University of New Mexico Press, Albuquerque NM. 143 ms pp.

Asmundsson, I.M., J.A. Campbell and D.W. Duszynski. 2000. A new Eimeria sp. from the plumbeous Central American caecilian, Dermophis mexicanus (Amphibia: Gymnophiona) from Volcán Tajumulco, Department of San Marcos, Guatemala. Journal of Parasitology 86: April issue.

NATVIG. D.O.

Much of my Spring semester was devoted to our failed effort to establish an NSF Science and Technology Center for Fungal Geneomics. This involved numerous teleconferences, hundreds of

hours of preparation, and two visits to the University of Georgia for a site visit rehearsal and an actual site visit.

WERNER-WASHBURNE, M.

Patents, Federal Report for OSTP/NSTC:

Patent disclosure filed: M. Werner-Washburne and A.R. Colina. A Modified Two-hybrid System for Detection of Molecular Interactions, Including Those That Are Transient And/or That Occur in Non-dividing Cells.

Patent filed: M. Werner-Washburne, E. Braun, P. Padilla, and E. Fuge. Snz1 Protein/SNZ1 Gene—Potential Antibiotic Target. Patent applied for June 1998, continued September 1999.

IV. ACTIVITIES IN LEARNED AND PROFESSIONAL SOCIETIES.

A. Invited or Plenary Talks at Professional Meetings, Workshops, Etc.

BARTON, L.L.

Biotechnology Workshop, UNM College of Engineering, "Bioremediation of Mixed Wastes," UNM, August 4.

Natural and Accelerated Bioremediation Research Program, Reston VA, January 25-27.

BROWN, J.H.

Presented a paper to the Board of Directors, Annual Meeting of the American Society of Mammalogists, Seattle WA, June 19-24.

DAHM, C.N.

Dahm, C.N. 1999. Hydrogeology and biogeochemistry of the surface water and ground water interface of a mountain stream. EPA Symposium on the Ground Water/Surface Water Interactions, Denver CO, January 27.

Dahm, C.N. 1999. Hydrogeology and biogeochemistry of the surface water and ground water interface of a small, perennial, montane stream. Annual Meeting of the Geological Society of America, Denver CO, October 27.

GOSZ, J.R.

Workshop on Long Term Research, Waterways Expt. Station. U.S. Army Engineer Research and Development Center, "The LTER Concept," Vicksburg MS, February 21.

Long Term Research in the U.K., Advisory Board for the Joint Infrastructure Fund of the U.K., London, England, March 8.

NoLIMITS Workshop, U.K. Environmental Change Network; "The Contribution of NoLIMITS to Global Terrestrial Observing System (GTOS)," Oxford, England, March 24.

NoLIMITS Workshop, U.K. Environmental Change Network, "The NPP Demonstration Project of GTOS," Oxford, England, March 26.

UNESCO, Man and the Biosphere, "Opportunities in MAB and the International LTER Program," Paris, France, March 29.

UNESCO, ROSELT, "Interactions between ILTER and ROSELT," Paris, France, March 30.

International Biodiversity Observing Year (IBOY), NCEAS, "ILTER and GTOS Concepts for IBOY," Santa Barbara CA, April 8.

Southwest Region AAAS Annual Meeting, AAAS, "LTER and Applications for Conservation Biology, Santa Fe NM, April 12.

Conference on Environmental Health, RAMBO, "RAMBO, LTER and Biodiveristy Observing Networks," Sevilleta Field Station, Soccorro NM, April 19.

Long Term Research Conference, Evergreen College, LTER Concepts—Role for Colleges," Olympia WA, April 26.

Turner Foundation Conference, Turner Foundation, "GTOS Opportunities," Washington DC, May 19.

Social, Behavioral, Economics Advisory Board Meeting, NSF, "ILTER/GTOS and Landsat 7 Needs," Washington DC, May 21.

Southwest Institute Program, Southwest Institute, "Ecology of the Rio Grande," Albuquerque NM, June 19.

Central and Eastern Europe Regional LTER Meeting, Hungarian Academy of Sciences, "ILTER and Central and Eastern Europe Networks," Budapest, Hungary, June 22.

Central and Eastern Europe Regional LTER Meeting, Hungarian Academy of Sciences, "NPP, Biodiversity, Demonstrations Projects for ILTER," Budapest, Hungary, June 24.

Drylands Biodiversity Workshop, Mitrani Center for Ecology, Ben Gurion University, "Species Diversity and Ecosystem Processes in Water Limited Systems," Sede Beqer, Israel, June 29.

Drylands Biodiversity Workshop, Mitrani Center for Ecology, Ben Gurion University, "Biodiversity and NPP at Global Scales," Sed Beqer, Israel, July 1.

International Union of Geophysics, IUGG, "Global Terrestrial Observing Systems," Birmingham, England, July 28.

North American Regional LTER Network Symposium, Ecological Society of America, "Introduction to the ILTER," Spokane WA, August 7.

Ecological Society of America (ESA) Annual Meeting, ESA, "Planning for Serendipity," Spokane WA, August 11.

ILTER Network Annual Meeting, NSF/South Africa, "Biodiversity/Productivity Relationships," Skukuza, South Africa, August 16.

ILTER/South African LTER Workshop, NSF/South Africa, "ILTER Concepts and Opportunities in South Africa," Skukuza, South Africa, August 17.

University of Pretoria Long Term Research Workshop, School for Environmental Studies, University of Pretoria, South Africa, "ILTER Concepts—Interactions with South Africa," Pretoria, South Africa, August 24.

Central and Eastern Regional LTER Meeting on Global Observing Systems, FAO/Hungarian Academy of Sciences, "Global Observing Systems and Central Europe," Budapest, Hungary, September 9.

Central and Eastern Regional LTER Meeting on Global Observing Systems; FAO/Hungarian Academy of Sciences, "NPP Global Demonstration Project," Budapest, Hungary, September 10.

LTER Network Science Meeting, NSF, "Global Demonstration Projects for LTER," Hubbard Brook Experimental Forest, New Hampshire, October 2.

LI, B.-L.

Invited Paper, the Association of American Geographers 95th Annual Meeting, "Toward a More Exact Landscape Ecology," Honolulu HI, March 23-27.

Invited Paper, Fifth World Congress of International Association for Landscape Ecology, "Towards a Synergetic View of Landscape Ecology," Snowmass Village CO, July 29–August 3.

LOKER, E.S.

FASEB summer research conference on Phylogenetic Perspectives on the Vertebrate Immune Response, E.S. Loker and C.J. Bayne, "Molecular Studies of the Molluscan Response to Digenean Infection," Copper Mountain CO, July 11-16.

7th International Symposium on Schistosomiasis, E.S. Loker, C.M. Adema, L.A. Hertel, P.M. Léonard, R.J. DeJong and G.M. Mkoji, "Molecular Studies of Schistosome-transmitting Snails," Rio de Janiero, Brazil, December 5-9.

MILNE, B.T.

Milne, B.T., A. Kerkhoff and C. Restrepo. Multiscale Assessment of Species Ranges. Ecological Society of America, Spokane WA, August. (Invited Symposium.)

MOLLES, M.C., JR.

National Center for Ecological Analysis and Synthesis, "Evidential Constraints at Large Scales: Lessons from Studies along the Middle Rio Grande in New Mexico," University of California, Santa Barbara CA, February.

NATVIG. D.O.

Natvig, D.O. and M.A. Nelson. "The *Neurospora* genome project at the University of New Mexico." Invited talk at the annual meeting of the Association of Biomedical Resource Facilities (ABRF), Durham NC, March.

Natvig, D.O. and M.A. Nelson. "The *Neurospora* Genome Project reveals a wealth of fungal gene diversity." Abstract of invited talk at the Ninth International Congress of Bacteriology and Applied Microbiology of the International Union of Microbiological Societies, Sydney, Australia, August.

Bieszke, J.A., K.A. Borkovich, D.O. Natvig, L.E. Bean, E.L. Braun and S. Kang. "Analysis of an opsin gene from *Neurospora crassa*." Abstract of invited talk presented by K. Borkovich at the 20th Fungal Genetics Conference, Asilomar CA, March.

Powell, A., G.S. Saenz, J.G. Stam, D. Jacobson and D.O. Natvig. Allelic diversity at the het-clocus in *Neurospora tetrasperma* poses an evolutionary dilemma. Invited talk presented by D. Jacobson at the 20th Fungal Genetics Conference, Asilomar CA, March.

NELSON, M.A.

Invited speaker, 20th Fungal Genetics Conference, "The Neurospora Genome: A First ESTimation," Asilomar CA, March 23-28.

Invited speaker, International Conference on Genomics, Developmental Biology and Protein Structure, "The *Neurospora* Genome: A First ESTimation," University of Bochum, Bochum, Germany, May 14-15.

SNELL, H.L.

Invited Symposium presentation, "La diversidad biologica de Galápagos. Ciencia y Conservación en Galápagos en Quito," July.

Symposium presentation, "The realities and distribution of biological diversity in the Galápagos," Galápagos: Ecology, Evolution, and Conservation in Darwin's Islands, American Association for the Advancement of Science, Pacific Division, 80th Annual Meeting, San Francisco CA, June.

Invited symposium presentation, Snell, H.L. and S. Rea, "El Niño 1997–1998 en Las Islas Galápagos," Guayaguil, Ecuador, September.

THORNHILL, R.

Symposium on Human Pheromones, Human Behavior and Evolution Society annual meeting, "The Scent of Symmetry: An Honest Signal of Fitness?", Salt Lake City UT, June 1999.

Symposium on Risk-taking, Human Behavior and Evolution Society annual meeting, "Women's Risk-taking and Risk Avoidance", Salt Lake City UT, June 1999.

TOOLSON, E.C.

Invited presentation to the First International Symposium on Cicada Phylogenetics, paper title: "Phylogeny of North American Cicada Genera," Cardiff, Wales; September, declined invitation for health reasons.

Invited presentation to the Annual Meeting of the Entomological Society of America, symposium title: "Recent Developments in Insect Thermobiology," Atlanta GA, December, declined invitation for health reasons.

WAGNER, A.

"Evolved Robustness in Gene Networks," Conference of the International Society for Mathematical Biology, Amsterdem, The Netherlands, July.

"Evolved Mutational Robustness in Genetic Networks of Yeast," The European Media Laboratory, Heidelberg, Germany, August.

WERNER-WASHBURNE, M.

Zeta Phi Beta meeting on The Human Genome Project, "The Biological Revolution: Genomics and its Challenge for Minority Education," New Orleans LA, April.

YATES, T.L.

Yates, T.L. 1999. "Lonitudinal Studies of Hantaviruses in New Mexico, 1994–1999." Supplement to *The American Journal of Tropical Medicine and Hygiene*. ASTMH annual meeting Washington DC, December.

Yates, T.L. 1999. "The Ecology of an Outbreak: Evidence for El Niño-driven Hantavirus Outbreaks in the United States." Ecological Society of America, Walla Walla WA, August.

Yates, T.L. 1999. "Biodiversity and the Health of Ecosystems: Why Should Public Health Officials Care?" First Annual Edward and Nancy Dodge Lectureship, The Johns Hopkins University, Baltimore MD, April 7.

The following were all invited, but no abstracts were published except for publicity. Yates, T.L. 1999. Invited lectures at University of Nebraska; Catholic University, Santiago, Chile; Department of the Interior (two talks) national safety lectures; UNM presidential Kitchen Cabinet; Federal Occupational health talk sponsored by FBI; and the National Science Foundation.

B. Contributed Talks at Professional Meetings, Workshops, Etc.

ALTENBACH, J.S.

Altenbach, J.S. "The Recreation of a Turn-of-the-Century Steam Shaft Sinking Operation." Paper presented at the Mining History Association annual conference, Ouray CO, June 5.

Presentation of workshop on Protocol for Evaluation of Abandoned Mines for Bat Occupancy and Habitat to U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service, Reno NV, June 8-10.

BARTON, L.L.

Barton, L.L. and H. XU. "Formation of Colloid Selenium and Uranium by Sulfate-reducing and Sulfide-oxidizing Bacteria." Actinide Work Shop, Albuquerque NM, October 14.

BROWN, J.H.

Working Groups of National Center for Ecological Analysis and Synthesis:

- > Body size, February 10-13.
- > Evidence, February 27-March 2.
- > Body size, July 11-14.
- ➤ Body size, November 11-15.

CRIPPS, R.M.

Cripps, R.M. and E.N. Olson. "Functions of twist and Mef2 in Adult Myogenesis." American Drosophila Research Conference, Seattle WA, March 24-28.

DAHM. C.N.

Dahm, C.N., J.R. Thibault, C.S. Crawford and M.C. Molles, Jr. 1999. "Interannual Flow Variability in the Bosque." Sevilleta Research Symposium, Sevilleta Field Station, Socorro NM, January 12.

DUSZYNSKI, D.W.

Asmundsson, I.M., J.A. Campbell and D.W. Duszynski. "A New Coccidian from the Mexican Caecilian *Dermophis mexicanus* (Amphibia: Gymnophiona) from Volcán Tajumulco, Department of San Marcos, Guatemala." 32nd Annual Meeting, Southwestern Association of Parasitologists (SWAP), Lake Texoma OK, April 15-17.

Asmundsson, I.M., J.A. Campbell and D.W. Duszynski. "A New Eimeria Species from the Guatemalan Palm-pitviper, Bothriechis bicolor (Serpentes: Viperidae)." 30th Annual Meeting, Rocky Mountain Conference of Parasitologists, Pocatello ID, May 6-8.

Asmundsson, I.M., J.A. Campbell and D.W. Duszynski. "Eimeria (Apicomplexa: Eimeriidae) de culebras a la familia Colubridae de Guatemala, con descripciónes de 4 nuevas especies y un nuevo registro de hueste para Eimeria ondinae Carini, 1939." XIVth Congreso, Federacion Latinoamericana de Parasitologia, Acapulco, Mexico, October 14-16.

Decker, S.K. and D.W. Duszynski. "Coccidian Parasites of the Rodents on the Sevilleta National Wildlife Refuge, 1989–1998." Second Sevilleta Symposium, UNM–LTER, Socorro NM, January 6.

Ryan, M.M., K.H. Decker and D.W. Duszynski. "Eimeria (Apicomplexa: Eimeriidae) Prevalence Change in Reintroduced Gunnison's Prairie Dogs (Cynomys gunnisoni)." 32nd Annual Meeting, Southwestern Association of Parasitologists (SWAP), Lake Texoma OK, April 15-17.

Zhao, X. and D.W. Duszynski. "Plastid DNA in Rodent Coccidia: Function (?) and Phylogenetic Inference." 32nd Annual Meeting, SWAP, Lake Texoma OK, April 15-17.

Zhao, X. and D.W. Duszynski. "Co-evolution of Plastid and Nuclear DNA in 10 *Eimeria* spp. from Rodents." Joint meeting of the American Society of Parasitologists (74th Annual Meeting) and the Society of Nematologists (38th Annual Meeting), Monterey CA, July 6-9.

Duszynski, D.W., S.J. Upton and L. Couch. "The Coccidia of the Insectivores, Scandentia and Primates.' 19th Scandinavian Symposium of the Scandinavian Society of Parasitology, Reykjavik, Iceland, May 6-11.

GOSZ, J.R.

Workshop on Long Term Research, Waterways Expt. Station. U.S. Army Engineer Research and Development Center, "The LTER Concept," Vicksburg MS, February 21.

Long Term Research in the U.K., Advisory Board for the Joint Infrastructure Fund of the U.K., London, England, March 8.

NoLIMITS Workshop, U.K. Environmental Change Network; "The Contribution of NoLIMITS to Global Terrestrial Observing System (GTOS)," Oxford, England, March 24.

NoLIMITS Workshop, U.K. Environmental Change Network, "The NPP Demonstration Project of GTOS," Oxford, England, March 26.

UNESCO, Man and the Biosphere, "Opportunities in MAB and the International LTER Program," Paris, France, March 29.

UNESCO, ROSELT, "Interactions between ILTER and ROSELT," Paris, France, March 30.

International Biodiversity Observing Year (IBOY), NCEAS, "ILTER and GTOS Concepts for IBOY," Santa Barbara CA, April 8.

Southwest Region AAAS Annual Meeting, AAAS, "LTER and Applications for Conservation Biology, Santa Fe NM, April 12.

Conference on Environmental Health, RAMBO, "RAMBO, LTER and Biodiveristy Observing Networks," Sevilleta Field Station, Soccorro NM, April 19.

Long Term Research Conference, Evergreen College, "LTER Concepts—Role for Colleges," Olympia WA, April 26.

Turner Foundation Conference, Turner Foundation, "GTOS Opportunities," Washington DC, May 19.

Social, Behavioral, Economics Advisory Board Meeting, NSF, "ILTER/GTOS and Landsat 7 Needs," Washington DC, May 21.

Southwest Institute Program, Southwest Institute, "Ecology of the Rio Grande," Albuquerque NM, June 19.

Central and Eastern Europe Regional LTER Meeting, Hungarian Academy of Sciences, "ILTER and Central and Eastern Europe Networks," Budapest, Hungary, June 22.

Central and Eastern Europe Regional LTER Meeting, Hungarian Academy of Sciences, "NPP, Biodiversity, Demonstrations Projects for ILTER," Budapest, Hungary, June 24.

Drylands Biodiversity Workshop, Mitrani Center for Ecology, Ben Gurion University, "Species Diversity and Ecosystem Processes in Water Limited Systems," Sede Beqer, Israel, June 29.

Drylands Biodiversity Workshop, Mitrani Center for Ecology, Ben Gurion University, "Biodiversity and NPP at Global Scales," Sed Beqer, Israel, July 1.

International Union of Geophysics, IUGG, "Global Terrestrial Observing Systems," Birmingham, England, July 28.

North American Regional LTER Network Symposium, Ecological Society of America, "Introduction to the ILTER," Spokane WA, August 7.

Ecological Society of America (ESA) Annual Meeting, ESA, "Planning for Serendipity," Spokane WA, August 11.

ILTER Network Annual Meeting, NSF/South Africa, "Biodiversity/Productivity Relationships," Skukuza, South Africa, August 16.

ILTER/South African LTER Workshop, NSF/South Africa, "ILTER Concepts and Opportunities in South Africa," Skukuza, South Africa, August 17.

University of Pretoria Long Term Research Workshop, School for Environmental Studies, University of Pretoria, South Africa, "ILTER Concepts—Interactions with South Africa," Pretoria, South Africa, August 24.

Central and Eastern Regional LTER Meeting on Global Observing Systems, FAO/Hungarian Academy of Sciences, "Global Observing Systems and Central Europe," Budapest, Hungary, September 9.

Central and Eastern Regional LTER Meeting on Global Observing Systems; FAO/Hungarian Academy of Sciences, "NPP Global Demonstration Project," Budapest, Hungary, September 10.

LTER Network Science Meeting, NSF, "Global Demonstration Projects for LTER," Hubbard Brook Experimental Forest, New Hampshire, October 2.

LI. B.-L.

Li, B.-L. "Self-thinning Patterns Formation and Ecological Field Theory." Theory and Mathematics in Biology and Medicine 1999, Amsterdam, Netherlands, June 29-July 3.

Li, B.-L. "A Non-equilibrium Thermodynamic Analysis of Tree-Grass Patch Dynamics in a Subtropical Savanna Parkland, Texas, USA." Fifth World Congress IALE, Snowmass Village CO, July 29-August 3.

Li, B.-L. "Multifractal and Wavelet Analysis of Vegetation Transect Data in Sevilleta LTER Site." The 84th Annual ESA Meeting, Spokane WA, August 8-12.

Fuller, M.M. and B.-L. Li. "A New Set of Biodiversity Indices That Reveal the Relative Contribution of Community Type and Environmental Variability on Diversity at Sevilleta LTER." The 84th Annual ESA Meeting, Spokane WA, August 8-12.

Kolasa, J. and B.-L. Li. "The Balance of Nature May Promote Diversity: An Empirical Approach to Testing New Scaling Relationships Using Natural Microcosms." The 84th Annual ESA Meeting, Spokane WA, August 8-12.

Wu, H. and B.-L. Li. "Self-thinning Rule: a Causal Interpretation from the Ecological Field Theory." The 84th Annual ESA Meeting, Spokane WA, August 8-12.

LIGON, J.D.

Hagelin, J. and J.D. Ligon, paper presented at Annual Meeting of the American Ornithologists' Union, Cornell University, Ithaca NY, August.

LOKER, E.S.

48th Annual Meeting of the American Society of Tropical Medicine and Hygiene, P.M. Leonard, D.C. Quintana, C.M. Adema and E.S. Loker, "Characterization of a Parasite-responsive Protein Family from the Snail Host of *Schistosoma mansoni* Featuring a Unique Combination of Fibrinogen and Ig V-type Domains," Washington DC, November 28–December 2.

74th Annual Meeting of the American Society of Parasitologists, P.M. Leonard, D.C. Quintana, C.M. Adema and E.S. Loker, "Characterization of a Parasite-responsive Protein Family from *Biomphalaria glabrata*, Featuring a Unique Combination of Fibrinogen and Ig V-type Domains," Monterey CA, July 6-9.

74th Annual Meeting of the American Society of Parasitologists, C.M. Adema, P.M. Leonard, R.J. DeJong, L.A. Hertel and E.S. Loker, "Probing the Intramolluscan Biology of *Echinostoma paraensei* (Digenea): Molecular Approaches," Monterey CA, July 6-9.

74th Annual Meeting of the American Society of Parasitologists, D. Molina, K.K. Sapp and E.S. Loker, "Echinostomatiform Flukes from New Mexico," Monterey CA, July 6-9.

LOWREY, T.K.

Chan, R., T. Lowrey, D. Natvig, R. Kimball, R. Whitkus and C. Quinn. 1999. "Molecular Phylogeny of *Tetramolopium* (Asteraceae)." XVI International Botanical Congress Abstracts, 3057. IBC, St. Louis MO, August.

MARSHALL, D.L.

Sher, A.A. and D.L. Marshall. "Effect of Soil Textures and Water Regimes on Competitive Intensity Between Native *Populus deltoides* Subsup. wislezenii and Invasive, Non-native, *Tamarix ramosissima*." Ecological Society of America, Spokane WA, August 8-12.

Marshall, D.L. 1999. "Mechanisms of Non-random Mating." Guild of Rocky Mountain Population Biologists, Boulder CO, September.

Simpson, H. and D.L. Marshall. 1999. "Assessing the Development of Inbreeding in a Selection Experiment Using Wild Radish." Guild of Rocky Mountain Population Biologists, Boulder CO, September.

MILNE, B.T.

Milne, B.T. "Computation in Ecological Landscapes: Interactions between Terrain and Vegetation." Annual Meeting of the International Association of Landscape Ecology, Snowmass CO, August.

TURNER, T.F.

Turner, T.F, L.R. Richardson and J.R. Gold. 1999. "Genetic Effective Population Size Is Much Lower than Census Size in Red Drum from the Northern Gulf of Mexico." American Society of Ichthyologists and Herpetologists 79th Annual Meeting, Pennsylvania State University, State College PA, June 24-30.

C. Attendance at Professional Meetings, Workshops, Etc.

ALTENBACH, J.S.

Mining History Association Meetings, Ouray CO, June 3-6.

BARTON, L.L.

Natural and Accelerated Bioremediation Research Program, Reston VA, January 25-27.

The WERC/HSRC '99 Joint Conference on the Environment, Albuquerque NM, April 26-28.

The 99th General Meeting of American Society for Microbiology, Chicago IL, May 30-June3.

BROWN, J.H.

Annual Meeting of the American Society of Mammaologists, Seattle WA, June 19-24.

CRIPPS, R.M.

American Drosophila Research Conference, Seattle WA, March 24-28, 1999.

EMBO Workshop on Molecular Genetics of Muscle Development and Neuromuscular Diseases, Kloster Irsee, Germany, September 26-October 1, 1999.

DAHM. C.N.

Sevilleta Research Symposium, Sevilleta Field Station, Socorro NM, January 12-14.

EPA Ground Water/Surface Water Interactions Workshop, Denver CO, January 26-28.

NSF Hydrology 2000 Workshop, Albuquerque NM, January 31-February 1.

American Society of Limnology and Oceanography Annual Meeting, Santa Fe NM, February 2-4.

Lotic Intersite Nitrogen Experiment (LINX) Synthesis Workshop, University of Illinois, Urbana IL, February 12-14.

Middle Rio Grande Evapotranspiration Workshop, Los Alamos National Laboratory, Los Alamos NM, February 16-17.

IGERT Principal Investigators Workshop, National Science Foundation, Arlington VA, May 13-14.

IRC-EB National Science Foundation Panel, National Science Foundation, Arlington VA, May 26-28.

Ecological Society of America Annual Meeting, Spokane WA, August 8-11.

Special Committee on Problems in the Environment (SCOPE), Corvallis OR, August 28-September 1.

United States/European Union Biotechnology Workshop, National Science Foundation, Arlington VA, September 14-16.

Geological Society of America Annual Meeting, Denver CO, October 25-28.

DUSZYNSKI, D.W.

32nd Annual Meeting, Southwestern Association of Parasitologists (SWAP), Lake Texoma OK, April 15-17.

19th Scandinavian Symposium of the Scandinavian Society of Parasitology, Reykjavík, Iceland, May 6-11.

Joint meeting of the American Society of Parasitologists (74th Annual Meeting) and the Society of Nematologists (38th Annual Meeting), Monterey CA, July 6-9.

Albuquerque TVI Arts & Sciences Advisory Committee Meeting, December.

GOSZ, J.R.

NoLIMITS Workshop, Oxford, England, March.

UNESCO, Paris, France, March.

AAAS Southwest Annual Meeting, Santa Fe NM, April.

Central and Eastern European Regional LTER Meeting, Budapest, Hungary, June.

Drylands Biodiversity Workshop, Sed Beger, Israel, June-July.

IUGG Annual Meeting, Birmingham, England, July.

Ecological Society of America, Spokane WA, August.

ILTER/South African Workshop on Long Term Research, Skukuza, South Africa, August.

Central and Eastern European Global Observing System Meeting, Budapest, Hungary, September.

Central and Eastern Europe ILTER Regional Workshop, Budapest, Hungary, September.

See also IV.A. above.

KODRIC-BROWN, A.

Annual Meeting of the Animal Behavior Society of America, Bucknell University, Lewisburg PA, June 26-30, 1999.

LI. B.-L.

Theory and Mathematics in Biology and Medicine 1999, Amsterdam, Netherlands, June 29-July 3.

Fifth World Congress IALE, Snowmass Village CO, July 29-August 3.

The 84th Annual ESA Meeting, Spokane WA, August 8-12.

LIGON, J.D.

Annual Meeting of the American Ornithologists' Union, Cornell University, Ithaca NY, August.

LOKER, E.S.

74th Annual Meeting of the American Society of Parasitologists, Monterey CA, July 6-9.

The FASEB summer research conference on "Phylogenetic Perspectives on the Vertebrate Immune Response," Copper Mountain CO, July 11-16.

The Seventh International Symposium on Schistosomiasis, Rio de Janiero, Brazil, December 5-9.

LOWREY, T.K.

XVI International Botanical Congress, St. Louis MO, August.

MARSHALL, D.L.

Guild of Rocky Mountain Population Biologists, Boulder CO, September.

NMHEAA Conference, Albuquerque NM, February.

MILNE, B.T.

Annual Meeting of the International Association of Landscape Ecology, Snowmass CO, August.

Ecological Society of America, Spokane WA, August.

MOLLES, M.C., JR.

Annual Meeting of the Ecological Society of America, Spokane WA, August.

NATVIG, D.O.

20th Fungal Genetics Conference, Asilomar CA, March.

Annual Meeting of the Association of Biomedical Resource Facilities (ABRF), Durham NC, March.

MBRS Program Directors Meeting, Chantilly VA, June

Ninth International Congress of Bacteriology and Applied Microbiology of the International Union of Microbiological Societies, Sydney, Australia, August.

NELSON, M.A.

20th Fungal Genetics Conference, Asilomar CA, March 23-28.

Strategic Planning Session to Consider the Development of a Regional Center for Functional Genomics, Albuquerque NM, May 10.

The Southwest as a Region of Innovation Conference, Albuquerque Convention Center, Albuquerque NM, June 17-18.

Second Functional Genomics Workshop, Albuquerque NM, June 24.

Alliance Chautauqua '99: Innovations in Science, Computing, & Grid Technology, UNM Research Park, Albuquerque NM, August 9-11.

Central New Mexico Next Generation Economic Strategy Technology Working Group, UNM Continuing Education Center, Albuquerque NM, November 10.

SNELL, H.L.

American Association for the Advancement of Science, Pacific Division, 80th Annual Meeting, San Francisco CA, June.

Annual Meeting of the Charles Darwin Foundation, Quito, Ecuador, July.

THORNHILL, R.

Human Behavior and Evolution Society annual meeting, Salt Lake City UT, June.

TURNER, T.F.

American Society of Ichthyologists and Herpetologists 79th Annual Meeting, Pennsylvania State University, State College PA, June 24-30.

VOGEL, K.G.

Orthopaedic Research Society Annual Meeting, Anaheim CA, February.

Session Chairman, Molecular Biology of Cartilage Development, Lake Tahoe CA, June.

WAGNER, A.

Conference of the International Society for Mathematical Biology, Amsterdem, The Netherlands, July.

The European Media Laboratory, Heidelberg, Germany, August.

WERNER-WASHBURNE, M.

Microbial Genomes Meeting, Chantilly VA, February.

National Academy of Sciences meeting on Intellectual Property, February.

Non-mammalian Models Workshop, National Institutes of Health, Bethesda MD, March.

Zeta Phi Beta symposium on the Human Genome Program, New Orleans LA, April 16.

American Society for Microbiology, Chicago IL, May.

YATES, T.L.

American Society of Tropical Medicine and Hygiene Annual Meeting, Washington DC, December.

Ecological Society of America Annual Meeting, Walla Walla WA, August.

D. Service as Editor of Scholarly Journal.

DAHM, C.N.

Associate editor for Ecology and Ecological Monographs, 1997-2000.

344

MILLER, R.D.

Guest Editor, Special issue of Developmental and Comparative Immunology

WAGNER, A.

Advances in Complex Systems, 1998-present.

Molecular Evolution and Development (a subsidiary of The Journal of Experimental Zoology, 1999-present.

E. Service on Editorial Board of Scholarly Journal.

BARTON, L.L.

Member of Editorial Board for the international journal BioMetals.

BROWN, J.H.

Ecological Society of America (Chaired Publications Visions Committee)

GOSZ, J.R.

Biogeochemistry

LI, B.-L.

Member, *Ecological Modelling* (Elsevier Science Ltd., Amsterdam and Oxford), the official journal of International Society for Ecological Modelling, 1999–2001.

MILNE, B.T.

Subject editor, Conservation Ecology, 1996-

Editorial Board, Landscape Ecology, 1998-

NELSON, M.A.

Associate Editor, Fungal Genetics and Biology, since 1998.

Editorial Board, Functional & Integrative Genomics, since 1999 (first issue January 2000).

SNELL, H.L.

Noticias de Galápagos

STRICKER, S.A.

Acta Zoologica

VOGEL, K.G.

Member of Editorial Board:

> Journal of Orthopaedic Research

- > Archives for Biochemistry and Biophysics
- European Journal of Cell Biology

YATES, T.L.

Managing editor, Museum of Southwestern Biology publication series.

F. Service as Officer of Professional Organization (indicate whether Elected or Appointed).

BARTON, L.L.

Secretary of International Biometals Society (appointed).

Member on Steering Committee for International Society for Iron Nutrition and Interaction in Plants (appointed).

CHARNOV. E.L.

In 1999, several people and I founded a new scientific society, The Bioeconomics Society, and began a new journal, *The Journal of Bioeconomics*, of which I am now an editor.

DAHM, C.N.

Chair of the Science and Policy Committee for the North American Benthological Society (appointed).

DUSZYNSKI, D.W.

National Scientific Program Officer, American Society of Parasitologists. Appointed and confirmed by ASP Council, 1998–2000.

Archivist, Annual Coccidiosis Conference. Appointed.

Archivist, Southwestern Association of Parasitologists. Appointed.

Research Affiliate, The Harold W. Manter Laboratory of Parasitology, University of Nebraska State Museum, Lincoln NE. Elected.

Albuquerque TVI, Arts & Sciences Advisory Committee. Appointed.

GOSZ, J.R.

Board of Governors, Ecological Society of America, Elected.

Chairman, U.S. LTER Coordinating Committee, Elected.

Chairman, International LTER Network Committee, Elected.

Chairman, Global Terrestrial Observating Systems Science Steering Committee, Appointed.

Advisory Board, Directorate for Social, Behavioral and Economics, NSF.

346

Advisory Board, Division of International Programs, NSF.

LI, B.-L.

Statistical Ecology Program Committee of International Association for Ecology (INTECOL), Member, 1997–2002.

LOKER, E.S.

Co-Chair of the Local Organizing Committee for the 2001 Meeting of the American Society of Parasitologists in Albuquerque NM.

LOWREY, T.K.

President-Elect, International Organization of Biosystematists, 2000.

Member, Publicity Committee, American Society of Plant Systematists, 1999-2000 (appointed).

NELSON, M.A.

New Mexico Computational Biology Committee, member, 1994-present (appointed).

Neurospora Policy Committee, 1997 (four-year term) (elected).

VOGEL, K.G.

Chairman, Editorial Advisory Board, Journal of Orthopaedic Research.

Member, Board of Directors, Orthopaedic Research Society.

YATES, T.L.

Board of Directors (or equivalent):

- > American Society of Mammalogists (elected);
- Society of Systematic Biology (elected);
- Southwestern Association of Naturalists (elected);
- > Peromyscus Stock Center (appointed);
- Association of Systematic Collections (elected).

Chairman, Board of Trustees, American Society of Mammalogists (ASM).

Member Board of Trustees, Southwestern Association of Naturalist.

Chair, Animal Care and Use Committee, ASM.

Member International Relations Committee, ASM.

Member, Executive committee, section on Ecology, NASULGC.

G. Other.

MARSHALL, D.L.

Botanical Society of America Committees:

Membership Committee;

Ad-hoc Committee on candidates for editor of American Journal of Botany.

Ecological Society of America:

MacArthur Award Committee.

V. OTHER PROFESSIONAL ACTIVITIES.

A. Colloquium Presentations, UNM and Elsewhere.

BROWN, J.H.

UNM Annual Research Lecture, 1999. University of Manitoba, Lubinski Lecture, April 1.

LI. B.-L.

Computer Science Department Colloquium, Emergence of Scaling in Ecological Systems: Analytical and Numerical Approaches, UNM, November 18.

LIGON, J.D.

UNM Valencia Co. Campus, "Sexual Selection and Mating Systems in Birds," April 29.

VOGEL, K.G.

Department of Orthopaedics, University Hospital, Providence RI, March 24.

WAGNER, A.

"Evolution of Gene Networks," Department of Biology, University of Oregon, Eugene OR, May.

WERNER-WASHBURNE, M.

"An Overview to Genomics," Functional Genomics Working Group (Sandia National Laboratories, UNM, Los Alamos National Laboratories, and New Mexico State University) Albuquerque NM, May 10.

B. Seminar Presentations, UNM and Elsewhere.

BROWN, J.H.

Stanford University, February 1. University of Manitoba, Lubinski Lecture, April 1. Michigan State University, April 6. Harvard University, May 20. į,

348

University of California, Santa Barbara, September 8. Cornell University, October 18. University of California, Los Angeles, November 8.

Spring:

Wednesday noon "Brown Bag" seminar (Biol. 502-002)

Wednesday afternoon "Complexity" seminar (Biol 502-017)

CHARNOV, E.L.

University of Michigan, Ann Arbor MI, January. University of Utah, Salt Lake City UT, December.

CRIPPS, R.M.

Cell and Molecular Biology Seminar, UNM Biology. Developmental Biology Journal Club, UNM Health Sciences Center. Cell Biology Department Seminar, UNM Health Sciences Center.

DAHM, C.N.

"Hydrogeology and Biogeochemistry of the Surface Water and Ground Water Interface of a Mountain Stream" departmental seminar in the Department of Earth and Planetary Sciences, The University of New Mexico, November 5.

DUSZYNSKI, D.W.

Duszynski, D.W. and S.J. Upton. Desenvolvimento de uma base de dados única de aplicação mundial para coccídeos e seus hospedeiros: O programa PEET-Partnership for Enhancing Expertise in Taxonomy. University of Sao Paulo, Sao Paulo, Brazil, July 30.

KODRIC-BROWN, A.

Fall:

University of California-Santa Barbara

Cornell University, Ithaca, NY

Cape Town University, Cape Town, South Africa

LI. B.-L.

University Utrecht Department of Plant Ecology and Evolutionary Biology Seminar: Selfthinning Pattern Formation: a Physical Approach, Wentgebouw, the Netherlands, July 6.

Mathematical and Statistial Department Seminar: Emergence of Ecological Scaling: Self-Thinning Pattern Formation and Others, UNM, October 1.

LOKER, E.S.

Biology Department Brown Bag Seminar, "Co-evolution of Parasites and Hosts," UNM, September 15.

Centro de Pesquisas Rene Rachou, FIOCRUZ, "The Response of Biomphalaria to Trematode Infection: a Molecular Approach," Belo Horizonte, Brazil, August 13.

Graduate group in parasitology, "Flukes and Snails: Models to Study Evolution of Immune Systems and Host-parasite Associations," University of Pennsylvania, Philadelphia PA, September 27.

MARSHALL, D.L.

University of Oklahoma, Norman OK, April

University of Colorado, Boulder CO, September

MILNE, B.T.

Center for Advanced Studies, The University of New Mexico, "Computation in Ecological Landscapes."

Computer Science Department, The University of New Mexico, "Computation in Ecological Landscapes."

Invited classroom lecture, Colorado State University, "Fractal Geometry and Ecological Complexity," Ft. Collins CO, October.

Department of EPOB, University of Colorado, "Self-organization in Landscapes: Coupled Models of Terrain and Vegetation," Boulder CO.

Invited classroom lecture, University of Colorado, "Ecological Stability Theory," Boulder CO.

SNELL, H.L.

"Conservation Biology of Galápagos: The Collision of Research, Management and Development," Department of Biology, UNM, November.

STRICKER, S.A.

"Calcium and ER Dynamics During Oocyte Maturation," Friday Harbor Laboratories, Friday Harbor WA, July.

VOGEL. K.G.

Department of Biomedical Engineering, Cleveland Clinic and Research Foundation, Cleveland OH, March 26.

WERNER-WASHBURNE, M.

"Genomics 101," for Sandia National Laboratories scientists and UNM administrators, Department of Biology, UNM, November.

C. Testimony in a Scholarly Capacity at Hearings of Commissions, Legislative Committees, Etc.

GOSZ, J.R.

Presentations to members of the New Mexico Congressional Delegation and their staff on Scientific Issues regarding the University of New Mexico Federal Priority List.

LIGON, J.D.

Report on recommendation to N.M. Department of Game and Fish to list the Lesser Prairie Chicken as Endangered, as my responsibility as the member of a peer veview panel from UNM. Originally appointed by President Peck.

YATES, T.L.

Expert Witness, Babbott Case, Washington DC

D. Presentation to General Audience in a Scholarly Capacity.

ALTENBACH, J.S.

Bats and Abandoned Mines. A presentation to the annual meeting of the NM Chapter of the New Mexico Mining engineers, Socorro NM, April 16.

Bats, An Evening with Scott Altenbach. Invited lecture presented to the participants and visitors at the bats/abandoned mines workshop in Reno NV, June 9.

Wings in the Night. Address presented at Festival of the Cranes, November 18.

Bats of New Mexico and their Conservation. Presentation to the Docents and Staff of the Albuquerque Biological Park, Albuquerque NM, August 20.

CRIPPS, R.M.

TV interview for Muscular Dystrophy Association Telethon, August 1999

Published interview in UNM's The Daily Lobo, Fall 1999

SNELL, H.L.

Invited Seminar. Snell, H.L. and H.M. Snell. "Status of Galápagos biological diversity." Science Applications International, Albuqueque NM, May.

WAGNER, A.

"The small world problem in Genetics," Lecture at the Austrian-American Week, UNM, November.

WERNER-WASHBURNE, M.

"The Biological Revolution: Genomics and its Challenge for Minority Education," Zeta Phi Beta Foundation symposium on the Human Genome Project, New Orleans LA, April 16.

E. Service in a Scholarly Capacity as Member of Local, State or National Panel, Committee, or Commission, for Purpose of Reviews of Public Policy Issues, Scientific Evaluations, Awards of Grants or Fellowships or Prizes, Etc.

ALTENBACH, J.S.

Reviewer for grant applications for Bat Conservation International, Austin TX.

Advisor to the New Mexico Chapter of the Nature Conservency on the Journada del Muerto bat caves.

Advisor to the University of Wisconsin, Milwauke, on the Neda Mine Bat Hibernaculum, Dodge Co., WI.

BARTON, L.L.

Reviewed three grant applications for National Research Agricultural Competitive Grants Program, Washington D.C.

Reviewed one grant application to National Research Council of Canada.

CRIPPS, R.M.

Member, Grove and Springfield Scholarship Committee, UNM Biology Dept.

DAHM, C.N.

Integrated Research Challenges in Environmental Biology (IRC–EB) panelist, National Science Foundation, Arlington VA, May 26-28.

DUSZYNSKI, D.W.

Outside Reviewer, three NSF grant proposals.

Asked to serve on NSF Panel for Living Stock Collections. Declined.

GOSZ, J.R.

Advisory Panel for the Joint Infrastructure Fund for the United Kingdom. (Reviewed proposals for Academic Infrastructure Development in U.K.)

Advisory Panel for the Canadian Infrastructure Program, Environment Canada. (Proposal reviewer for Research Infrastructure Development in Canada)

Scientific Advisory committee for the Smithsonian Environmental Research Center.

Scientific Advisory Committee for the National Canopy Crane Facility of the U.S. Forest Service, Washington.

Scientific Advisory committee for Congresswoman Heather Wilson.

Proposal Reviewer for NSF (8 proposals)

Proposal Reviewer for NASA (2 proposals)

KODRIC-BROWN, A.

Spring:

Member and reviewer, Animal Behavior Grants Committee

LI, B.-L.

Judge, Buell/Braun Awards, Ecological Society of America

LIGON, J.D.

NSF proposal reviews (2)

LOWREY, T.K.

Member, New Mexico Rare Plant Technical Council

Member, U.S. Fish and Wildlife Service Plant Recovery Team

Ad hoc Reviewer, National Science Foundation, three grant proposal reviews

MARSHALL, D.L.

NSF proposals reviewed (2)

MILLER, R.D.

Ad hoc grant review panel: NSF, Signal transduction section

Invited Participant, NSF national workshop for CAREER awardees

MILNE, B.T.

Water, Earth and Biota (WEB). Member of a working group to formulate a vision statement for a hydrological research agenda, as service to the National Science Foundation. V.K. Gupta, Chair, 1999–present.

MOLLES, M.C., JR.

Appointed by National Academy of Sciences to the National Research Council Special Committee on Riparian Zones to write a position book for the nation, 1999–2000.

National Center for Ecological Analysis and Synthesis Working Group Member, Scientific Evidence Project, 1999–2001, University of California, Santa Barbara CA.

Invited by the National Science foundation to attend workshop and write white paper for NSF on "Frontiers in Ecology," December.

NATVIG, D.O.

Reviewed one NSF proposal

Reviewed Genomics grant proposal for NSERC of Canada.

NELSON, M.A.

Scientific Review Committee for the 1999 and 2000 National American Indian Science and Engineering Fairs; Co-Chair for 1999–2000.

SNELL, H.L.

Member, N.M. Department of Game and Fish Non-Game Review Panel.

TURNER, T.F.

Panelist, U.S. Bureau of Reclamation, Grand Canyon Monitoring and Research Center, Flagstaff AZ, October. Evaluated proposals related to genetic work on endangered fishes of the Colorado River drainage.

VOGEL, K.G.

National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Long-Range Planning Meeting, Orthopaedics Research, Bethesda MD, July 19, 1999.

WERNER-WASHBURNE, M.

Ad hoc member, NIH Genomics panel, June.

Coordinator, federal committee to write report on "Federal Investment in Microbial Genomics," April-July.

YATES, T.L.

Expert Panel, NIH, Ecology of Infectious Diseases Review Panel, NSF

F. List Journals and the Number of Papers You Refereed for Each in 1999.

ALTENBACH, J.S.

Journal of Mammalogy (1)

BARTON, L.L.

Canadian Journal of Microbiology (1)

Anaerobe (2)

Journal of Plant Nutrition (2)

Applied and Environmental Microbiology (3)

Biometals (2)

Antoine Von Leeuwenhoek Journal of Microbiology (1)

```
BROWN, J.H.
Eight articles for PNAS, Nature, Science, Evolution
CRIPPS, R.M.
Developmental Biology (5)
Journal of Cell Science (1)
DAHM, C.N.
Ecology (12)
Ecological Monographs (2)
Journal of the North American Benthological Society (1)
DUSZYNSKI, D.W.
Acta Protozoologica (1)
Folia Parasitologica (3)
Journal of Eukaryotic Microbiology (1)
Journal of Parasitology (3)
Southwestern Association of Naturalists (2)
Transactions of the Royal Society of South Australia (1)
GOSZ, J.R.
Journal of Vegetation Science (2)
Ecological Applications (2)
Ecology (1)
LI, B.-L.
Ecosystems (1)
Ecosystem Health (1)
Contributions to Atmospheric Physics (1)
Landscape Ecology (1)
Ecological Modelling (4)
LIGON, J.D.
Behavioral Ecology and Sociobiology (1)
Behavioral Ecology (1)
Wilson Bulletin (1)
Biological Conservation (1)
LOKER, E.S.
Experimental Parasitology (2)
International Journal for Parasitology (1)
Canadian Journal of Zoology (1)
Parasitology (2)
Journal of Parasitology (6)
```

```
Developmental and Comparative Immunology (1)
 Biological Bulletin (1)
American Journal of Tropical Medicine and Hygiene (2)
 Wellcome Trust Grant Proposals (2)
 Maryland Sea Grant Proposals (1)
 Austrian Academy of Sciences Proposal Review (1)
LOWREY, T.K.
Systematic Botany (2)
American Journal of Botany (1)
Sida (1)
Phytologia (1)
Journal of Biogeograpy (1)
MARSHALL, D.L.
American Journal of Botany (3)
Evolutionary Ecology Research (1)
Canadian Journal of Botany (1)
MILLER, R.D.
Journal of Immunology (3)
Laboratory Animal Science (1)
The Anatomical Record (1)
MILNE, B.T.
Landscape Ecology (1)
Nature (1)
Oecologia (1)
NATVIG, D.O.
Proceedings of the National Academy of Sciences USA (1)
Fungal Genetics and Biology (1)
Genetics (1)
Journal of Clinical Microbiology (1)
NELSON, M.A.
Fungal Genetics and Biology (3)
Reviewed three proposals for the National Science Foundation
SNELL, H.L.
Noticias de Galápagos (2)
Informe de Galápagos (3)
```

STRICKER, S.A.

Developmental Biology (3)

Acta Zoologica (1)

International Journal of Developmental Biology (1)

THORNHILL, R.

Numerous journals in biology, psychology and anthropology

TURNER, T.F.

Copeia, the journal of the American Society of Ichthyologists and Herpetologists (3)

Journal of Heredity (1)

Marine Ecology Progress Series (2)

Canadian Journal of Fisheries and Aquatic Sciences (1)

NSF Systematics Program, 2 proposals

VOGEL, K.G.

Journal of Orthopaedic Research (12)

Archives Biochemistry & Biophysiology (1)

European Journal of Cell Biology (1)

Journal of Shoulder and Elbow Surgery (1)

Cell and Tissue Research (1)

Canadian Research Council (1)

WAGNER, A.

Proceeding of the National Academy of Sciences U.S.A. (1)

Discrete and Applied Mathematics (1)

Molecular and Developmental Evolution (1)

Advances in Complex Systems (2)

NSF (4)

WERNER-WASHBURNE, M.

Genetics (~15)

Gene (~15)

European Molecular Biology Organization (~20)

VI. NON-TEACHING UNIVERSITY, COLLEGE AND DEPARTMENT SERVICE.

A. Symposia, Workshops, Conferences, Etc., Sponsored, Hosted, Organized.

BARTON, L.L.

International Steering Committee for Second International Biometals Symposium to be held in Tuebingen, Germany, April 24-29, 2000.

GOSZ, J.R.

Co-organizer, with Dr. Angela Karp of the University of Bristol in England, of a workshop on "The Use of Molecular Methods in Ecology" at the National Science Foundation September 14-15. This workshop was held as part of the Ninth Annual Meeting of the U.S.–E.C. Task Force on Biotechnology Research, Arlington VA.

LIGON, J.D.

Workship for Santa Fe school teachers about teaching birds/natural history to kids, Santa Fe NM, March.

LOWREY, T.K.

New Mexico Rare Plant Technical Council Meeting, Sevilleta Field Station, Socorro NM, November.

NELSON, M.A.

Co-organizer of *Neurospora* 2000 Conference (annual meeting sponsored by the *Neurospora* Policy Committee), to be held in Asilomar CA, March 9-12, 2000.

Co-organizer of meeting (with M. Altherr, Los Alamos National Laboratory), Strategic Planning Session to Consider the Development of a Regional Center for Functional Genomics, Sheraton Old Town, Albuquerque NM, May 10.

Co-organizer of meeting (with M. Altherr, Los Alamos National Laboratory), Second Functional Genomics Workshop, Sheraton Old Town, Albuquerque NM, June 24.

SNELL, H.L.

Charles Darwin Foundation/World Wildlife Fund "BioDiversity Vision Symposium" held in Galápagos, June.

WERNER-WASHBURNE, M.

Two meetings of the Southwest Genomics and Biotechnology Alliance.

YATES, T.L.

Organized and hosted two workshops on emerging threat analysis, one in Santa Fe NM and the other at the Sevilleta Field Station, Socorro NM.

B. Distinguished Departmental Visitors You Hosted.

BROWN, J.H.

Maya Paczuski, visiting lecturer for Ecological Complexity Seminar. Steve Carpenter, visiting lecturer for Ecological Complexity Seminar.

DAHM. C.N.

Dr. Mike Billett, University of Edinburgh, Scotland

Dr. Indrajeet Chaubrey, University of Alabama

Dr. Alistar Robertson, Charles Sturt University, Australia. Dr. Robertson was a sabbatical guest I hosted from September 1999–January 2000 at the University of New Mexico.

Dr. Diane Hope, Arizona State University

Dr. Peter Jacobson, Grinnell College

DUSZYNSKI, D.W.

Dr. Duane Lassen, Associate Dean, College of Veterinary Medicine, Colorado State University, Ft. Collins CO, April 27.

GOSZ, J.R.

Dr. Bruce Hayden; Division Director, Environmental Biology, NSF

Dr. Harry Biggs, Park Director, Kruger National Park, South Africa

LIGON, J.D.

Dr. Geoff Hill, Auburn University, Auburn AL.

LOWREY, T.K.

Professor Christopher Quinn, University of New South Wales, Sydney, Australia, June-October.

Dr. Scott Kelley, University of Colorado, Spring.

MILNE, B.T.

My lab hosted Maya Pachuski from Texas A&M as part of the complexity RTG. Carla Restrepo was responsible for this visit.

NELSON, M.A.

Anne Stone, UNM Department of Anthropology, April 23.

Michael Waterman, University of Southern California, April 26 (as part of the AHPGC Seminar Series).

STRICKER, S.A.

Prof. Baldomero Olivera, Department of Neurosciences, University of Utah (as part of 1999 Research Day).

THORNHILL, R.

Dr. Steve Shuster, Department of Biology, Northern Arizona University, Flagstaff AZ.

TURNER, T.F.

Kirk O. Winemiller, Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station TX, November 10, 1999.

C. Committee Service.

1. Departmental committees served on in 1999 (indicate chair with asterisk).

ALTENBACH, J.S.

Undergraduate Policy Committee *Graduation Committee Plant Physiological Ecologist search committee

BARTON, L.L.

Spring: Graduate Policy Committee

Fall: Graduate Student Selection Committe

the Microbiology Facility Committee

Grove Scholarship Committee
*Microbiology Search Committee

CHARNOV. E.L.

Spring:

Graduate Student Selection Committee

Museum of Southwestern Reorganization Committee

Biology Salary Committee

Fall:

*Graduate Student Selection Committee

CRIPPS, R.M.

* Departmental Seminar Committee Graduate Policy Committee Space/Buildings Committee Grove and Springfield Scholarship Committee

DAHM. C.N.

Library Liaison Committee Chair's Executive Committee Microbiology Search Committee

DUSZYNSKI, D.W.

*Biological Society of New Mexico Field Program Committee Chairperson's Advisory Committee *Space Committee

GOSZ, J.R.

Space Committee

*Grove Scholarship Award Committee

KODRIC-BROWN, A.

Spring:

Graduate Policy Committee; worked on outcomes asssessment and evaluation

forms for graduate students.

LI. B.-L.

Committee for Graduate Research Training in Ecological Complexity (1998–present) Undergraduate Policy Committee (1998–May 1999) 1999 Research Day Organizing Committee Computer Facility Committee

LIGON, J.D.

Phylogeneticist Search Committee Space Committee Graduate Selection Committee (no work in 1999)

LOKER, E.S.

Spring:

*Space Committee

Ad Hoc Committee for Reorganization of the Museum of Southwestern

LOWREY, T.K.

Biology

*Phylogeneticist Faculty Search Committee Space Committee Greenhouse Committee

MARSHALL, D.L.

*Greenhouse Committee Space Committee

*Plant Physiological Ecologist Search Committee

MILLER, R.D.

Undergraduate Policy Committee Microbiology Faculty Search Committee Departmental Safety Committee Executive Council

MILNE, B.T.

Member, Plant Physiological Ecologist Search Committee, 1998-99.

NATVIG, D.O.

Space Committee Microbiology Committee

NELSON, M.A.

Library Liaison
Undergraduate Policy Committee
* Microbiology Committee

SNELL, H.L.

Field Trip Committee.

STRICKER, S.A.

- *Research Day, 1999
- *Computer Use Committee, chair
- *Research Day, 2000

THORNHILL, R.

* Graduate Policy Committee

TURNER, T.F.

Graduate Student Selection Committee Biology Department Executive Committee Research Day Committee Phylogenetics Search Committee MSB Executive Committee

VOGEL, K.G.

Graduate Student Selection Committee* Research Day Committee Salary Committee

WAGNER, A.

Plant Physiological Ecologist Search Committee Animal Physiology Search Committee Computer Committee

WERNER-WASHBURNE, M.

*Physiology Search Committee Executive Committee

YATES, T.L.

Space Committee Bookstore Rennovation Committee Ex Officio most others

2. College/University committees served on in 1999 (indicate chair with asterisk).

BARTON, L.L.

Member of Admissions and Registration Committee

CRIPPS, R.M.

Radiation Control Committee

DAHM, C.N.

Curriculum Committee, College of Arts and Sciences Graduate Advisor's Committee, College of Arts and Sciences

GOSZ, J.R.

Federal Priorities Committee (Office of the Vice President for Institutional Advancement; Judy Jones)

KODRIC-BROWN, A.

Spring: Member, Research Allocation Committee

LI. B.-L.

Research Allocations Committee (1999–2001)
Scientific and Engineering Computation Program Committee (1998–present)

LIGON, J.D.

A&S Senior Promotion Committee

LOKER, E.S.

Review of proposals for Hispanic Serving Institutions Education Grants Program

LOWREY, T.K.

Academic Freedom and Tenure Committee

MARSHALL, D.L.

NCA Self-Study Steering Committee

MILNE, B.T.

Center for Advanced Studies Steering Committee

Tenure and Promotion Committee to review Code 3 files for A&S.

S. 1.

NATVIG, D.O.

MBRS advisory committee

NELSON, M.A.

SEC Program Committee (since 1997)
AHPCC Associated Faculty Group (Charter member)

A&S Junior Faculty Promotion and Tenure Committee for 1999–2000 Protein Chemistry Laboratory Advisory Group (UNM Medical School)

SNELL, H.L.

Latin American Institute Grants and Awards Committee.

VOGEL, K.G.

Rhodes Scholarship Interview Committee, November 1999

WAGNER, A.

Library Liaison Committee SEC (Science and Engineering Council) Program Committee

YATES, T.L.

- * EMIS (Co-chair)
- * Provost Search
- * Main Campus animal Care and Use

Health Sciences Center Animal Care and Use

D. Other.

DAHM, C.N.

Advisory field trip for The Nature Conservancy to their riparian restoration projects on the Gila and Mimbres rivers of New Mexico, November 12-14.

Sampling expedition to Spider Cave in Carlsbad National Park, October 2-4.

LI. B.-L.

Post-doctoral supervision: Madhur Anand (August 1999-July 2000)

LOKER, E.S.

Partial funding, design and implementation of a Biology Department Lecturer III position.

MARSHALL, D.L.

Spring:

Director, Student Outcomes Assessment

MILLER, R.D.

Pre-veterinary Student Advisor

Honors Advisor

MILNE, B.T.

Faculty Mentor for Drs. Larry Li and Andreas Wagner, 1997-99.

NATVIG. D.O.

Co-director of the UNM MBRS program.

NELSON, M.A.

Mentored one undergraduate student, Brauer Trammel, in the UNM Research Opportunity Program, Summer 1999.

Mentored two undergraduate students, Diego Martinez and Christina Flores, in the Minorities in Biomedical Research Support (MBRS) Program

Mentor for a Regents' Scholar (Elizabeth Patrick)

TURNER, T.F.

Development of MSB Fishes Web Page.

Supervised accessions and cataloging of more than 100,000 specimens.

Participated in planning and monitoring MSB renovation activities at weekly construction meetings.

WAGNER, A.

Academic Appointments: External Faculty Member, The Santa Fe Institute (SFI), Santa Fe NM, 1999–present.

NSF Site Visit Rehearsal for the "STC for Fungal Genomics" at the University of Georgia, Athens GA, February.

Member, Fellows-at-large Selection Committee, SFI, Santa Fe NM, 1998-present.

Theme Coordinator for Research Program on "Evolutionary Dynamics," funded by the Keck Foundation, SFI, Santa Fe NM, 1999–present.

Site visit to Seattle, WA, with a delegation of SFI researchers as part of a program to establish research collaborations between SFI and the Fred Hutchinson Cancer Center, Seattle WA, April.

WERNER-WASHBURNE, M.

Interim Director, Southwest Genomics and Biotechnology Alliance, http://www.sandia.gov/swgaba/

VII. ADVANCED STUDY AND NEW SCHOLASTIC HONORS. FELLOWSHIPS. ETC.

BROWN, J.H.

UNM Annual Research Lecturer, 1999

CHARNOV, E.L.

MacArthur Fellow, 1997-02

GOSZ, J.R.

Twentieth Century Distinguished Service Award, Ninth Lukacs Symposium, Society for Statistics, Ecology and Environment.

MOLLES, M.C., JR.

Named to the Potter Chair of Plant Ecology in the UNM Department of Biology.

National Center for Ecological Analysis and Synthesis Working Group Member, Scientific Evidence Project, 1999–2001, University of California, Santa Barbara CA.

SNELL, H.L.

Re-assignment to the Charles Darwin Research Station (CDRS), in Galápagos Islands, Ecuador, as Program Leader for Vertebrate Restoration Ecology and Ecological Monitoring under collaborative agreement between Biology Department and the CDRS.

VIII. SABBATICALS, LEAVES OF ABSENCE, SUMMER TEACHING ELSEWHERE, TRAVEL, ETC., DURING THE PERIOD.

BROWN, J.H.

Fall: UNM Faculty Sabbatical

DUSZYNSKI, D.W.

Presented a Workshop on the Biology and Identification of Coccidian Parasites of Wild and Domestic Animals: Departamento de Zootecnía, Universidade Estadual Paulista, Ilha Solteira/SP, Brazil, August.

Traveled to the following places on some aspect of teaching, research or professional service in 1999:

- > Belém, Rio de Janeiro, Sao Paulo & Ilha Solteria, Brazil (research, teaching)
- > Belize, Central America (teaching)
- Halifax, Nova Scotia (service)
- Lake Texoma, OK (research)
- Monterey, CA (research)
- > Reykjavik, Iceland (research)
- San Jose, Costa Rica (service)
- San Juan, Puerto Rico (service)

KODRIC-BROWN, A.

Fall: Sabbatical leave to National Center for Ecological Analysis and Synthesis, NCEAS, University of California–Santa Barbara.

LOKER, E.S.

On sabbatical, starting in Fall Semester. My major goals for the sabbatical are to work on writing a book to be tentatively entitled *Parasites: The Biology of Infectious Organisms*. This process is well-underway.

I also have spent considerable time initiating activities associated with two new grants, including hiring of two post-does and undertaking collection trips associated with the projects.

Travel:

- > Cuba, June 21-28, to collect snails with the help of Cuban colleagues.
- >> Brazil, August 1-14, to collect snails and parasites with help of Brazilian colleagues in Belo Horizonte and Rio de Taniero.
- > Brazil, November 27-December 10, to collect snails and parasites near Recife, Brazil, to consult with colleagues at FIOCRUZ in Rio de Janiero, and to attend scientific meeting.

LOWREY, T.K.

Biol. 461, Introduction to Tropical Biology, class field trip, Belize, Central America, March.

MARSHALL, D.L.

Fall: Sabbatical at the University of Colorado in Boulder, CO.

MILNE, B.T.

Fall: Sabbatical, University of Colorado, Institute of Arctic and Alpine Research, Boulder CO.

MOLLES, M.C., JR.

Developed and taught summer course in tropical forest ecology (Biol. 407, Bosque Biology) in Costa Rica.

NATVIG. D.O.

Spring: Sabbatical (in residence at UNM).

NELSON, M.A.

Fall: Sabbatical, Fall 1998-Spring 1999 (in residence at UNM).

THORNHILL, R.

Spring: Sabbatical leave for travel and research in the West Indies.

TURNER, T.F.

Traveled to Venezuela January 1-18, 1999 to conduct field component of a population genetic study of migratory fishes in the Rio Orinoco Basin, funded by the National Geographic Society.

WERNER-WASHBURNE, M.

Leave of Absence September 1998–September 1999; Program director for Microbial Genetics, National Science Foundation. Awarded outstanding program officer award for MCB Division, nominated for NSF Director's award, and received a special merit award from Rita Colwell, Director of NSE.

IX. PUBLIC SERVICE.

ALTENBACH, J.S.

Advisor to the City of Albuquerque on the Bat Habitat Project in the Montaño Bridge.

CRIPPS, R.M.

TV interview for Muscular Dystrophy Association Telethon, August 1999

Telephone conversations with school students and teachers concerning genetics, Cleveland Middle School [Didi Acosta, teacher], Albuquerque Academy, and Roosevelt Middle School.

DAHM, C.N.

Science Judge, Mountain View Middle School, February 4.

LI. B.-L.

The N.M. High School Regional Supercomputing Challenge

MARSHALL, D.L.

Local arangements, Expanding Your Horizons Conference, March

Lab demo and tours for senior elementary class, Escuela del Sol, March

NELSON, M.A.

Lead Judge for the 1999 National Native American Science & Engineering Fair, March 4-6.

Court Appointed Special Advocate (addressing child abuse and neglect).

Panel member for the Student Endocrinology Workshop, UNM Medical School, September 17-18.

THORNHILL, R.

Training two high school students in my laboratory.

WERNER-WASHBURNE, M.

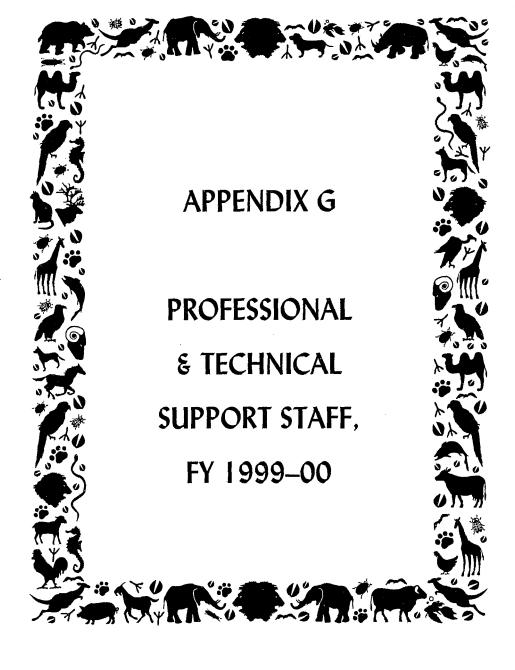
Work at NSF. I contributed to positioning NSF in the area of microbial genomics (funding four large proposals in this area) and represented NSF at numerous meetings at NIH, TIGR and elsewhere. I received two awards from NSF for this work.

I helped the State of Alaska EPSCoR committee and faculty participants develop a proposal for

368

genomic research through a visit in August 1999, review of a proposal, and another review visit in 2000, organized by AAAS.

Wrote and developed document for UNM Federal Priorities 2000.



BIOLOGY DEPARTMENT PROFESSIONAL & TECHNICAL SUPPORT STAFF (Excluding Temporary/On-Call Personnel) FY 1999-2000

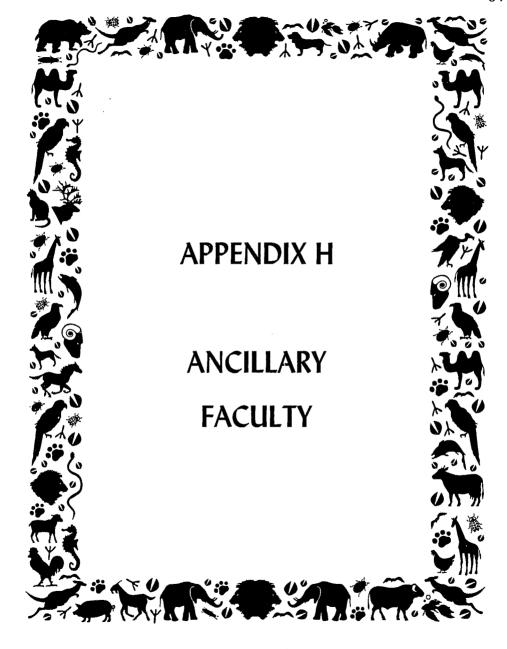
EMPLOYEE	TITLE	GRANT P.I.	EMPLOYMENT DATES
ADEMA, COENRAAD	SR. RESEARCH SCIENTIST I	LOKER, E	5/1/93-7/31/01
ATENCIO, LUPE	ACCOUNTANT!		6/22/99-12/31/49
AVRITT, JOY	RESEARCH TECH/LIFE SCIENCES	MARSHALL, D	8/1/94-12/31/00
BAKER, MICHELLE	POSTDOCTORAL FELLOW	MILLER, R	1/1/99-04/30/01
BARNHART, DENNIS	SUPPLY/STOCK CLERK		12/13/94-12/31/49
BLANKMAN, DAVID	DATABASE ADMINISTRATOR	WAIDE, R	04/24/00-08/31/01
BOSTON, PENELOPE	RESEARCH ASSOCIATE PROFESSOR	DAHM, C	10/1/98-9/30/00
BOUCHER, RAYMOND	RESEARCH TECH/LIFE SCIENCES	BARTON, L	4/6/92-12/31/49
BRANDENBURG, WILLIAM	FIELD RESEARCH TECH/LIFE SCI	SNYDER, A	3/16/98-3/15/01
BRANDT, CAROL	PROGRAM COORDINATOR	YATES, T	4/4/94-6/30/01
CHAUVIN, YVONNE	FIELD RESEARCH TECH/LIFE SCI	MEHLHOP, P	2/20/97-9/30/00
CLEVERLY, JAMES	POSTDOCTORAL FELLOW	MILNE, B	10/20/98-9/30/00
COLINA, ANA	POSTDOCTORAL FELLOW	WERNER-WASHBURNE, M	4/12/99-12/31/00
CONTOS, LINDA	VETERINARIAN	YATES, T	7/1/98-12/31/00
COUCH, LEE	RESEARCH SCIENTIST III	YATES, T	7/1/98-8/31/00
COX, JOHN	SUPV, SHOP		4/19/98-12/31/49
CRAIG, JOHN	PROGRAMMER ANALYST I	PARMENTER, R	8/10/92-10/14/00
DAHRINGER, RICHARD	USER SUPPORT ANALYST III	WAIDE, R	8/9/99-2/28/01
DAVIS, NANCY	SYSTEM ADMINISTRATOR		3/6/00-12/31/49
DEWITT, JOHN	COORD, RESEARCH	PARMENTER, R	7/1/92-6/30/01
DRAGOO, JERRY	RESEARCH ASSISTANT PROFESSOR	YATES, T	12/1/95-7/31/01
DUNNUM, JONATHAN	FIELD RESEARCH ASSOC/BIOL SCI	YATES, T	10/15/94-9/29/00
DVORACHEK, WILLIAM	POSTDOCTORAL FELLOW	NATVIG, D	3/1/00-5/31/01
EASTMAN, JOSEPH	POSTDOCTORAL FELLOW	WAIDE, R	11/1/99-9/30/00
EDDINS, OWEN	ANALYST/PROGRAMMER III	BRUNT, J	7/10/00-8/31/01
FRANCIS, JOYCE	POSTDOCTORAL FELLOW	PARMENTER, R	11/16/98-9/30/00
FRANK, BRIAN	FIELD RESEARCH ASSOC/BIOL SCI	YATES, T	2/16/98-9/29/00
FREEHLING, MICHAEL	SR RESEARCH TECH/LIFE SCI.	MEHLHOP, P	4/22/96-9/7/00
FRENCH, CHRISTINE	ECOL RES NETWORK CONSULTANT	WAIDE, R	12/1/96-9/30/00
FRIGGENS, MICHAEL	FIELD RESEARCH ASSOC/BIOL SCI	PARMENTER, R	4/1/95-10/14/00
FUGE, EDWINA	RESEARCH ASSISTANT PROFESSOR	WERNER-WASHBURNE, M	4/1/93-9/30/00

<u>EMPLOYEE</u>	<u>TITLE</u>	GRANT P.I.	EMPLOYMENT DATES
GALLEGOS, MELISSA	ADMINISTRATIVE ASSISTANT II		9/29/99-12/31/49
GANNON, WILLIAM	SR. COLLECTION MANAGER	YATES, T	4/14/86-12/31/49
GARCIA, JOSLYN	ADMINISTRATIVE ASSISTANT I	PARMENTER, R	1/2/96-12/31/49
GEGICK, PATRICIA	RESEARCH TECH/LIFE SCIENCES	MARSHALL, D	4/16/94-8/31/01
GILLOOLY, JAMES	POSTDOCTORAL FELLOW	BROWN, J	5/15/00-5/14/01
GOTTLIEB, SARA	DATA MANAGER	SNYDER, A	10/12/98-9/30/00
GRIEGO, PAMELA	ADMINISTRATIVE ASSISTANT III	WAIDE, R	6/5/00-2/28/01
GURULE, FRANK	LAB ANIMAL TECH	YATES, T	4/5/93-12/31/49
HERTEL, LYNN	RESEARCH SCIENTIST III	LOKER, E	8/16/86-11/30/00
JOHNSON, KRISTINE	RESEARCH ASSOCIATE PROFESSOR	MEHLHOP, P	5/1/96-6/30/01
KELLEY, THERESA	ACCOUNTANT III		10/14/97-12/31/49
KENT, VIVIAN	COORDINATOR, GRADUATE PROGRAM		3/5/90-12/31/49
KOONTZ, TERRI	FIELD RESEARCH ASSOC/BIOL SCI	PARMENTER, R	1/24/00-1/31/01
KUBLER, SHARON	DEPARTMENT ADMINISTRATOR III		1/11/88-12/31/49
LIGHTFOOT, DAVID	SR. RESEARCH SCIENTIST I	PARMENTER, R	2/1/92-10/31/00
LIN, ZHEN-SHAN	POSTDOCTORAL FELLOW	LI, L	2/1/00-10/31/00
LOVATO, TYANNA	RESEARCH TECH/LIFE SCI	CRIPPS, R	3/18/99-12/31/00
MARTENS, SCOTT	RESEARCH ASSOCIATE PROFESSOR	PARMENTER, R	6/1/97-10/14/00
MILFORD, ELIZABETH	RESARCH SCIENTIST I	MULDAVIN, E	2/2/98-1/30/01
MOORE, DOUGLAS	RESEARCH SCIENTIST II	PARMENTER, R	7/1/96-1/31/00
MORGAN, JESSICA	POSTDOCTORAL FELLOW	LOKER, E	1/13/00-3/31/01
MULDAVIN, ESTEBAN	RESEARCH ASSOCIATE PROFESSOR	MEHLHOP, P	9/13/93-6/30/00
MYGATT, JANE	COLLECTION MGR.	LOWREY, T	7/1/89-12/31/49
NEVILLE, TERI	GIS ANALYST	MEHLHOP, P	1/6/97-9/30/00
PARMENTER, CHERL	FIELD RESEARCH ASSOC/BIOL SCI	YATES, T	10/14/94-9/29/00
PARMENTER, ROBERT	SR. PROGRAM MANAGER	YATES, T	8/1/89-6/30/00
PEREZ-CASTRO, ANA	RESEARCH ASSISTANT PROFESSOR	VOGEL, K	3/25/96-12/31/00
POLECHLA, PAUL	FIELD RESEARCH ASSOC/BIOL SCI	YATES, T	9/30/96-05/14/01
RESTREPO, CARLA	RESEARCH ASSISTANT PROFESSOR	MILNE, B	9/19/97-12/31/00
RICCI, ROY	SUPV., ANIMAL RES. FACILITY	YATES,T	7/7/81-12/31/49
RICE, ANNE	TECHNICAL WRITER		8/1/90-12/31/49
ROSENBERG, GEORGE	RESEARCH SCIENTIST II	MILLER, R	3/27/95-12/31/49
RUEDAS, LUIS	RESEARCH ASSISTANT PROFESSOR	YATES, T	7/1/96-1/31/01
SAENZ, GREGORY	POSTDOCTORAL FELLOW	NATVIG, D	9/2/97-8/31/00
SANTILLANES, RENEE	ADMINISTRATIVE ASSISTANT II		10/11/95-12/31/49

EMPLOYEE	TITLE	GRANT P.I.	EMPLOYMENT DATES
SHIVELY, LESLIE	EDITORIAL TECH	BROWN, J	9/3/98-8/31/01
SHORE, GREGORY	MGR,GEOGRAPHIC INFO SVCS	PARMENTER, R	2/18/91-10/14/00
SNYDER, ALEXANDRA	COLLECTION MGR.	YATES, T	12/1/92-6/30/00
SPROTT, PATRICIA	TECHNICAL WRITER	WAIDE, R	1/1/97-2/28/01
THIBAULT, JAMES	FIELD RESEARCH TECH/LIFE SCIENCES	DAHM, C	11/12/98-2/14/01
THOMAS, CHRISTOPHER	FIELD RESEARCH TECH/LIFE SCIENCES	DAHM,C	4/17/00-10/14/00
TINNIN, DAVID	FIELD RESEARCH ASSOC/BIOL SCI	YATES, T	12/1/97-7/31/01
VANDERBILT, KRISTIN	POSTDOCTORAL FELLOW	GOSZ, J	4/17/00-10/14/00
VARNEDOE, ELIZABETH	ADMINISTRATIVE ASSISTANT III	MEHLHOP, P	5/11/00-6/30/01
WELLS, JAIME	FIELD RESEARCH ASSOCIATE/BIOL SCI	YATES, T	3/6/00-5/14/01
WETHERILL, KAREN	FIELD RESEARCH ASSOCIATE/BIOL SCI	PARMENTER, R	2/7/00-1/31/01
WHITE, MARSHALL	GRAPHIC DESIGNER	WAIDE, R	2/29/00-2/28/01
WYSE, LAURA	ADMINISTRATIVE ASSISTANT III		6/1/99-12/31/49
ZHANG, SI-MING	POSTDOCTORAL FELLOW	LI, L	1/13/00-11/30/00

BIOLOGY DEPARTMENT ON-CALL AND TEMPORARY STAFF FY 99-00

EMPLOYEE	TITLE	GRANT PI
BERCKMAN, SARAH	FIELD RESEARCH ASSISTANT ON-CALL	PARMENTER
BROWN, JENNIFER	RESEARCH TECH LIFE SCIENCES -TEMP	LOKER,S
CHAVEZ, CHRISTINA	FIELD RESEARCH ASSISTANT	YATES,T
COHEN, ADAM	FIELD RESEARCH ASSISTANT - ON CALL	SNYDER,L
COPELIN, CRAIG	MEDICAL LAB TECHNICIAN	THORNHILL,R
DUDLEY, ROBERT	FIELD RESEARCH ASSISTANT ON CALL	SNYDER,L
ELLIS, LISA	DATA ANALYST - TEMPORARY	MOLLES,M
FARRINGTON, MICHAEL	FIELD RESEARCH ASSISTANT ON CALL	SNYDER,L
GIBSON, DON	FIELD RESEARCH ASSISTANT ON CALL	SNYDER,L
GOSZ, MARY JANE	FIELD RESEARCH ASST ON-CALL	PARMENTER
HANSEN, SUE	SUMMER HELPER	SULLIVAN
HAYMOND, SHAUNA	FIELD RESEARCH ASSISTANT	YATES,T
HUNTER, ANDREA	FIELD RESEARCH ASSISTANT	NORTHUP
LIN, JOHN	FIELD RESEARCH ASST ON-CALL	PARMENTER
LOCKNER, DAVID	FIELD RESEARCH ASSISTANT	YATES,T
MARSHALL, MICHAEL	FIELD RESEARCH ASSISTANT	DAHM,C
MEINECKE, TODD	FIELD RESEARCH ASSISTANT	YATES,T
OLIVA, JON-PAUL	FIELD RESEARCH ASSISTANT	YATES,T
PLUNKETT, RICHARD	RESEARCH TECH/LIFE SCIENCES	BARTON,L
SCORE, KIMBERLY	FIELD RESEARCH ASST ON-CALL	PARMENTER
WALTERS, JOSHUA	FIELD RESEARCH ASSISTANT ON CALL	SNYDER,L
WEGENER, CHRISTY	FIELD RESEARCH ASST ON-CALL	PARMENTER
WOLFE, JANET	FIELD RESEARCH ASST ON-CALL	PARMENTER



-

DEPARTMENT OF BIOLOGY ANCILLARY FACULTY FY 1999-00

JOINT APPOINTMENTS (with other departments or areas)

Sarah Allen, Assoc. Prof., Internal Medicine Brian Hjelle, Assoc. Prof., Dept. of Medicine Frederick Koster, Prof., Dept. of Medicine Miriam Roman, Asst. Prof., Valencia Campus Sherry Rogers, Assoc. Prof of Anatomy Henry Shapiro, Assoc. Prof. Of Computer Sci. Ursula Shepherd, Asst. Prof., Univ. Honors Program John Trotter, Prof., Anatomy

ADJUNCTS (not on UNM payroll):

Richard Aguilar, Forest Service, Adj. Asst. Prof.

Craig R. Baird, Adj. Prof.

Susan M. Barns, Res. Asst. Prof.

David Bleakley, Assoc.

Michael Bogan, Res. Prof.

David Breshears, Res. Asst. Prof.

Ralph T. Bryan, Adj. Res. Prof.

Rudy Bueno, Jr., Adj. Res. Asst. Prof.

Richard A. Byles, USFWS, Adj., Asst. Prof.

Jack L. Carter, The Colorado College, Associate

Jean-Luc Cartron, Res. Asst. Prof.

David M. Chapin, Univ. of Washington, Res. Asst. Prof.

David M. Chapin, Univ. of Washir James Cheek, Res. Asst. Prof.

James Childs, Adj. Assoc. Prof.

Roger Conant, UNM, Adj. Prof.

John O. Corliss, UNM, Adj. Prof.

David Cowley, North Carolina State, Adj. Asst. Prof.

Nancy Cox, Associate

Clifford S. Crawford, Res. Prof.

Harry Crissman, Los Alamos Natonal Labs, Adj. Prof.

David C. Deardorff, Adj. Prof.

Robert Dickerman, Res. Assoc. Prof.

Christopher A. Fields, Res. Prof.

Lee Fitzgerald, World Wildlife Fund, Adj. Asst. Prof.

Deborah Finch, Res. Asst. Prof.

Richard Forbes, Res. Prof.

Jacob Frenkel, Adi. Prof.

Jennifer Frey, Res. Asst. Prof.

Vincent Gutschick, NMSU, Res. Prof.

Charles Gwo, Res. Asst. Prof.

David Hafner, NMMNH, Res. Assoc. Prof. &

Visiting Scholar

Robert Harrison, Res. Asst. Prof.

Bill Hevron, Associate

Davis Hsi, NMSU, Adj. Prof.

John P. Hubbard, NMG&F, Adj. Assoc. Prof.

Mary Stuever, Assoc.

Eleonara Trotter, UNM, Res. Asst. Prof.

Randy Jennings, Adj. Asst. Prof.

Kathryn M. Jacobson, Res. Asst. Prof.

Peter Jacobson, Res. Asst. Prof.

Karl Johnson, Res. Prof.

Mahmood Kassam, Ryerson University (Canada),

Res. Prof.

Donald W. Kaufman, Res. Prof.

Glennis A. Kaufman, Res. Asst. Prof.

Claude L. Keenan, Adj. Res. Assoc. Prof.

Timothy Keitt, Visiting Asst. Prof.

Jeffrey Kelly, USDA, Res. Asst.

William J. Kuipers, Adj. Asst. Prof.

Samuel Kunkle, Adj. Prof.

Juanita Ladyman, Adj. Assoc. Prof.

James Lewis, Res. Prof.

Ronald D. Ley, Lovelace foundation, Adj. Prof.

Karen Lightfoot, Associate

John E. Lobdell, Univ. of Alaska, Adj. Assoc. Prof.

Lawrence M. Mallory, Res. Assoc. Prof.

Patricia Mehlhop, Nature Conservancy, Adj. Asst. Prof.

Gary S. Morgan, Associate

Paul J. Polechia, Res. Assoc. Prof.

Deborah U. Potter, Res. Asst. Prof.

Arian Pregenzer, SNL, Res. Prof.

Eric M. Rominger. Res. Asst. Prof.

J. Rowland, Adi, Assoc, Prof.

Kenneth Schoenly, Adi, Asst. Prof.

Kenneth Schoenly, Adj. Asst. Prof

Daniel Shaw, Associate

Michael E. Seidel, Res. Prof.

Gary L. Simpson, Res. Prof.

Robert Sivinski, Associate

Bruno Sobral, Adi, Asst. Prof.

Mohna Sopori, Lovelace Foundation, Adj. Prof.

Peter B. Stacey, Res. Prof.

Florence Stein, Adj. Res. Asst. Prof.

George Stevens, Adi. Assoc.

Paul J. Watson, UNM, Res. Asst. Prof.

John Weins, Adj. Distinguished Prof.

John Ubelaker, Southern University-Dallas, Adj. Prof.

Roby Wallace, Nature Conservancy, Associate

Marcus I, Yaffee, Res. Assoc. Prof.

RESEARCH OR VISITING STATUS (usually on UNM payroll):

Coenraad Adema, Res. Asst. Prof. Penelope Boston, Res. Assoc. Prof. Sandra Brantley, Res. Asst. Prof. James Brunt, Res. Asst. Prof. Debra Coffin, Res. Asst. Prof. Lee Couch, Res. Assoc. Charles Curtin, Res. Asst. Prof. (P-T) Murray Dailey, Adj. Prof. Jerry Dragoo, Res. Asst. Prof. William Dunmire, Associate Michael Folsom, Res. Asst. Prof. (P-T) K. (Wendy) Fuge, Res. Asst. Prof. Deborah Goldberg, Univ. of Michigan, Res. Assoc. Prof. Gregory Glass, Res. Assoc. Prof. Lynn Hertel, Res. Assoc. Kristine Johnson, Res. Assoc. Prof. David Lightfoot, Res. Assoc. Prof. (P-T) Scott Martens, Res. Assoc. Prof.

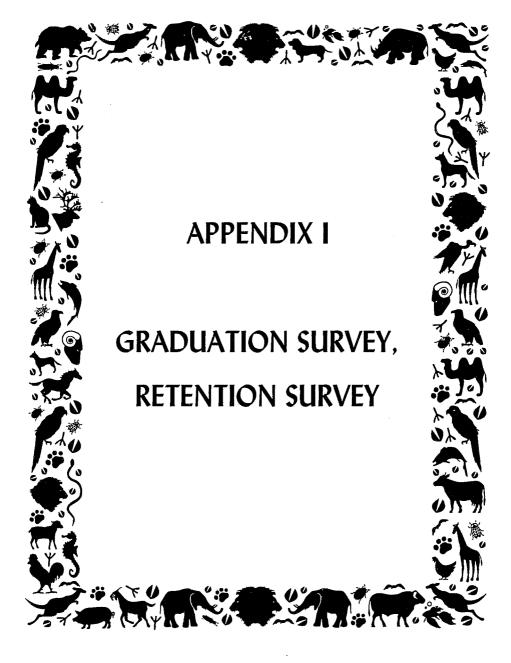
Gary Miller, Visiting Asst. Prof. Gerald Mkoji, Res. Assoc. Esteban Muldavin, Res. Assoc. Prof. Diana Northup, UNM Centennial Library, Res. Assoc. Robert Parmenter, Res. Assoc. Prof. Vicki Peck, Visiting Asst, Prof. Ana V. Perez, Res. Asst. Prof. Carla Restrepo, Res. Asst. Prof. Elizabeth Roberts, Visiting Assoc. Prof. Luis Ruedas, Res. Asst. Prof. Felisa Smith, Adj. Asst. Prof. Kenneth Sylvester, Visiting Asst. Prof. Scott Snyder, Post-doctoral Fellow John Vande Castle, Res. Assoc. Prof. Robert Walde, Res. Prof. Carleton White, Res. Asst. Prof. Patricia Wilber, Adj. Asst. Prof.

EMERTI

Oswald Baca
Earl W. Bourne
Clifford Crawford
William Degenhardt
Howard Dittmer
James S. Findley
Sector Johnson
William W. Johnson

Paul Kerkof William Martin

NL Riedesel





The University of New Mexico

Department of Biology 167 Castetter Hall Albuquerque, NM 87131-1091 (505) 277-3411

Memorandum

To: Kathryn Vogel, Biology Department Chair

From: Carol Brandt, Program Coordinator - Biology

Date: 8/15/00

Re: Results of the 1999-2000 Graduation Survey

Attached you will find the results of the graduation survey that I administer when students complete their 90 credit hour degree check. The results aren't much different from last year. The number of students who have experienced advising within the department continues to grow (90%)!

For me as an advisor, the important details are:

- Two-thirds of our students have had significant amount of class work transferred from other universities.
- 2. Half of the undergraduates have had a research experience or were planning to undertake research before graduating.
- 3. Very few students participate in Research Day.
- 4. Two-thirds of our students are using the Departmental email servers.

I'll be taking some of these results to Wanda Martin, the new Associate Academic Dean in A&S. We really need to have more systematic ways of getting our transfer students advised.

Is there something we can do to encourage undergrads to participate more in Research Day? Even the attendance is very low.

Graduation Survey 1999-2000

A total of 175 students completed this survey when they applied for their degree at 90 credit hours. Please keep in mind that some of these students graduated during the year, while others still have more credits to complete within their degree.

1.	How m	any years will you have spe	nt as an u	ndergrad	luate by t	he time v	ou gradu	ate?	
	a.	4.0-4.5 years	73	42%			o- 6		
	b.	5 years	50	29%					
	c.	6 years	26	15%					
	d.	7 years	12	7%					
	е.	more than 7 years	14	8%					
	e.	more than 7 years	14	070					
2.		r complete any college cours M branch campuses)?	sework a	t other ur	niversities	or comn	unity co	lleges (i	ncluding
			110	66%					
	a.	Yes No	115 60	34%					
	ь.	NO	00	34%					
3,		nswered yes to #2 above, he							r at
	another	school before you transferre					ised on N	√=115)	
	a.	One or more summer sessi	ons only		20	17%			
	ь.	One to two semesters			30	26%			
	c.	Three to four semesters			32	28%			
	d.	More than four semesters			29	33%			
4.	Did you	participate in a biologically	relevan	t research	n project	in the lab	or field	that was	not a part
-		M class (examples: research							
		honors, or programs at othe			,	•	J. ,	,	
	a.	Yes	55	31%					
	b.	No	93	53%					
	c.	I plan to participate in rese	arch this	next yea	г.	27	15%		
5	If you d	id not participate in a resear	ch projec	rt what i	vere the r	eason(s\7	(Based	on N=93	1)
٥.	a.	I did not know about the o			25	27%	(Dasea	01111 75	,
	ъ. Ъ.	I was not interested in doir			17	18%			
	c.	I did not have time to do re		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	55	59%			
	d.	I applied but was never acc		to a resea				6	6%
	u. e.	I wanted to, but needed to						31	33%
		•		•	•				
6.	•	receive any advising within			artment?				
	a.	Yes	158	90%					
	ь.	No	17	10%					
7.	If you re	plied yes to #6 above, how	would yo	ou rate yo	our advisi	ing from t	he Depa	rtment?	
	a.	Excellent	72	45%					
	Ъ.	Very good	72	45%					
	c.	Average	14	9%					
	d.	Poor	1	.6%					
8.		take advantage of any of th				activities	?		
	a.	Attend biology club meetir		27	15%				
	ь.	Attend Departmental semin		46	26%				
	c.	Use the Biology Departme	nt email :		114	65%			
	d.	Attend Research Day?		53	30%				
	e.	Participate in Research Day	y?	13	7%				

9. What are you going to do in the year following graduation?

a.	Begin employment	31	18%
b.	Go to graduate school	53	30%
c.	Go to Medical school	42	24%
d.	Go to a Professional School	23	13%
e.	Relax or travel	12	7%
f.	Look for a job, not in biology	6	3%
0	Undecided	41	23%

Below are samples of the responses to the open-ended questions on the survey:

What do you like about advising you received in the Biology Department?

Willingness to listen

Sympathetic, straightforward

Easy to understand

Clear and concise

I really enjoyed the bio-club email server because there was lots of great information.

Made me feel confident that I was taking the right classes.

Honest realistic advice. Helps to put everything into perspective.

Very approachable

Taking time to listen instead of getting you out the door.

Clarity

Very knowledgeable

Accurate, friendly, helpful

Willing to take as much time as needed to answer questions

Always available when I needed advising

Very straightforward with no surprises

Always on the ball about job postings, etc.

The opportunities and the reality check

The packet with all the courses listed was very helpful

The advisor was interested in my work and progress

They encourage research and future preparation

People friendly

They care about the students' progress

Are highly knowledgeable about upcoming positions that can enhance work experience in a particular field.

They make sure to keep you on top of things so you don't fall behind.

Provided final directions to graduation and application to medical school.

The listsery was invaluable to me.

What could the Biology Department do to improve advising for undergraduates?

Have more office hours.

Make students aware early on the importance of advising.

Mandatory advising within the department

More advisors

More advising hours

Greater accessibility

More stuff on graduate schools

Advertise that four advisors exist and their hours

Encourage students to visit more frequently

Have our transcripts available on the computer for the advisors.

Careers mentioned in Ouestion #9:

Sales - Pharmaceuticals

Medical Lab Technician

Osteopathic Physician

Pharmacist Dentist Educator High School Biology Teacher Veterinarian Naturalist or Ecologist Massage Therapy **Environmental Law** Physician Assistant Physician Biology Research Technician Physical Therapy Optometrist Military Pilot Biotechnologist Nursing Nutritionist **Botanical Field Research Assistant** Marine Biologist Wildlife Biologist **Genetic Counseling EMT** Chiropractor GIS data coordinator Occupational Therapist Scientific Writer Fire Ecologist Landscape Designer Zookeeper Technical Writer

Graduate Programs mentioned in Question #9:

Microbiology
Ecology/Evolutionary Biology
Biogeoecology
Biomedical Sciences
Conservation
Molecular Biology
Toxicology
Public Health
Genetics
Immunology
MBA
Restoration Ecology
Forensic Science
Ethnobotany
Pathology

Insights into the Retention and Persistence of Science Majors: An Example from the Biology Department at UNM

Carol Brandt, Amy Marion, and Vickie Peck

This is a summary of a presentation made at the New Mexico Higher Education Persistence/Retention

Conference, February 24 in Las Cruces.

- In this study, we look students who took Biol 121L in the Fall of 1997 and their persistence at UNM, two years later (Fall 1999).
 - Our study coincides with a campus-wide retention effort spearheaded by Peter White.
 - How do our science majors negotiate the transition from high school to college courses?
 - What happens if they miss that first crucial turn towards their intended major?

II. Our Sample:

- Of 744 students who took Biol 121L in Fall 1997, a total of 621 complete the course.
- We randomly chose 30 students from each grade level (A, B, C, D, F, and W). Our sample consists of 180 students.
- We looked at their student records through the UNM Student Information System available to Departmental Advisors.

III. Variables Examined:

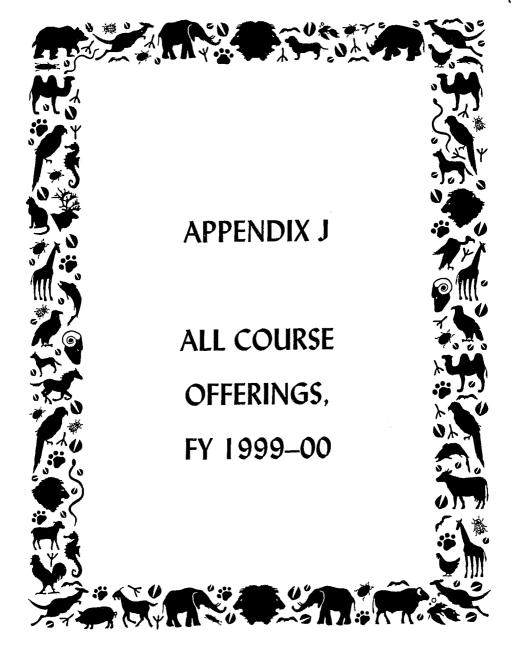
- · Ethnicity and Gender
- ACT Scores
- High School GPA (Academic Units)
- Number of High School Academic Units
- Completion of College Algebra (Math 121)
- UNM GPA, total credit hours, and biology credits
- Number of failing grades, Ws, and repeats

IV. Results:

- Students who receive a D or F in Biol 121L are failing all their classes at UNM, and do not
 persist. Most are on academic suspension.
- Students who had a HS GPA <2.9 have a lower chance of passing Biol 121L. HS Grade Inflation! Note, UNM currently accepts students with a GPA of 2.25.
- Students who had taken only one lab science in HS, had a lower chance of succeeding at Biol 121L. This suggests a lack of academic preparedness.
- Students who had not taken Math 121L (college algebra) or its equivalent have a lower chance of success in Biol 121L. Again, this refers to academic preparedness.

V. Insights for Immediate Action:

- Consider a math prerequisite? Should we require Math 121 in the next catalogue?
- Engage High School instructors on the issue of student preparedness.
- Bring in Departmental advising during Freshman orientation.
- Need for coordination among introductory math and science courses.



COURSE OFFERINGS & SEMESTER CREDIT HOURS, FY 1999-00

SOMIV	<u>ER 1999</u>	No. of	Total No.		Total
<u>No.</u>	Course Title	Sections	<u>Students</u>	<u>Cr.</u>	<u>SCH</u>
110	Biology Non-Majors	1	45	3	135
121	Principles of Biology	1	54	4	216
121L	Principles of Biology Lab	3	53		
122	Principles of Biology	1	28	4	112
122L	Principles of Biology Lab	2	28		
221	Introductory Genetics	1	68	3	204
400	Senior Honors Thesis	2	2	v	6
402	Special Topics	2	8	3	24
407	Bosque Biology	1	7	3	21
499	Undergraduate Problems	7	10	v	27
502	ST/Bosque Internship	1	2	3	6
551	Graduate Problems	9	10	V	28
599	Masters Thesis	4	4	V	10
651	Advanced Field Biology	1	1	v	4
699	Dissertation	6	7	V	24
	TOTAL, SUMMER 1999	42	327		817

FALL	<u>1999</u>				
		No. of	Total No.		Total
<u>No.</u>	Course Title	<u>Sections</u>	<u>Students</u>	<u>Cr.</u>	<u>SCH</u>
110	Dialam Man Malam	,	120	3	390
110	Biology Non-Majors	1	130	3	
112L	Biology Lab for Non-Majors	2	4 7	1	47
121	Principles of Biology	2	714	4	2,856
121L	Principles of Biology Lab	30	<i>7</i> 08		_
122	Principles of Biology	1	121	4	484
122L	Principles of Biology Lab	6	127		_
136	Human Anat & Physiol Non-Majors	1	20	3	60
219	Principles of Cell Biology	2	248	3	744
220	Cell Biology Problems	3	51	1	51
221	Introductory Genetics	2	162	3	486
222	Introductory Genetics Problems	4	50	1	50
237	Human Anatomy & Phys I	2	340	3	1,020
238	Human Anatomy & Phys II	1	100	3	300
239	Microbiology for Health Sciences	1	94	4	376

<u>No.</u>	Course Title	No. of Sections	Total No. <u>Students</u>	<u>Cr.</u>	Total <u>SCH</u>
239L	Microbiology for Health Sci Lab	4	93	_	
247L	Anatomy & Phys Lab I	13	294	1	294
248L	Anatomy & Phys Lab II	5	92	1	92
300	Evolution	1	97	3	291
310	Principles of Ecology	1	29	4	116
310L	Principles of Ecology Lab	2	20	_	_
351	General Microbiology	1	72	3	216
352L	General Microbiology Lab	4	<i>7</i> 3	1	73
360	General Botany	1	24	4	96
360L	General Botany Lab	2	24	_	
371	Invertebrate Biology	1	24	4	96
371L	Invertebrate Biology Lab	2	23	_	
379	Conservation Biology	1	46	3	138
386	General Vertebrate Zoology	1	34	4	136
386L	General Vertebrate Zoology Lab	2	33	_	
400	Senior Honors Thesis	10	15	V	34
402	ST/Ecology Seminar	1	11	1	11
402	ST/Fungal Molecular Biology	1	3	1	3
402	ST/Environmental Biotechnology	1	3	1	3
402	ST/In Systematics	1	1	v	2
402	ST/Applied Ecology	1	4	2	8
402	ST/Plant-Micro Interactions	1	1	2	2
402	ST/Conservation Biology	1	9	1	9
402	ST/Brain & Behavior	1	24	3	72
402	ST/Systematics Discussion	1	2	1	2
402	ST/Developmental Genetics	1	2	1	2
402	ST/Conservation & Native People	1	10	1	10
402	ST/Bosque Internship	1	4	3	12
402	ST/Computational Biology	1	9	3	27
402	ST/Computational Genomics	1	5	1	5
402	ST/Biodiversity Richness	1	1	3	3
407L	Bosque Biology	1	14	3	42
416	Histology	1	39	4	156
416L	Histology Lab	2	38	-	
428	Human Heredity	1	45	3	135
429	Molecular Cell Biology I	1	114	4	456
435	Animal Physiology	1	25	4	100
435L	Animal Physiology Lab	2	26		
440	The Soil Ecosystem	1	14	4	56
440L	The Soil Ecosystem Lab	1	14	-	·

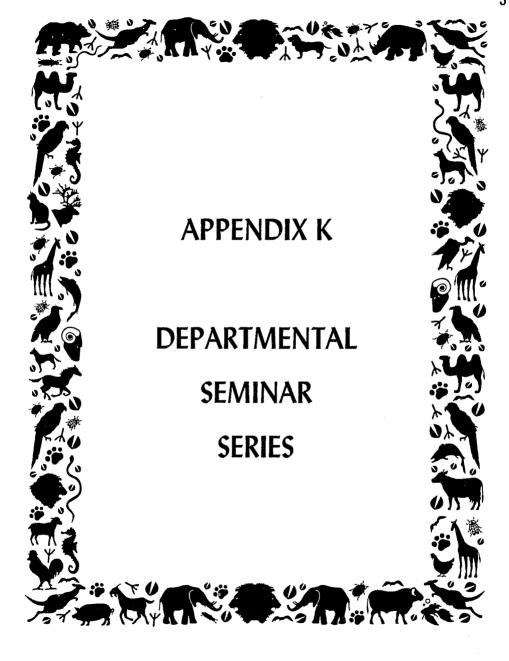
No.	Course Title	No. of Sections	Total No. <u>Students</u>	<u>Cr.</u>	Total <u>SCH</u>
446	Lab Methods in Molecular Biology	1	6	4	24
447	Prosection	1	8	3	24
451	Microbial Ecology	1	8	3	24
456	Immunology	1	92	3	276
463	Flora of New Mexico	1	31	4	124
463L	Flora of New Mexico Lab	2	30		
499	Undergraduate Problems	13	25	v	55
500	New Graduate Student Seminar	1	19	1	19
502	ST/Ecology Seminar	1	5	1	5
502	ST/Fungal Molecular Biology	1	6	1	6
502	ST/Environmental Biotechnology	1.	4	1	4
502	ST/Avian Social Systems	1	5	v	6
502	ST/In Systematics	1	6	v	9
502	ST/Immunogenetics	1	2	3	6
502	ST/Applied Ecology	1	2	2	4
502	ST/Conservation Biology	1	2	1	2
502	ST/Brain & Behavior	1	4	3	12
502	ST/Systematics Discussion	1	8	1	8
502	ST/Evolution & Ecology	1	14	1	14
502	ST/Ecological Complexity	1	11	V	11
502	ST/Developmental Genetics	1	3	1	3
502	ST/Conservation & Native People	1	1	1	1
502	ST/Bosque Internship	1	3	3	9
502	ST/Computational Biology	1	8	3	24
502	ST/Computational Genomics	1	2	1	2
507L	Bosque Biology/Lab	1	5	3	15
514	Ecosystem Studies	1	22	3	66
546	Lab Methods in Molecular Biology	1	8	4	32
551	Problems	27	46	V	120
581	Advanced Cell & Molecular Biology I	1	1	4	4
582	Advanced Cell & Molecular Biology II	1	1	4	4
599	Masters Thesis	12	43	v	46
651	Advanced Field Biology	3	4	V	20
699	Dissertation	16	29	V	197
	TOTAL, FALL 1999	<u>236</u>	<u>4,767</u>]	10,735

SPRING 2000

2000				
			_	Total
Course Title	Sections	<u>Students</u>	<u>Cr.</u>	<u>SCH</u>
D. 1 . C . 37	,		•	100
				192
				25
			4	1,228
			4	1,688
			4	520
			_	
	-			54
	1			609
Cell Biology Problems		54		54
Introductory Genetics	2	185	3	555
Introductory Genetics Problems	4	<i>7</i> 8	1	<i>7</i> 8
Human Anatomy & Phys I	1	190	3	570
Human Anatomy & Phys II	1	230	3	690
	1	81	4	324
	4	80		
	7	144	1	144
	10	195	1	195
•	1	5	1	5
	1	72	3	216
	3	<i>7</i> 1		
		21	4	84
•		21		
•			3	348
•				75
o,				176
	_		_	
<u> </u>			v	44
				8
				39
				8
				3
				16
				33
				6
				2
				24
S1/Gene Expression	1	6	1	6
	Course Title Biology for Non-majors Biology Lab for Non-majors Principles of Biology Principles of Biology Lab Principles of Biology Lab Biology for Health Rel Sci Biology for Health Rel Sci Lab Human Anatomy Physiol Non-Majors Principles of Cell Biology Cell Biology Problems Introductory Genetics Introductory Genetics Problems	Biology for Non-majors 1 Biology Lab for Non-majors 1 Principles of Biology 2 Prinicles of Biology 2 Principles of Biology 4 Biology for Health Rel Sci 4 Biology for Health Rel Sci Lab 6 Human Anatomy Physiol Non-Majors 1 Principles of Cell Biology 1 Cell Biology Problems 3 Introductory Genetics Problems 4 Human Anatomy & Phys I 1 Human Anatomy & Phys I 1 Microbiology for Health Sci 1 Anatomy & Phys Lab I 7 Anatomy & Phys Lab I 10 Human Anatomy Lab 1 General Microbiology 1 General Microbiology 1 General Botany 1 General Botany 1 General Botany 1 Conservation Biology 1 General Verte Zoology 1 General Verte Zoology 1 General Verte Zoology 1 Senior Honor Thesis 11 ST/Ecology Seminar 1 ST/Bosque Internship 1 ST/Comparative Genomics 1 ST/Physical Drug Addiction 1 ST/Isotope Ecology 1 ST/Advanced Fungal Genetics 1 ST/Restoration Ecology 1 ST/Restoration Ecology 1 ST/Restoration Ecology 1 ST/Restoration Ecology 1	Course TitleNo. of SectionsTotal No. StudentsBiology for Non-majors164Biology Lab for Non-majors125Principles of Biology2307Principles of Biology Lab13307Principles of Biology Lab20417Biology for Health Rel Sci1130Biology for Health Rel Sci Lab6130Human Anatomy Physiol Non-Majors118Principles of Cell Biology1203Cell Biology Problems354Introductory Genetics Problems478Human Anatomy & Phys I1190Human Anatomy & Phys II1230Microbiology for Health Sci181Microbiology for Health Sci Lab480Anatomy & Phys Lab I7144Anatomy & Phys Lab II10195Human Anatomy Lab15General Microbiology172General Microbiology Lab371General Botany121General Botany Lab221Human Sexuality1116Conservation Biology125General Verte Zoology144General Verte Zoology Lab244Senior Honor Thesis1115ST/Ecology Seminar18ST/Ecxual Selection18ST/Conservation Biology18ST/Comparative Genomics18ST/Sexual Selectio	Course Title No. of Sections Total No. Students Cr. Biology for Non-majors 1 64 3 Biology Lab for Non-majors 1 25 1 Principles of Biology 2 307 4 Principles of Biology Lab 13 307 — Principles of Biology Lab 20 417 — Biology for Health Rel Sci 1 130 4 Biology for Health Rel Sci 1 130 4 Biology for Health Rel Sci Lab 6 130 — Human Anatomy Physiol Non-Majors 1 18 3 Principles of Cell Biology 1 203 3 CClB Biology Problems 1 18 3 Principles of Cell Biology 1 203 3 CClB Biology Problems 1 18 3 Introductory Genetics Problems 4 78 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <

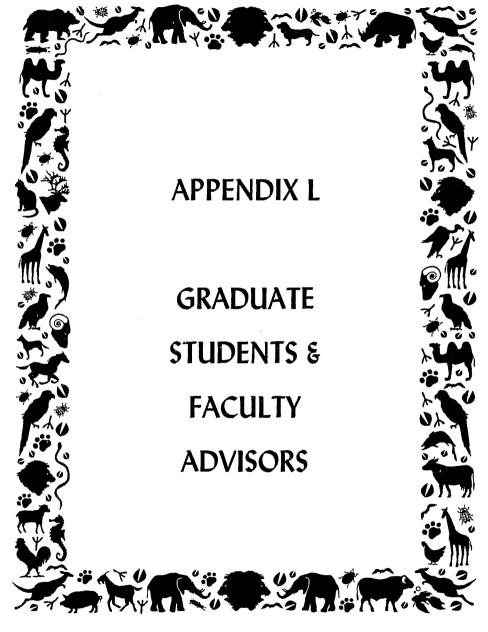
		No. of	Total No.		Total
<u>No.</u>	Course Title	<u>Sections</u>	<u>Students</u>	<u>Cr.</u>	<u>SCH</u>
		7	20	3	84
403	Ecosystem Ecology	1	28 25	3	75
425	Molecular Genetics	1	25 22	4	88
435	Animal Physiology	1		*	00
435L	Animal Physiology Lab	2	22 15	3	<u></u> 45
437	Evolutionary Genetics	1		3	15
447	Prosection	1	5	3	15 114
449	Molecular Cell Biology II	1	38	3	
450	General Virology	1	40		147
455	Ethology: Animal Behavior	1	21	3	63
456	Immunology	1	69	3	207
460	Micro Physiology	1	46	3	138
461L	Introduction to Tropical Biology	1	13	3	39
465	Sociobiology Evol Ecology	1	13	3	39
475	Desert Field Biology	1	11	5	55
478	Plant Physiology	1	20	4	80
478L	Plant Physiology Lab	2	20	-	
482L	Parasitology Lab	1	7	4	28
486	Ornithology	1	19	4	76
486L	Ornithology Lab	1	19		
494	Biogeography	1	34	3	102
495	Limnology	1	10	3	30
496L	Limnology Lab	1	6	1	6
499	Undergraduate Problems	19	45	V	102
502	ST/Ecology Seminar	1	2	1	2
502	ST/Tropical Ecology	1	1	3	3
502	ST/Bosque Internship	1	4	3	12
502	ST/Immunogenetics	1	4	V	7
502	ST/Conservation Biology	1	2	1	2
502	ST/Comparative Genomics	1	4	1	4
502	ST/Sexual Selection	1	7	2	14
502	ST/Physical Drug Addiction	1	3	3	9
502	ST/Ecological Complexity	1	14	V	18
502	ST/Isotope Ecology	1	7	1	7
502	ST/Advanced Fungal Genetics	1	2	1	2
502	ST/Restoration Ecology	1	6	3	18
502	ST/Gene Expression	1	2	1	2
502	ST/Advanced Systematics	ī	6	V	9
511	Community Ecology	ī	14	3	42
512	Population Biology	ī	6	4	24
	Molecular Biology & Evolution	1	6	3	18
522	Molecular protogy of Evolution		ŭ	-	

<u>No.</u>	Course Title	No. of <u>Sections</u>	Total No. <u>Students</u>	<u>Cr.</u>	Total <u>SCH</u>
				_	
523	Principles of Systematic Biology	1	8	3	24
537	Evolutionary Genetics	1	4	3	12
5 4 7	Adv Tech Light Microscope	1	5	4	20
549	Molecular Cell Biology II	1	5	3	15
551	Problems	21	35	V	89
565	Sociobiology Evol Ecology	1	6	3	18
575	Desert Field Biology	1	2	5	10
599	Masters Thesis	8	10	V	39
651	Advanced Field Biology	3	4	V	23
699	Dissertation	17	36	V	270
	TOTAL, SPRING 2000	<u>230</u>	<u>4,530</u>	<u>]</u>	0,330
	TOTALS, AY 1999-00	508	9,624	2	1,882



- DR. CHRISTOPHER QUINN, School of Biological Sciences, University of New South Wales, Sydney, Australia, "Phylogeny of Southern Hemisphere Conifers," September 16, 1999.
- DR. KEVIN OMLAND, Genetics Laboratory, National Zoological Park, Washington, DC, "Plumage Evolution and Speciation in Birds," September 23, 1999.
- DR. STEVEN POE, Department of Zoology, University of Texas-Austin, "The Effect of Taxonomic Sampling on Estimation of Phylogeny," September 30, 1999.
- DR. SCOTT KELLEY, Department of Molecular, Cellular & Developmental Biology, University of Colorado—Boulder, "Phylogenetic Analysis with RNA: Trees, Structure and Alignment," October 7, 1999.
- DR. KIRK O. WINEMILLER, Department of Wildlife & Fisheries Services, Texas A & M University, College Station, TX, "Effects of Seasonality and Fish Movement on Food Webs of Tropical Floodplain Rivers," November 11, 1999.
- DR. CRAIG STOCKWELL, Department of Zoology, North Dakota State University, Fargo, ND, "Evolutionary Trajectories of Recently Established Fish Populations," February 3, 2000.
- DR. JOHN HOLLAND, Professor of Computer Science & Electrical Engineering, Professor of Psychology, University of Michigan, Member, Center for Study of Complex Systems, "How Recombination Drives Evolution, or It's Building Blocks All the Way Down!", February 10, 2000.
- MR. RAY POWELL, N.M. State Commissioner of Public Lands, and MR. HARRY RELKIN, Assistant Commissioner for Community Partnerships, "Designing an Urban Ecological Field Station: The Mesa del Sol Project," February 17, 2000.
- DR. ROSEMARY KNAPP, Assistant Professor, Department of Zoology, University of Oklahoma– Norman, "Endocrine and Environmental Mediation of Alternative Male Reproductive Tactics," February 22, 2000.
- DR. BLAIR WOLF, Research Associate Professor, Department of Ecology & Evolutionary Biology, University of Arizona—Tucson, "From Heat Transfer to Nutrient Fluxes: The Physiological Ecology of Desert Birds," February 24, 2000.
- Dr. Becky Code, Associate Professor, Department of Biology, Texas Women's University— Denton, "k-Opioid Receptor Activation Modulates Intracellular Calcium Concentration in Chick Cochlear Nucleus Neurons," March 2, 2000.
- DR. STANLEY SMITH, Department of Biological Sciences, University of Nevada—Las Vegas, "Responses of a Mojave Desert Ecosystem to Elevated CO₂," March 23, 2000.
- DR. ALAN RAWLS, Department of Biology, Arizona State University, Tempe, AZ, "The Role of Paraxis in Somitogenesis: Linking Form to Function," March 30, 2000.

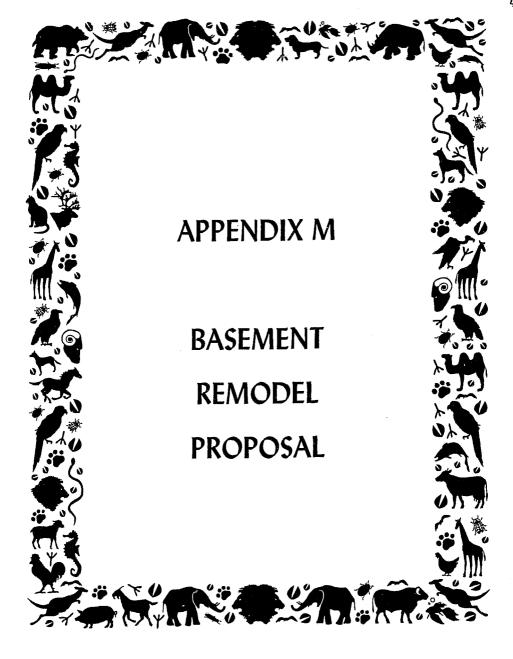
- DR. ROBERT WHITTAKER, Department of Geography, Oxford University, "Water-energy Dynamics and the 'Latitudinal' Gradients in Species Richness," April 4, 2000.
- DR. DANIEL CRAWFORD, Department of Evolution, Ecology & Organismal Biology, Ohio State University, "Plant Evolution on Oceanic Islands: Insights from Molecular Data," April 20, 2000.
- DR. ANNA-LOUISE REYSENBACH, Department of Environmental Biology, Portland State University, Portland, OR, "The Hot Microbial Gourmet Dinner at Hydrothermal Vents: H₂, CO₂, and a Pinch of O₂," April 27, 2000
- DR. ROBERT JANSEN, School of Biological Sciences, Section for Integrative Biology, University of Texas—Austin, "Origin and Evolution of Plants Endemic to the Macaronesian Archipelagos," May 4, 2000.



GRADUATE STUDENTS AND FACULTY ADVISORS 1999–2000

Student	<u>Advisor</u>	Student	<u>Advisor</u>
Allen, A.	Milne	Heilman, A.	Johnson, G.
Altamirano, M.	Snell	Hertel, L.	Loker
Andrews, P.	Thornhill	Hill, J.	Ligon
Asmundsson, I.	Duszynski	Howard, K.	Kodric-Brown
Ballantyne, F.	Brown	Howe, K.	Nelson
Barlow, P.	Lowrey	Hraber, P.	Milne/Brown
Boykin, L.	Lowrey	Hurlbert, A.e	Yates/Brown
Brown, G.	Barton	Keil, P.	Thornhill
Burt, S.M.	Yates	Kelly, K.	Cripps
Buxbaum, C.	Gosz/Dahm	Kerkhoff, A	Milne
Chen, Y.	Yates	Kim, i4.	Nelson
Chung-MacCoubrey, A.	Brown/Bogan	LaRue, W.	Kodric-Brown/
Christensen, O.	Lowrey		Charnov
Cline, K.	Thornhili	Leonard, M.	Kodric-Brown
Conant, G.	Wagner	Leonard, P.	Loker
Crowell, E.	Johnson, G.	Linderoth-Hummel, O.	Molles
Cryan, P.	Altenbach	McClellan, Y.	Gosz
Davidson, A.	Gosz	McPhee, M.	Hofmann
Decker, E.	Milne	Miska, K.	Miller
DeJong, R.	Loker	Morita, C.	Marshall
Ditto, A.	Natvig/Smith	Northup, D.	Dahm
Dolan, P.	Nelson	Parker, G.	Barton
Dunnum, J.	Yates	Parker, T.	Ligon
Earsom, S.	Snell	Parody, J.	Brown
Edwards, M.	Turner	Passell, H.	Carroll
Eichhorst, K.	Molles/Crawford	Platania, S.	Snell
Ennis, M.	Gosz	Platero, H.	Nelson
Enquist, C.	Molles	Powell, A.	Natvig
Ernest, M.	Brown	Putze, M.	Brown
Errett-Golden, A.	Werner-Wash-	Racz, G.	Yates
Effett-Golden, 71.	burne	Reynolds, J.	Lowrey
Fellows, C.	Dahm/Valett	Rosenfield, J.	Kodric-Brown
Fincher, C.	Thornhill	Runyan, N.	Crawford
Flores-Ramirez, S.	Miller	Salazar-Bravo, J.	Yates
Frazier, C.	Lowrey	Schultz, A.	Snell
Fridrick, C.	Barton	Sherwin, R.	Altenbach
Fuller, M.	Li	Shoup, S.	Lewis, P.& L.
Gaines, K.	Brown	Sias, D.	Snell
Galbraith, J.	Natvig	Smith, B.	Ligon
Garcia, A.	Yates	Smythe, T.	Stricker
Garcia, J.	Gosz	Strietelmeier, E.	Barton
Geluso, K.	Brown	Suzan, G.	Yates
Giermakowski, J.	Snell	Thibault, K.	Yates
Guzman, L.	Molles	Tull, D.	Kodric-Brown
Hall, P.	Marshall	Walker, H.	Brown
* ***** * *		1	

Student	<u>Advisor</u>
Walker, K.	Carroll
Walsh, R.	Vogel
Wang, X.	Li
Watson, M.	Altenbach
Whalen, D.	Gosz
White, E.	Brown
Yanoff, S.	Lowrey
Zhao, X.	Duszynski



THE UNIVERSITY OF NEW MEXICO MAJOR CAPITAL PROJECTS - FY 2001-2002

DESCRIPTION & JUSTIFICATION FORM

Remodel Basement of Biology Building

COLLEGE/DEPARTMENT: _	Arts and Sciences/Biology	N
PREPARED BY:	Kathryn Vogel, Chairman, Dept of Biology	1/3,600
DESCRIPTION: Briefly descri	ibe the scope of the project and the functions it i	ncludes.
Castetter Hall (Biology building collections will be renovated to research laboratories, a medium	remodeling of about 20,500 square feet in the ba g). Space that has previously been devoted to me create four new teaching laboratories, three new sized lecture hall, four seminar/conference room.	useum faculty s, and a

In addition, an inaccessible central courtyard that has been minimally used will be covered and remodeled, creating two new lecture halls and a Southwestern display garden that will be

Key components of the plan are as follows:

accessible to the entire UNM community.

PROJECT NAME:

- 1. Configure the building in a modular fashion so that teaching and research areas are, in general, separate from each other.
- 2. Increase natural light in the building.
- 3. Increase square footage by incorporating the patio area (7,500 ft²) into the building floorplan.

This is Phase I of a plan for renovation of Castetter Hall. Once this first and largest phase of the project is complete we will update the research and office space on the first floor (Phase II). The last phase involves reorganization of the research space on the second floor and converting remaining teaching laboratories on that level to research space (Phase III). The completion of this plan, along with completion of the Museum of Southwestern Biology (old bookstore renovation) will generate a research and teaching facility that will accommodate the foreseeable needs of students and faculty in the Department of Biology. This plan could replace the Biology department's portion of the Science and Engineering Complex.

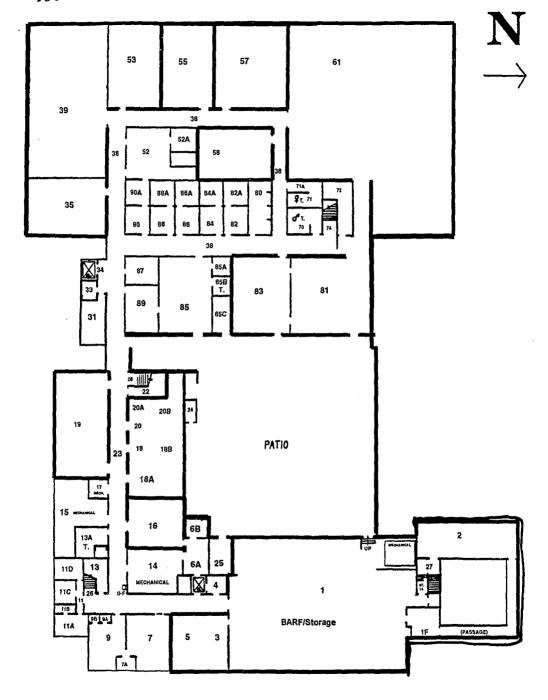
JUSTIFICATION:

When the collections of the Museum of Southwest Biology move to their new home in the remodeled old bookstore, approximately 15,000 ft² of space will be vacated; most of this is in the basement of Castetter Hall. It is anticipated that the move will occur during the summer 2000. The space that will be vacated is urgently needed in remodeled form to meet current and future needs of the Department of Biology.

- Space in the Biology building is insufficient to meet the current and projected needs of the undergraduate student population. There has been a rapid and constant increase in the number of undergraduate majors, from 405 in 1990 to 1102 in 1998. We anticipate that this number will continue to climb, such that we could be supervising as many as 2500 undergraduate majors by 2010. This upsurge of interest in biological processes, both at the ecological level and the molecular /genetic level, has placed extreme pressure on the current building and requires increased lecture hall space and laboratory teaching space.
- Current infrastructure and facilities in the Biology building are extremely outdated. The electrical system is stretched to capacity and heating, cooling, gas, air, and vacuum services function poorly. As you know, it was recently necessary to replace all of the plumbing to deliver water throughout the "new" half of the building. This "new" facility was built in 1967 and has not been renovated since that time. The old part of the building is.....well, even older. The waste/sewer system has continual problems and it is impossible to add additional furne exhaust capacity with the current infrastructure. In addition to being unpleasant, there could be code violations and health hazards.
- There is insufficient space available to meet current needs for the department. The administrative and office staff are packed like sardines into a tiny amount of space. Last year the Biology department handled over \$10 million in extramural funding in addition to regular departmental business. It is not reasonable to expect good employees to stay with us when the largest amount of office space assigned to any staff person is 100 ft², and two bookkeepers now work in only 25 ft² each. In addition, there is insufficient office space for graduate students, post-doctoral fellows, research assistant professors or for academic staff and part-time instructors.
- Current facilities are insufficient for our current thirty-two tenure track faculty members. Departmental growth will require new space for new faculty. The current number of tenure-track faculty in the Biology department is much lower than would be expected for the number of undergraduate and graduate students in the department. The goal is to increase the number of full-time faculty in the department to forty. However, it is estimated that eleven additional research laboratories will be needed in order to support a research faculty of forty.

PHASE I RENOVATION: BIOLOGY BASEMENT (20,675 ft²)

Renovated Space/Rooms	<u> Use/Intent</u>
1, 2, 3/5 (3206 ft²)	Biology Animal Resource Facility (BARF) & some storage space (cages, Gosz)
16 (340 ft²)	Botany Teaching collection & specimen storage
18/20 (615 ft²)	Teaching Lab: General Botany (360L); Flora of New Mexico (463L); Desert Field Biology (475L)
19 (740 ft²)	Teaching Lab: Animal Physiology Lab (435); Methods in Molecular Biology (446); Immunology Lab (456); Microbiology Labs (350, 352)
35, 39 (in part), 53 (1692 ft², all 3 rooms	Teaching Labs: Microbiology (350, 352)
39 (in part)	Prep rooms for microbiology teaching labs; new autoclave
55 (504 ft²)	Faculty member research lab: new faculty member
57 (728 ft²)	Faculty member research lab: Dr. A. Kodric-Brown
58 (468 ft²)	Faculty member research lab: new faculty member
61 (3561 ft²)	1. Lecture Hall (similar to Rm. 258); 2. three-four seminar/conference rooms (similar to 163B) for teaching, graduate student committee meetings, seminar classes, etc.; 3. central lounge area for students to meet, study, etc.
81 (756 ft²)	Vertebrate Teaching collection & specimen storage
83 (540 ft²)	Teaching Lab: General Vertebrate Zoology (386L); Comparative Vertebrate Anatomy (421L); Ornithology (486L); Ichthyology (487L); Herpetology (488L); Mammalogy (489L)
Patio Area (7525 ft²)	1. Cover over patio and remove cement barriers; 2. Ground Level: University access (between Geology & Biology) to a Southwestern Garden with tables, benches and many decoratively-hidden skylights to provide lots of natural light to Lecture Halls below; 3. Basement Level: Two Lecture Halls (similar to Rm. 258) with central lounge area attractively decorated with plants, planters (natural light from above skylights) and comfortable chairs, couches, low tables, etc. for students to meet, study, relax, have discussions, etc.



BIOLOGY BUILDING UNM

GROUND FLOOR

i. 2 t.

COLLEGE OF ARTS AND SCIENCES ·

· -- THE REPORT OF THE DEPARTMENT OF CHEMISTRY

July 1, 1999 to June 30, 2000

Fritz S. Allen, Chair

A. Significant Events During Academic Year 1999-2000

The past academic year has been a very busy one for the Department of Chemistry. The department was able to complete two hires in the inorganic chemistry area during the year. Dr. Richard Watt will be joining the faculty in August of 2000 from a post-doctoral position at the University of Wisconsin, Madison. Dr. Richard Tierney will join us in January, 2001 from a similar post at Northwestern. Watt is a bio-inorganic chemist and Tierney is physical inorganic chemist specializing in magnetic techniques. Having lost Ignacio Villegas last year and with Dr. Thomas Niemczyk assuming the chairmanship of the department in July, the department was critically short of faculty in analytical chemistry. The department hired a teaching post-doc to help in the analytical area. Todd Allen joined the department in August of 2000. Li Qiu-Gresham was also hired as a teaching post-doc to help in the Freshman program. Andre Straumanis, an NSF teaching fellow will join us for a year and will contribute to the teaching of organic chemistry. Professor Paul Papadopoulos, a long time organic faculty member retired this year. Paul will be extended emeritus status and continue to teach for two years. The department has been allowed to search for an analytical chemist during the upcoming year. The successful candidate will replace the teaching post-doc in the analytical area.

Continued efforts have also been underway to provide the additional high-quality space needed by the department With the demise of the Science and Engineering Building as a concept, we are back to construction of a building primarily for the Chemistry department. The current plan is to obtain funding to complete the renovation of the bookstore for use by Biology and fine art. This package will also have the funding to renovate the basement space in the Biology department. Subsequent to that the next project planned would be the construction of a building

primarily for Chemistry. This building will have a small amount of space dedicated to Earth & Planetary Sciences. The department's faculty and research programs are now spread out in two

2. Faculty

buildings.

UNM's Chemistry department continues to have the smallest faculty of any of the UNM peer institutions so the issue of faculty size is of critical import as reported in the latest ACS survey of Chemistry departments. In an informal survey of the current chemistry faculty, we have learned that we will lose approximately a half dozen faculty to retirement over the next half dozen years. Fortunately, the Dean of A&S is aware of our situation and has been helpful with positions and setup funding to address this issue. While the hiring of Chemistry faculty is expensive and can only proceed at the pace at which the start-up funding can be located, every effort must be made to continue to increase the department faculty numbers. The Associate Provost for Research has not been as forthcoming as usual with help with the set-up packages and this will slow the development of the department.

3. Curriculum

In the last several years the department has implemented a new Freshman/Organic curriculum that should have two main results. First, most students will encounter higher level courses as they take their chemistry requirements. Second, Tenured faculty will be teaching the Freshman courses in place of the lecturers who have taught the course in the past five years. I predict that the enrollments in Freshman chemistry will be dramatically impacted by this change. The glassware we purchased last year has enabled us to continue to open sections of Organic lab and thus we have been able to keep up with the demand for this course. A number of the sections are offered in the evening to make them available to the growing number of non-traditional students who cannot attend the usual weekday/daytime sections. The Saturday sections in Organic Chemistry Laboratory were deleted last year to no apparent problem.

The faculty of the Chemistry department has engaged in an exhaustive reexamination of our undergraduate curriculum. We have restructured the majors curriculum so they take less freshman chemistry and more advanced courses. A typical entering student will take one semester of freshman chemistry and enter directly into the Organic lecture sequence. The content of the first semester of freshman chemistry will be altered to reflect the needs of the student entering into the organic sequence. The credits from the second semester of freshman chemistry will be replaced with course work in the senior year. The American Chemical Society, our accrediting body, has determined that we must offer biochemistry to our B.S. majors. To that end we now offer a new biochemistry course, Chem 421. The course will be more chemically oriented than the course offered in the Medical School. This course and others in the topical areas of chemistry supply the credits lost by the majors to the Freshman program. For those students seeking to meet group requirements through the freshman chemistry path, we have quite drastically changed the content of the second semester of freshman chemistry to more directly reflect the appropriate ideas required for a scientifically literate citizen.

In the past, the department has offered an honors track for our B.S. majors. In 1998-99, Professor James Brozik has taught Chem 131L-132L, the honors freshman course and Professor Holder once again offered the honors Organic lectures, Chem 307-307. This year We will no longer offer the 131-132 class and 307-8 will be offered for the last time. These classes were valuable additions to our offerings but they are very faculty intense for the small number of students involved. Professors Deck and Paine continue to offer the course they began recently, Chem 415L, with excellent success.

All classes offered by the chemistry department are listed in Appendix B.

4. Facilities

The renovation of the heating, ventilating and air conditioning system in the Riebsomer wing of the Chemistry building which was begun in December of 1995 has finally been completed. The renovation was funded from a proposal to the National Science Foundation along with state matching money. Funding in the amount of \$1.3 million was awarded by the NSF with matching

funds of \$1.7 million required to claim the NSF grant. The project improved the quality and safety of the instructional and research laboratories in that wing. It will also represent a component of the work called for in-phase II of the programming document for Chemistry space that was completed four years ago. It greatly improved the safety and functionality of our facilities. However, it did not provide the additional space required by the Department. The project was complex and benefited from an excellent Contractor, Shumate Constructors.

The department of Chemistry went through a programming exercise with Facilities Planning in 1989-90 with a view to developing a plan for a Chemistry Addition. Although the program was completed, no building priority was forthcoming and the project was not funded. We were told that the legislative environment was not "right" for a chemistry building. However, during these years, New Mexico State was funded for a Chemistry addition and they are now occupying their new facility. An alternative approach to resolving the space problem was sought through continued consideration of the long-discussed Science and Technology Research Center. An agreement was reached among the chemistry faculty that, since the Research Center was the building the University seemed to be willing to build, we should seek the space we needed in that building. Biology and Earth and Planetary Sciences were contacted and invited to participate in a joint use building providing needed space to those three departments. With this support, a proposal for planning funds for such a building was sought from the 1994 legislative session and \$250,000 was provided. The planning so far carried out has led to an agreement with the Provost that these three departments and Computer Science will share the space created. The size of the budget has also been determined. However, how the space is to be divided amongst these users remains a source of considerable contention. The fact that the building went unfunded last year and has dropped to second priority for next session implies to me that UNM fears the cost of the centralized building. This is especially ridiculous in view of the fact that the Facilities Planning and the central administration asked us to band together and actually enlarged the building by the inclusion of Computer Science. Now, we are surprised that a building of sufficient size for the four departments is large and expensive. Truly, considering UNM's continual lack of focus on this issue which is so

critical for the department, I do not expect to see adequate space for the department until long after my retirement.

5. Graduate-Program

The Graduate Recruitment and Selection Committee was again very active under the leadership of Professor Cary Morrow, the Associate Chairman for Graduate Recruitment, and succeeded in attracting an average size group of new graduate students to the department for the coming year. The return to a larger class reflects the Committee's efforts to increase significantly the quality of students available to the graduate program. Other methods are being sought to alleviate the ongoing problem of needing to use graduate students who are less than fluent in English to teach undergraduate laboratories. Professor Cary Morrow has agreed to continue to serve as Associate Chair for Graduate Recruitment in the 99-00 academic year. Appendix A summarizes the recruiting activities.

Dr. Joe Ho, the Laboratory Supervisor has continued his efforts to reduce the average number of laboratories each Teaching Assistant must teach from six per year to five per year. We have continued to guarantee the incoming graduate students a position for the summer. Although our basic offer is still not as competitive as we would like it to be, the recent change in stipend represents major progress toward building a competitive graduate program. We are grateful to the Dean for his continuing support for our achieving this goal.

This year we reserved a portion of the TA stipends for a reward for a job well done at the end of the semester. The TAs who were well regarded by their students, the lab director, the faculty in charge of the lab and the stock room attendants were rewarded with \$1200 at the end of the semester. This program has significantly improved the teaching in the labs.

6. Undergraduate Program

We had our eighth annual departmental commencement following the general commencement ceremonies, followed by an elegant catered buffet luncheon served on our patio. This year again, we were not joined by the department of Biochemistry in our graduation ceremony. Over 100 graduates

414

011

and guests attended, with Dr. Holder presenting certificates to those receiving the B.S., B.A., M.S. and Ph,D. degrees, and to award winners.

Our own undergraduate program produced a small but well prepared group of graduating majors this year. Several will attend graduate or professional schools this fall. Three females including an Hispanic and one male student earned a B.S. degree. Three male students earned the B.A. degree. In addition to these students who completed chemistry degrees, seventy-two men and twenty-six women earned a minor in chemistry. At the graduate level, three Asian students earned the M.S. degree (all male), and three women, including two Asians, finished the Ph.D. degree. Individuals receiving degrees in Chemistry during the 1998-99 academic year are listed below.

. 1:

STUDENTS RECEIVING THE B.A. DEGREE IN CHEMISTRY 1999-2000

Diane Bennett Nathan Donart Joanette Hanlon Jacob Jacobson Greg Tafoya Angelina Villas

STUDENTS RECEIVING THE B.S. DEGREE IN CHEMISTRY 1999-2000

Jeremy Barlow Adam Koertner McKenzie Minke Theodore Ortiz Jessica Rothfuss Martin Sanchez

Jessee Stanchfield

STUDENTS COMPLETING THE M.S. DEGREE IN CHEMISTRY 1999-2000

Songling Jia Michael Fallbach Kathleen Banjac Katie Woodcock Jason Deck Norma Weiler Yi Li Clarissa Sorensen Si Wu

STUDENTS COMPLETING THE DOCTOR OF PHILOSOPHY DEGREE IN CHEMISTRY 1999-2000

Alec Bailey	Spring 1999	Dr. Christie Enke
Marianne Wilkerson	Spring 2000	Dr. Robert Paine
Lusong Lou	Spring 2000	Dr. Debra Dunaway-Mariano
Min Wei	Spring 2000	Dr. Debra Dunaway-Mariano
Matthew Helton	Spring 2000	Dr. Martin Kirk
Frank Inscore	Spring 2000	Dr. Martin Kirk
Wenxiang Zeng	Spring 2000	Dr. Thomas Niemczyk

GRADUATE STUDENTS IN CHEMISTRY 1999-2000

<u>Name</u>	<u>Assistantship</u>	Research Director
BUTLER, Karen	R.A.	Martin L. Kirk
CAI, Xiaolu	R.A.	Patrick Mariano
CHANG, Virginia	R.A.	Patrick Mariano
CORBITT, Tom		Fritz Allen
COSTELLO, Alison	R.A.	James Brozik
DEPPERMAN, Ezra	T.A.	Martin Kirk
DIЛВА, Yanga	R.A.	Thomas Niemczyk
DRESSIG, Dirk	R.A.	Robert Paine
ELICKER, Sean	R.A.	Debra Evans
ENLOW, Mark	R.A.	Edward Walters

GRADUATE STUDENTS IN CHEMISTRY 1999-2000

Name	<u>Assistantship</u>	Research Director
FALLBACH, Michael	R.A.	Philip Hampton
FU, Qiang	T.A.	Philip Hampton
FU, Xingfa	T.A.	Cary Morrow
GALLIMORE, David		Fritz Allen
GRISENTI, David	T.A.	Martin Kirk
HAIBACK, Frederick	R.A.	Tom Niemczyk
LINDLEY, Nadja	R.A.	Christie Enke
LU, Hailong	T.A.	David Keller
LU, Haiyan	T.A.	Patrick Mariano
LU, YI	R.A.	John Shelnutt
LU, Zhibing	R.A.	Debra Dunaway-Mariano
MALLICK, Govind	·R.A.	Deborah Evans
MCNAUGHTON,	R.A.	Martin Kirk
Rebecca	* · ·	
NEIRA, Stephen	T.A.	James Brozik
PARVEEN, Sahrah	R.A.	Robert Paine
PIYASENA, Menake	T.A.	Edward Walters
REN, Qin	T.A.	Edward Walters
RUBIE, Nick	R.A.	Martin Kirk
STRUNK, Michael	R.A.	Tom Niemczyk
SUN, Lisong	R.A.	John Shelnutt
WEI Yansheng	R.A.	Debra Dunaway-Mariano
WILCOX, Bruce	R.A.	Christie Enke
WILLIAMS, Antonio	T.A.	Martin Kirk
WILLIAMS, Michael	T.A.	
WU, Chun	R.A.	Debra Dunaway-Mariano
XIAO, Yunhai	T.A.	
XU, Qing	R.A.	Edward Walters
YE, Dongmei	R.A.	Debra Dunaway-Mariano
ZHANG, Anding	R.A.	Thomas Niemczyk
ZHANG, Guofeng	R.A.	Debra Dunaway-Mariano
ZHANG, Jun C.	R.A.	Christie Enke
ZHOU, Cheng	R.A.	Hua Guo
ZHOU, Quan	T.A.	Edward Walters
ZHU, Yan	T.A.	Hua Guo
ZHUANG, Zhihao	R.A.	Debra Dunaway-Mariano

<u>Name</u>	Assistantship	Research Director
·		
ZHANG, Guofeng	T.A.	
ZHANG, Jun (#1)	T.A.	John Shelnutt
ZHANG, Jun (#2)	T.A.	John Shelnutt
ZHANG, Jun Chang	R.A.	Christie Enke
ZHANG, Wenhai	R.A.	Debra Dunaway-Mariano
ZHOU, Cheng	T.A.	
ZHUANG, Zhihao	T.A.	

APPENDIX A APPLICATIONS RECEIVED FOR GRADUATE STUDY IN CHEMISTRY U.S. CITIZENS 1998-1999

APP - APPLICATIONS RECEIVED APR - APPLICATIONS APPROVED

DIS - APPLICATIONS DISAPPROVED

INC - APPLICATIONS INCOMPLETE

DEC - APPLICATIONS APPROVED BUT DECLINED OFFER

STATE	<u>APP</u>	<u>APR</u>	<u>DIS</u>	<u>INC</u>	DEC
ALASKA	0	0	0	0	0
CALIFORNIA	2	0	0	0	2
COLORADO	1	0	0	0	1
CONNECTICUT	0	0	0	0	0
IOWA	1	0	0	0	1
KENTUCKY	0	0	0	0	0
LOUISIANA	0	0	0	0	0
MINNESOTA	1	0	0	1	0
MISSISSIPPI	0	0	0	0	0
MISSOURI	0	0	0	0	0
MONTANA	1	0	1	0	0
NEW MEXICO	7	5	1	1	0
NORTH CAROLINA	. 0	0	0	0	0
OHIO	0	0	0	0	0
OREGON	0	0	0	0	0
NORTH DAKOTA	1	0	1	0	0
SOUTH DAKOTA	0	0	0	0	0

! :

APPENDIX A APPLICATIONS RECEIVED FOR GRADUATE STUDY IN CHEMISTRY U.S. CITIZENS

1999-2000

STATE	<u>APP</u>	<u>APR</u>	<u>DIS</u>	<u>INC</u>	<u>DEC</u>
PENNSŸLVANIA	0	0	0	0	0
TEXAS	1	0	0	0	1
RHODE ISLAND	0	0	0	0	0
WASHINGTON	2	0	0	2	0
WISCONSIN	0	0	0	0	0
TOTALS:	17	5	3	4	5
ETHNICITY:	Male Femal	le.			12 5
		ican Ind	dian		Õ
	Asian				0
	Black				0
	Cauca	sian			17
	Hispa	nic			0

APPLICATIONS RECEIVED FOR GRADUATE STUDY IN CHEMISTRY <u>U.S. CITIZENS</u> 1999-2000

APP - APPLICATIONS RECEIVED

APR - APPLICATIONS APPROVED

OCC 4 COTS

DIS - APPLICATIONS DISAPPROVED

INC - APPLICATIONS INCOMPLETE

DEC - APPLICATIONS APPROVED BUT DECLINED OFFER

STATE	APP APR DIS	INC	DEC
ETHNICITY:	Hispanic White		0 17
	American Indian		0
	Asian		0
	Black		0

APPLICATIONS FOR GRADUATE STUDY IN CHEMISTRY FOREIGN CITIZENS 1999-2000

COUNTRY	<u>APP</u>	APR	<u>DIS</u>	<u>INC</u>	<u>DEC</u>
AFRICA	0	0	0	0	0
BULGARIA	0	0	0	0	0
CANADA	0	0	0	0	0
CHINA	188	44	102	14	28
COLUMBIA	0	0	0	0	0
INDIA	4	2	0		2
ITALY	0	0	0	0	0
JAPAN	0	0	0	0	0
KOREA	2	0	0	0	2
PHILLAPINES	0	0	0	0	0
ROMANIA	1	0	1	0	0
RUSSIA	0	0	0	0	0
SPAIN	1	0	0	1	0
SRI LANKA	2	0	2	0	0
SWITZERLAND	0	0	0	0	0
TAIWAN	0	0	0	0	0
TOTALS:	198	46	106	15	32

APPLICATIONS FOR GRADUATE STUDY IN CHEMISTRY FOREIGN CITIZENS 1999-2000

COUNTRY	APP APR DIS	NC DEC
ETHNICITY:	Male	155
	Female	43
	American Indian	0
	Asian	190
	Black	0
	Hispanic	1
	Other	2
	White	1
	Indian (INDIA)	4

APPLICATIONS FOR GRADUATE STUDY IN CHEMISTRY FOREIGN CITIZENS 1999-2000

GRAND TOTALS

APP	" APR	DIS	INC	DEC
198	46	105	15	32

PERCENTAGE OF APPLICATIONS

ETHNICITY	NUMBER	%OF APPS.
MALE	147	74%
FEMALE	41	20%
AMERICAN INDIAN	0	0%
AFRICAN	0	0%
ASIAN	190	96%
BLACK	0	0%
HISPANIC	1	.005%
OTHER	2	.010%
WHITE	1	.005%
INDIA	4	.020%

COURSE #	SEMESTER	SECTIONS	STUDENTS	CR HRS
AND NAME	F 99	3	163	652
Elem of Gen Chem	9.00	2	151	604
111 Elem of Gen Chem	S 00	2	151	004
111	SS 99	0	0	0
Elem of Gen Chem	F 99	3	519	2076
General Chemistry	F 99	3	319	2070
121	S 00	1	369	1476
General Chemistry 121	SS 00	1	61	244
General Chemistry	33 00	1	01	2.77
122	F 99	1	217	868
General Chemistry	9.00	2	000	1100
122	S 00	3	282	1128

COURSE#	SEMESTER	SECTIONS	STUDENTS	CR HRS
AND NAME				
General Chemistry				
122	SS 00	1	66	264
General Chemistry				
131	F 99	0	0	0
Prin of Chemistry				
132	S 00	0 .	0	0
Prin of Chemistry				
151	F 99	1	1	3
Gen Chem Special				
151	S 00	1	2	6
Gen Chem Special				
151	SS 00	0	0	0
Gen Chem Special				
152	F 99	0	0	0
Gen Chem Special				
152	S 00	3	3	9
Gen Chem Special				
152	SS 00	1	2	6
Gen Chem Special				
212	F 99	1	55	220
Int OrgChem & Bioch	em			
212	S 00	1	59	236
Int OrgChem & Bioch	em ·		,	
212	SS 00	0	0	0
Int OrgChem & Bioch	em			
253	F 99	1	32	128
Quant Analysis				

COURSE # AND NAME	SEMESTER	SECTIONS	STUDENTS	CR HRS
253 Quant Analysis	S 00	1	41	164
253 Quant Analysis	SS 00	1	15	60
Sub-Total Undergra	duate Lower Divi	sion	2038	8144
301 Organic Chemistry	F 99	3	294	882
301 Organic Chemistry	S 00	2	221	663
301 Organic Chemistry	SS 00	1	50	150
302 Organic Chemistry	F 99	2	82	426
302 Organic Chemistry	S 00	2	206	618
302 Organic Chemistry	SS 00	1	44	132
303 Organic Chem Lab	F 99	14	234	234
303 Organic Chem Lab	S 00	7	111	111
303 Organic Chem Lab	SS 00	3	34	34
304 Organic Chem Lab	F 99	5	82	82
304	S 00	10	162	162
Organic Chem Lab	SS 00	2	29	29
Organic Chem Lab	F 99	1	8	24
Organic Chemistry 308	S 00	1	18	54
Organic Chemistry 311 Physical Chem	F 99	1	55	220

COURSE # AND NAME.	SEMESTER	SECTIONS	STUDENTS	CR HRS
312	S 00	1	1	4
Physical Chem 312	S00	1	54	216
Physical Chemistry 315	F 99	1	26	104
Intro Phy Chem 325	F 99	4	58	72
Spec Top Undergrad	SS 00	2	2	5
Spec Top Undergrad	S 00	1	31	31
St/Solv Org Chem Pa	S 00	1	5	5
ST/Mass Spectro Set 326	SS 00	0	0	0
St/Intro Compt UNN 331	1 F 99	2	16	32
Chem Lab III 332L	S 00	2	15	25
Chem Lab III 391	F 99	1	10	30
Read Select Topics 391	SS 00	1	1	1
St/NMR Spec/Instru 392	S 00	1	1	1
Read Select Topics 401L	F 99	1	1	1
Scient Glassblowing 401L	S 00	0	0	0
Scient Glassblowing 415L	F 99	1	8	16
Synth & Struc Lab 421	S 00	1	22	66
Biological Chemistry 423	F 99	0	0	0
Intro Biochem 423	S 00	0	0	0
Intro Biochem 423	SS 00	0	0	0

COURSE # AND NAME	SEMESTER	SECTIONS	STUDENTS	CR HRS
Intro Biochem 431	F 99	1	19	57
Sub-Total Undergra	1900	4487		
Adv Inorgan Chem				
445	F 99	0	0	0
Intensive Biochem 446	S 00	0	0	0
Intensive Biochem 454	S 00	1	12	48
Inst. Analysis				
466	S 00	1	17	51
Sci Computation 495	F 99	7	12	19
Undergrad Problems' 495	* SS 00	0	0	0
Undergrad Problems'				
496	S 00	6	11	18
Undergrad Problems 496	SS 00	1	3	7
Undergrad Problems				
497	F99	0	0	0
Senior Honors Resrch 497	h			
Senior Honors Resrch	h SS 00	1	1	3
498	S 00	1	2	5
Senior Honors Resrch				
499	F 99	1	15	15
Chem Sem Resrch				
Sub-Total Undergrad	73	166		
Sub-Total Undergrad	4011	12797		

COURSE # AND NAME	SEMESTER	SECTIONS	STUDENTS	CR HRS
501	F 99	1	16	48
Molecular Struc Thr 504	y S 00	1	6	18
Chemical Dynamics 511	F 99	1	12	36
Mechanisms Org Cho	em S 00	0	0	0
Org Molec Struct De	et S 00	1	6	18
Topics Org. Chem 515	F 99	0	0	0
Topics Organic Cher	nistry	-		
521 Biological Chemistry	S 00	0	0	0
534	S 00	1	8	24
Phys Meth Inorg Che 537	F99	1	7	21
Spec Topics Inorg C 536	S 00	0	0	00
Syn Mech Inorg Che 538	m S 00	1	5	15
Spec Top Inorg Cher 540	n F 99	1	7	21
Adv Analytical Chem 541	ı S 99	1	5	15
Separations 543	F99	0	0	Ó
Analycl Spectroscopy 543	y S 00	1	8	24
Analyc Spectroscopy 545	F 99	0	0	0
T/Biosensors Fund 562	S 00	1	8	24
Quantum Chem II 565	F 99	0	0	0
Kinetics 566	F99	0	0	0
Spectroscopy 566	S 00	0	0	0

COURSE # AND NAME	SEMESTER	SECTIONS	STUDENTS	CR HRS
Spectroscoy 567	F 99	2	15	41
T/Physical Chem 567 T/Physical Chem	S 00	0	0	0
568 T/Physical Chem	S 00	0	. 0	0
587 Adv. Topics Biol Ch	F 99 nem	1	7	21
599 Masters Thesis	F 99	1	1	6
599 Masters Thesis	S 00	0	0	0
599 Masters Thesis	SS 00	0	0	0
625 S/Analytical 625	F 99 F 99	1	6 8	6 8
S/Inorganic 625	F 99	1	10	10
S/Organic 625	F 99	1	8	8
S/Physical 625	F 99	1	3	3
S/Mass Spec 625	F 99	1	5	5
S/NMR C200 625 S/Speakers	F 99	1	47	47
625 S/Analytical	S 00	1	9	9
625 S/Inorganic	S 00	1	8	8
625 S/Organic	S 00	1	12	12
625 S/Physical	S 00	1	10	10
625	S 00	1	5	5

COURSE # AND NAME	SEMESTER	SECTIONS	STUDENTS	CR HRS
S/Mass Spec				
625	S 00	1	4	4
S/NMR." 625	S 00	1	43	43
Chemistry Seminar 650	F 99	1	1	7
Research Readings		_		00
650 Research Readings	F 99	1	4	22
650	F 99	1	1	4
Research Readings 650	F 99	1	1	5
Research Readings 650	F 99	1	1	6
Research Readings		1	1	2
650 Research Readings	F 99	1	-	
650 Research Readings	F 99	1	5	19
650	F 99	1	2	17
Research Readings 650	F 99	1 -	2	13
Research Readings 650	F 99	1	3	13
Research Readings		•	3	21
650 Research Readings	F 99	1	3	21
650 Research Readings	F 99	1	2	10
650	S 00	1	2	10
Research Readings 650	S 00	1	1	7
Research Readings 650	S 00	1	1	9
Research Readings		_		22
650 Research Readings	S 00	1	4	22

COURSE # AND NAME	SEMESTER	SECTIONS	STUDENTS	CR HRS
650 Research Readings	S 00	1	1	3
650 Research Readings	S 00	1	2	2
650 Research Readings	\$ 00	1	3	23
650 Research Readings	S 00	1	1	6
650 Research Readings	S 00	1	3	17
650 Research Readings	S 00	1	4	15
650 Research Readings	S 00	1	1	6
650 Research Readings	S 00	1	1	2
650 Research Readings	S 00	1	1	3
650 Research Readings	S 00	1	1	2
650 Research Readings	SS 00	1	9	25
699 Dissertation	F 99	1	3	12
699 Dissertation	F 99	1	3	23
699 Dissertation	F 99	1	1	7
699 Dissertation	F 99	1	1	5
699 Dissertation	F 99	1	4	29
699 Dissertation	F 99	1	1	6
699 Dissertation	F 99	1	3	17
699 Dissertation	F 99	1	3	15

APPENDIX B CHEMISTRY COURSE OFFERINGS

COURSE # AND NAME	SEMESTER	SECTIONS	STUDENTS	CR HRS
699	F 99	1	1	7
Dissertation				
699	F 99	1	1	3
Dissertation				
699	F 99	1	2	8
Dissertation				
699	S 00	1	1	3
Dissertation		_	_	
699	S 00	1	3	12
Dissertation		_		•
699	S 00	1	1	3
Dissertation	~ ^^	•		1.5
699	S 00	1	3	15
Dissertation	0.00	1	1	6
699	S 00	1	1	Q
Dissertation	g 00	1	3	22
699	S 00	1	3	22
Dissertation 699	S 00	1	3	18
Dissertation	3 00	1	3	10
699	S 00	1	3	16
Dissertation	3 00	•	J	10
699	S 00	1	1	10
Dissertation	D 00	•	*	
699	S 00	1	2	11
Dissertation	5 00	•	-	
699	S 00	1	2	18
Dissertation	2 00			
699	SS 00	1	10	30
Dissertation				
Sub-Total Graduate			384	1097
GRAND TOTAL AI	L STUDENTS		4395	13894

SPONSORED RESEARCH

Investigator	Begin Date	Source	Amount
Allen, Fritz	05/15/00	Chromex	\$26,331.00
Brabson, Dana	09/01/99	NSF	\$212,875.00
Brabson, Dana	09/01/99	NSF	\$638,625.00
Brabson, Dana	04/01/99	ARA	\$11,992.00
Brabson, Dana	04/01/00	ARA	\$77,000.00
Brozik, Jim	10/01/99	SNL	\$35,000.00
Deck, Lorraine	06/01/99	NSF	\$55,000.00
Dunaway-Marian	10		
Debra	02/01/98	NIH	\$288,248.00
Evans, Deborah	10/14/99	NSF	\$79,900.00
Evans, Deborah	05/01/00	Dreyfus Foundation	\$60,000.00
Guo, Hua	06/01/99	NSF	\$88,900.00
Keller, David	01/01/00	LANL	\$25,100.00
Kirk, Martin	04/01/99	NIGM	\$46,451.00
Mariano, Patrick	06/01/99	NIGM	\$67,843.00
Mariano, Patrick	05/01/00	ACS	\$60,000.00
Niemczyk,			
Thomas	08/01/99	SNL	\$56,369.00
Niemczyk,			
Thomas	01/01/99	SNL	\$14,988.00
Niemczyk,			
Thomas	05/15/99	Army Research	\$83,000.00
Paine, Robert	06/01/99	DOE	\$155,000.00
Paine, Robert	06/01/99	NSF	\$345,000.00

FACULTY AND STAFF OF THE DEPARTMENT OF CHEMISTRY

PROFESSORS:

ALLEN, Fritz S., Ph.D.	1969	University of Illinois
DUNAWAY- MARIANO, Debra, Ph.D.	1979	University of Wisconsin
ENKE, Christie, G., Ph.D.	1959	University of Illinois
HAMPTON, Philip D., Ph.D.	1989	Stanford University
HOLDER, Richard W., Ph.D.	1970	Yale University
MARIANO, Patrick, PhD.	1969	University of
		Wisconsin
MORROW, Cary J., Ph.D.	1970	Tulane University
NIEMCZYK, Thomas M., Ph.D.	1972	Michigan State
		University
ONDRIAS, Mark R., Ph.D.	1979	Michigan State
		University

432			
PAINE, Robert, Ph.D.		1970	University of Michigan
PAPADOPOULOS, E. Pau	l, Ph.D.	1961	University of Kansas
WALTERS, Edward A., Pi	ı.D.	1966	University of
•			Minnesota
ASSOCIATE PROFESSO	DRS:		
DECK, Lorraine, Ph.D.		1989 Mexico	University of New
GUO, Hua, Ph.D.		1988	Sussex University
KELLER, David, Ph.D.		1984	University of
,			California-Berkeley
KIRK, Martin L., Ph.D.		1991	University of North
•		Carolina	
MCLAUGHLIN, Donald R	., Ph.D.	1965	University of Utah
ASSISTANT PROFESSO	RS:		
DDOZIIC Tomos		1006	Washington State
BROZIK, James		1996	Washington State University
EVANS, Deborah, Ph.D.		1995	University of
, ,			Pittsburgh
			J
EMERITUS PROFESSOI	RS:		
CATON, Roy D., Ph.D.		1963	Oregon State
, , ,			University
HOLLSTEIN, Ulrich, Ph.D.		1956	University of
			Amsterdam
LITCHMAN, William M., F	h.D.	1965	University of
COLLABEED Dil Di D		1067	Utah
SCHAFFER, Riley, Ph.D.		1967	University of Chicago
VISITING FACULTY:			Omougo
NONE			
POSTDOCTORAL AND	RESEARC	H FELLOWS	<u>!:</u>
BASAME, Solomon	1998	Universi	ty of Utah
BOND, Evelyn	1998		ty of New Mexico
CHEN, Chuanfeng	1994		University
CHEN, Rongqing	1991		i Institute of Optics and
		•	•

		rine iviechanics
CHO, Sung Ju	1996	Pusan National University
CONSTANTOPOLOUS,		
Terri	1999	University of New Mexico
GAN, Xinmin	1995	Kinki University
KIM, Hyun-Jin	1997	Pusan National University
LEE, Sangok	1992	Pusan University
MA, Guobin	1992	Shanghai Institute of Optics and
		Fine Mechanics
MEDFORTH, Craig	1988	University of Liverpool, U.K.
SONG, Xingzhi	1996	University of New Mexico
SU, Zhuoyi	1997	University of Maryland
WOOD, Gary	1987	University of Maryland

ADJUNCT PROFESSORS:

BAKER, Thomas R.	Adjunct Research Professor
CLARK, David L.	Adjunct Research Professor
COCIVERA, Michael	Adjunct Research Professor
DORKO, Ernest A.	Adjunct Professor
DUESLER, Eileen	Research Associate Professor
ELLIOTT, Scott M.	Adjunct Research Professor
ENGLEMAN, Rolf, Jr.	Adjunct Professor
GANDER, John E.	Adjunct Research Assistant Professor
HAALAND, David	Adjunct Professor
HERBELIN, John M.	Adjunct Research Professor
HO, Kuangchiu	Lecturer III
KEOGH, Daniel W	Adjunct Assistant Professor
PINEDA, Andrew	Adjunct Research Professor
SHASHI, Karna P	Adjunct Research Professor
SHELNUTT, John	UNM/SNL Adjunct Professor
SHREVE, Andrew P.	Adjunct Assistant Research Professor
SMITH, Karen Ann	Adjunct Assistant Research Professor
STALLARD, Brian	Adjunct Assistant Professor
TAPSCOTT, Robert	Research Professor
WATKIN, John G.	Adjunct Assistant Professor

#{{ }

APPENDIX C DEPARTMENT OF CHEMISTRY UNIVERSITY OF NEW MEXICO SEMINAR SPEAKERS 1999-2000

24 September 1999	Dr. William Heineman, The University of Cincinnati, "Strategies for New Chemical Sensors"
01 October 1999	Dr. Susan Dexheimer, Washington State University "Femtosecond Vibrational Dynamics of Self-Trapping in Quasi—One-Dimensional System"
22 October 1999	Dr. Paul Lindahl, Texas A&M University "Structure and Function of the Ni-Fe-S Clusters in Acetyl-Coenzyme A Synthase"
05 November 1999	Professor Robert E. Wyatt, The University of Texas at Austin "Quantum Dynamics with Trajectories
19 November 1999	Professor Sheldon Shore, Ohio State University "Metallocene Derivatives of Cyclic Organohydro- bortates and Their Conversion to Metallocene Cations"
03 December 1999	Professor Jeffrey Zaleski, Indiana University "Transition Metal Activated Diradical Formation for Thermal and Photochemical DNA-Cleavage"
10 December 1999	Professor Hector Abruna, Cornell University "Redox-Active Dendrimers in Solution and on Surfaces"

APPENDIX C DEPARTMENT OF CHEMISTRY UNIVERSITY OF NEW MEXICO SEMINAR SPEAKERS 1999-2000

28 January 2000	Professor Donald J. Darensbourg, Texas A&M University "The Coordination Chemistry of Zinc and Cadmium Phenoxides. Catalysts for the Coupling of CO2 and Epoxides"
04 February 2000	Professor Kirk Peterson, Washington State University/ Pacific Northwest National Laboratory "Potential Energy Surfaces for the Photodissociation of Small Moleules: HOCl, HOBr, and OclO"
10 March 2000	Professor Jeanne Mchale, University of Idaho "Resonance Raman Studies of Solvent Dynamical Effects in Photoinduced Electron Transfer"
24 March 2000	Professor John Dawson, University of South Carolina "Spectroscopic and Mechanistic Studies of Cytochrome P450, Nitric Oxide Sythase and Related Heme Systems"
07 April 2000	Professor Tom Poulos, University of California, Irvine "Structural Studies on Nitric Oxide Synthase and a P450 Electron Transfer Complex"
14 April 2000	Professor William Montfort, University of Arizona "Nitric Oxide Transport and Signaling by Blood-Sucking Insects: Hemoprotein Structure, Dynamics,
21 April 2000	And Chemistry" Professor John Enemark, University of Arizona "Sulfite Oxidase: Chemistry and Spectroscopy of a Vital Molybdenum Enzyme"
28 April 2000	Professor Pat Sullivan, University of Wyoming "Chains and Squares of Charge Transfer Chromophores"
05 May 2000	Professor Jeanne Pemberton, University of Arizona "Atmospherically-Relevant Heterogenious Reactions at Alkali Halide Surfaces"

APPENDIX D FACULTY AND STAFF OF THE DEPARTMENT OF CHEMISTRY RESEARCH SCIENTIST:

DUESLER, Eileen, Ph.D., 1973, University of California-Berkeley - Determines structures of materials using x-ray techniques.

SMITH, Karen An, Ph.D, 1984, University of Illinois - Oversees, maintains, and operates the Department's NMR spectrometers, trains students and faculty in their use, and consults with faculty and students concerning the solution of chemistry problems using NMR.

RESEARCH ENGINEER II:

SHAHVAR, Hoshang, B.S., 1981, University of New Mexico - Manufactures state of the arts electronic equipment as requested by faculty and graduate students.

RESEARCH SCIENTIST II:

DAVENPORT, Michael, - Electronic design and maintenance engineer for faculty and graduate students.

OTHER STAFF:

BAUER, John - Research Tech/Life Sciences: - Performs multi-step tests, analyses, results of experiments, specimens and samples and provides support to students in learning and functional activities within the lab setting.

BLYTHE, William, Coordinator of Purchasing: prepares sale invoices, inventory entries and places orders while overseeing the receiving and proper stocking and delivery of orders.

BUSH, Gary, Research Tech/Life Sciences: - Performs multi-step tests, analyses, results of experiments, specimens and samples and provides support to students in learning and functional activities within the lab setting.

CANO, Daniel, Research Tech/Life Sciences: - Performs multi-step tests, analyses, results of experiments, specimens and samples and provides support to students in learning and functional activities within the lab setting.

APPENDIX D FACULTY AND STAFF OF THE DEPARTMENT OF CHEMISTRY

DUNAGAN, Julie, Editorial Tech: - Responsible for transcription, proofreading and typing complex manuscripts and other documents for publication or other distribution for the Department of Chemistry.

HILTON, Carl, C.R.L.S. Operations Manager II - Responsible for the overall operation of C.R.L.S. including budget, buying and inventory control and EPA/OSHA regulations and compliance.

MINSSEN, Ovella, Admissions Assistant I: - Responsible for processing student applications for admissions status and residency for foreign and U.S. graduate applicants to the Department of Chemistry, The University of New Mexico.

MORRATO, Anna, Department Administrator III: - Manages, controls and supervises the fiscal system, daily administrative operations and assists the Chairman with departmental matters.

PENHALL, Michele, Administrative Assistant III: coordinates and performs a variety of staff and/or operational support activities for C.R.L.S.; manages daily administrative operations and assist the Manager of C.R.L.S. in all daily activities.

SOBLICK, Leonard, Accountant II: - Responsible for compiling, analyzing and reviewing data and statistics pertaining to revenues and expenditures; prepares, examines and verifies accounting data and documents and maintains accounting records.

STANLEY, Kriss, C.R.L.S. Systems Analyst III: - Assists Department and UNM personnel with all aspects of ordering, receiving, billing and inventory of chemicals. Responsible for all computer operations in C.R.L.S.

TEWOLDE, Adda, Accountant II: Responsible for compiling, analyzing and reviewing data and statistics pertaining to revenues and expenditures; prepares, examines and verifies accounting data and documents and maintains accounting records for C.R.L.S..

FACULTY AND STAFF OF THE DEPARTMENT OF CHEMISTRY

APPOINTMENTS TO STAFF:

None

CHANGES TO STAFF PERSONNEL:

SEPARATIONS:

CANDELARIO, Ricky, Supply/Stock Clerk: - Assists the Department and UNM personnel with all aspects of ordering, receiving, billing and inventory of chemicals and supplies.

SCHELLENBERBER, Karen, Editorial Tech: - Responsible for transcription, proofreading and typing complex manuscripts and other documents for publication or other distribution for the Department of Chemistry.

RESEARCH EQUIPMENT:

Major pieces of equipment (more than \$10,000.00 unit price) acquired during the reporting year:

794616	Nexus 870 Spectrometer	\$131,048.00
701065	Timeharp 100	\$ 11,950.00
796169	EMX Series EPR Spectrometer	\$171,400.00

PROPOSALS SUBMITTED FOR FY 98-99

Investigator	Source	<u>Amount</u>
Allen, Fritz	National Science Foundation	\$ 453,250.00
Allen, Fritz	Chromex	\$ 23,042.00
Brabson, Dana	WAESO	\$ 3,756.00
Brabson, Dana	National Science Foundation	\$ 903,306.00
Brabson, Dana	USAF thru ARA	\$ 11,992.00
Brozik, James	Los Alamos National Laboratory	\$ 38,500.00
Brozik, James	Department of Energy	\$ 488,659.00
Brozik, James	Sandia National Laboratory	\$ 35,000.00
Deck, Jason	Department of Defense	\$ 66,000.00
Deck, Lorraine	American Heart Association	\$ 35,000.00
Deck, Lorraine	National Science Foundation	\$ 165,000.00
Deck, Lorraine	WAESO	\$ 1,378.00
Dunaway-Mariano, D	National Institute of Health (NIH)	\$ 281,297.00

56,770.00

\$

30,000.00

Investigator_	Source	Amount
Enke, Christie	Sandia National Laboratory	\$ 8,144.00
Enke, Christie	Pfizer, Inc.	\$ 17,140.00
Enke, Christie	National Institute of Health (NIH)	\$ 607,363.00
Evans, Deborah	National Science Foundation	\$ 416,336.00
Evans, Deborah	ACS/PRF	\$ 20,000.00
Evans, Deborah	Research Corporation	\$ 50,000.00
Evans, Deborah	Dreyfus	\$ 60,000.00
Guo, Hua	ACS/PRF	\$ 22,378.16
Guo, Hua	PRF	\$ 60,000.00
Guo, Hua	National Science Foundation	\$ 88,900.00
Keller, David	DOE/HiCrest	\$ 364,950.00
Kirk, Martin	National Institute of Health (NIH)	\$ 145,522.00
Mariano, Patrick	National Science Foundation	\$ 707,124.00
Mariano, Patrick	National Institute of Health (NIH)	\$ 1,431,691.00
Mariano, Patrick	National Institute of Health (NIH)	\$ 204,916.00
Niemczyk, Thomas	Sandia National Laboratories	\$ 74,304.00
Niemczyk, Thomas	Sandia National Laboratories	\$ 21,380.00
Niemczyk, Thomas	Army Research Office	\$ 98,778.12
Niemczyk, Thomas	Army Research Office	\$ 240,000.00
Ondrias, Mark	National Science Foundation	\$ 367,322.00
Paine, Robert	ACS/PRF	\$ 50,000.00
Paine, Robert	National Science Foundation	\$ 354,304.00
Paine, Robert	Department of Energy	\$ 106,000.00
Shelnutt, John	DARPA	\$ 869,952.00
Shelnutt, John	National Institute of Health (NIH)	\$ 833,412.00
Villegas, Ignacio	National Science Foundation	\$ 204,944.00
Villegas, Ignacio	DOE/HiCrest	\$ 99,484.00
Walters, Edward	Arizona State University	\$ 1,756.00
Walters, Edward	USIP	\$ 35,208.00

CONVOCATION CEREMONY 15 MAY 1999 UNDERGRADUATE AWARDS

McKenzie Minke		Hughes Award
Justin Marbury		Hughes Award
Greg Tafoya		Gibson Award
Jeremy Barlow		Millican Award
Mikel Roberts		Riebsomer Award
Mandy Flores		P. Mozely Award
'Adam Koertner		M. Kahn Award
Jason Mudd		Dean Uhl Award
Carmen Zamarro		Merck Award
Carol Barnes		Merck Award
Adam Collingsworth		ACS Award
Diana Habel-Rodriguez		ACS Award
Dylan Harp		ACS Award
Todd Dettmer		ACS Award
Jaclyn Terrel		ACS Award
D 11 - D1 - "	100 1	

Rahima Bhanji ACS Award

Jeremiah Wright CRC Award
Bea Yu CRC Award
Brad Dempsey CRC Award
LaDonna Malone CRC Award
Eva Angli CRC Award

Department of Communication and Journalism Annual Report July 1, 1999 - June 30, 2000

Submitted by Karen A. Foss, Outgoing Chair

Significant Developments

The department of Communication & Journalism celebrated its 50th anniversary with a series of events in October, including a hardhat party and birthday dinner. The hardhat party, held October 21 1999, featured the faculty and staff in red, yellow, or green hardhats and coordinating ties and scarves showing off the empty space in the building that is awaiting renovation. Various student organizations set up booths to communicate the many facets of C&J. When not perusing the booths, the campus community ate hotdogs and sodas and danced to the music of the Virginia Creepers.

The birthday dinner was held at the La Posada Hotel on October 23. A silent auction helped raised money for the event and for the C&J building fund. A harp quartet, that included C&J alum Jeannie Page, played during the dinner. The following awards were presented by the department: Undergraduate Student of the Year, Graduate Student of the Year, Journalism Professional, Communication Professional, Lifetime Achievement, and Friend of the Department. Several members of the original Journalism class of 1949 attended. Hank Trewhitt was the featured speaker from the first class; Kathryn Sorrells, who received her Ph.D. from the department in fall, 1999, spoke as the representative of the most recent class. Karen Foss, Chair, gave an opening welcome, and Jack Condon served as Master of Ceremonies. Judith Hendry, chair of the anniversary committee, was instrumental in the success of all of the anniversary activities.

The department, with the assistance of Leslie Elgood from the UNM Development Office, prepared a proposal that was submitted to Bill Daniels, chair of Daniels Communications, Inc. and founder of the first cable brokerage company, requesting 3.5 million for the renovation of the C&J building. Unfortunately, Mr. Daniels died on March 7, 2000 without acting on the C&J request. The department, however, now has a proposal prepared for other such funding opportunities as well as department video, prepared by Professor Richard Schaefer and several broadcasting students.

The department also initiated an alumni newsletter, under the direction of Judie Hendry, to keep alums informed of C&J activities and to create a potential donor base for the department. A survey of alums will be sent out in spring 2000, designed to identify those who wish to help with fundraising.

The department, after considerable deliberation, decided to disband its forensics program, effective with the 2000-2001 academic year. The funds that were designated for forensics were returned to the department in the form of two new teaching assistant lines.

Appointments

Brad Hall was elected to serve as the next C&J chair. He will take over July 1, 2000, when Karen Foss completes her term.

Janet Cramer joined the department in fall 1999; she is a 1999 graduate of the University of Minnesota.

The department searched for a tenure-track faculty member in Communication, to begin the 2000-2001 academic year. Krishna Kandath, completing his degree at Ohio University, accepted the position.

Brad Hall was on sabbatical fall semester, 1999. Everett Rogers was on sabbatical for the 1999-2000 academic year.

A full roster of faculty and staff is attached.

Separations

Rachel Milan, graduate administrative assistant, left in November 1999 to join her husband in Phoenix. Toni McDaniels replaced her. Linday Yancy, undergraduate administrative assistant, left in November to take a teaching job. She was replaced by temporary help. Mary Beibot currently is in that position.

Publications of the Department

Monique Bell coordinated the revision of the department's undergraduate brochure as well as its web site.

For faculty publications, see annual biographical reports.

Professional Activities of the Staff

Monique Bell, Department Administrator, attended the UNM Diversity Conference. She also served as parliamentarian of the Staff Council and as a member of that body's Ethics Committee.

Pat Kiska, Broadcasting Engineer, was a representative to Staff Council and a member of the Salary Committee.

Toni McDaniels took an Access Data Base class.

Mitsubishi International Corporation. This grant, to study technology transfer through research findings from multi-disciplinary research centers to receptors outside of the university, continued for a fourth year. Everett Rogers, PI.

Minority Alcohol and Substance Abuse Prevention Program. Funded by NIAAA. Gill Woodall, co-principal investigator.

Evaluation of a multi-component DWI treatment facility in San Juan County, New Mexico. Funded by the national Institute on Alcohol Abuse and Alcoholism. Gill Woodall, PI.

Alcohol Server Educa5tion as a FAS Prevention Model. Funded by the national Institute on Alcohol Abuse and Alcoholism. Gill Woodall, PI.

Significant Plans

The department will undertake a review of its Graduate Program during the 2000-2001 academic year.

Faculty and Staff Roster Communication & Journalism 1999

Faculty

Jean Civikly-Powell, Professor Jack Condon, Professor Janet Cramer, Assistant Professor Karen Foss, Professor and Chair Ken Frandsen. Professor and Associate Dean, Arts & Sciences Diane Furno-Lamude, Associate Professor Miguel Gandert, Associate Professor Bob Gassaway, Associate Professor Dirk Gibson, Assistant Professor Brad Hall, Associate Professor Michael McDevitt, Assistant Professor John Oetzel, Assistant Professor Everett Rogers, Professor Janice Schuetz, Professor Richard Schaefer, Assistant Professor Gill Woodall, Associate Professor

Estelle Zannes, Professor

Staff

Monique Belle, Department Administrator Linda Yancy, Undergraduate Administrative Assistant Rachel Milan; Toni McDaniels, Graduate Administrative Assistants Pat Kiska, Broadcasting Engineer

4

THE ANNUAL REPORT OF THE DEPARTMENT OF EARTH AND PLANETARY SCIENCES

January 1, 1999 to December 31, 1999

Department of Earth and Planetary Sciences

Annual Report

January 1, 1999 – December 31, 1999

Leslie D. McFadden, Chair

TABLE OF CONTENTS

I. OVERVIEW OF SIGNIFICANT EVENTS, ACTIVITIES AND PROGRAM IMPROVEMENTS	
Introduction	I
Faculty and Staff Accomplishments	I
General Department Activities	
Alumni Progress and Support	10
II. STUDENT ACHIEVEMENTS	12
Student Publications and Other Accomplishments	
Progress of Earth and Planetary Sciences Department Graduate Students	
Student Scholarships and other Awards	
III. FACULTY AND STAFF ACCOMPLISHMENTS	
Activities of Full Associates and Assistant Professors	
Activities of Senior Research Professors	
Activities of Research Professors	
Activities of Research Scientists	78
IV. FACULTY PROFESSIONAL, COMMUNITY AND UNIVERSITY SERVICE	
Research Professors	
Senior Research Professors	
Research Scientists	107
IV. SELECTED DATA CONCERNING STUDENT ENROLLMENTS AND	
GRANTS AND CONTRACTS	
VI. GENERAL DEPARTMENTAL INFORMATION	115
Faculty and Staff	116
Faculty and Staff	119
Department Committees	120, 121
NUL ELUTIDE DI ANG	100
VII. FUTURE PLANS	122
(APPENDIX)	124
Geology Museum Register	125
Harding Permatite Mine	

I. OVERVIEW OF SIGNIFICANT EVENTS, ACTIVITIES AND PROGRAM IMPROVEMENTS

INTRODUCTION

This annual report summarizes the activities, accomplishments and plans of the Department of Earth and Planetary Sciences (E&PS), including the Institute of Meteoritics (IOM), during 1999. Most details of faculty activities (Part III) are derived from biographical supplements for 1999. Therefore, much of what is contained in this report overlaps with materials in the last Department Annual Report for 1998-99 academic year. The greatly modified format of this report reflects the decision by Dean Mike Fischer to change Annual Reports from an academic year to a calendar year format. As this is the only document that comprehensively summarizes the Department's history during the past year and it is used as a source of information by many people both within and outside of the University, we have endeavored to make it as complete as possible.

During most of 1999, the faculty of the Department of Earth and Planetary Sciences consisted of 19 regular tenured or tenure-track faculty, 3 Senior Research Professors, and 3 Research Professors. In addition, 9 Ph.D.-level research scientists (2 within IOM) filled a variety of non-faculty positions within the Department. Most were scientific staff with specific responsibilities relating to analytical laboratories and departmental research endeavors; 5 were post-doctoral scientists. The Departmental faculty is thus augmented by a significant number of other doctoral-level geoscientists, who in some cases participate in teaching and advising of graduate students, and add to the research capabilities and scholarly reputation of the Department.

Permanent scientific staff also includes several technicians and Research Associates, and the office administrative, clerical, and support staff also contribute vitally to the functioning of the Department. Several other geoscientists affiliated with other institutions were in residence in the Department for periods ranging from weeks to the entire year, conducting research as visiting scientists and working with faculty and staff members. The names of all these departmental personnel are included in the Appendix or are noted later in this section.

In Fall of 1999, a new committee, the Long-Rang Strategic Planning Committee, was formed under the Chairmanship of Dr. Jim Papike. The purpose of the committee were to evaluate strategies for faculty productivity assessment, course load distribution, and to develop a long-range five year plan for the department. This was done at the request of Dean Mike Fischer, and some aspects of the plan are described in this report, i.e., although most discussion and finalization of proposed plans were set for Spring of 2000.

FACULTY AND STAFF ACCOMPLISHMENTS

Position Changes in Faculty

No new regular faculty members joined the Department in 1999. In Spring 1999 Assistant Professor Frank Pazzaglia accepted a tenured Associated Professorship at Lehigh University, Pennsylvania, and resigned his UNM faculty position effective at the end of July. Dr. Pazzaglia, a geomorphologist, came to UNM in 1994 and contributed greatly to the Department, especially the Quaternary Studies Program, in his teaching, research and service.

Dr. Albert M. Kudo retired in October of 1999 due to severe health problems; he unfortunately tragically passed away in February, 2000. Dr. Frank Pazzaglia resigned from the department in May, 2000.

Impending Faculty Changes

The Department formally requested approval from the Dean for a search for a new faculty member in geomorphology during the 1999-2000 year, to replace the departing Frank Pazzaglia. The search was approved and following a search conducted in the Fall of 1999 and early Spring, 2000, the Department will be joined by Dr. Grant Meyer in Fall of 2000.

In the summer of 1999, Drs. Steve Getty and Roberto Molina-Garza resigned from their staff positions.

11 11 40

In Fall 1999 Jim Connolly, the Department's computer network manager, also assumed the responsibility of managing the X-ray diffraction laboratory, under the supervision of Professor Adrian Brearley.

The Department hired Nicu-Viorel Atudorei (Ph.D., 1998, University of Lausanne, Switzerland) as a research scientist in the stable isotope laboratory, in January 1999.

Faculty Advancement and Selected Honors

Although Section III contains all appropriate data concerning faculty advancement, activities and honors, we include here some selected highlights for 1999.

Associate Professor Laura Crossey was promoted to full Professor in Spring, 1999.

The faculty reviewed and recommended Assistant Professors Yemane Asmerom and Frank Pazzaglia for tenure and promotion to Associate Professor in Fall 1998. Asmerom's advancement became effective in Fall 1999; Pazzaglia's is moot, as he resigned from the Department following the Spring of 2000.

The faculty conducted Assistant Professor Peter Fawcett's Code 2 review in April, 1999.

The faculty conducted mid-probationary reviews for Assistant Professor Peter Fawcett, Associate Professors Zachary Sharp and Adrian Brearley. All three achieved positive recommendations from the Department. The faculty also reviewed and recommended Associate Professors Gary Smith and Jane Selverstone for promotion to Full Professors.

In Spring 1999, the faculty reviewed the Department's three Research Professors (Horton Newsom, Frans Rietmeijer, and Chip Shearer), and renewed their two-year appointments.

Mike Campana continued his half-time appointment as Director of UNM's Master of Water Resources Administration program this year.

Laura Crossey continued her two-thirds-time appointment as Associate Dean, College of Arts and Sciences this year.

John Geissman and Les McFadden both served as Arts and Sciences representatives on the Faculty Senate during the 1999.

Laura Crossey and Les McFadden served as Assistant Chairs of the Department for the Spring semester of 1999.

In February 1999 the faculty recommended Les McFadden to the Dean as the next Chair of E&PS, and the Dean appointed him to a four-year term beginning July 1, 1999. McFadden succeeded Barry Kues, who served as Chair from 1991-1999.

Drs. Gary Smith and Laura Crossey were Associate Chairs beginning in Fall, 1999.

In April of 1999, Jim Papike was presented with the Outstanding Achievement Award of the University of Minnesota, which recognizes former students who have attained unusual distinction in their chosen field or profession, and who have demonstrated outstanding achievement and leadership.

The Department learned this Spring that Emeritus and Senior Research Professor Wolf Elston will be honored at the Fall 1999 national meeting of the Geological Society of America, with "A multidisciplinary symposium on volcanism, planetary geology, and economic geology in honor of 50 years of geological work by Wolf Elston."

452

On May 6, 1999, the Department honored the numerous teaching and research accomplishments of Dr. Albert
M. Kudo by holding a reception and a special presentation by Dr. Scott Aldridge (LANL). Major Baca of Albuquerque
proclaimed the day as Dr. Albert M. Kudo Day in Albuquerque as a very special added honor.

Sabbatical and Other Leaves

Gary Smith's sabbatical leave continued during the Spring of 1999. His primary activity during the sabbatical was research work in the Geohydrology Group at Sandia National Laboratories. This work mostly centered around geostatistical simulation methods applied to understanding transmissivity variation near the Waste Isolation Pilot Plant. These methods are also applicable to Smith's new research directions in the application of sedimentology to hydrological problems and the experience with SNL was extremely beneficial in broadening his expertise. Additional effort was directed toward developing interactive, animated computer presentations for use in introductory geology classes. Smith also gave invited colloquium presentations at UNM, University of Nevada-Las Vegas, and Oregon State University.

Dr. Barry Kues began a one-year sabbatical in the Fall of 1999, following eight long years as Department Chair. His research involving Paleozoic, invertebrate fossil studies at world-class locales in New Mexico and he continued work on a special volume describing late Paleozoic fossils of the state.

Instructional Activities

1. Student enrollments

Student enrollments in Department of Earth and Planetary Sciences courses during the 1998-99 academic year, as indicated by total student credit hours (SCH), totaled 5705 for regular courses, and 6777 counting natural sciences courses (see #3 below). These figures represent a decline of 3.0% for the regular courses, but an overall increase of 3.7% with Natural Sciences, compared to the previous year. These figures include academic year courses plus our three summer field courses (E&PS-319, -420, and -451). The Department's SCH figures for the past 5 years are given below. The recent declines in departmental SCH have to some extended mirrored similar declines in UNM enrollment, and perhaps too, an increase in transfer students who have fulfilled science requirements at other institutions.

Year	SCH	SCH (with Natural		om previous year
		Sciences)	regular	Inc. N.S.
1994-95	6763		-6.7	· -
1995-96	6524	-	-3.5	-
1996-97	6303	-	-3.4	-
1997-98	5882	6534	-6.7	+3.7
1998-99	5705	6777	-3.0	+3.7

Total reported SCH for Fall, 1999 was 3,084 (excluding Natural Sciences), which represented a 12.6% increase over Fall, 1998 SCH numbers, representing a significant reversal of a five-year trend of decreasing enrollment. Preliminary SCH data for Spring, 2000 compared with Spring, 1999 indicated an even larger increase.

The Department has extensively discussed enrollment trends in the past two years, with a view towards determining causes for declining enrollments and measures that could be taken to continue to increase student enrollment. Numerous factors appear to be involved, some of which we have some control of, some not.

Unlike the other sciences and mathematics, geoscience courses are not required for majors in other fields; thus students in E&PS 100 and 200-level courses are volunteers rather than filling mandatory requirements. The Department effectively loses academic-year SCH credit for our summer field courses, which are required or strongly recommended for our undergraduate majors, but which cannot easily be taught during the academic year.

Elementary geography courses are now considered science courses in the A&S Group Requirements and in the new Core Curriculum; because these courses are not as rigorous as earth sciences courses they attract some students who would otherwise have taken E&PS courses. Most students entering the university have not been exposed to earth sciences in high school, in contrast to biology, chemistry and physics, suggesting that the Department should develop an outreach program to make students aware of our subject before they reach UNM, and to encourage high school science teachers to develop geoscience teaching units. Progress has been made in this regard. A formal advanced geology course for high school students has been proposed to appropriate Albuquerque Public School officials by Alex Castrounis (public school science teacher and currently in our graduate program), with the help of Dr. John Geissman. Many other E&PS faculty, staff and students have been active in a variety of K-12 science/geoscience education initiatives, an effort highlighted in the forthcoming issue of "Inside Arts and Science at UNM" issue. Within UNM, better communication of our course offerings to advisors and other departments, and increased advertising of each semester's offerings, might help to draw more students into our courses. Some revision of course descriptions for the next edition of the UNM catalog was completed, as well as development of a series of 1- and 2-unit short courses on selected topics of wide interest, which will be conducted initially in the 1999-2000 AY, we hope will increase student interest. All of the faculty agree that content and grading standards must be maintained; making courses easier in order to attract greater enrollments benefits neither the students nor the integrity of our instructional program. Finally, it should be noted that the upturn in Department SCH occurred some two years following an upturn in UNM's overall enrollment that reflects initiation of the Lottery Scholarship Program. Perhaps many students who arrived at UNM in the 1997-98 academic year are now taking E&PS courses to fulfill various science course requirements. If so, Department enrollments might increase even more; and of course we hope our efforts to increase enrollment described above will also bear fruit, as well as the addition of a new B.S. degree program in Environmental Sciences (described in #4 below), envisioned to start in the fall of 2001.

At the end of 1999, the number of declared undergraduate E&PS majors stood at 80. During Fall, 1999, 48 students were pursuing M.S. and Ph.D. degrees (see section 2 for additional, related data concerning students) in the Department.

2. Developments in Course Offerings -

A very large majority of the courses offered by this department in 1999 were taught by the faculty. Several new or modified courses were conducted this year. During Spring 1999 four topics (EPS-400) courses were offered on subjects not previously taught by the Department but for which there was significant student interest. These courses -- Vertebrate Paleontology (by Adjunct Professor S. Lucas); El Nino (D. Gutzler); Processes of the Earth's Deep Interior (A. Brearley); and Hydrology of Small Watersheds (Research Assistant Professor P. Unnikrishna) - - attracted a total enrollment of 46. In addition, two new graduate seminars were conducted, on Strength and Dynamics of the Lithosphere (Caswell Silver Research Professor Mousumi Roy), and Geomicrobiology (cross-listed in the Biology Dept., and conducted by L. Crossey and C. Dahm).

The Department reviewed its 400-level course offerings and added 500-numbered parallel courses to most of them, in order to allow students and the University to receive appropriate graduate credit for these courses. Previously, many graduate students enrolled in these 400-level courses together with undergraduates; in the future graduate students will enroll in the 500-numbered versions. A new course developed by Dr. Jim Papike, Mars Evolution is a good example (E&PS-465/565; 21 and 3 students, respectively; Fall, 1999). During this process several new courses were added as well, including a series of 1- and 2-unit short courses at the 100-level designed to provide short introductions to topics of wide interest within the geosciences. One such course was E&PS-106 (Evolution and Age of the Earth) developed by Dr. Zachary Sharp (11 students). Also, Dr. Adrian Brearley offered a new 200-level course, in Fall, 1999, E&PS-210 (Life in the Universe), which attracted 19 students.

In January 1998 the Department assumed responsibility for the Natural Sciences Program, which provides a series of three courses integrating the natural sciences for College of Education students who will become K-9 teachers in New Mexico's public schools. The intent of the program is to provide potential public school teachers with solid training in science and in the effective teaching of science to younger students. In summer 1999, one classroom in Northrop Hall was renovated and all natural science classes are now taught in it. In the Fall of 1999, 8 classes were offered with a total enrollment of 119 students, producing 476 credit hours, a not insignificant contribution to the total

SCH produced by the Department. Ways to further integrate Natural Sciences Program and geoscience education into the Department constituted one of several key issues discussed by the new Long-Range Strategic Planning Committee in the fall of 1999.

3. Summer Course Offerings

During Summer 1999 the Department conducted its 6-week Beginning and Advanced Field Geology sequence (E&PS-319 and E&PS-420). Both the field courses, but especially E&PS-319, experienced increases in enrollment. E&PS-319 attracted 39 students. E&PS 420 also maintained a healthy enrollment of 19, the maximum number of students that can be accommodated in this class. The Department also offered E&PS-101, -105, and -365 during summer 1999, with the latter course of special interest to public school teachers and trainees.

4. Curriculum Changes and Outcomes Assessment

The faculty discussed and approved a proposal by the undergraduate committee for a Bachelor of Science degree in Environmental Sciences. This degree would be offered through E&PS (in addition to our regular E&PS degree), and includes several required E&PS, math and outside science courses, an interdisciplinary menu of course options, and two new "core" environmental science courses. This degree program will provide students rigorous training in the environmental sciences to better prepare them for careers in this rapidly maturing field. The proposal for this new degree was under review by various university committees outside the Department during the Spring of 2000.

The Department completed a third year of undergraduate outcomes assessment during the summer of 1999, adding to the data base begun last year, and continued the initial phase of outcomes assessment for graduate students. We hope to use data provided by these reports to evaluate the impacts of curriculum changes and other changes to our degree program on student outcomes and student retention.

Research and Publication

The faculty, research staff and students of the Department continued their high level of productivity in research in 1999. Research, contributing to human knowledge in one's discipline, is an essential and fundamental function of the Department of Earth and Planetary Sciences at UNM. The Department's status and respect within its discipline depends primarily on the quality and quantity of its research, just as a university's stature depends mainly on the scholarly activities of its entire faculty. In addition, active research programs form an essential teaching tool in keeping students up to date, in educating them not only about facts but also about how knowledge is gained, and (especially with graduate students) providing support for thesis/dissertation work and in the mentoring process of future geoscientists.

During calendar year 1999, members of the Department and Institute of Meteoritics (including faculty, research scientists and students) produced more than 260 publications, including books, scholarly papers in refereed journals, edited volumes, geologic maps, notes, extended abstracts and technical reports (see section 3). About of quarter of these publications are papers published in major national and international journals or edited volumes.

As in past years, graduate students and even some undergraduates participated significantly in the Department's publication effort (see section II). Many refereed papers published in 1999 had student coauthors and students also contributed to many of the published abstracts based on presentations made at professional meetings; in many cases students were the presenters. This shows the importance the faculty places on involving students in research and in presenting the results of their research through professional talks and publications, an important part of their preparation for careers in the geosciences.

Faculty and research scientists also continued their success in attracting external funding to support their research. 17 new externally funded grants and contracts, 26 continuing from past year were in effect among Department scientists in 1999 (see section 3 and 5). This data reported figures include the Institute of Meteoritics.

C 7 k

The great majority of these awards were from Federal agencies, especially the National Science Foundation, Department of Energy, the National Labs, and the National Aeronautics and Space Administration. Competition for these awards with scientists across the country has always been rigorous, but has become increasingly severe in recent years, which makes the success of the Department in 1998-99 all the more noteworthy. The amount of new research funding received each year by the faculty and research scientists exceeds the entire state/university - supported budget of the Department. Not only do these grant and contract funds support a large proportion of departmental research, and benefit the University as a whole through the overhead funds they generate, but many graduate students are supported as research assistants by these funds as well (sections 3 and 4). Also, because most of these external funds are expended in the state, they represent a significant addition to New Mexico's economy.

In addition to publications and grant/contract-supported research, the E&PS faculty and research staff also pursued a wide variety of other research projects during 1998-99 that were not externally funded or published upon during the year (see Section 3).

Other Scholarly Activities

Most of the faculty and research staff participated widely outside the University in various professional activities at the state, national and international levels. These include service on the committees and panels of governmental agencies, as well as participation in professional organizations, such as presenting talks and posters at national meetings, organizing and chairing symposia, leading field trips, and serving as officers. Such activities are a form of service to the profession, but also increase professional recognition, the opportunity for collaborative research, and leads to greater visibility for UNM and the work of its faculty. This participation is summarized in sections III and IV.

The faculty's involvement in professional activities is too lengthy to completely survey here, but some of these contributions were especially important nationally and internationally, and are worth mentioning. Adrian Brearley was a member of the NASA Cosmochemistry Review Panel; Mike Campana was on the Board of Directors of the Association of Groundwater Geologists and Engineers, UNM delegate to the Commission on Food, Energy and Renewable Resources for the National Association of State Universities and Land-Grant Colleges, and was a member of the National Resource Council Water, Science and Technology Board Committee on U.S. Geological Survey Water Resources Research; Kase Klein was Treasurer of the International Mineralogical Association; Jim Papike had several NASA posts, including Chief of the Cosmochemistry Panel and Chair of the Curation Analysis Planning Team for Extraterrestrial Materials; and Jane Selverstone served on the NSF Tectonics Panel, and was elected Vice-Chair of the Structure and Tectonics Division of the Geological Society of America, and later became Chair.

Participation by the faculty and research staff as Editors, Associate Editors, and on Editorial Boards of international journals was substantial in 1999 as it has been in the past. Also, several faculty participated in scholarly and professional activities in numerous foreign countries. Such activities help to advance UNM's reputation worldwide.

University and Public Service

Service to the University and to the public is an important component of the Department's activities. During the past year, E&PS faculty participated on numerous College and University committees (see section IV), and on the Faculty Senate (L. McFadden and J. Geissman). The faculty also served as a resource of expertise in the geosciences and science in general for individuals, groups and organizations outside the University (see Part III and IV). Members of the Department routinely identify rock, mineral, fossil and suspected meteorite specimens for the public, give talks to civic groups and public school classes, judge in science fairs, answer questions for radio, television and newspaper reporters, and participate in socially important issues, such as the selection process for science textbooks in the public schools.

In 1999, many E&PS faculty and research scientists were featured in newspaper articles and radio and television reports on a variety of topics ranging from regional weather and climate issues to studies of meteorites, fossils and volcanoes.

An important resource provided by the Department to the University and the public is maintenance (without specified University support) of two public museums, one devoted to geology (rocks, minerals, fossils, New Mexico geology) and the other to meteorites. These museums are open each weekday, are free, and are visited by thousands of school children and adults each year. A free pamphlet provides information for a self-guided tour, and faculty and graduate students on occasion lead tours when arrangements have been made in advance. Thousands of recorded (group) visitors toured the Geology Museum in 1999; as many or more unrecorded (individual) visitors also visit the museum. These visitors include dozens of elementary, middle, and high school classes from around New Mexico, together with teachers and parents (see Appendix for a complete list). The Geology Museum and collections constantly receive donations of new materials, and donated funds are used to purchase several display-quality specimens each year. The Geology Museum was represented by G. Smith at the Annual Tucson Gem and Mineral Show, the nation's largest, in February 1999.

The Department also maintains the Harding Pegmatite mine in southern Taos County, donated to UNM by Dr. Arthur Montgomery, as an unusual mineral-collecting locality and outdoor geological laboratory. Mr. Gilbert Griego, a Department staff member, is the long-time caretaker of the property. More than 1700 people visited the Harding property in 1999, and they came from all over the country (30 states) (see Appendix). Among the visitors were mineralogy and field geology classes from 15 other universities, in addition to students from UNM. Clearly, the Harding mine is very well known to geologists and amateur rockhounds and mineral collectors, and in maintaining and operating it, the University and Department perform a notable service for the public. The Department welcomes visitors, but permission from the E&PS Chair must be obtained before each visit.

GENERAL DEPARTMENTAL ACTIVITIES

Facilities

1. Capital Improvements

As usual, there were no significant capital improvements to Northrop Hall this past year, although some are needed. The department recently learned that on the proposed new Science and Technology building - - which would provide E&PS and three other departments badly needed additional space - - will not be built. Clearly, the department research and teaching needs are such that additional space remains a high priority, so we initiated discussions to try to see how these needs can be addressed. Planning began for renovation of our large lecture hall (Northrop Room 122), together with the Biology Department's lecture hall and Woodward hall. The intent is to modernize these facilities to allow a wider range of functions and presentation modes, and to integrate them via computer, making use of the most modern available technology.

In response to the Dean's request, the Department submitted its request for new equipment and minor capital improvements in February. The highest priorities for capital improvements are substantial repair and renovation of several heavily utilized classrooms, an upgrade of our radioactive mineral storage area, and replacement of the 55-year old, creaky main elevator. In the Fall of 1999, we learned that there were no funds to respond positively to this request.

In Spring 1999, the facilities committee developed and circulated a questionnaire to the faculty concerning space needs, in order to assist in planning space utilization over the next few years in an increasingly cramped Northrop Hall. Without the prospect of additional space becoming available in a new building, the Department must use existing space with maximum efficiency. The Long-range Strategic Planning Committee began to address this question in the Fall of 1999 as part of their goal of developing a five-year plan on the Spring of 2000.

2. Analytical Facilities

The Department and Institute of Meteoritics maintains an outstanding array of analytical facilities necessary to advanced research in many areas of the earth sciences. These facilities are also utilized extensively by other departments and high-tech centers on campus, as well as institutions outside UNM (e.g., the national labs, Intel Corp., etc.). Sustaining the operation and maintenance of the Department's analytical laboratories (mainly from grants and user fees) is for the most part successfully accomplished, but in some cases rather precariously. The costs of instructing students in these labs, service contracts and technician salaries is a persistent drain on their budgets, which may be exacerbated by declines in the user base. Relatively little assistance can be provided directly by the Department, and annual University support for the operation of out multi-user analytical labs, which are really university facilities, was nil this past year.

A new \$1.5 million field-emission gun transmission electron microscope, funded by NSF in Fall 1998, with cost-sharing by several UNM offices and departments, arrived in the Fall of 1999 and installation in the basement of Northrop Hall commenced soon there after.

In 1999, the X-Ray Powder Diffraction Laboratory upgraded its analytical software to the Microsoft Windows-based DataScan 3.1 and Jade 5.0 from a VMS-based system, and installed a new Pentium II workstation and color printer. Conversion to a Windows-based system has made the exchange of data between the analytical system and our department local area computer network much simpler. This upgrade also allows for a significant increase in ease of use of our Scintag PADV system, and, combined with an upgrade to our Powder Diffraction File Database, makes software-assisted analysis of sample data quicker and more reliable.

A Shaw-type, large volume thermal demagnetization/paleointensity system was added to the Paleomagnetic Lab.

3. Computing Facilities

Two new Sun Ultra workstations were added to the department's Unix cluster, which now includes seven fully cross-linked Unix workstations with approximately 60 Gbytes of total disk storage. Use of these machines is growing rapidly, particularly as more students carry out GIS-based mapping to complement their fieldwork.

Professors Pazzaglia, Gutzler and Fawcett submitted a proposal to the National Science Foundation (currently under review) to fund a major upgrade in the Ethernet backbone in Northrop Hall by replacing the network hubs; unfortunately the proposal was turned down, presumably owing largely to Pazzaglia's departure according to statements by NSF. The Long-Rang Strategic Planning Committee recognizes modernization and upgrading of our computer facilities as major issues in this department (see section 7). In Fall of 1999, department funds were used to purchase new computer hardware and software in an attempt to at least partly address the issue. Also, the faculty formally identified purchase of a large-format, computer based plotter, as one of its prioritized overall capital equipment request in the Fall of 1999; submitted to the Dean of the College of Arts and Sciences.

4. Teaching Facilities

In the Spring the Department purchased a used but relatively low mileage 15-passenger Dodge van from the UNM automotive division for a good price, to augment our aging fleet of vehicles utilized mainly for class field trips. The van was immediately pressed into service in the early summer field courses. In the Fall, the Department voted to prioritize purchase of a 9-passenger suburban to be used as an essential field vehicle, in teaching and research (in response to the request for small capital purchases from the Dean).

Some minor improvements were made in Room 114 to improve classroom teaching-related activities in Natural Sciences program classes.

Recruiting Visits

The Department did not host recruiters from companies such as Vastar Resources, Conoco, Exxon, and Arco Gas during 1999 as we have usually done in the past. Unfortunately, a severe downturn in petroleum prices in the past few years has severely limited hiring in this area and therefore diminished recruiting by such companies.

Professional Lectures given in the Department during the 1999 academic year are listed below:

<u>Date</u>	<u>Speaker</u>	Title of Presentation
9/1/99	Michael Sandiford	University of Adelaide "Tectonic Feedback, Intraplate Deformation and the Geochemical Structure of Continents: A View From Down Under"
9/3/99	Tim Lawton	New Mexico State University. "Salt Tectonics and its Influence on Sedimentation, La Popa Basin, Northeast Mexico"
9/10/99	Eric Small	New Mexico Institute of Mining and Technology. "Regional Hydrologic & Climatic Changes Caused by Anthropogenic Desiccation of the Aral Sea"
9/17/99	Troy Rasbury	SUNY Stony Brook. "Directly Dating the Sedimentary Record: Approach and Application"
9/20/99	Gene Humphreys	University of Oregon. "The role of the Mantle in Western U.S. Tectonics" California Institute of Technology.
9/22/99	Martha House	"(U-TH)/HE Thermochronometry and Cenozoic Evolution of the Sierra Nevada, California: Uplift, Exhumationand Relief"
10/1/99	Penny Brown	Boulder, Colorado. "Microbe-Mineral Interactions: Earth, Mars and Beyond"
10/7/99	Anthony Philpotts	University of Connecticut. "Geologic Field Mapping Techniques in the New Millennium: Revolutionizing Geological Mapping Through the use of the Electronic Total Station and Other Computer - Assisted Devices"
10/8/99	Anthony Philpotts	University of Connecticut. "Differentiation of Basaltic magmas"
10/22/99	Scott Tyler	Darcy Distinguished lecturer-University of Nevada, Reno. "Ground-Water Recharge in Arid Regions: Questions About Today and the Past"
11/3/99	Kevin M. Bohacs	1999-2000 AAPG Distinguished Lecture, Exxon Production Research Company, Houston, Texas. "Sequence Stratigraphy of Lake Basins: Unraveling the Influence of Climate and Tectonics"
11/5/99	Cliff Dahm	University of New Mexico, Biology Department. "Biogeochemistry and Hydrogeology of Surface Water and Ground Water Interfaces"
11/12/99	Huifang Xu	University of New Mexico. "A Unified Equation for Predicting Stability Constants of Aqueous Metal Complexes and Intrinsic Sorption Constants of Metal Ions at Mineral-Water Interfaces"
11/19/99	David Des Marais	NASA Lab, California. "Early Evolution of the Biogeochemical Carbon Cycle"

11/22/99 Lokesh Chaturvedi Environmental Evaluation Group New Mexico Institute of Mining and

Technology. "Where is WIPP now"

12/3/99 Alan Boss Carnegie Institute of Washington. "Extrasolar Planets"

12/10/99 Orin Pilkey Using Mathematical Models to Predict Earth Surface Processes: They Don't

Work " (Duke University).

ALUMNI PROGRAMS AND SUPPORT

The Department is very fortunate in being supported by a large group of active and enthusiastic alumni. Individually and collectively these graduates provide generous financial, advisory and moral support for many departmental activities, which contribute significantly to our success in our educational and research missions.

Caswell Silver Foundation

First among sources of alumni support is the Caswell Silver Foundation. Funds generated by the investments of the Foundation in 1998-99 provided full-time support for the Leon Silver/Vincent Kelley graduate student Fellows (Colin Shaw and Mike Gaud), and subsidized most of the travel of faculty to professional meetings in 1999. The Foundation also supports periodically an endowed faculty chair, the Caswell Silver Research Professor; as noted earlier, Dr. Mousumi Roy, began a 2-year appointment as Silver Research Professor in July, 1998.

The Caswell Silver Foundation also supports the Caswell Silver Distinguished Lecturer series, which allows the Department to bring one or two National Academy of Sciences Members for lectures and visits with faculty and students. This year, the faculty chose Professor Victor Baker, Head of the Department of Hydrology and Water Resources at the University of Arizona, and 1998 President of the Geological Society of America, as the Caswell Silver Distinguished Lecturer. Professor Baker presented two lectures during his visit on April 1 and 2, 1999: "Toward a Philosophy of the Earth Sciences," and "Geomorphology and Paleohydrology of Mars" He was honored at a reception in the geology museum and spent much of his visit talking with faculty and students individually. Visits of Distinguished Lecturers are welcomed by the Department both for the opportunities they provide us to interact with some of the most distinguished and influential geologists in the country, and to inform them about our department and the research and other academic activities we are pursuing. No Caswell Silver Distinguished Lecture was presented in the Fall of 1999.

As in previous years, the Silver Foundation made possible two \$500 Meritorious Staff Awards, presented to two outstanding non-academic staff members. These awards allow the faculty to express in a tangible way its deep appreciation for the efforts of the staff in contributing to the effective operation, advancement and well being of the Department. Recipients of these awards, presented at the Department's May, 1999 Commencement Ceremonies, were Paula Holub, departmental administrator, and Gilbert Griego, Harding Mine manager.

In addition to these major ways in which the Silver Foundation assisted the Department of Earth and Planetary Sciences during the past year, the Foundation also provided the means to accomplish other important functions, such as advertising and supporting the visits of top potential graduate students to the department, and sponsoring the reception for the Distinguished Lecturer. Support from the Caswell Silver Foundation benefits the Department in many different ways, and thereby strengthens the Department as a whole, as well as assisting individual faculty and students in their scholarly endeavors. In the Fall of 1999, for example, the Foundation Board voted to support on initiative to use Foundation funds to extend Dr. Mousumi Roy's position in the Department another two years, with the support of the College of Arts and Sciences. The Department deeply appreciates this support.

13.

Alumni Contributions and Accomplishments

Donations and contributions from alumni, faculty and friends of the Department support about a dozen scholarship funds, mostly managed by the UNM Foundation. The interest generated by these funds annually is utilized to award scholarships to undergraduate and graduate students. Such scholarships are augmented by other scholarships awarded by the Department, scholarships and research grants from institutions outside the University, and occasionally fellowship funds from the University. A full summary of scholarships and fellowships received by Earth and Planetary Sciences students is presented in Part IV of this report. Here we note that in 1998-99, scholarships derived from alumni-supported funds amounted to \$26,575 awarded to 31 undergraduate students (Leonard, Campbell and Pfeiffer Scholarships), plus \$21,800 awarded to 22 graduate students (Alumni Fellowship, Kelley, Miossec, Wanek, Rhodes, Vann and Wengerd Scholarships).

The Department also maintains contact with its alumni through gatherings at professional meetings, newsletters and many personal and professional contacts. Several alumni of the Department advanced significantly in their careers this past year, and we recognize these accomplishments here.

- Alex Castrounis (B.S., 1998) is an APS Science teacher.
- Anna Snider (M.S., 1999) just started working in Carlsbad for Sandia National Laboratories.
- Brad Ilg (Ph.D., 1996) Research Associate, School of Earth Sciences, Victoria University of Wellington, Wellington 6000, New Zealand. He is responsible for field programs and "Research Expeditions".
- Brian Horton (B.S., 1992) after finishing Ph.D. elsewhere, obtained tenure-track faculty position at Louisiana State University.
- Bruce Harrison (Ph.D., 1991) gained tenure in Geology Department, New Mexico Tech. Socorro.
- Chris Andronicos (B.S., 1994) is now Assistant Professor, University of Texas at El Paso, starting in
- Edmund Deal (Ph.D., 1973) became Director and State Geologist, Montana Bureau of Mines and Geology.
- Heather Weigel (B.S., 1996) is working for Washington Group International (formerly Raytheon) in Colorado.
- Kathleen McLeroy (B.A., 1999) is working for New Mexico Bureau of Mines and Mineral Resources and plans to enter Anderson School in Spring, 2001.
- Kathy Dotson (B.S., 2000) accepted a position with Hazen Research in Golden, Colorado.
- Lance Cook (M.S., 1979) became State Geologist of Wyoming.
- Laura Hagan and Jake Armour (Both are working on M.S.,) are working for John Shomaker, a local, prominent geohydrologist.
- Peter Maggiore (M.S., 1982) became Director, New Mexico State Environment Department.
- Sheila Hutcherson (B.S., 1999) is working on a Masters at UNLV Reno.
- Stephen Harlan (Ph.D., 1992) tenure-track faculty position, George Mason University, Virginia.
- Tracey Cascadden (Ph.D., 1997) tenure-track faculty position, Emporia State University, Emporia, Kansas.
- Adam Read, (M.S., 1997) Geoscientist and GIS Specialist, accepted a position with the New Mexico Bureau of Mines and Mineral Resources, Socorro, New Mexico.

Alumni Contributions and Accomplishments

Donations and contributions from alumni, faculty and friends of the Department support about a dozen scholarship funds, mostly managed by the UNM Foundation. The interest generated by these funds annually is utilized to award scholarships to undergraduate and graduate students. Such scholarships are augmented by other scholarships awarded by the Department, scholarships and research grants from institutions outside the University, and occasionally fellowship funds from the University. A full summary of scholarships and fellowships received by Earth and Planetary Sciences students is presented in Part IV of this report. Here we note that in 1998-99, scholarships derived from alumni-supported funds amounted to \$26,575 awarded to 31 undergraduate students (Leonard, Campbell and Pfeiffer Scholarships), plus \$21,800 awarded to 22 graduate students (Alumni Fellowship, Kelley, Miossec, Wanek, Rhodes, Vann and Wengerd Scholarships).

The Department also maintains contact with its alumni through gatherings at professional meetings, newsletters and many personal and professional contacts. Several alumni of the Department advanced significantly in their careers this past year, and we recognize these accomplishments here.

- Alex Castrounis (B.S., 1998) is an APS Science teacher.
- Anna Snider (M.S., 1999) just started working in Carlsbad for Sandia National Laboratories.
- Brad Ilg (Ph.D., 1996) Research Associate, School of Earth Sciences, Victoria University of Wellington, Wellington 6000, New Zealand. He is responsible for field programs and "Research Expeditions".
- Brian Horton (B.S., 1992) after finishing Ph.D. elsewhere, obtained tenure-track faculty position at Louisiana State University.
- Bruce Harrison (Ph.D., 1991) gained tenure in Geology Department, New Mexico Tech. Socorro.
- Chris Andronicos (B.S., 1994) is now Assistant Professor, University of Texas at El Paso, starting in 1999
- Edmund Deal (Ph.D., 1973) became Director and State Geologist, Montana Bureau of Mines and Geology.
- Heather Weigel (B.S., 1996) is working for Washington Group International (formerly Raytheon) in Colorado.
- Kathleen McLeroy (B.A., 1999) is working for New Mexico Bureau of Mines and Mineral Resources and plans to enter Anderson School in Spring, 2001.
- Kathy Dotson (B.S., 2000) accepted a position with Hazen Research in Golden, Colorado.
- Lance Cook (M.S., 1979) became State Geologist of Wyoming.
- Laura Hagan and Jake Armour (Both are working on M.S.,) are working for John Shomaker, a local, prominent geohydrologist.
- Peter Maggiore (M.S., 1982) became Director, New Mexico State Environment Department.
- Sheila Hutcherson (B.S., 1999) is working on a Masters at UNLV Reno.
- Stephen Harlan (Ph.D., 1992) tenure-track faculty position, George Mason University, Virginia.
- Tracey Cascadden (Ph.D., 1997) tenure-track faculty position, Emporia State University, Emporia, Kansas.
- Adam Read, (M.S., 1997) Geoscientist and GIS Specialist, accepted a position with the New Mexico Bureau of Mines and Mineral Resources, Socorro, New Mexico.

463

II. STUDENT ACHIEVEMENTS

Student Publications and Other Accomplishments

(Please see section 3 for papers in which students are co-authors with faculty and/or research scientists; student co-authors are indicated by a star).

Student: Deb Bergfeld

Abstract:

Preliminary Evaluation of Geothermal Potential at the Cheyenne River Sioux Reservation, South Dakota, 1999. Bergfeld D., Bruton C., Goff F.E. and Counce D. Geothermal Resources Council Transactions 23, 7 pp.

Presentation:

Publication and Presentation at yearly Geothermal Resources Council Meeting at Reno, NV, Oct. 1999. Awarded Best Paper for the session.

Student: Peter J. Castiglia

Abstract:

Late Quaternary glacial chronology of the Cordillera Vilcanota Quelccaya Ice Cap region in southeastern Peru based on lake sedimentology, radiocarbon dates, and soils, Geological Society of America, Abstract with Programs, Rodbell, D.T., Castiglia, P.J., Mark, B.G., Seltzer, G.O., Goodman, A.Y., Moy, C.M., and Abbott, M.B., v. 31, no. 7, p. 56, 1999.

Funding:

GSA: \$1,600 Sigma Xi: \$800

RPT: \$ 750

Graduate Student: Aaron Cavosie

Collaborated with Laura Pletsch-Rivera (former undergraduate student).

Poster Presentation:

Quartz veins as proxies for fluid pressure evolution in the contact aureole of the 1.4 Ga Sandia Pluton, New Mexico at the Spring NMGS Meeting in Socorro, New Mexico.

Poster Presentation:

Undergraduate Steven Rogers and Elizabeth Lucky collaborated with graduate student Aaron Cavosie.

Early Proterozoic ophiolite fragments in the northern Colorado Front Range?, at the GSA Meeting in Denver, Colorado.

Student: Kate Duke 465

Abstract:

Experimental low temperature aqueous alteration of Allende under reducing conditions. Lunar and Planetary Science XXX, CDROM Abstract #1782. Duke, C.L., and Brearley, A.J. (1999)

Paper:

Paper presented at the 30th Lunar and Planetary Science Conference, Houston, Texas, Spring 1999.

Funding:

\$6000,00 from Zonta International Foundation Amelia Earhart Fellowship.

Student: Laura Hagan

Abstracts:

Abstract, presented at the Waste Environment Research Consortium, Conference on the Environment, Albuquerque, NM, April, 1999.

Abstract, AGU, San Francisco, CA, December, 1999. GSA student grant, 1999.

Zeigler, K., Droxler, A.W., Schwartz, J.P. and Shearer, M., High-resolution study of the MIS II maximum dissolution interval at subthermoclinal depth i Pedro Channel (Northern Nicaragua Rise, Caribbean Sea): EOS, v. 80, p. F557, 1999.

Student: Andrew B. Heckert

Abstracts presented at Professional Meetings:

Harris, J.D., Heckert, A.B. and Lucas, S.G., Preliminary analysis of sphenodontian (Lepidosauria) diversity in the Upper Triassic Chinle Group, southwestern USA. Journal of Vertebrate Paleontology, v. 19(3) p. 49A, (incorrectly printed as Harris, Lucasand Heckert). Presented at the annual meeting of the Society of Vertebrate Paleontology, Denver, CO., October, 1999.

Heckert, A.B. and Lucas, S.G., Late Triassic ornithischian dinosaur evolution. Journal of Vertebrate Paleontology, v. 19(3), p. 50A. Presented at the annual meeting of the Society of Vertebrate Paleontology, Denver, CO., October, 1999.

Heckert, A.B., Harris, J.D., Lucas, S.G. and Rinehart, L.F., The oldest coelophysoid (Dinosauria: Theropoda) skull, from the Upper Triassic Chinle Group, north-central New Mexico, U.S.A. GSA Abstracts with Programs, v. 31(7), A365. Presented at the annual meeting of the Geological Society of America, Denver, CO., October, 1999.

Heckert, A.B., Lucas, S.G. and Estep, J.W. Lower Chinle Group (Upper Triassic:Upper Carnian) tetrapods from the vicinity of Cameron, Arizona. Southwest Paleontological Symposium Proceedings 1999, p. 17-18. Presented at the annual meeting of the Southwest Paleontological Society, Mesa, AZ., February, 1999.

Heckert, A.B., Lucas, S.G. and Rinehart, L.F., From decapods to dinosaurs: a diverse new fauna from a bonebed in the Upper Triassic (Norian) Petrified Forest Formation. Journal of Vertebrate Paleontology, v.

19(3), p. 50A. Presented at the annual meeting of the Society of Vertebrate Paleontology, Denver, CO., October, 1999.

Heckert, A.B., Lucas, S.G., Krzyzanowski, S.E. and Estep, J.W., Additions to the vertebrate fauna of the Upper Triassic Blue Mesa Member, (Adamanian-latest Carnian) of the Petrified Forest Formation in the Blue Hills, Apache County, Arizona. Southwest Paleontological Symposium Proceedings 1999, p. 19. (BEST STUDENT PAPER AWARD). Presented at the annual meeting of the Southwest Paleontological Society, Mesa, AZ., February, 1999.

Heckert, A.B., Rinehart, L.F., Lucas, S.G., Downs, A., Estep, J.W., Harris, J.D., Reser, P.K.and Snyder, M., A diverse new Triassic fossil assemblage from the Petrified Forest Formation (Revueltian: early-mid Norian) near Abiquiu, New Mexico. New Mexico Geology v. 21, p. 42. Presented at the Spring meeting of the New Mexico Geological Society, Socorro, NM April, 1999.

Lucas, S.G., Heckert, A.B. and Estep, J.W. Topotype skull of Placerias (Synapsida:Dicynodontia) from the Upper Triassic Chinle Group of northern Arizona. Southwest Paleontological Symposium Proceedings 1999, p. 21. Presented at the annual meeting of the Southwest Paleontological Society, Mesa, AZ., February, 1999.

Lucas, S.G., Heckert, A.B. and Estep, J.W. Continuity of Triassic strata and unconformities across the Rio Grande Rift, north-central New Mexico. New Mexico Geology v. 21, p. 44. Presented at the Spring meeting of the New Mexico Geological Society, Socorto, NM April, 1999.

Lucas, S.G., Heckert, A.B. and Harris, J.D., Biostratigraphic correlation based on cladistic phylogeny: an unparsimonious exercise. GSA Abstracts with Programs, v. 31(7), p. A42. Presented at the annual meeting of the Geological Society of America, Denver, CO., October, 1999.

Lucas, S.G., Heckert, A.B. and Morgan, G.S., Newly discovered skull of the Proboscidean Gomphotherium from the Miocene of the Espaola Basin, New Mexico. New Mexico Geology v. 21, p. 44. Presented at the Spring meeting of the New Mexico Geological Society, Socorro, NM April, 1999.

Peterson, R., Peterson, R., Andrea, N.V., Lucas, S.G. and Heckert, A.B. Geology and taphonomy of the Peterson site, New Mexico's most extensive Late Jurassic dinosaur quarry. New Mexico Geology v. 21, p. 43-44. Presented at the Spring meeting of the New Mexico Geological Society, Socorro, NM April, 1999.

Peterson, R., Peterson, R., D. Andrea, N.V., Lucas, S.G. and Heckert, A.B., Geological context and preliminary taphonomic analysis of the Peterson site, a Late Jurassic dinosaur quarry in New Mexico. Journal of Vertebrate Paleontology, v. 19(3), 68A. Presented at the annual meeting of the Society of Vertebrate Paleontology, Denver, CO., October, 1999.

Rinehart, L.F., Heckert, A.B. and Lucas, S.G., A probable decapod crustacean from the Upper Triassic Petrified Forest Formation of the Chinle Group, north-central New Mexico. New Mexico Geology v. 21, p. 43. Presented at the Spring meeting of the New Mexico Geological Society, Socorro, NM April, 1999.

Rinehart, L.F., Heckert, A.B. and Lucas, S.G., Late Triassic decapod from the Upper Triassic Petrified Forest Formation, north-central NM, U.S.A. GSA Abstracts with Programs, v. 31(7), p. 464. Presented at the annual meeting of the Geological Society of America, Denver, CO, October, 1999.

<u>Papers</u>

Heckert, A.B., Upper Triassic tetrapods from the Lucero uplift, central New Mexico. New Mexico Geological Society Guidebook 50, p. 311-315.

Heckert, A.B. and Lucas, S.G., A new aetosaur (Archosauria: Crurotarsi) from the Upper Triassic of Texas and the phylogeny of aetosaurs. Journal of Vertebrate Paleontology, v. 19, p. 50-68.

Heckert, A.B. and Lucas, S.G., Global chronology and correlation of Triassic theropods (Archosauria:Dinosauria). Albertiana 23, p. 22-35.

Heckert, A.B., Lucas, S.G. and Harris, J.D., An aetosaur (Reptilia:Archosauria) from the Upper Triassic Chinle Group, Canyon lands National Park, Utah. in Santucci, V., (ed.) National Park Service Geologic Resources Division Technical Report, p. 23-26.

Lucas, S.G., Estep, J.W., Heckert, A.B. and Hunt, A.P. Cynodont teeth from the Upper Triassic of New Mexico, U.S.A. Neues Jahrbuch fur Geologie und Palontologie Monatsheft, 1999(6), p. 331-344.

Lucas, S.G., Heckert, A.B. and Estep, J.W., Correlation of Triassic strata across the Rio Grande rift, North-Central New Mexico, New Mexico Geological Society Guidebook 50, p. 305-310.

Lucas, S.G., Heckert, A.B., Fraser, N.C. and Huber, P., Aetosaurus from the Upper Triassic of Great Britain and its biochronological significance. Neues Jahrbuch fr Geologie und Palontologie Monatsheft, 1999(9), p. 568-576.

Grants:

Paleobiological Fund Grant; \$1500 (1999). New Mexico Geological Society Student Grant; \$500 (1999). UNM Research Projects and Travel Grant; \$800 (1999).

Selected Scholarships, Fellowships and Awards:

Society of Vertebrate Paleontology Bryan Patterson Award for field research; \$2000, (only one awarded), University of New Mexico Geology Alumni Scholarship, 1999.

Conferences attended:

Society of Vertebrate Paleontology Annual Meeting. Geological Society of America Annual Meeting. Southwest Paleontological Symposium. New Mexico Geological Society Annual Spring Meeting.

Departmental Service

Full time TA, Spring and Fall Semesters, 1999. E&PS 105L Coordinator. Spring and Fall Semesters, 1999.

Student: Marcia Jensen

Abstract:

Migrating Cretaceous theropods? Evidence from oxygen isotope geochemistry, Canada and New Mexico. Marcia L. Jensen*, Zachary D. Sharp and Spencer G. Lucas, In New Mexico Museum of Natural History and Science Bulletin 18, in press.

Grants and Awards:

1999—Outstanding Student Research Award, Geological Society of America, 1999—Student Research Grant (\$1866.00), Geological Society of America, 1999—Research, Project and Travel Grant (\$900.00), Office of Graduate Studies, University of New Mexico

Student: Timothy Wawrzyniec

Presentation: Collaborated with Gary Axen and Jane Selverston.

Rapid Thinning and Embrittlement of Ductile Shear Zones: Alternatives to P and T as Principal Controls on the Brittle-Ductile Transition at the Fall AGU Meeting.

<u>Progress of Earth and Planetary Sciences Department Graduate Students Supported by The</u> Institute of Meteoritics

Justin Hagerty completed the second year of his Master's degree program and intends to graduate in December 2000. The focus of his research is to use the Lonar Lake impact structure in Maharashtra, India as an analogue for similar craters on the surface of Mars. This work will provide information concerning hydrothermal alteration products and the formation of the Martian soil. Justin also worked in conjunction with Dr. Horton Newsom to create and provide educational outreach activities for middle school students.

Justin attended the 31st Lunar and Planetary Science conference in Houston, Texas where he gave an oral presentation titled, "Hydrothermal activity at the Lonar Lake impact structure: Implications for the formation of the Martian soil." He also presented a poster titled "Addressing the misconceptions of middle school students about becoming a scientist or engineer."

Chris Herd is actively pursuing his Ph.D. and expects to graduate in the spring of 2001. He has completed the first section of his dissertation, focusing on the oxygen fugacity of the martian basalts and has submitted the results to American Mineralogist for publication. Ion Probe work on Ni and Co in martian olivines continues, with initial results presented at the Lunar and Planetary Science Conference in Houston in March. Experiments with Dr. John Jones at Johnson Space Center continued after the March meeting, with results expected to produce a paper in the near future. Development of spinel standards for Ion Probe analysis is in progress.

A poster presentation titled, "Systematics of Ni and Co in olivine from planetary melt systems: martian basalts Dar al Gani 476 and EETA 79001" was given at the 31st Lunar and Planetary Science Conference.

An oral presentation was given at the Geological Society of America Annual Meeting titled, "Implications for the petrogenesis of martian meteorite Dar al Gani 476 from spinel, olivine and pyroxene compositions".

An oral presentation was given at the 2nd Canadian Space Exploration Workshop titled "Canada's Potential Role in Martian Materials Research: Examples from Petrologic Studies of Martian Meteorites".

An oral presentation was given at the 31st Lunar and Planetary Science Conference titled, "Experimental constraints on the Cr content, oxygen fugacity and petrogenesis of EETA 79001 Lithology A."

Jim Karner is currently working on his dissertation while working part time as the laboratory technician in the Microprobe and SEM labs. His dissertation focuses on the major, minor and trace element chemistry of silicate minerals in basalts in a comparative planetology study. Jim was recently awarded a New Mexico Space Grant Consortium fellowship that will help fund his research.

Jim also volunteers his time to a couple of the Institute's public outreach activities. He works with Dr. Horton Newsom and Justin Hagerty in designing and implementing space-based inquiry activities for middle school students involved in the MESA program. Jim also assists Dr. Rhian Jones in analyzing and identifying suspect meteorite samples as a public service to anyone who brings or sends their samples in.

Placement of Department Graduates

- Anders Lundahl: is with City of Albuquerque Water District.
- Meaghan O'Rourke is working with an environmental consulting firm in Albuquerque, and then moved to a
 job at Sandia National Laboratories.
- Tim Wawrzyniec, Ph.D., employed with Research Scientist at Texas Bureau of Economic Geology at the University of Texas.

1

STUDENT SCHOLARSHIPS AND OTHER AWARDS

Many Graduate and Undergraduate students were supported by scholarships, fellowships and other awards during the 1998-1999 year. Many scholarships are derived from various funds that have been established for this purpose by alumni and other friends of the Department. The Department augments these awards with travel scholarships that partially offset the expenses of traveling to professional meetings (and often provide free use of vehicles to these meetings) and other scholarships supporting use of the analytical instruments and other research expenses. Recipients of such awards are listed below:

Outstanding Student of the Year Award

Stuart A. Northrop, Outstanding Senior (Brunton Compass) – Sheila K. Hutcherson Sherman A. Wengerd, Award (Hand Lens) – Diana B. Strickland J.P. Fitzsimmons, Award (NMGS Guidebook) – Paulo de Sa'Rego

V.C. Kellev Outstanding Field Geologist (Estwing Hammer)

Sheila K. Hutcherson

Harry and Mabel Leonard Scholarship

James Ashby	Linda Brown	Justin Christofferson
Paulo de Sa'Rego	Kathleen Dotson	Eileen Embid
Ivan Erchak	Sheila Hutcherson	David Johnson
Todd Lopez	Anders Lundahl	Nancy Natek
Richard Ortiz	Joan Otahal	Doug Raszewski
Jason Ray	Marisa Salazar	Leigh Shean
Diana Strickland	- John Whalen	-

General Thomas Campbell Award

Catalina Bryant	Kelly Clayton	Meghan Duran
Adam Erenstein	Shawna Hollen	Elizabeth Lagenburg
Kenneth Marshall	Serenity Nehring	Christopher Purcell
Angie Smigelski	Eric Wilkins	

James Drew Pfeiffer Memorial Award

David Johnson

New Mexico Geological Society, Outstanding Senior Award

Eben Crawford

New Mexico Geological Society, Lucille H. Pipkin Undergraduate Award

Eben Crawford Nancy Natek Diana Str

Los Alamos National Laboratories, Field Conference Award

Sheila Hutcherson

Association for Women Genscientists Award

Sheila Hutcherson

Mary Simmons

Geology Alumni Fellowship Fund

Jake Armour Aaron Cavosie Andy Heckert Tom Loveland

Michael Timmons

Nicole Bailey
Patrick Florence
Dale Henderson
David Mitchell
Dezbah Tso

Claudia Borchert Tim Gere Michelle Kearney Jessica Moore

Paul Wisniewski

Jean-Luc Miossec Memorial Scholarship (Geomorphology/Sedimentology)

Missy Eppes

Richard P. Vann Memorial Scholarship (Paleontology)

Marcia Jensen

Sherman A. Wengerd Traveling Fellowship

Laura Hagan

Alexander and Geraldine Wanek Scholarship

Carol Dehler Anna Snider

Karen Roche

Vincent C. Kelley Scholarship

Colin Shaw

Rodney Rhodes Scholarship

Jessica Moore

Albuquerque Petroleum Association Award

Aaron Cavosie

New Mexico Geological Society, Fall Field Conference Scholarship

Aaron Cavosie Anna Snider

Colorado Scientific Society Research Grant

Carol Dehler

UNM Office of Graduate Studies Graduate Fellowship

Missy Eppes

Bachelor of Arts

471

Marsha R. Green – Spring, 1999 Mark L. Luongo – Spring, 1999 Fredric Shean Jr., – Spring, 1999 Todd M. Lopez - Spring, 1999 Kathleen E. McLeroy - Spring, 1999

Bachelor of Science

James Morton Ashby – Spring, 1999 Ivan Michael Erchak – Spring, 1999 Alexander A. Garza – Spring, 1999 Anders H. Lundahl – Spring, 1999 Meghan S. O'Rourke – Spring, 1999 Jasper David Schaer – Spring, 1999 Angie Smigelski – Fall, 1999 Charles A. Bertram – Spring, 1999 Leigh Margaret, Fall-Spring, 1999 Sheila K. Hutcherson – Spring, 1999 Mary Ann Montoya – Spring, 1999 Jessica W. Preston – Spring, 1999 Douglas A. Rasewski – Fall, 1999

Master of Science

Daniel J. Koning - Spring, 1999 David K. Mitchell - Fall, 1999 Karen N. Roche - Spring, 1999 Anna C. Snider – Fall, 1999 Karl W. Wegmann – Spring, 1999 Paul A. Wisniewski – Fall, 1999

Bachelor of Science - Departmental Honors ~ Senior Thesis

Sheila K. Hutcherson, Spring 1999 - A geochemical Comparison of Topaz, Rhyolite to Other Mount Taylor Volcanic Field Rhyolites. (Dr. Albert M. Kudo, Advisor).

Kathleen E. McLeroy, Spring, 1999 - Characteristics of Melted Xenoliths at Vulcan Cone, Albuquerque Volcanoes. (Dr. Gary A. Smith, Advisor).

Graduate Degrees Awarded

The following students received M.S. and Ph.D. degrees in Earth and Planetary Sciences, between fall 1993 and summer 1999. Thesis/dissertation titles and faculty advisors are also indicated.

Master of Science

Daniel J. Koning, Spring, 1999 - Fault Segmentation and Paleoseismicity in a Continental Rift Setting, Alamogordo Fault Southern New Mexico. (Dr. Frank J. Pazzaglia, Advisor).

Karen N. Roche, Spring, 1999 — A High-Resolution Petrographic Study of the Cretaceous Ferron Sandstone, Coyote Basin, Utah: Integrating Petrology and Petrophysics. (Dr. Laura J. Crossey, Advisor).

Karl W. Wegmann, Spring, 1999 – Late Quaternary Fluvial and Tectonic Evolution of the Clearwater River Basin, Western Olympic Mountains, Washington State. (Dr. Frank J. Pazzaglia, Advisor).

Doctor of Philosophy

Joel L. Pederson, Spring, 1999 – A Long-Term Record of Climate-Controlled Hillslope Sedimentation. (Dr. Frank J. Pazzaglia, Dr. Gary A. Smith, Advisors).

Timothy F. Wawrzyniec, Fall, 1999 — Dextral Transcurrent Deformation of the Eastern Margin of the Colorado Plateau (USA) and the Mechanics of Footwall Uplift Along the Simplon Normal Fault (Switzerland/Italy). (Dr. Jane Selverstone, Dr. John W. Geissman, Advisors).

III. FACULTY AND STAFF ACCOMPLISHMENTS

- Activities of Full Associates and Assistant Professors
- Activities of Research Professors
- Activities of Senior Research Scientists and Staff

.

Activities of Full Associates and Assistant Professors

Yemane Asmerom

Teaching

Courses taught:

Spring: Radiogenic Isotopes 534

Fall: Environmental Geology 333, Fundamentals of Geochemistry

In Lab training-UNM: Brian Beirman, Dezbah Tso, Tedros Tesfay, Angela McLain, Colin Shaw, Victor Polyak.

Outside (US): Claudia Lewis (Los Alamos), Rhawn Denniston (U. Iowa).

International: Andy Baker (Great Britain); Fidel Grandia (Spain); Brad Elg (New Zealand); Mengist Teklay (Eritrea).

Graduate students supervised: Dezbah Tso, Brian Bierman, Tedros Tesfay. Carter Dunaway (inactive).

Graduate student committee: Angela McLain (Ph.D., soils; Sr isotope work in my lab). Rebecca Gardner M.S. (low temperature geochemistry; Sr isotopes). Rich Woodford (Ph.D., paleoclimate).

Faculty Advisor: Association of Black Student Engineers, Amnesty International.

Publications (* indicates student authors)

Th-U Fractionation and Mantle structure. Y. Asmerom, Earth and Planetary Sciences Letters, v. 166, p. 163-175, 1999.

Evidence for increased cool season moisture during the middle Holocene. F. Denniston*, L.A. González, Y. Asmerom, R.G. Baker, M.K. Reagan and E.A. Bettis, Geology, v. 27, p. 815-818, 1999.

Integrating stalagmite, vertebrate and pollen sequences to investigate Holocene vegetation and climate change in the southern Midwest. R.F. Denniston, L.A*. Gonzalez, H.A. Semken, Y. Asmerom, R.G. Baker, H. Recelli-Snyder, M.K. Reagan and E.A. Bettis III. Quaternary Research, v. 52, p. 381-387, 1999.

Chemical signatures of epiphytic lichens in southwestern North America; Natural versus anthropogenic sources for incorporated particulates. S. Getty, D. Gutzler, Y. Asmerom, C. Shearer and S. Free, Atmospheric Environment, v. 33, p. 5095-5104, 1999.

Speleothem evidence for a sharp and long-term prairie-forest ecotone at the northeast border of the middle Holocene prairie peninsula. R. Denniston*, L. Gonzalez, R. Baker, Y. Asmerom, M. Reagan, L. Edwards and C. Alexander, The Holocene, v. 9, p. 671-676, 1999.

The half-lives of uranium-234 and thorium-230. H. Cheng, R.L. Edwards, C. Gallup, D. Richards, J. Hoff and Y. Asmerom, Chemical Geology, (in press).

Speleothem records of early and late Holocene vegetation dynamics in the Ozark Highlands, U.S.A. R.F. Denniston, L.A*. González, Y. Asmerom and M.K. Reagan, Quaternary International (in press).

* 1, 4.

Manuscripts in review:

Lithospheric mantle melting constrained by Pa-Th-U isotopic data. Y. Asmerom, H. Cheng, R. Thomas, M. Hirschmann and L. Edwards.

Nature (in review):

The Structure of the Mantle During Early Extension in the Rio Grande Rift. S. Minchak, Y. Asmerom, A. Kudo and S. Baldridge, Geological Society of America Bulletin.

A high-resolution speleothem record of climatic variability during the Allerød-Younger Dryas transition in Missouri, central United States. R.F. Denniston, L.A. González, Y. Asmerom and M.K. Reagan, Palaeogeography, Palaeoclimatology, Palaeocology.

Abstracts:

Pa-Th-U fractionation during mantle melting: Inferences from continental basalt data. Y. Asmerom, H. Cheng, T. Tesfay*, B. Bierman* and R.L. Edwards, Ninth Annual Goldschmidt Conference (1999).

Use of stalagmites in the study of the history of the Asian monsoon system. L.A. González, R.F. Denniston, M.K. Reagan, R. Ciochon and Y. Asmerom, The Geological Society of America Fall Meeting Abstracts with Programs, v. 31, p. 89 (1999).

A high-resolution record of Indian summer monsoon variability preserved by speleothem carbonate mineralogy. R.F. Denniston*, L.A. González, M.K. Reagan and Y. Asmerom, Geological Society of America Fall Meeting Abstracts with Programs, v, 31, p. 153 (1999).

Insights from Sr isotope analysis of exchangeable cations and carbonates in Av horizons and pavement collars in volcanic and alluvial desert soils. A. McLain, L.D*. McFadden, Y. Asmerom and E. McDonald, American Geophysical Union Fall Meeting Abstracts with Program, v. 80, p. 1167 (1999).

Effects of the Younger Dryas on the carbon and oxygen isotopic compositions of a Missouri speleothem. R.F. Denniston*, L.A. González, M.K. Reagan and Y. Asmerom, Geological Society of America Spring Meeting Abstracts with Programs, v.31, p. 13 (1999).

Externally Funded Research

Awards Current in 1999:

²³¹Pa-²³⁵U Fractionation During Intra-Plate Mantle Melting and Magma Transport. Y. Asmerom, PI (UNM), National Science Foundation [11/99-10/01], \$98,000 UNM; \$50,000 (UMN).

The Role of Mantle Plumes in Formation of New Tectonic Plates: Constraints from Basalt Geochemistry and Geochronology. Y. Asmerom, UNM, PI, C. Lewis and S. Baldridge LANL, PI, IGPP, \$-25,000 [1999-2000] Renewed.

Research Projects in Progress

Increasing Minority Ph.D.s in Geochemistry. Asmerom, PI, The Sloan Foundation, \$55,000 (1999-2001).

U-series Isotope Systematics of Continental Rift Basalts (2 yrs). Y. Asmerom, PI, National Science Foundation, \$127,000 (1997-1999).

Chronology of submerged speleothems from the Blue Hole, Belize: Implication for sea level and tropical climate change through time. Y. Asmerom, PI, National Science Foundation, \$50,000 (1998-2000).

U-Pb Geochronology in Marine Carbonates: A New Approach for Age Dating in Paleoclimate Reconstruction. S. Getty and Y. Asmerom, Co-Pls, National Science Foundation, \$154,995 (1997-2000).

Collaborative Research: An Integrated Study of Late Proterozoic (ca. 1.2 - 0.7 Ga) Extensional Tectonism. UNM PIs (K. Karlstrom, J.W. Geissman, M. Elrick and Y. Asmerom), National Science Foundation, \$160,309 (UNM portion).

Conference, Symposium and Invited Lectures

The Geochemical Society Goldschmidt Conference, Harvard University, Cambridge, Fall AGU.

Society for the Advancement of Chicano and Native American Students in Science, Annual Meeting, Portland, OR.

Sloan Foundation Minority Student Recruitment and Retention Workshop, Rice University.

Off campus talks: University of Michigan.

Sabbatical and Travel

Outside Activity: Amnesty International; The Sierra Club; talk at Sandia Prep; UNM Earth Day.

Adrian Brearley

Teaching

Courses taught:

Spring: E&PS 101 - Physical Geology (85 enrolled); E&PS 400 - Topics in Earth Sciences, Processes in the Earth's Deep Interior - (6 enrolled); E&PS 552 Problems - (1 enrolled).

Fall: E&PS 210 - Life in the Universe (17 enrolled); E&PS 518 - Electron Probe Microanalysis and Scanning Electron Microscopy (9 enrolled) - Cotaught with Mike Spilde; E&PS 519L - Selected topics in Geochemistry - Cotaught with other members of E&PS (9 enrolled).

Guest lecture in Geomicrobiology seminar - Current views of fossil life in ALH 84001.

Served as Advisor and M.S. committee member for Kate Duke.

Thesis Committee member for Tedros Tesfay, Brian Bierman, Nicole Bailey, Kurt Steffan, Toti Larsen, David Vaughan (Anthropology), Jim Karner.

Ph.D. Exam Committee member for Yaming Jin (Chemical and Nuclear Engineering), Dan Barton (Electrical and Computer Engineering), Linda Mansker (Chemical and Nuclear Engineering).

Publications (* indicates student authors)

Papers:

Mineralogy, petrography and bulk chemical, I-Xe and oxygen isotopic compositions of dark inclusions in the reduced CV3 chondrite Efremovka. A.N. Krot, A.J. Brearley, A.A. Ulyanov, V.V. Biryukov, T.D. Swindle, K. Keil, D.W. Mittlefehldt, E.R.D. Scott, R.N. Clayton and T.K. Mayeda, Meteoritics and Planetary Science, v. 34, p. 67-90 (1999).

Origin of graphitic carbon and pentlandite inclusions in matrix olivines in the Allende meteorite. A.J. Brearley, Science, v. 285, p. 1380-1382 (1999).

Abstracts:

Carbonates in the Murchison CM chondrites: CL characteristics and Oxygen Isotopic Compositions. A.J. Brearley, J.M. Saxton, I.C. Lyon and G. Turner, Lunar Planet. Sci. XXX. Abstract CD ROM, Abstract #1301 (1999).

Fine-grained rims in CM carbonaceous chondrites: A comparison of rims in Murchison and ALH 81002. A.J. Brearley, N.P. Hanowski and J.F. Whalen, Lunar Planet. Sci. XXX. Abstract CD ROM, Abstract #1460 (1999).

In situ growth of fayalite and hedenbergite in the ungrouped carbonaceous chondrites MAC 88107 with affinities to the CM-CO clan. A.N. Krot, A.J. Brearley, G.W. Kallemeyn, I.D. Hutcheon, M.I. Petaev and K. Keil, Lunar Planet. Sci. XXX. Abstract CD ROM, Abstract #1514 (1999).

Experimental low temperature aqueous alteration of Allende under reducing conditions. C.L. Duke* and A.J. Brearley, Lunar and Planetary Science, XXX, CDROM Abstract #1782 (1999).

In situ growth of fayalite and hedenbergite in the ungrouped carbonaceous chondrites MacAlpine Hills 88107. A.N. Krot, M.I. Petaev, A.J. Brearley, G.W. Kallemeyn, D.W.G. Sears, P.H. Benoit, I.D. Hutcheon and K. Keil, Meteoritics and Planetary Science, v. 34, A68 (1999).

Externally Funded Research

Awards Current in 1999:

Mechanisms and kinetics of aqueous alteration reactions in chondritic meteorites. A.J. Brearley NASA Origins of Solar Systems Program, \$20,000: May 15, 1999 to May 14, 2000.

Awards Continuing from Previous Years:

Geochemical signatures of melt segregation in static vs. dynamic environments. A.J. Brearley, NSF Petrology and Geochemistry Program, \$42,940: June 1, 1997 - May 30, 2000.

Microstructural studies bearing on the origin of carbonates and associated minerals in Martian meteorite, ALH 84001. NASA Ancient Martian Meteorite Program, \$78,000: July 1, 1997 - June 31, 2000.

Phase transformations involving olivine, β-phase and spinel in the mantle transition zone: experimental studies of transformation mechanisms in Mg₂SiO₄ and (MgFe)₂SiO₄. A.J. Brearlev. National Science Foundation, \$102,175: August 1, 1995 - July, 31 2000.

Research Projects in Progress

Manuscripts in press:

Articles in press

Bleached chondrules: Evidence for widespread aqueous processes on the parent asteroids of ordinary Chondrites. J.N. Grossman, C.M.O.'D. Alexander, J. Wang and A.J. Brearley, Meteoritics and Planetary Science (2000).

Manuscripts submitted:

Iron-rich aureoles in the CM carbonaceous chondrites, Murray, Murchison and ALH81002: Evidence for in situ alteration. N.P. Hanowski and A.J. Brearley (1999). Meteoritics and Planetary Science (2000).

MAC88107, ungrouped carbonaceous chondrite with affineitoes to CM-CO clan: evidence for in situ growth of fayalite and hedenbergite. A.N. Krot, M.I. Petaev, A J. Brearley, G.W. Kallemeyn, D.W.G. Sears, P.H. Benoit, I.D. Hutcheon and K. Keil. Meteoritics and Planetary Science (2000).

Advanced Study and New Scholastic Honors

Nominated for councillor of the Meteoritical Society.

Conference, Symposium and Invited Lectures

30th Lunar and Planetary Science Conference, Houston, Texas, March, 15-19, 1999.

Talks presented:

Presented talk, "Carbonates in the Murchison CM chondrites: CL characteristics and Oxygen Isotopic Compositions", 30th Lunar and Planetary Science Conference, Houston, Texas, March 15-19, 1999.

Presented poster, "Fine-grained rims in CM carbonaceous chondrites: A comparison of rims in Murchison and ALH 81002", 30th Lunar and Planetary Science Conference, Houston, Texas, March 15-19, 1999.

Coauthored poster, "Experimental low temperature aqueous alteration of Allende under reducing conditions", 30th Lunar and Planetary Science Conference, Houston, Texas, March 15-19, 1999.

Sabbatical and Travel

 March 19-20, 1999 - 30th Lunar and Planetary Science Conference, Houston, Texas. June 17-18, 1999 - Visit to Department of Earth Sciences, Manchester University, England to discuss collaborative research.

Michael E. Campana

Teaching

Courses taught:

Spring: E&PS 472, Subsurface Fate and Transport Processes (8 enrolled). WR 572 (AOA Econ 545), Interdisciplinary Water Resources II: Use of Technical Models and Communications Laboratory (8 enrolled) (with D. Brookshire, R. Heggen and M. Kantrowitz).

Summer: WR 573 (AOA CRP 426/526), Interdisciplinary Water Resources III: Field-Based Problems and Communications Laboratory (12 enrolled) (with D. Brookshire and O.P. Matthews).

Fall: WR 571, Interdisciplinary Water Resources I: Basin Survey and Communications Lab (12 enrolled) (with D. Brookshire and O.P. Matthews), E&PS 476/576 (AOA WR 576), Physical Hydrology (38 enrolled).

Graduate students:

Student Advisement/Thesis Supervision:

M.S.: Michelle Kearney, Susan Lucas, Senait Ghebremicael. MWR: Chris McLean, Jeffrey Peterson, Linda I. Gordan, Marquis Childs, Casey Cook, William McDonald, Elaine Brouillard, Nicole Nienow, Debbie Terry, Kerry Bassoreandrea Hunter, Toby Walters.

Ph.D.: Ivan Thorsos (co-advisor).

Professional projects completed (MWRA degree):

Jeffrey L. Peterson, 1999. Coordinated water resource planning for the Sandia Basin: a perspective on regional planning needs (UNM - Master of Water Resources Administration).

Elaine S. Brouillard, 1999. Erosion potential of the main branch of the Piedras Marcadas watershed, Petroglyph National Monument, New Mexico. (UNM - Master of Water Resources Administration).

Marquis Childs, 1999. Surface soil sampling and assessment of radionuclide concentrations at Material Disposal MDA-G, Los Alamos National Laboratory. (UNM - Master of Water Resources Administration).

Service on Thesis/Dissertation/Professional Project Committees:

M.S.: Karen Roche, Laura Hagan, Claudia Borchert, David Mitchell, Patrick Florence, Susan Lucas. Senait Ghebremicael, Michelle Kearney.

MWR: Debbie Terry, Linda I. Gordan, Jeffrey Peterson, William McDonald, Richard M. Renn, Elaine Brouillard. Hirotaka Satoandrea Hunter. Toby Walters.

<u>Ph.D.</u>: Richard Woodford, Ivan Thorsos, Armand Groffman, Drew Baird (Civil Engineering), Steven Dominguez (Archaeology).

New Courses Developed: E&PS 476/576 (AOA WR 576) Physical Hydrology. ENVSCI 330 Environmental Studies. ENVSCI 430 Environmental Science.

1361

Refereed Journals:

"Case Studies of Sustainable Water Resources Development, Rio Grande Basin, New Mexico," Water Researches Program Publication, No. WRR-1, 125 p. (1999). Coauthors: D.P. Matthews, D. DeSimone, R. DeSimone and N. Gillard.

Refereed Reports:

Hydrologic hazards science in the U.S. Geological Survey, Committee on USGS Water Resources Research, National Academy Press, 79 p.

Externally Funded Research

Awards Current in 1999:

A quantitative assessment of the economic and institutional impacts of climate change on the Upper Rio Grande Valley using an integrated GIS framework. L. Scuderi, O.P. Matthews, M. Campana, D. Brookshire and J. Chermak, National Science Foundation, \$675,000: 1/1/00-12/31/02.

Policy conflicts and sustainable water resources development in New Mexico's Rio Grande Basin. M.E. Campana and O.P. Matthews, U.S. Dept. of Commerce-NOAA, \$15,000: 6/1/99-2/15/00.

IGERT: Freshwater graduate studies link fundamental science with applications through integration of ecology, hydrology and geochemistry in regions with contrasting climates. A. Ward, A. Benke, W. Lyons, R. Wetzel (Univ. of Alabama); and C.N. Dahm (UNM). (Note: not a PI, but played substantial role in proposal writing, along with 6 other UNM faculty members.), National Science Foundation, \$2,700,000 (UNM share: \$1,200,000): 10/1/99-9/30/04.

Awards Continuing from Previous Years:

A multi-level approach to modeling ground and surface water exchange in agriculturally-dominated settings. W.A. McKay, E.A. Jacobson and E.V. McDonald, Desert Research Institute; M.E. Campana, UNM, U.S. Geological Survey - Western Regional Competitive Grants Program, \$741,000 (UNM share: \$165,000, including CS): 9/1/98 - 8/31/0.

Sustainable water resources development in New Mexico and the Rio Grande Basin. M.E. Campana and O.P. Matthews, National Oceanic and Atmospheric Administration, \$21,500: 6/1/98 – 9/30/99.

Outcrop characterization of heterogeneity: explicit linkage of hydrologic and sedimentological properties and testing of stochastic model performance. G.A. Smith and M.E. Campana, National Science Foundation - Hydrologic Sciences Program, \$120,000: 8/15/97 - 8/14/00.

Geochemistry and hydrology of the Red River stream system before and after open-pit mining, Questa area, Taos County, NM. B. Allen, R. Anderson, M. Campana and L. Crossey, Office of Natural Resource Trustee, State of New Mexico, \$134,000: 3/1/97-9/30/99.

Stream/ground water ecotones: hydrology, biogeochemistry and ecology. C.N. Dahm, M.E. Campana and C. Crawford, National Science Foundation, \$610,000: 2/1/95-10/31/99.

Research Projects in Progress

Manuscripts in Press:

Compartment model simulation of ground-water flow systems, to be published as a chapter in an International Atomic Energy Agency TECDOC.

Compartmental model approaches to groundwater flow simulation, to be published as a chapter in a UNESCO publication on groundwater modeling (with G. Harrington and L. Tezcan).

Environmental isotope dynamics in the Roswell Ground-Water basin, New Mexico, USA. M.E. Campana.

International Atomic Energy Agency, 6/1/99- 5/31/02; funding provided only for travel to research group meetings. Proposals Submitted.

Integrated environmental isotopic-hydraulic approach to the inverse problem and numerical modeling in ground-water hydrology. M.E. Campana and D.B. Rogers, LANL, Los Alamos National Laboratory, \$165,000 (UNM share: \$138,000): 8/15/99 - 8/14/02. Submitted 2/19/99 (unfunded).

An integrated GIS framework for water reallocation and decision-making in the Upper Rio Grande Valley. O.P. Matthews, D. Brookshire, L. Scuderi, M. Campana, K. Krause, J. Chermak and K. Gregory, U.S. Environmental Protection Agency, \$900,000: 3/1/00 - 2/28/03. Submitted: 5/99 (likely to be funded at \$410,000).

Residence time and porosity distributions in the Roswell Basin, New Mexico. M.E. Campana, Petroleum Research Fund, American Chemical Society, 6/1/00 - 8/31/02: \$60,000 (pending).

Conference, Symposium and Invited Lectures

Presented talk, "Ground Water Development Potential in Belize", Association of Ground Water Scientists and Engineers Annual Conference, Nashville, TN, December 1999.

Presented talk, "Appropriate Technology and Water Resources Development on the Embera Indian Reservation, Southern Darien Province, Panama", Association of Ground Water Scientists and Engineers Annual Conference, Nashville, TN, December 1999.

Convener and Co-Chair, session on "Ground Water Supplies in Developing Nations", Association of Ground Water Scientists and Engineers Annual Conference, Nashville, TN, December 1999.

Co-Chair, Association of Ground Water Scientists and Engineers Annual Conference, Nashville, TN, December 1999.

Presented talk, "Hydrologic Aspects of Water Reallocation in the Western U.S.", Panama City, Panama, Third Inter-American Dialogue on Water Management, March 21 - 26, 1999.

Presented talk, "Environmental Isotope Dynamics in the Roswell Ground-Water Basin, New Mexico, USA", Research Coordination Meeting, International Atomic Energy Agency's (IAEA) Coordinated Research Program on Isotope Response of Hydrological Systems to Long-Term Exploitation, November 8-12, 1999.

Sabbatical and Travel

Travel:

- Cleveland, TX, to attend well drilling and construction workshop, February 24-28, 1999.
- Panama, to conduct field work in the southern Darien Province and attend and present paper at the Third Inter-American Dialogue on Water Management, March 5 - 26, 1999.
- Tucson, AZ, to attend meeting of the National Research Council-Water Science and Technology Board Committee on U.S. Geological Survey Water Resources Research, April 19-20, 1999.
- Orange Beach, AL, to attend mid-year meeting of the Board of Directors, Association of Ground Water Scientists and Engineers, May 20-23, 1999.
- Washington, DC, to attend meeting of the National Research Council-Water Science and Technology Board Committee on U.S. Geological Survey Water Resources Research, September 27-28 1999.
- Washington, DC, to attend panel meeting of the Fulbright Senior Scholar Caribbean, Central American and Mexico Peer Review Panel, November 1, 1999.
- Vienna, Austria, to attend research coordination meeting of the International Atomic Energy Agency's (IAEA) Coordinated Research Program on Isotope Response of Hydrological Systems to Long-Term Exploitation, November 8-12, 1999.
- Nashville, TN, to attend annual conference and Board of Directors meetings, National Ground Water Association and Association of Ground Water Scientists and Engineers; and Board of Directors meeting, Ground Water Publishing Company, December 2-6, 1999.

Laura J. Crossey

Teaching

Courses taught:

Spring: E&PS 415 - Geochemistry of Natural Waters (13 enrolled); E&PS 548 - Topics (Biogeochemistry) (3 enrolled); concurrent w/ Biol topics/ C. Dahm (9 enrolled); E&PS 491-Problems (1 enrolled); E&PS 495 - Senior Thesis (1 enrolled); E&PS 599 - Masters Thesis (2 enrolled); E&PS 699 - Dissertation (2 enrolled).

Fall: E&PS 101- Introductory Geology (80 enrolled); E&PS 492 - Problems (2 enrolled); E&PS 599 - Masters Thesis (1 enrolled); E&PS 699 - Dissertation (2 enrolled); E&PS 552 - Problems (1 enrolled).

Ph.D. Committees:

Deborah Bergfeld, Armand Groffman (chair); Angela McLain (co-chair). Christy Fellows, Diana Northup (Biology). Mike Timmons, Carol Dehler, Jim Karner and Ivan Thorson.

M.S. Committees:

Rebecca Gardner, Laura Hagen, Susan Block (chair). Dezbah Tso, Anna Snider, Jake Armour, Marcia Jensen, Justin Haggerty. Thomas Loveland.

Undergraduate Sr. Thesis Committees:

Rick Ortiz, Joan Otahal, Kathleen Dotson (chair). Sharon Sparks

Student Grant Support:

Graduate: Armand Groffman (full); Christy Fellows, Laura Hagen (partial). Undergraduate: Dave Johnson, Richard Ortiz, Paulo de sa Rega, Joan Otahal.

Publications (* indicates student authors)

Published, peer-reviewed

Transient redox regimes in a shallow alluvial aquifer. A.R. Groffman and L.J. Crossey, Chemical Geology, v. 161, pp. 415-442 (1999).

Published, other

Geochemistry of the Red River Stream System Before and After Open-Pit Mining, Questa Area, Taos County, NM. B.D. Allen, A.R. Groffman*, M.C. Molles, R.Y. Anderson and L.J. Crossey, Report to the State Office of the Natural Resource Trustee, NM, 43 p. (1999).

Abstracts:

Seasonal Geochemical Response of a Shallow Alluvial Aquifer Associated with a First Order Montane Stream in Northern NM. R.M. Ortiz*, A. Groffman* and L.J. Crossey, New Mexico Geological Society, Spring Meeting, Socorro, NM, April, 1999.

Seasonal and Interannual Biogeochemical Response of a Shallow Alluvial Aquifer Associated with a First-order Montane Stream in Northern New Mexico. L.J. Crossey, A.R. Groffman, R*. Ortiz, P*. Sa Rego and M. Baker, Geological Society of America, Annual Meeting, Abstracts with Program, v. 31, No. 7, p. A-413, October 25-28, 1999.

The Impact of Precipitation and Surface Water on the Biogeochemical Structure of Groundwater in a Shallow Phreatic Aquifer. A.R. Groffman, L.J. Crossey and C.S. Fellows, Geological Society of America, Annual Meeting, Abstracts with Program, v. 31, No. 7, p. A-413, October 25-28, 1999.

Geochemistry and Mineralogy of Corrosion Residue, Lechuguilla and Spider Caves, Carlsbad National Park, NM: Biogeochemical Processes in an Extreme Environment, K. Dotson*, R. Schelble*, M. Spilde, L.J. Crossey and D.E. Northup*, Geological Society of America, Annual Meeting, Abstracts with Program, v. 31, No. 7, p. A-154, October 25-28, 1999.

Evaluating the Environmental Impacts to the Groundwater and Surface-Water System of the Red River, Northern NM. L Hagan*, L.J. Crossey, B. Allen and A.R. Groffman*, American Geophysical Union Fall Meeting, EOS, Transactions, v. 80, No. 46, p. F316, November 16, 1999.

Externally Funded Research

Awards Current in 1999:

IGERT – Integrated Graduate Research Training. Co-I; C. Dahm, M. Molles, C. Crawford, T. Turner (UNM Biology) and Z. Sharp, D. Gutzler, M. Campana, L. McFadden (E&PS), National Science Foundation, IGERT, 8/1/99-7/31/04: \$2,500,000 (including University of Alabama, Partner with 9 additional Co-PI's).

Travel:

- Cleveland, TX, to attend well drilling and construction workshop, February 24-28, 1999.
- Panama, to conduct field work in the southern Darien Province and attend and present paper at the Third Inter-American Dialogue on Water Management, March 5 - 26, 1999.
- Tucson, AZ, to attend meeting of the National Research Council-Water Science and Technology Board Committee on U.S. Geological Survey Water Resources Research. April 19-20, 1999.
- Orange Beach, AL, to attend mid-year meeting of the Board of Directors, Association of Ground Water Scientists and Engineers, May 20-23, 1999.
- Washington, DC, to attend meeting of the National Research Council-Water Science and Technology Board Committee on U.S. Geological Survey Water Resources Research, September 27-28 1999.
- Washington, DC, to attend panel meeting of the Fulbright Senior Scholar Caribbean, Central American and Mexico Peer Review Panel, November 1, 1999.
- Vienna, Austria, to attend research coordination meeting of the International Atomic Energy Agency's (IAEA) Coordinated Research Program on Isotope Response of Hydrological Systems to Long-Term 'Exploitation, November 8-12, 1999.
- Nashville, TN, to attend annual conference and Board of Directors meetings, National Ground Water Association and Association of Ground Water Scientists and Engineers; and Board of Directors meeting, Ground Water Publishing Company, December 2-6, 1999.

Laura J. Crossey

Teaching

Courses taught:

Spring: E&PS 415 - Geochemistry of Natural Waters (13 enrolled); E&PS 548 - Topics (Biogeochemistry) (3 enrolled); concurrent w/ Biol topics/ C. Dahm (9 enrolled); E&PS 491-Problems (1 enrolled); E&PS 495 - Senior Thesis (1 enrolled); E&PS 599 - Masters Thesis (2 enrolled); E&PS 699 - Dissertation (2 enrolled).

Fall: E&PS 101- Introductory Geology (80 enrolled); E&PS 492 - Problems (2 enrolled); E&PS 599 - Masters Thesis (1 enrolled); E&PS 699 - Dissertation (2 enrolled); E&PS 552 - Problems (1 enrolled).

Ph.D. Committees:

Deborah Bergfeld, Armand Groffman (chair); Angela McLain (co-chair). Christy Fellows, Diana Northup (Biology). Mike Timmons, Carol Dehler, Jim Karner and Ivan Thorson.

M.S. Committees:

Rebecca Gardner, Laura Hagen, Susan Block (chair). Dezbah Tso, Anna Snider, Jake Armour, Marcia Jensen, Justin Haggerty. Thomas Loveland.

Undergraduate Sr. Thesis Committees:

Rick Ortiz, Joan Otahal, Kathleen Dotson (chair). Sharon Sparks.

Student Grant Support:

Graduate: Armand Groffman (full); Christy Fellows, Laura Hagen (partial). Undergraduate: Dave Johnson, Richard Ortiz, Paulo de sa Rega, Joan Otahal.

Publications (* indicates student authors)

Published, peer-reviewed

Transient redox regimes in a shallow alluvial aquifer. A.R. Groffman and L.J. Crossey, Chemical Geology, v. 161, pp. 415-442 (1999).

Published, other

Geochemistry of the Red River Stream System Before and After Open-Pit Mining, Questa Area, Taos County, NM. B.D. Allen, A.R. Groffman*, M.C. Molles, R.Y. Anderson and L.J. Crossey, Report to the State Office of the Natural Resource Trustee, NM, 43 p. (1999).

Abstracts:

Seasonal Geochemical Response of a Shallow Alluvial Aquifer Associated with a First Order Montane Stream in Northern NM. R.M. Ortiz*, A. Groffman* and L.J. Crossey, New Mexico Geological Society, Spring Meeting, Socorro, NM, April, 1999.

Seasonal and Interannual Biogeochemical Response of a Shallow Alluvial Aquifer Associated with a First-order Montane Stream in Northern New Mexico. L.J. Crossey, A.R. Groffman, R*. Ortiz, P*. Sa Rego and M. Baker, Geological Society of America, Annual Meeting, Abstracts with Program, v. 31, No. 7, p. A-413, October 25-28, 1999.

The Impact of Precipitation and Surface Water on the Biogeochemical Structure of Groundwater in a Shallow Phreatic Aquifer. A.R. Groffman, L.J. Crossey and C.S. Fellows, Geological Society of America, Annual Meeting, Abstracts with Program, v. 31, No. 7, p. A-413, October 25-28, 1999.

Geochemistry and Mineralogy of Corrosion Residue, Lechuguilla and Spider Caves, Carlsbad National Park, NM: Biogeochemical Processes in an Extreme Environment, K. Dotson*, R. Schelble*, M. Spilde, L.J. Crossey and D.E. Northup*, Geological Society of America, Annual Meeting, Abstracts with Program, v. 31, No. 7, p. A-154, October 25-28, 1999.

Evaluating the Environmental Impacts to the Groundwater and Surface-Water System of the Red River, Northern NM. L Hagan*, L.J. Crossey, B. Allen and A.R. Groffman*, American Geophysical Union Fall Meeting, EOS, Transactions, v. 80, No. 46, p. F316, November 16, 1999.

Externally Funded Research

Awards Current in 1999:

IGERT - Integrated Graduate Research Training. Co-I; C. Dahm, M. Molles, C. Crawford, T. Turner (UNM Biology) and Z. Sharp, D. Gutzler, M. Campana, L. McFadden (E&PS), National Science Foundation, IGERT, 8/1/99-7/31/04: \$2,500,000 (including University of Alabama, Partner with 9 additional Co-PI's).

Awards Continued from Previous Years:

Biogeochemical Cycling of Redox-sensitive Metals During Surface-subsurface Water Exchange in a Shallow Alluvial Aquifer. H.M. Valett, Dept. of Biology, UNM Co-I, National Science Foundation, Environmental Geochemistry/Biogeochemistry Division, 7/15/96-6/15/99: \$290,000. (Undergraduate Research Supplement, 1997-98; \$3,000).

Water Quality of the Red River, NM. Co-I; R. Anderson PI; B. Allen and M. Campana Co-I's, State Office of the Natural Resource Trustee, 3/1/97-7/31/98: \$134,000.

Supplement to Biogeochemical Cycling. National Science Foundation, POWRE Program, 9/1/97-2/28/99: \$48,000.

Geomicrobial Interactions of Microbial Communities in Cave Deep Subsurface Environments: A Novel Extreme. Environment, Co-I; C. Dahm, UNM Biology PI; D. Northup (UNM Biology) Co-I, National Science Foundation, LexEn Program, 8/1/98-7/31/01: \$292,134.

Advanced Study and New Scholastic Honors

Regents Lecturer, University of New Mexico, 1997-1999.

Conference, Symposium and Invited Lectures

Meetings Attended/Talks Presented:

Geological Society of America Annual Meeting; Denver, CO, October 25-28, 1999. American Geophysical Union Fall Meeting, December 13-19, 1999. Editorial Board, Geology Magazine, 1997-1999.

Maya Elrick

Teaching

Courses taught:

Spring: E&PS 537 Basin Analysis (cancelled due to low enrollment); Major redesigning of lectures and labs for E&PS 304/304L.

Fall: E&PS 304 Sedimentology-Stratigraphy (19 enrolled); E&PS 490 Geologic Presentations (8 attended); E&PS 401/501 Seminar (14 attended).

Graduate Students:

Advisement: Anna Snider MS (defended 9/99); Carol Dehler Ph.D. Supported by NSF. Thesis/exam committees: Andy Heckert, Ph.D.

Publications (* indicates student authors)

In Review

The Chuar Group of the Grand Canyon: Record of break up of Rodinia, associated change in the global carbon cycle and ecosystem expansion by 740 Ma. K.E. Karlstrom, S.A. Bowring, C.M.

Dehler*, A.H. Knoll, S.M. Porter, Z.D. Sharp, D.J. Des Marais, A.B. Weil, J.W. Geissman, M. Elrick, J.M. Timmons, K. Keefe, L.J. Crossey, Geology.

Estimating the mineralogical composition of precursor sediments of strongly diagenetically altered rhythmites. A. Munnecke, H. Westphal, M. Elrick and J.J.G. Reijmer, Sedimentology.

Abstracts:

Chuar Group (1.1-0.74 Ga), Grand Canyon: Carbon-isotope stratigraphy systematics at the onset of Sturtian glaciation. C.M. Dehler*, D.J. DesMarais, S. Bowring, Z. Sharp, K.E. Karlstrom and M. Elrick. GSA Annual Meeting Abstract. p. 487, 1999.

Externally Funded Research

Awards Current in 1999:

An integrated study of late Proterozoic (1.2-0.7 Ga) extensional tectonism, basin evolution and biological evolution in the Grand Canyon Supergroup and Apache Group during incipient breakup of Rodinia. K.E. Karlstrom, M. Elrick and J.W. Geissman, National Science Foundation, June, 1997-June, 2000; \$140,006.

A record of early life, changing climate and supercontinent breakup in the Precambrian Earth. M. Elrick (to fund 3 undergraduate and 2 graduate students), NASA-UNM PURSUE Program, 4/99 - 12/99, \$14.450.

Proposals Submitted:

Integrated stratigraphic and chemostratigraphic analysis of Lower Cretaceous platform-to-basin carbonates, northeastern Mexico. M. Elrick, Y. Asmerom and I.P. Montanez, National Science Foundation, June '99-02; \$200,390 (not funded).

Sequence Stratigraphic and Chemostratigraphic Analysis of Lower Cretaceous Platform-to-Basin carbonates, northeastern Mexico. M. Elrick, Y. Asmerom and Z. Sharp, Petroleum Research Fund, June '00-June '03; \$90,000 (pending).

Conference, Symposium and Invited Lectures

Meetings attended:

American Association of Petroleum Geologists, San Antonio, TX, April 11-14, 1999. Geological Society of America, Denver, Colorado, Oct 25-27, 1999.

Invited talk University of Nevada, Las Vegas, Spring, 1999. Field work Grand Canyon, 9 days, October, 1999.

Peter J. Fawcett

Teaching

Courses taught:

Spring: E&PS 103 - Earth's Environment and Global Change (35 enrolled); E&PS 439 Paleoclimatology (21 enrolled).

Fall: E&PS 547 - Problems in Quaternary Paleoclimatology (7 enrolled); E&PS 552 Problems (1 enrolled).

Guest Lecture: 2 lectures in E&PS 351 (Fall).

Graduate Students Supervised:

Dale Henderson (M.S., supported with NSF and NUCOR funding); Jake Armour (M.S., supported with NSF funding); Peter Castiglia (M.S., supported with NSF funding); Anne Tillery (M.S.).

Graduate Thesis Committees:

M.S.: Tom Loveland, David Mitchell, Anna Snider, Paul Wisniewski, Nicole Bailey, Kate Ziegler.

Ph.D.: Missy Eppesandy Heckert, Joel Pederson, Richard Woodford.

Publications (* indicates student authors)

Articles in Refereed Journals:

M.T. Gibbs, G.S. Bluth, P.J. Fawcett and L.R. Kump, Global chemical erosion over the last 250 my: variations due to changes in paleogeography, paleoclimate and paleogeology, American Journal of Science, v. 299, p. 611-651, 1999.

Articles in Edited Volumes:

R.B. Alley, A.M. Agustsdottir and P.J. Fawcett, Ice-core evidence of late-Holocene reduction in North Atlantic ocean heat transport, in R.S. Webb, P.U. Clarkand L.D. Keigwin (eds.) Mechanisms of Millennial-Scale Global Climate Change, Geophysical Monograph 112, American Geophysical Union, Washington DC, p. 301-312, 1999.

C.J. Poulsen, E.J. Barron, C.C. Johnson and P.J. Fawcett, 1999, Links between major climatic factors and regional oceanic circulation in the mid-Cretaceous, in E. Barrera and C.C. Johnson, eds., Evolution of the Cretaceous Ocean/Climate Systems, GSA Special Paper 332, Boulder CO, p. 73-89.

Abstracts:

J. Armour*, P.J. Fawcett and J.E. Bossert, 1999, Potential controls on a late Holocene (neoglacial) glacial advance in the southern Sangre de Cristo Mountains, New Mexico, Geological Society of America Annual Meeting, Abstracts with Programs, v. 31, p. 442.

D. Henderson*, J. Stalker, P.J. Fawcett, D. Gutzler and J.E. Bossert, 1999, Effects of land-surface forcing on the strength of the Southwestern United States and Mexican monsoon; A numerical simulation, American Geophysical Union Fall 1999 Meeting, v. 80.

Externally Funded Research

Awards Current in 1999:

Impact Induced Climate Change. P.J. Fawcett, Sandia - University Research Program (SURP), \$25,000: 10/1/98 to 9/30/99.

Modeling the effects of land surface forcing on summer rainfall in southwest North America. P.J. Fawcett and D. Gutzler, Los Alamos National Laboratory NUCOR program, \$40,593; 8/15/98 to 8/15/99 (renewable for two additional years).

Nested GCM/mesoscale model studies of large rapid Holocene and late glacial climate changes: synthesis with the Greenland ice core records. P.J. Fawcett, NSF (3-48771), \$84,514; 6/1/97 to 5/31/99.

Observations and Modeling of large-scale controls on summer rainfall in Southwest North America. D. Gutzler and P.J. Fawcett, NSF (3-10411); \$130,580; 2/1/98 to 1/31/2000.

Pending Research Proposals:

Science and Technology Center: Center for Modeling Earth System History. P.J. Fawcett UNM P.I., (E.J. Barron, Penn State University Project P.I.), National Science Foundation Science and Technology (Integrated Partners), Proposed Dates: 12/01/99-12/31/04, \$355,752.

Unsuccessful Research Proposals:

Impact Induced Climate Change (continuation). P.J. Fawcett, \$34,429; Sandia National Laboratory SURP Program.

Earth Systems Computational Facility (INESCOF) Infrastructural Upgrade and Expansion of the SUN UNIX. Network at the Department of E&PS, University of New Mexico, P.J. Fawcett, D. Gutzler and F.J. Pazzaglia (no longer at UNM), \$55,394; National Science Foundation, GEO/EAR Instrumentation and Facilities.

Unsupported Research Projects:

Climate-vegetation-landscape evolution in the late Pleistocene and Holocene, Black Mesa, Arizona region.

Conference, Symposium and Invited Lectures

American Geophysical Union: Co-author on a student poster at the Fall 1999 AGU Meeting, San Francisco, CA.

Geological Society of America: Co-author on a student paper given at the 1999 Annual GSA Meeting in Denver, CO.

Invited Presentations at other meetings and departments:

November 1999, University of New Mexico - LANL Collaboration Meeting, Albuquerque NM. Title: "Modeling the effects of land surface forcing on summer rainfall in southwest North America".

September 1999, LANL - Organization of American States - UNM, Natural Disasters Mitigation Workshop, Santa Fe, NM. Title: "Modeling the effects of land surface forcing on summer rainfall in southwest North America".

June 1999, National Center for Atmospheric Research, Climate System Model Workshop, Breckenridge CO. Title: "NCAR CCM3 and the Southwest Monsoon"

February 1999, NSF Science and Technology Center Site Visit, Penn State University. Title: "Abrupt climate change events: The Younger Dryas termination in Greenland".

January 1999, University of New Mexico - LANL Collaboration Meeting, Socorro NM. Title: "Modeling the effects of land surface forcing on summer rainfall in southwest North America".

Sabbatical and Travel

Professional travel:

- January 30 February 2, Penn State University, NSF S&T Center Site Visit.
- May 27 Los Alamos NM, Research Meeting.
- June 1-4 Black Mesa, AZ, Field Research.
- June 21-24 Breckenridge, CO, NCAR CSM Meeting.
- September 9-11 Durango, CO, FOP Field Trip.
- September 23-25 New Mexico, NMGS Field Trip.
- October 1-3 Black Mesa, AZ, Field Research.
- October 25-28 Denver CO, Annual GSA Meeting.
- December 12-15 San Francisco, CA, Fall AGU Meeting.

John W. Geissman

Teaching

Courses taught:

Spring: E&PS 101 - Physical Geology (66 enrolled).

Summer: E&PS 319L - Introductory Field Geology (28 enrolled). F. Pazzaglia, co-instructor.

Fall: E&PS 427/527 - Geophysics (Exploration) (14 enrolled).

<u>Graduate students supervised</u>: Tim Wawrzyniec, Ph.D., co-advised, Marlo Mikolas, M.S., Gordon Keating, Ph.D.

Exam committees: Brian Bierman, M.S.

Graduate Students financially supported: Tim Wawrzyniec, Gordon Keating and Marlo Mikolas.

Course Development:

Continued to organize, with Roberto Molina-Garza, a non-credit weekly "seminar" meeting for the users of the paleomagnetism laboratory, focusing on laboratory improvements, current research by users of the laboratory and controversial research topics in paleomagnetism. Continued continue to modify/improve undergraduate field geology course (E&PS 319L).

"Guest' lecturer in E&PS 101 sections and E&PS 103.

Undergraduate Research Advising:

Anders Lundahl, Emily Clary and Josh Johnson.

Graduate Theses Completed:

Timothy F. Wawrzyniec, "Dextral Transcurrent Deformation of the Eastern Margin of the Colorado Plateau (USA) and the Mechanics of Footwall Uplift Along the Simplon Normal Fault (Switzerland/Italy)", (co-advised with Jane Selverstone).

Reader: Mike Timmons, M.S.

Publications (* indicates student authors)

Articles in Refereed Journals:

- G.A. Smith, M. Grubensky* and J.W. Geissman. "Nature and origin of cone-forming volcanic breccias in the Te Herenga Formation, Ruapheu, New Zealand." Bulletin of Volcanology, 1999.
- R.S. Molina-Garza and J.W. Geissman. Tectonics, Paleomagnetic data from the Caborca Terrane, Mexico: Implications for Cordilleran tectonics and the Mojave-Sonora megashear hypothesis."
- K.E. Karlstrom, S.S. Harlan, M.L. Williams, J. McLelland, J.W. Geissman and K-I. Ahal. "Refining Rodinia: Geologic evidence for the Australian-western U.S. connection in the Proterozoic." GSA Today 9: 1-7, 1999.

Book Chapters (Sections):

- M.R. Hudson, M. Mikolas*, J.W. Geissman and B.D. Allen. Paleomagnetic and rock magnetic properties of Santa Fe Group sediments in the 98th Street core hole and correlative surface exposures, Albuquerque Basin, New Mexico. Albuquerque Geology, Guidebook 50, New Mexico Geological Society, F.J. Pazzaglia and Lucas, S.G., eds. Socorro, 355-361, 1999.
- R.S. Molina-Garza and J.W. Geissman, (ed.). Remagnetization along the Permian-Triassic disconformity in central New Mexico and remanence acquisition in the Moenkopi Formation, Albuquerque Geology, Guidebook 50, New Mexico Geological Society, F.J. Pazzzaglia and Lucas, S.G., eds. Socorro, 125-132, 1999.
- A. Lundahl* and J.W. Geissman. Paleomagnetism of the early Oligocene mafic dike exposed in Placitas, northern termination of the Sandia Mountains. Albuquerque Geology, Guidebook 50, New Mexico Geological Society, F.J. Pazzaglia and Lucas, S.G., eds. Socorro, 8-9, 1999.
- J.W. Geissman. Late Paleozoic remagnetization of Precambrian crystalline rocks, Sandia Mountains and elsewhere: Relationship to ancestral Rocky Mountain deformation and sedimentation. Albuquerque Geology. Guidebook, New Mexico Geological Society. 50F. J. Pazzaglia and Lucas, S.G., eds., Socorro, 39-40, 1999.

Abstracts:

B.C. Burchfiel, J.W. Geissman, E. Wang, C. Liangzhong and J.Y. Yin. "Cenozoic tectonic rotations in northern Indochina and implications for middle Cenozoic extrusion of crust south of the Ailao Shan Shear Zone." Eos, Transactions of the American Geophysical Union 80: F1044, 1999.

- 491
- J.W. Geissman, B.C. Burchfiel, C. Liangzhong, S.S. Harlan and T.F. Wawrzyniec*. "Paleomagnetic data from Upper Jurassic to lower Tertiary redbeds, western Yunnan, PRC: Testing spatial variability in large-magnitude intracontinental deformation." Abstracts with Programs, Geological Society of America 31: A-371, 1999.
- J.W. Geissman. "Teaching geoscience: Challenges and Opportunities." Eos, Transactions of the American Geophyscial Union 80: F120, 1999.
- J.W. Geissman, T.F. Wawrzyniec* and E. Clary. "Paleomagnetism of Pennsylvanian to Lower Permian Sangre de Cristo Formation, southern Colorado: A quality record of late Paleozoic apparent polar wander?" Eos, Transactions of the American Geophysical Union 80: F278, 1999.
- G.N. Keating* and J.W. Geissman. "The rate of change of the transitional magnetic field: An estimate based on data from the Paiute Ridge intrusive complex, southern Nevada." Eos, Transactions of the American Geophysical Union 80: F285, 1999.
- A. Lundahl and J.W. Geissman. "Paleomagnetism of Permian Abo and Yeso Formation strata and a mid-Tertiary intrusion, northern termination of the Sandia Mountains, New Mexico." Eos, Transactions of the American Geophysical Union 80: F279, 1999.
- R.S. Molina-Garza, J.W. Geissman and S.G. Lucas. "Paleomagnetism and correlation of Triassic-Jurassic strata of the Colorado Plateau." Abstracts with Programs, Geological Society of America 31: A-234, 1999.
- R.S. Molina-Garza and J.W. Geissman. "The Moenave Formation and Wingate Sandstone revisited: Paleopoles, magnetostratigraphyand anomalous field behavior." Eos, Transactions of the American Geophysical Union 80: F278, 1999.
- M.S. Petronis*, J.W. Geissman, J.S. Oldow and W.C. McIntosh. "40Ar/39Ar age determinations on mafic dikes and sills in the Silver Peak Range, west-central Nevada and their bearing on paleomagnetic data." Eos, Transactions of the American Geophysical Union 80: F280, 1999.
- L. Snee, D. Miggins, J.W. Geissman, M. Reed, J. Dilles and L. Zhang. "Thermal history of the Butte Porphyry System, Montana." Abstracts with Programs, Geological Society of America 31: A-380, 1999.
- T.F. Wawrzyniec*, J.W. Geissman, M. Melker and M. Hubbard. "Dextral shear east of the Colorado Plateau-A kinematic link between the Laramide orogeny and Rio Grande rifting and a new model for rift tectonism." Abstracts with Programs, Geological Society of America 31: A-115, 1999.
- A.B. Weil, J.W. Geissman, R. Van der Voo and K. Karlstrom. "Preliminary paleomagnetic results from a suite of Proterozoic dikes from the Grand Canyon Supergroup, Arizona [abstract]." Eos, Transactions of the American Geophysical Union, 1999.
- A.B. Weil, R. Van der Voo, J.W. Geissman and K.E. Karlstrom. "Preliminary paleomagnetic results from the Neoproterozoic Chuar Group, Grand Canyon Supergroup, Arizona." Abstracts with Programs, Geological Society of America 31: A-317, 1999.

Papers in press:

E. Campbell-Stone, B.E. John, D.A. Foster, J.W. Geissman and R.F. Livaccari. "Mechanism for accommodation of Miocene extension: Low-angle normal faulting, magmatism and secondary breakaway faulting in the southern Sacramento Mountains, southeastern California." Tectonics, 1999.

W.J. Taylor, J.M. Bartley, M.W. Martin, J.W. Geissman, J.D. Walker, P.A. Armstrong and J.E. Fryxell. Relations between hinterland and foreland shortening. Sevier orogeny, central North American Cordillera, Tectonics.

J.M. Timmons*, K.E. Karlstrom, C.M. Dehler*, J.W. Geissman and M.T. Heizler. "Proterozoic multistage (~1.1 and ~0.8 Ga) extension in the Grand Canyon Supergroup and establishment of northwest and north-south tectonic grains in the southwestern United States." Bulletin of the Geological Society of America, 1999.

Magnetostratigraphy. J.W. Geissman, in Oxford Companion to the Earth, edited by P. Morgan, Oxford University Press, Oxford, UK, 1999.

Paleomagnetism and Continental Drift. J.W. Geissman, in Oxford Companion to the Earth, edited by P.W. Morgan, Oxford University Press, Oxford, UK, 1999.

Paleomagnetism and polar wander. J.W. Geissman, in Oxford Companion to the Earth, edited by P.W. Morgan, Oxford University Press, Oxford, UK, 1999.

Paleomagnetism, local deformation. J.W. Geissman, in Oxford Companion to the Earth, edited by P.W. Morgan, Oxford University Press, Oxford, UK, 1999.

Paleomagnetism, past intensity of the field. J.W. Geissman, in Oxford Companion to the Earth, edited by P.W. Morgan, Oxford University Press, Oxford, UK, 1999.

Paleomagnetism, Techniques and Remanent Magnetization. J.W. Geissman, in Oxford Companion to the Earth, edited by P.W. Morgan, Oxford University Press, Oxford, UK, 1999.

Evolution of the Potrillo volcanic field, Rio Grande rift, southern New Mexico, U.S.A. Part I. Geochemistry, 3He surface exposure dating and paleomagnetism. E.Y. Anthony, W. Chen*, W.J.W. Williams*, J. Poths, M.J. Whitelaw, J.W. Geissman and M.A. Oimette*, Journal of Geophysical Research, 1999.

Externally Funded Research

Awards Current in 1999:

Thermal modeling of cooling ash-flow sheets and mafic intrusions: Implications for the role of fluids and the rate of change of the geomagnetic field during a reversal. J.W. Geissman, G. Keating and G.A. Valentine (LANL), IGPP Program, Los Alamos National Laboratory, Second year of a three-year program, \$36,830.

Collaborative Research: Assessing the style, evolution of large-magnitude intracontinental deformation and the role of extrusion tectonics, eastern Himalayan. Syntaxis, Yunnan, China, J.W. Geissman and Clark Burchfiel (MIT), National Science Foundation, Tectonics, \$181,103 (UNM component); 1 July, 1997 to 30 June, 2000.

Collaborative Research: An integrated study of Late Proterozoic (ca. 1.2 -0.7 GA) extensional tectonism, basin evolution and biological evolution in the Grand Canyon. Supergroup and Apache Group during incipient breakup of Rodinia, K.E. Karlstrom, J.W. Geissman, M. Elrick and Y. Asmerom, National Science Foundation, Tectonics, \$140,000; July 1, 1997 to June 30, 1999.

Research Projects in Progress

Unsuccessful proposals for grants:

Non-sponsored Research:

"Generic" paleomagnetic and rock magnetic investigations of: Cenozoic volcanic rocks (Arizona, Nevada, California, New Mexico).

Lower Paleozoic plutons (New Mexico, Colorado).

Mesozoic sedimentary rocks (New Mexico, Colorado, West Texas, Nevada).

Paleozoic sedimentary rocks (Nevada, New Mexico, Colorado, Utah).

Meteorite ejecta blankets (West Germany).

Cenozoic intrusions (Utah, Nevada, New Mexico)

Mesozoic intrusions (Nevada, Colorado, California)

Other creative work:

A.R. Palmer and J.W. Geissman, Geologic Time Scale 1999, Geological Society of America, Boulder, Colorado, 1999. J.W. Geissman. "Active Scientists Make the Difference." Geotimes: 19-20, 1999.

J.W. Geissman, D. Applegate, R. Barber, G.B. Dalrymple, R. Hazen, M. Kingston, S. Stanley and M.L. Zoback. "Earth History and the Evolution of life must be taught: Creationism is not science, American Geophysical Union Position Statement on Science and Creationism", 1999.

Conference, Symposium and Invited Lectures

Professional talks:

"Creationism and geoscience in the classroom: they do not mix", American Geological Institute Sponsored forum on creationism and our approach to it, Geological Society of America Annual Meeting, Denver, Colorado.

"Paleomagnetic data from Upper Jurassic to lower Tertiary redbeds, western Yunnan, PRC: Testing spatial variability in large-magnitude intracontinental deformation." Geological Society of America annual meeting, Denver, Colorado.

"Teaching geoscience: Challenges and Opportunities", Fall American Geophysical Union meeting, San Francisco.

Organized Journal Science Editors forum at the Geological Society of America Annual Meeting (Denver). The forum focused on the manuscript review process and what can be done to improve the timing and overall quality of manuscript reviews. Organized meeting of the Associate Editors of the Bulletin of the Geological Society of America at the Geological Society of America Annual Meeting (Denver) to discuss Bulletin activities, etc.

Sabbatical and Travel

Summer teaching:

University of Michigan Camp Davis, Geological Sciences 440, Advanced Field Geology, June 26-July 7.

Travel:

- January 12-February 10, Yunnan, People's Republic of China, field sampling.
- February 25-27, Boulder, Colorado, GSA Hq. For Publication Committee meeting.
- April 29-May 2, field work, southern Colorado.
- May 10-May 13, field work, west-central Nevada.
- May16-June5, New Mexico, southern Colorado, UNM Introductory Field Geology course.
- June 22-July 10, Wyoming, University of Michigan, Field Camp.
- August 9-August 15, Field work, southern Colorado.
- September 7- September 13, Field work, Grand Canyon.
- September 22-September 25, New Mexico Geological Society.
- October 23-27, Denver, Colorado, Geological Society of America, Annual Meeting.
- December 11-17, San Francisco, AGU Meeting.

David Gutzler

Teaching

Courses taught:

Spring: E&PS/Geography 251-Meteorology (35 enrolled); E&PS 400/522 - El Niño (12 enrolled); E&PS 599 - Thesis (1 enrolled).

Guest lectures: E&PS 439, February 1. Natural Sciences 261L, February 3.

Fall: E&PS/Geography 351 - Climatology (24 enrolled); E&PS 599 - Thesis (1 enrolled); Guest lectures: E&PS 101, October 25.

Supervision of undergraduate students:

M. Duran, analyses of summer rainfall variability, Spring.

Supervision of graduate students:

D. Etheredge, M.S. student, R. Woodford, Ph.D. student, P. Goda, Ph.D. student.

Other thesis committees:

J. Armour (M.S.), D. Henderson (M.S.), C. Johnson (M.A. Geography).

Other exam committees:

T. Gere (M.S.), J. Armour (M.S.).

Publications (* indicates student authors)

Proceedings volumes:

Regional patterns of interannual summer rainfall variability across the American Southwest. D.S. Gutzler, Proceedings, AMS 14th Conference on Hydrology, p. 299-300.

Land surface forcing of Southwest summer precipitation anomalies. D.S. Gutzler, to appear in Proceedings of the 24th NOAA Climate Diagnostics and Prediction Workshop.

Isotopes in precipitation: A new diagnostic tool for research on the North American monsoon. D.S. Gutzler, Z. Sharp and V. Atudorei, to appear in Proceedings of the 24th NOAA Climate Diagnostics and Prediction Workshop.

Articles in refereed journals:

Chemical signals of epiphytic lichens in southwestern North America: Natural vs. man-made sources for airborne particles. S.R. Getty, D.S. Gutzler, Y. Asmerom, C. Shearer and S. Free*, Atmospheric Environment, 33, 5095-5104 (1999).

Abstracts:

Regional patterns of interannual summer rainfall variability across the American Southwest. D.S. Gutzler, 14th Hydrology Conference, American Meteorological Society, Dallas TX, January 13.

Land surface forcing of Southwest summer precipitation anomalies. D.S. Gutzler, NOAA Climate Diagnostics and Prediction Workshop, Tucson AZ, November 1.

Isotopes in precipitation: A new diagnostic tool for research on the North American monsoon. D.S. Gutzler, Z. Sharp and V. Atudorei, NOAA Climate Diagnostics and Prediction Workshop, Tucson AZ, November 1.

Influence of land surface and equatorial ocean anomalies on the Southwest North American monsoon. D.S. Gutzler, Fall AGU meeting, San Francisco CA, December 15.

Effect of land surface forcing on the strength of the Southwestern U.S. and Mexican monsoon: A numerical simulation. D. Henderson*, J. Stalker, P.J. Fawcett, D.S. Gutzler and J.E. Bossert, Fall AGU meeting, San Francisco CA, December 16.

(My M.S. student, Devin Etheredge, also made a single-authored presentation based on his thesis work at the Fall AGU meeting).

Externally Funded Research

Awards Current in 1999:

Observations and modeling of large-scale controls on summer rainfall in Southwest. North America (P. Fawcett, Co-PI), Climate Dynamics Program, National Science Foundation, Two years (February, 1998 to January, 2000), \$64K/yr.

Modeling the effects of land surface forcing on summer rainfall in Southwest North America. (P. Fawcett, Co-PI), NUCOR program, Los Alamos National Lab, Three years (August, 1998 to August, 2001), \$55K/yr (year two of a three-year project).

Freshwater graduate studies linking fundamental science with application through integration of ecology, hydrology and geochemistry in regions with contrasting climates. (I am one of 6 E&PS faculty participants), IGERT program, National Science Foundation, Five years (November, 1999 to October, 1004), \$2.7M.

Unsuccessful proposal:

Integrated Earth Systems Computational Facility Infrastructural Upgrade and Expansion of the Sun UNIX Network at the Department of Earth and Planetary Sciences, UNM. (F. Pazzaglia and P. Fawcett, co-PIs), National Science Foundation.

Research Projects in Progress

Submitted proposal:

Climatic Factors Modulating Warm Season Precipitation in Southwest North America. NOAA Office of Global Programs, Proposal submitted in December, requesting 3 years of support.

Manuscripts in press:

Temperature and precipitation patterns associated with the 1950s drought in the U.S. Southwest. H.F. Diaz and D.S. Gutzler, A chapter of "The 1950s drought in the American Southwest: Hydrological, Ecological and Socioeconomic Impacts", to be published by U. Arizona Press (J. Betancourt, editor).

Covariability of spring snow pack and summer rainfall across the American Southwest. D.S. Gutzler, Journal of Climate, accepted for publication.

Human response to environmental disruption: A climatological perspective. D. S. Gutzler, A chapter of "Environmental Disruption and the Archeology of Human Response", to be published by University of New Mexico Press (R. Reycraft and G. Bawden, editors).

Manuscript and Grant Proposal Reviews:

Journal of Climate: 5 manuscripts.
Bulletin of the American Meteorological Society: 1 manuscript.
Water Resources Research: 1 manuscript.
Geophysical Research Letters: 2 manuscripts.
International Journal of Climatology: 1 manuscript.
New Mexico Water Resources Research Institute: 1 proposal.
National Science Foundation: 4 proposals.
NOAA Office of Global Programs: 3 proposals

UNM Physics Dept Colloquium, "Global Warming", Feb 12.

Conference, Symposium and Invited Lectures

Invited presentations:

City Hall, Albuquerque, "How Might Global Warming Affect Albuquerque?", April 14. Sandia National Laboratory, "El Niño and Climate Prediction", April 20. Press Briefing for Arizona newspapers on long-range summer rainfall prediction, Tucson AZ, November 1.

Numerous interviews for New Mexico newspapers and television stations regarding summer rainfall, El Niño/La Niña and other weather-related and climate-related topics.

45 1

Travel:

- AMS Annual Meeting, Dallas TX, 11-14 January.
- NOAA Drought Monitoring Workshop, Boulder CO, 5-6 April.
- LANL Natural Hazards Mitigation Workshop, Santa Fe, 21 September.
- Fieldwork in northeastern AZ, 1-3 October.
- NOAA Climate Diagnostics and Prediction Workshop, Tucson AZ, 31 October-4 November.
- AGU Fall Meeting, San Francisco CA, 14-17 December.

Stephen P. Huestis

Teaching

Courses taught:

Spring: E&PS 115 - Geological Disasters (44 enrolled); E&PS 225 - Oceanography (23 enrolled).

Fall: E&PS 101 - Introduction to Geology (79 enrolled); E&PS 115 - Geological Disasters (24 enrolled); E&PS 433/533 - Statistics and Data Analysis in Earth Sciences (7 enrolled).

Exam committees: Michelle Kearny, Tedros Tesfay and Martha Eppes.

MS thesis committee: Dale Henderson.

Ph.D. Dissertation committee: Timothy Wawrzyniec.

Other Projects in Progress

Manuscript in review: A Fourier method for computing the perturbation to a two-dimensional electric potential by a conductor of arbitrary shape, S.P. Huestis, submitted to Numerical Methods for Partial Differential Equations.

Karl E. Karlstrom

Teaching

Courses taught:

Spring: E&PS 307, Structural Geology (24 enrolled); E&PS 307L, Structural Geology Lab (24 enrolled); E&PS 490, Presentations (12 enrolled); E&PS 690, Dissertation (1 enrolled); E&PS 599, Masters Thesis (3 enrolled).

Summer: E&PS 420, Advanced Field Geology (19 enrolled).

Fall: E&PS 526, Advanced Structural Geology (8 enrolled); E&PS 101, Physical Geology (72 enrolled); E&PS 551, Problems (3 enrolled); E&PS 699, Dissertation (2 enrolled); E&PS 599, Masters Thesis (2 enrolled W.J. Taylor, J.M. Bartley, M.W. Martin, J.W. Geissman, J.D. Walker, P.A. Armstrong and J.E. Fryxell).

Innovative activities:

Spring: Undergraduate poster session: Structural Geology of the Sandia Mountains region: Outgrowth of E&PS 307.

Fall: Graduate poster session: Tectonic Evolution of the Colorado Plateau: Stable remnant of a western U.S. orogenic plateau: Outgrowth of E&PS 526.

Graduate students completed:

Cynthia Brown, Synchronous plutonism, metamorphism and deformation of the 1.65 Ga Monzanita pluton, Monzanita Mountains. New Mexico, 82 p.

Mary Simmons, Quartz-Kyanite pods in Proterozoic rocks in northern New Mexico: shear zone formation along an older hydrothermal alteration horizon.

Mike Timmons, Proterozoic multistage (~1.1 and ~0.8 Ga) extension in the Grand Canyon Supergroup and establishment of northwest and north-south tectonic grains in the Southern United States.

Graduate students in progress: Colin Shaw, Ph.D. expected 2000, Annie McCoy, MS expected 2001, Mike Timmons, Ph.D. expected 2002, Mark Quigley, M.S., expected 2002.

Thesis committee:

Chaired: Cynthia Brown, Mary Simmons, Colin Shaw, Annie McCoy.

Committee member:

Carol Dehler, Aaron Cavosie, Toti Larson, Kurt Steffan, Dan Koning, Steve Grimes (University of Texas).

Exam committee:

Cynthia Brown, Mary Simmons, Michael Timmons, Colin Shaw, Annie McCoy, Aaron Cavosie, Dan Koning, Justin Hagerty.

Undergraduate research:

Doug Raszewski; (Honors thesis completed 1999); Diana Stickland (Honors thesis in progress); John Walen, James Ashby and Eb Crawford (Statemap funding).

Publications (* indicates student authors)

Refereed Journals/Papers (* = graduate student co-author)

Read*, A., Karlstrom, K.E., Grambling, J.A., Bowring, S.A., Heizler, M. and Daniel*, C., 1999. A mid-crustal cross section from the Rincon Range, northern New Mexico: Evidence for 1.68 Ga pluton-influenced tectonism and 1.4 Ga regional metamorphism: Rocky Mountain Geology, v. 34. no. 1, p. 67-91.

Shaw*, C.A. and Karlstrom, K.E., 1999. The Yavapai-Mazatzal crustal boundary in the southern Rocky Mountains: Rocky Mountain Geology, v. 34, no.1, p. 37-52.

Williams, M.L., Karlstrom, K.E., Lanzirotti, A., Read*, A.S., Bishop, J.L., Lombardie, C.E. Pedrick*, J.N. and Wingstead, M.B., 1999. New Mexico middle crustal cross sections: 1.65 Ga macroscopic geometry, 1.4 Ga thermal structure and continued problems in understanding crustal evolution: Rocky Mountain Geology, v. 34, no.1, p. 53-66.

Karlstrom, K.E., 1999, Introduction to special issues: Nature of tectonic boundaries in the lithosphere of the Rocky Mountains: Rocky Mountain Geology, v. 34, no. 1, p. 1-4.

McCaffrey, K.J.W., Miller, C.F., Karlstrom, K.E. and Simpson, C., 1999, Synmagmatic deformation patterns in the Old Woman Mountains, SE California: Journal of Structural Geology, v. 21, p. 335-349.

Karlstrom, K.E., Harlan, S.S., Williams, M.L., McLelland, J., Geissman, J.W. and Ahall, K.I., 1999, Refining Rodinia: Geologic evidence for the Australia – Western U.S. connection for the Proterozoic: GSA Today, v. 9, no. 10, p. 1-7.

Meltzer, A., Rudnick, R., Zeitler, P., Levander, A., Humphreys, G., Karlstrom, K.E., Ekstiöm, G., Carlson, R., Dixon, T., Gunis, M., Shearer, P. and Van Der Hilst, R., 1999, US Array Initiative: GSA Today v. 9, no. 11, p, 8-10.

Keller, G.R., Karlstrom, K.E. and Farmer, G.L., 1999, Tectonic Evolution in the Rocky Mountain Region: 4-D imaging of the continental lithosphere: EOS, v. 80, p. 493-498.

Brown*, C.L., Karlstrom, K.E., Heizler, M.T. and Unruh, D., 1999, Paleoproterozoic deformation, metamorphism and ⁴⁰Ar/³⁹Ar thermal history of the 1.65 Ga Manzanita pluton, Manzanita Mountains, New Mexico: New Mexico Geological Society Guidebook, 50th, Albuquerque Country, p. 255-268.

Karlstrom, K.E., Cather, S., Kelley, S., Heizler, M., Pazzaglia, F.J. and Roy, M., 1999, Sandia Mountains and Rio Grande Rift: Ancestry of structures (Proterozoic to Laramide) and history of development of a segmented crust: New Mexico Geological Society Guidebook, 50th, Albuquerque Country, p. 155-165.

Roy, M., Karlstrom, K.E., Kelley, S.A., Pazzaglia, F.J. and Cather, S.M., 1999, Topographic Setting of the Rio Grande Rift, New Mexico: Assessing the role of "rift-flank uplift": New Mexico Geological Society Guidebook, 50th, Albuquerque Country, p. 1267-174.

Geologic Maps (** = undergraduate student co-author)

Karlstrom, K.E., Connell, S.D., Edwards, D., Armour**, J., Lewis**, J. and Jackson, P.G., 1999, Geology of the Bosque Peak 7.5-minute quadrangle, Torrance, Bernalillo and Valencia Counties, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Open-File Digital Map 24.

Notes, Extended Abstracts and other Publications (* indicates student authors)

Karlstrom, K.E., 1999, Southern Margin of the Sandia Pluton and the "Cibola Problem": New Mexico Geological Society Guidebook, 50th, Albuquerque Country, p. 30.

Read*, A.S., Karlstrom, K.E. and Ilg*, B., 1999, Mississippian Del Padre Sandstone or Proterozoic quartzite: New Mexico Geological Society Guidebook, 50th, Albuquerque Country, p. 41.

Lucas, S.G., Read*, A. and Karlstrom, K.E., 1999, Second-Day Trip 1 Road Log: Albuquerque to Tijeras, Cedar Crest and Sandia Crest: New Mexico Geological Society Guidebook, 50th, Albuquerque Country, p. 27-46.

Pazzaglia, F.J., Lucas, S.G., Estep, J.W., Connell, S.D., S.G., Estep, J.W., Connell, S.D., Karlstrom, K.E., Black, BA, Smith, G.A., Hawley, J.W., Johnson, P., Cather, S. and Stearns, C., 1999, First-Day Road Log from Albuquerque to Placitas, Hagan Basin and Espinoso Ridge: New Mexico Geological Society Guidebook, 50th, Albuquerque Country, p. 1-26.

Technical Reports

Karlstrom, K.E., Connell, S.D., Edwards, D.L., Armour**, J., Lewis**, J. and Jackson, P.B., 1999, Geology of the Bosque Peak Quadrangle, Torrance, Bernalillo and Valencia Counties, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open-file report 24.

Abstracts (* = graduate student co-author)

Karlstrom, K.E., 1999, Ancestry of structures and record of a composite uplift history in the Rocky Mountains: Geological Society of America Abstracts with Programs, v. 31, no. 7, p. A-244.

Shaw*, C.A., Karlstrom, K.E., McCoy*, A.M. and Williams, M.L., 1999, Multiple displacements on Proterozoic Intracontinental shear zones in Colorado: Insights into the lithospheric evolution of the Rocky Mountains: Geological Society of America Abstracts with Programs, v. 31,no. 7, p. A-107.

Weil, A., Van Der Voo, R., Geissman, J. and Karlstrom, K.E., 1999, Preliminary paleomagnetic results from the Neoproterozoic Chuar Group, Grand Canyon Supergroup, Arizona: Geological Society of America Abstracts with Programs, v. 31, no. 7, p. A-317.

Timmons*, J.M. and Karlstrom, K.E., 1999, Multistage Proterozoic extension and establishment of the N-S and NW tectonic grains in the southwestern United States: Evidence from 1:12,000 mapping of the Grand Canyon Supergroup: Geological Society of America Abstracts with Programs, v. 31, no. 7, p. A-177.

Karlstrom, K.E., Heizler, M. and Williams, M.L., 1999, Erosional demise of an orogenic plateau-Record from the Great Unconformity of the western U.S.: Geological Society of America Abstracts with Programs, v. 31, no. 7, p. A-67.

Dehler*, C.M., Des Marais, D.J., Bowring, S.A., Sharp, Z., Karlstrom, K.E. and Elrick, M., 1999, Chuar Group (1.1-0.74 Ga), Grand Canyon: Carbon-isotope systematics at the onset of Sturation glaciation: Geological Society of America Abstracts with Programs, v. 31, no. 7, p. A-487.

Karlstrom, K.E. and Shaw*, C.A., 1999, Continental Dynamics-Rocky Mountain Project (CD-ROM): 4-D imaging of the continental lithosphere: v. 80, no. 46, p. F640.

Karlstrom, K.E. and Williams, M.L., 1999, Heterogeneity of the middle crust: Perspectives from well-exposed transects of Proterozoic rocks in the southwestern United States: EOS, Transactions, American Geophysical Union, v. 80, no. 46, p. F943.

Heizler, M.T., Karlstrom, K.E. and Timmons, M.J., 1999, Where have all the old micas gone?: New Mexico Geological Society Spring Meeting.

Karlstrom, K.E., 1999, New results from geologic mapping of the basin margins: Geometry and history of development of a fault-segmented crust: Third annual USGS Middle Rio Grande Basin study workshop, p. 8.

Awards Current in 1999:

An integrated study of Late Proterozoic (1.2-0.7 Ga) extensional tectonism, basin evolution and biological evolution in Grand Canyon, K. Karlstrom, M. Elrick, J. Geissman, Y. Asmerom, National Science Foundation, 7/1/97 to 7/31/00, \$140,006.

Lithospheric structure and evolution of the Rocky Mountain transect of western U.S., K.E. Karlstrom and F.J. Pazzaglia, National Science Foundation (3-48951), \$300,000, 7/1/97 to 12/31/99.

Supplement to Grand Canyon grant, K.E. Karlstrom, National Science Foundation, \$10,000 for new motors.

Supplement to Rocky Mountain grant, K.E. Karlstrom, National Science Foundation, \$50,000 for additional seismic data acquisition.

Great Unconformity of SW U.S.A.-Ar/Ar and structural studies of a billion years of regional exhumation, K.E. Karlstrom, National Science Foundation, \$76,866, 7/15/99 to 6/30/02.

Research Projects in Progress

Papers in Press (* = graduate student co-author, ** = undergraduate student co-author)

Andronicos,** C.L., Karlstrom, K.E., Nyman, M.W. and Kirby,* E. and Timmons*, M., 1999. Interactions of metamorphism, deformation and plutonism in low-pressure, high temperature metamorphic belts: An example from the Mesoproterozoic Sandia pluton, New Mexico, U.S.A.: Journal of Metamorphic Geology.

Ilg*, B.R., Karlstrom, K.E. and Williams, M.L., 2000. Porphyroblast inclusion trail geometries in the Grand Canyon: Evidence for rotation and non-rotation? Journal of Structural Geology, v. 22, p. 231-243.

Karlstrom, K.E., Ilg*, B.R., Williams, M.L., Hawkins*, D.P., Bowring, S.A. and Seaman, S.J., in press. Paleoproterozoic rocks of the Granite Gorges, in Beus, S.S. and Morales, M., eds., Grand Canyon Geology: Oxford University Press, second edition.

Timmons*, M.J., Karlstrom, K.E. and Sears, J.W., in press. Geologic structure of the Grand Canyon Supergroup, in Beus, S.S. and Morales, M., eds., Grand Canyon Geology: Oxford University Press, second edition.

Timmons*, M.J., Karlstrom, K.E., Dehler*, C.M., Geissman, J.W. and Heizler, M.T., in press, Proterozoic multistage (~1.1 and ~0.8 Ga) extension in the Grand Canyon Supergroup and establishment of northwest and north-south tectonic grains in the southwestern United States: Geological Society of America Bulletin.

Cather, S.M. and Karlstrom, K.E., in press, Implications of Jurassic, Cretaceous and Proterozoic piercing lines for Laramide oblique-slip faulting in New Mexico and relation of the Colorado Plateau: Reply: Geological Society of America Bulletin.

Moldonado, F., Love, D.W., Connell, S.D., Slate, J.L., Karlstrom, K.E. and Williams, V.S., 2000, Preliminary geologic map of Isleta Reservation and continuous areas: U.S. Geological Survey openfile map.

In Review:

Karlstrom, K.E., Harlan, S.S., William, M.L., McLelland, J., Geissman, J.W. and Ahall, K-I., in review, Long-lived (1.8-0.8 Ga) Cordilleran – type orogen in southern Laurentia, its extensions to Australia and Baltica and implications for refining Rodinia: Precambrian Research, submitted.

Karlstrom, K.E., Bowring, S.A., Dehler*, C.M., Knoll, A.H., Porter, S., Sharp, Z., Des Marais, D., Weil, A., Geissman, J.W., Elrick, M., Timmons, M.J., Keefe, K. and Crossey, L., in review, The Chuar Group of the Grand Canyon: Record of breakup of Rodinia, associated change in the global Carbon cycle and ecosystem expansion by 740 Ma: Geology, submitted.

Marshak, S., Karlstrom, K.E. and Timmons, M.J., in review, Inversion of Proterozoic extensional faults: An explanation for the patterns of Laramide and Ancestial Rockies intracratonic deformation, U.S.A.: Geology, submitted.

Conference, Symposium and Invited Lectures

Invited papers and meetings:

Keynote speaker for GAC-MAC meeting on "Precambrian Terrane Boundaries", Sudbury Ontario, 1999.

Co-convener and invited speaker for GSA National meeting theme session: Origin of orogenic plateaus: Interactions of plate convergence, mantle processes and surficial processes in continental tectonics: Denver, Colorado, 1999.

Co-convener and invited speaker for GSA National meeting theme session. Cenozoic tectonics of the southern Rocky Mountains in Colorado and New Mexico: Connections with global processes: Denver, Colorado, 1999.

Co-convener of special session: Lithospheric structure and evolution of the Rocky Mountain region: AGU Fall meeting, San Francisco, 1999.

Invited speaker for special session: Characterization of small-scale crustal heterogeneity: AGU Fall meeting, San Francisco, 1999.

Attended and organized two workshops for U.S. Array, a component of the NSF-Earthscope initiative March 1-18, Albuquerque, New Mexico September 26-27, Houston, Texas

Sabbatical and Travel

Travel:

- January 8 Field work, Placitas Quad.
- January 10-11 Field work Sacramento Mountains (with Mike Timmons, Anne McCoy).
- January 15 Field work with Doug Raszewski.
- January 30 Field trip, E&PS 307L.
- February 6 Field trip, E&PS 307L.
- February 20 Field trip E&PS 307L.
- March 6 Field trip E&PS 307L.
- March 15-18 US Array Workshop, Albuquerque, New Mexico.
- March 18-21 Gold Butte Fieldwork with MIT.
- April 5-6 Guest Lecture, University of Wyoming.

- April 9 NMGS Meeting, Socorro, New Mexico.
- April 14 Renewed drives license from UNM.
- April 19 University of Texas, Ph.D. Defense, Steve Grimes.
- April 22 Field work with John Walen and Tomas Ashby.
- April 28-29 Guest Lecture, Northern Arizona University.
- May 8-9 Field work in Colorado with Colin Shaw (field check for summer field course).
- May 13 Field work, Manzano Mountains.
- May 6 June E&PS 420, Advanced Field Geology.
- July 21-15 Field work in Colorado with Annie McCov.
- August 2 Seismic Experiment Meeting, Las Vegas, New Mexico.
- August 12 Field work with Diana Stickand.
- August 13 Field work with Doug Raszewski.
- September 3-19 Research in Upper Gorge of Grand Canyon, work with Carol Dehler, Mike Timmons, Elizabeth Lengerburg, Colin Shaw, Mica Jessup and other students.
- September 23-24 Led NMGS field trip on September 24, 1999.
- September 25-28 US Array Workshop, Houston, Texas.
- October 1 New Mexico Bureau Placitas Quad Field check. October 24-28 - GSA National Meeting, Denver, Colorado.
- November 18-20 Invited talk, University of Michigan.
- December 6-8 Meeting of US Array Steering Committee with NSF Program Director, Washington, D.C.
- December 12-13 American Geophysical Union Fall Meeting, San Francisco, California,

Cornelis Klein

Teaching

Courses taught:

Spring: E&PS 105L - Physical Geology Labs (faculty coordinator, 136 enrolled). E&PS 204 -Gem Minerals and Gems (16 enrolled; ICES global items: 5.7; 5.9; 5.7); E&PS 101 - Physical Geology (49 enrolled; ICES global items: 5.3; 5.4; 5.3).

Fall: E&PS 105L - Physical Geology Labs (faculty coordinator, 172 enrolled). E&PS 301 -Mineralogy (42 enrolled; ICES global items: 5.5; 5.8; 5.4). E&PS 302L - Mineralogy laboratory (three lab sessions per week of 4 hours each; 31 enrolled); E&PS 402 - Environmental Mineralogy (7 enrolled; ICES global items; 5.6; 5.9; 5.4).

Guest lecturer in Natural Sciences 261 on April 13, 1999. Title of lecture "The asbestos saga".

Graduate students:

Ph.D. Committee member: Christopher Herd.

M. Sc., Examination Committee member: Marcia L. Jensen, Aaron Cavosie.

M. Sc., Committee member: Scott du Frane.

Also, over the last 10 years, as faculty coordinator of 105L (Physical Geology) Laboratories, I have been responsible for the instruction of teaching methods (approach, subject coverage, presentation, etc.) to between 6 to 9 graduate students in E&PS each semester; for many of these teaching in 105L is their first instructor experience.

3.5

Publications (* indicates student authors)

- C. Klein, 2000, Mineralogy Tutorials: Interactive instruction on CD-ROM, version 2.0, John Wiley and Sons, New York.
- C. Klein and R.C. Morris, 1999, Origin of Precambrian iron-formations and their iron ores, Abstracts, Abstracts with Programs, Geological Society of America. p. A-21 to A-22.
- C. Klein and A.E. Ladeira, in press, Geochemistry and Petrology of some Proterozoic banded iron-formations of the Quadrilátero Ferrifero, Minas Gerais, Brazil, Economic Geology.
- C. Klein, A.E. Ladeira and J.H. Grossi Sad, submitted for publication, Geologic Setting, Petrology and Geochemistry of some high-grade metamorphic Archean banded iron-formations of the Guanhães district, Minas Gerais, Brazil, Mineralium Deposita.
- C. Klein and A.E. Ladeira, submitted for publication, Geochemistry and Geology of Archean banded ironformations (BIF) and some metacherts that host the Morro Velho and Raposos Gold deposits, Minas Gerais, Quadrilátero Ferrífero, Brazil, Economic Geology.
- C. Klein and A.E. Ladeira, Petrology and geochemistry of banded iron-formations of the Archean Carajás Formation, in the state of Pará, northern Brazil (manuscript 95% completed).
- C. Klein and A.E. Ladeira, Geochemistry and petrology of some Neoproterozoic banded iron-formations and associated manganese-formations from the Urucum district, Matto Grosso do Sul, Brazil (manuscript 50% completed).
- C. Klein and C.S. Hurlbut, 1997, Manual of Mineralogy 21st edition, 2001, being translated into a Chinese edition, National Science Publications (* indicates student authors), Republic of China.

Externally Funded Research

Awards Current in 1999:

"Geochemistry, petrology and geologic setting of Precambrian Urucum and Carajás ironformation, Brazil", C. Klein, National Science Foundation Grant EAR-940467, \$89,000; June 1, 1994 to May 31, 1999.

Collaborative research with Professor Clark Johnson, University of Michigan, 2-year NSF grant (1999-2001) on "Iron isotopes in the transition from a preoxgenerated Earth: evidence for banded iron-formations".

Conference, Symposium and Invited Lectures

Invited participant in conference on "Bridging two worlds: from the Archean to the Proterozoic", February 18-20, 1999, at the IGPP Center for the Study of Evolution and the Origin of Life, University of California, Los Angeles.

Invited speaker at the Society Economic Geology Janus I Symposium "Impact of Research on Mineral Exploration: a century-long perspective" (half hour invited lecture) during the Geological Society of America, Annual Meeting, October 24, 1999, Title of lecture (with R.C. Morris) "Origin of Precambrian iron-formations and their iron ores".

Attended the New Mexico Mineral Symposium, NMIMT Campus, Socorro, New Mexico, November 13 and 14, 1999.

During the Annual Geological Society America Meetings October 23 to 26, I attended as prospective Vice Presidentand subsequently Vice President of the Mineralogical Society of America the following sessions.

- October 23 MSA Management Committee
- October 24 MSA Council Breakfast
 - -MSA 1999 Council Meeting
 - -MSA Council Dinner
 - MSA 2000 Council Meeting
- October 25 MSA Presidents' Breakfast
- October 26 MSA Awards Luncheon
 - -MSA Presidential Address
 - MSA Business Meeting
 - MSA Geological Society Joint Reception

Barry S. Kues

Teaching

Courses taught:

Spring: E&PS-101 (88 enrolled); E&PS-493 (1 enrolled); E&PS-699 (1 enrolled).

Fall: On sabbatical leave. E&PS-699 (1 enrolled).

Publications (* indicates student authors)

Refereed Articles:

Uppermost Pennsylvanian and Permian stratigraphy and biostratigraphy at Placitas, New Mexico. S.G. Lucas, J.M. Rowland, B.S. Kues, J.W. Estepand G.L. Wilde, Albuquerque Geology (F.J. Pazzaglia and S.G. Lucas, eds.), New Mexico Geological Society, Guidebook 50, p. 281-292.

Early Permian plant Megafossils from Carrizo Arroyo, central New Mexico. W.D. Tidwell, S.R. Ash, B.S. Kues, K.K. Kietzkeand S.G. Lucas, Albuquerque Geology (F.J. Pazzaglia and S.G. Lucas, eds.), New Mexico Geological Society, Guidebook 50, p. 297-304.

Articles in Edited Volumes:

Second-day trip 1 road log, from Albuquerque to Tijeras, Cedar Crest and Sandia Crest. S.G. Lucas, A. Read, K.E. Karlstrom, J.W. Estep, B.S. Kues, O.J. Anderson, G.A. Smith and F.J. Pazzaglia, Albuquerque Geology (F.J. Pazzaglia and S.G. Lucas, eds.), New Mexico Geological Society, Guidebook 50, p. 27-46.

Third-day trip 1 road log, from Albuquerque to Tijeras, Cedro Canyon trilobite locality ad Kinney brick quarry. S.G. Lucas, B.S. Kues and J.W. Estep, Albuquerque Geology (F.J. Pazzaglia and S.G. Lucas, eds.), New Mexico Geological Society, Guidebook 50, p. 67-73.

Reviews:

[Review of] Dinosaurs of Utah, by Frank deCourten. B.S. Kues, New Mexico Historical Review, v. 74, p. 329.

Other Research in Progress

Manuscripts in Press:

Dedication to Vincent C. Kelley. B.S. Kues, Revised edition of Albuquerque, Scenic Trips to the Geologic Past (P. Bauer et al. (eds.), New Mexico Bureau of Mines and Mineral Resources.

Manuscripts in Review:

Middle Pennsylvanian gastropods from the Flechado Formation, north-central New Mexico. B.S. Kues and R.L. Batten, Journal of Paleontology.

Conference, Symposium and Invited Lectures

Attended annual N.M. Geological Society Field Conference, Albuquerque, Sept. 23-25 Road-log committee for N.M.G.S. Annual Field Conference

Sabbatical and Travel

Sabbatical leave, 1999-2000 academic year.

Travel:

- April 24 Taos area, fossil collecting
- June 10 Placitas area, fossil collecting
- July 11 Taos area, fossil collecting
- July 16-18 El Paso and Garfield areas, fossil collecting
- August 6-8 Tucumcari-San Jon areas, fossil collecting
- September 14 Carrizo Arroyo, Lucero uplift, fossil collecting
- September 15 Zuni Mountains, fossil collecting
- September 16 Sandia Park area, fossil collecting
- September 17-21 Mud Springs and Robledo Mountains, stratigraphy and fossil collecting
- September 23-25 Albuquerque area, N.M. Geological Society annual field conference
- September 26 Abo Canyon, stratigraphy and fossil collecting
- November 26-27 Oscura Mountains, stratigraphy and fossil collecting
- December 2 Oscura Mountains, stratigraphy and fossil collecting
- December 17/Jan.4, 2000 New Zealand, geological observations and photography

Leslie D. McFadden

Teaching

Courses taught:

Spring: E&PS-484/584 Soil Genesis (6 enrolled).

Summer: Environmental Impacts of Urbanization on the Albuquerque Region (College of Education and Albuquerque Teacher's Institute).

Fall: E&PS-101 Physical Geology (86 enrolled).

<u>Guest Lecturer</u>: Department of Architecture and Planning-Community and Regional Planning 570: Soil geomorphic and ecologic studies in NE Arizona, (2) Community and Regional Planning 470/570-Semiarid lands Development, Planning and Restoration; (3) E&PS-101: Weathering and Soils.

Graduate Students Supervised or Co-supervised:

Angela McLain (Ph.D.); Martha Eppes (Ph.D.) (Funded, 0.5 R.A., U.S.G.S.); Tim Gere, Nicole Bailey (M.S.); Ann Tillery (M.S., co-supervised with Dr. P. Fawcett).

M.S. Thesis Committees:

Dan Koning, Karl Wegmann, Paul Wisnieski, Devin Etheridge.

Ph.D. Committees:

Ariane Oberling (Dept. of Anthropology)
Joel Pederson

Publications (* indicates student authors)

Chapter in Edited Volume in Press:

Soil Survey and Soil-Geomorphology, Holliday, V.T., McFadden, L.D., Bettis, E.A., Birkeland, P.W., in Douglas Helms (ed.), History of the National Cooperative Soil Survey, Iowa State University Press.

Paper in press in refereed publication:

Influence of Parent Material and Grain Size On Carbonate Formation in Gravelly Soils in a Desert Piedmont, Sevilleta LTER, Palo Duro Canyon, New Mexico; Treadwell-Steitz, C*. and McFadden, L.D. (Geoderma).

Abstracts:

Desert pavements, vesicular horizons and anomalous, surface accumulation of pedogenic calcium carbonate; McFadden, L.D., Geological Society of America South-Central Section Meeting, Calcium carbonate-enriched soils of the Southwest Symposium, Abstracts with Programs, p. A-29, v. 31, 1999.

Hypothesized changes in dust sources from Sr isotope composition of CaCO3 in volcanic and alluvial desert soils; McLain, A*., McFadden, L., Asmerom, Y., McDonald, E. and Poths, J.

Externally Funded Research

Awards Current in 1999:

"IGERT: Freshwater graduate studies link fundamental science with applications through integration of ecology, hydrology and geochemistry in regions with contrasting climates"; Co-Principal Investigator (at UNM), Cliff Dahm, McFadden L.D. (one of ten collaborators at UNM), National Science Foundation, 1/99 - 1/2004, \$2,699,289.

Contracts continuing in 1999:

"Soils and Geomorphological Studies in the Transverse Ranges", McFadden, L.D., U.S. Geological Survey, 12/97 - 5/99, \$20,000.

"Geoarcheological Studies in Support of Highway 22 and Highway 117 Site Investigations," McFadden, L.D., Office of Contract Archeology, 6/98-5/99, \$2,500.

Research Projects in Progress

Proposal in Review:

"Collaborative Proposal: Soil Development Control on Geomorphic Processes and Long-term Landscape Development; A Case Study along the Northern Flank of the San Bernardino Mountains, Transverse Ranges, California." McFadden, L.D. (P.I.), National Science Foundation, 5/1/00-5/1/02, \$79,389.

Manuscripts Submitted or in Review:

The influence of dust and lithology on the origin and evolution of desert pavements on alluvial fans; McDonald, E.V., McFadden, L.D. and Wells, S.G., for Geological Society of America Bulletin (revise and re-submit).

Conference, Symposium and Invited Lectures

Talks Given:

Desert pavements, vesicular horizons and anomalous, surface accumulation of pedogenic calcium carbonate; McFadden, L.D.; Geological Society of America South-Central Section Meeting, Calcium carbonate-enriched soils of the Southwest Symposium.

Professional Meetings Attended:

Annual Meeting, Geological Society of America, Denver, Colorado Oct. 24-29.
South-Central Sectional Meeting, Geological Society of America, Lubbock TX. March 13-16.

Other

Co-chair, 1999 New Mexico Geological Society Field Conference Panel Member, Evolution and Creationism in the Classroom, "Hot Topics" noontime colloquium, GSA Annual Meeting, Denver, CO.

Sabbatical and Travel

Travel:

- January 7-10: Participant, Yale-New Haven Teaching Institute Meeting, representing the Albuquerque Teacher's Institute, Yale University, New Haven, CT.
- March 13-16: Present paper at South-Central Sectional Meeting of the Geological Society of America Meetings, Texas Tech University, Lubbock, TX.
- March 17,18: Fieldwork and overview of Ph.D., graduate student research, western Mojave Desert, Lucerne Valley, CA.

- July 12-16: Participant, Yale-New Haven Teaching Institute Meeting, representing the Albuquerque Teacher's Institute, Yale University, New Haven, CT.
- September 23,24: Participant, 100th Field Conference, New Mexico Geological Society, Albuquerque region.
- October 1 -3: Fieldwork, northeastern Arizona.
- October 24 29: Attend Geological Society of America Annual Meetings and Post-meeting Field trip. Denver, CO.
- November 12,13: Review fieldwork, research of Ph.D., graduate student, western Mojave Desert, CA.

James J. Papike

Teaching

Courses taught:

Spring: E&PS - "Exploring the Solar System" (28 enrolled).

Fall: E&PS 465/565 - "Mars Evolution" (23 enrolled).

M.S. Advisor: Justin Hagerty.

Ph.D. Advisor: Christopher D.K. Herd and James Karner.

Student Graduate Committees: Kate Jones and Gordon Keating.

Publications (* indicates student authors)

Articles in refereed journals: (Double Asterisk IOM Staff, Single Asterisk Student).

Systematics of Ni and Co in olivine from planetary melt systems: Lunar mare basalts. Papike, J.J., G.W. Fowler**, C.T. Adcock** and C.K. Shearer**, American Mineralogist, v. 84, p. 392-399 (1999).

Diogenites as asteroidal cumulates: Insights from spinel chemistry. Bowman, L.E.*, J.J. Papike and M.N. Spilde**, American Mineralogist, v. 84, p. 1020-1026 (1999).

Magmatic evolution of the Moon. Shearer, C.K.** and J.J. Papike, American Mineralogist, v. 84, p. 1469-1494 (1999).

Petrogenesis of silicate inclusions in the Weekeroo Station IIE iron meteorite: Differentiation, remelting and dynamic mixing. Ruzicka, A., G.W. Fowler**, G.A. Snyder, M. Prinz, J.J. Papike and L.A. Taylor, Geochimica et Cosmochimica Acta, v. 63, p. 2123-2143 (1999).

Abstracts in conference and symposia proceedings:

30th Lunar and Planetary Science Conference, Houston, Texas.

Systematics of Ni and Co in Olivine from Planetary Melt Systems: Lunar Mare Basalts. Papike, J.J., G.W. Fowler**, C.T. Adcock** and C.K. Shearer**, Lunar and Planetary Science XXX, Abstract No. 1006 (1999).

Diogenites as Asteroidal Cumulates: Insights from Spinel chemistry. Bowman*, L.E., J.J. Papike and M.N. Spilde**, Lunar and Planetary Science XXX, Abstract No. 1008 (1999).

Nonstoichiometry in SNC Spinels: Implications for the Determination of Oxygen Fugacity from Phase Equilibria. Herd*, C.D.K. and J.J. Papike, Lunar and Planetary Science XXX, Abstract No. 1503 (1999).

Origin of Lunar Mare High-Titanium Basalts. Melting of a Deep Hybridized Source or Shallow Assimilation of High-Ti Cumulates? Shearer**, C.K. and J.J. Papike, Lunar and Planetary Science XXX, Abstract No. 1365 (1999).

Aladdin: Exploration and Sample Return of Phobos and Deimos. Pieters, C., J.J. Papike and others. Lunar and Planetary Science XXX. Abstract No. 1155 (1999).

New Views of the Moon II, Flagstaff, Arizona.

A view from the sample suite with and without a remote sensing prospective. Shearer**, C.K., J.J. Papikeand L.R. Gaddis Mare basalt magmatism, Meeting Abstracts, 59-61 (1999).

G.S.A. Annual Meeting, Denver, Colorado

Implications for the Petrogenesis of Martian Meteorite Dar Al Gani 476 from spinel, olivine and pyroxene compositions. Herd*, C.D.K. and J.J. Papike, Abstracts with Programs (1999).

Externally Funded Research

Awards Current in 1999:

Microbeam Studies of Planetary Materials. J.J. Papike, L. Borg, R. Jones and C. Shearer, NASA, \$233,000; December 15, 1999 to December 15, 2000.

Support of UNM/SNL Ion Microprobe Facility. J.J. Papike and C. Shearer, National Science Foundation, \$80,000; August 1, 1999 to July 31, 2000.

Institute for the Study of Biomarkers in Astromaterials. J.J. Papike, NASA, \$50,000; May 14, 1999 to May 13, 2000.

Spinels as Recorders of Planetary Basalt Evolution: Martian Samples. J.J. Papike and C. Herd, NASA, \$22,000; July 15, 1999 to July 14, 2000.

Awards continuing from previous years:

Microbeam Studies of Planetary Materials. J.J. Papike, A. Brearley, R. Jones and C. Shearer, NASA, \$219,000; December 15, 1998 to December 15, 1999.

Support of UNM/SNL Ion Microprobe Facility. J.J. Papike and C. Shearer, National Science Foundation, \$80,000; August 1, 1998 to August 1, 1999.

Spinels as Recorders of Planetary Basalt Evolution: Martian Samples. J.J. Papike and C. Herd, NASA, \$22,000; July 15, 1998 to July 14, 1999.

Advanced Study and Scholastic Honors

Outstanding Achievement Award, University of Minnesota, highest award for alumni.

Conference, Symposium and Invited Lectures

Meetings attended:

- February 15-18: Mars Sample Return Workshop, Jet Propulsion Laboratories (JPL), Pasadena, CA.
- February 21-24: Lunar Data Analysis Review Panel (LDARP), Lunar and Planetary Institute (LPI), Houston, TX.
- March 1-3: Mars Architecture Wrap-up Workshop (JPL), Pasadena, CA.
- March 13-14: Cosmochemistry Program "Management Operations Working Group" (MOWG)
 meeting, LPI, Houston, TX.
- March 15-19: 30th Lunar and Planetary Science Conference, Johnson Space Center (JSC), Houston, TX
- March 19-21: Presided as Chair for the Curation and Analysis Planning Team for Extraterrestrial Materials (CAPTEM) Meeting, LPI, Houston, TX.
- May 11-14: Aladdin Discovery Mission: Program Review and Site Visit at the Advanced Physics Laboratory (APL), John Hopkins Applied Physics Laboratory, Baltimore, MD.
- May 20-22: Attended 125th Anniversary of the Department of Geology and Geophysics, University of
 Minnesota and received the Outstanding Achievement Award from the University, which is the highest
 honor bestowed to alumni.
- July 27-30: NASA, Space Science Advisory Committee (SScAC) Meeting, Washington, D.C.
- September 21-24: Lunar Initiative Workshop, Flagstaff, AZ.
- October 1-4: Mars 2001 Workshop, LPI, Houston, TX.
- October 5-8: NASA, Mars Exploration Program Advisory Group (MEPAG) Meeting, JPL, Pasadena, CA.
- October 14-16: Meeting with FBI to prepare to testify as an Expert Witness for the Prosecution on a bogus Moon rock sale attempt.
- November 1-4: NASA, Office of Space Science Advanced Planning Meeting, Galveston, TX.
- November 10-12: Presided as Chair of the NASA/CAPTEM Meeting, LPI, Houston, TX.

Jane Selverstone

Teaching

Courses taught:

Spring: E&PS 303 - Igneous and Metamorphic Petrology (25 enrolled); E&PS 303L - Petrology lab with optical mineralogy; 25 enrolled).

Fall: E&PS 101 - Physical Geology (95 enrolled); E&PS 526 - Advanced Structural Geology - gave two weeks of lectures; E&PS 5xx - Analytical Methods - gave 3-hour class on fluid inclusions.

<u>Undergraduates supervised</u>: Doug Raszewski, Senior thesis completed Dec. 1999 (coadvisor with K. Karlstrom), Diana Strickland, Senior thesis in progress (coadvisor with K. Karlstrom), Elizabeth Lucky, independent research.

Graduate students supervised (* supported by my NSF funding): *Timothy Wawrzyniec, PhD completed Dec. 1999 (coadvisor with J. Geissman), *Aaron Cavosie, MS in progress, Kurt Steffen, MS in progress (Kelly-Silver fellow).

Thesis and dissertation committees (in addition to students listed above): Colin Shaw, Ph.D., Christopher Herd, Ph.D., Toti Larson, Ph.D., Annie McCoy, M.S.

Exam committees: Patrick Florence, M.S.

Publications (* indicates student authors)

Refereed articles:

Lewis, C., Wernicke, B., Selverstone, J. and Bartley, J., 1999. Deep burial of the footwall of the northern Snake Range décollement, Nevada. Geol. Soc. Amer. Bull. 111, 39-51.

Shaw, C.*, Snee, L., Selverstone, J. and Reed, J.C., 1999.

40Ar/³⁹Ar thermochronology of Mesoproterozoic metamorphism in the Colorado Front Range. J. Geol. 107, 49-68.

Condie, K.C. Latysh, N., Kozuch, M., Van Schmus, W.R.and Selverstone, J., 1999. Geochemistry, Nd and Sr isotopesand U/Pb zircon ages of granitoid and metasedimentary xenoliths from the Navajo Volcanic Field, Four Corners area, southwestern United States. Chem. Geol. 156, 95-133.

Selverstone, J., Pun, A. and Condie, K.C., 1999. Xenolithic evidence for Proterozoic crustal evolution beneath the Colorado Plateau. Geol. Soc. Amer. Bull. 111, 590-606.

Wawrzyniec, T.*, Selverstone, J., Axen, G.J., 1999. Correlations between fluid composition and deep-seated structural style in the footwall of the Simplon low-angle fault zone, Switzerland. Geology 27, 715-718.

Condie, K.C. and Selverstone, J., 1999. The crust of the Colorado Plateau: new views of an old arc. J. Geol. 107, 387-398.

Abstracts:

Cavosie, A.*, Pletsch-Rivera, L.*, Selverstone, J., Sharp, Z. and Dutrow, B., 1999. Quartz veins as proxies for fluid pressure evolution in the contact aureole of the 1.4 Ga Sandia Pluton, New Mexico. New Mexico Geological Society.

Selverstone, J., 1999. Tectonometamorphic perspectives on drainage-basin-scale exhumation in the eastern and central Alps. Geological Society of America Program. Abstract 31.

Cavosie, A.*, Lucky, E.*, Rogers, S.*and Selverstone, J., 1999. Early Proterozoic ophiolite fragments in the northern Colorado Front Range? Geological Society of America Program. Abstract 31.

Axen, G.J., Selverstone, J. and Wawrzyniec, T.*, 1999. Rapid Thinning and Embrittlement of Ductile Shear Zones: Alternatives to P and T as Principal Controls on the Brittle-Ductile Transition. EOS.

Pazzaglia, F.J., Selverstone, J., Roy, M. and Steffen, K.*, 1999. Topographic expression of extension in a convergent orogen: Hillslope and fluvial processes in the central and eastern Alps. EOS.

Externally Funded Research

Awards Current in 1999:

Geomorphic and geodynamic response to extension in convergent orogens. F.J. Pazzaglia, M. Roy, J. Selverstone, National Science Foundation, \$84,901; 6/1/99-5/31/01.

Continuing awards:

Collaborative research: Integrated structural and fluid inclusion study of rolling hinges and low-angle normal faults in metamorphic core complexes. J. Selverstone (with G.J. Axen and J.M. Bartley), National Science Foundation, \$91,593, 1/1/96-6/30/99.

Proterozoic assembly of the northern Colorado Front Range. J. Selverstone, National Science Foundation, \$128,000; 6/1/98-5/31/00.

Pending proposals:

Interactions between deformation and metamorphism: Controls on shear zone rheology and metamorphic memory. J. Selverstone and A. Brearley. National Science Foundation, \$143,608; 6/1/00-5/31/03.

Research Projects in Progress

Manuscripts in review:

Axen, G.J., Selverstone, J.and Wawrzyniec, T.F.*, in review. High-temperature embrittlement of extensional Alpine mylonite zones in the midcrustal ductile-brittle transition. J. Geophysical Research.

Selverstone, J., Hodgins, M.*, Aleinikoff, J.N. and Fanning, C.M., in review. Middle Proterozoic reactivation of an Early Proterozoic transcurrent boundary in the northern Colorado Front Range: Implications for ca. 1.7 and 1.4 Ga tectonism. Rocky Mountain Geology.

Unsupported research projects:

Interrelationships between deformation mechanisms, metamorphic reactions and strain localization in a deep-seated Alpine shear zone (NSF proposal pending).

Fracture generation and fluid circulation during emplacement of the Sandia Pluton, New Mexico.

Advanced Study and New Scholastic Honors

UNM Regents' Lecturer, 1998-2000

Conference, Symposium and Invited Lectures

Vice-Chair to Chair, GSA Structural Geology and Tectonics Division

Member, AGU Publications (* indicates student authors) committee evaluating the journal Tectonics Chair, AGU search committee for editor of Tectonics

Member, GSA Joint Technical Program committee; scheduled 300 abstracts for national meeting Attended annual meeting, Geological Society of America; presented talk and poster (see abstracts) Attended workshop on future research directions in tectonics

Sabbatical and Travel

Travel:

- Northern Colorado, 6/9-6/17, to conduct fieldwork.
- Switzerland, Austria, Italy, 6/28-7/13, to conduct fieldwork.
- New Mexico Geological Society field conference, 9/23-9/25.
- Denver, Colorado, 10/23-10/28, to attend Geological Society of America annual meeting.

1

Zachary Sharp

Teaching

Courses taught:

Spring: E&PS 405 - Thermodynamics, 4 units (9 enrolled), Biology 402 - Stable Isotope Seminar, 1 unit (15 enrolled).

Fall: E&PS 103 - Earth's Environment and Global Change, 3 units (35 enrolled); E&PS 106 - Evolution and Age of the Earth, 2 units (9 enrolled, 1 audit).

New courses: Biology 402 "Stable Isotope Seminar"

Evolution and Age of the Earth (Fall '99) Methods in the Earth Sciences (Fall, '99)

Graduate Students supervised (Major advisor): Marcia Jensen, (MS), 1998- present. Kate Zeigler (M.S.), Scott 'Andy' DuFrane (MS), Toti Larson (Ph.D.), 1999- present. Raffaele Lucchini, Ph.D. (50% at University of Lausanne, funded by Lausanne, Swiss NSF to Sharp), 1997- present.

Postdoctoral fellows: 1999-2000: Tomasz Durakiewicz,

Exam Committee member: Carol Dehler, Ph.D., Mike Timmons, Ph.D., Deb Bergfeld, Ph.D., Michelle Kearney, M.S., Aaron Cayosie, M.S., Susan Block, M.S., Susan Lucas, M.S., Kurt Steffen, M.S.

<u>Undergraduate Student Projects</u>: Katherine F. Smith - Physiological factors controlling the δ^{18} O values of body water for coexisting endotherms and ectotherms (Sharp, J. Brown (Biology) co-directors), funded by NSF to Sharp.

T. Meehan – Stable isotope geochemistry of raptor feathers (Sharp, director). Student research projects using the stable isotope laboratory: A. Cavosie δ^{18} O values of quartz veins as source fluids (Selverstone, director).

Laboratory Visitors, 1999: Dr. Mengist Tekley, University of Asmara, Eritrea; June 15 - Sept. 15.

Fidel Grandia, University of Barcelona, Spain; March 1-June 15.

Dr. Rhawn Denniston, University of Iowa; March-April.

Dr. Claudia Lewis, Los Alamos. A number of weeks through out the year.

Dr. Andy Baker, University of New Castle, England April 1-27.

Short term visitors: Dr. Anna Voica Bojar (University of Graz, Austria); Dr. Hans-Peter Bojar (University of Graz, Austria); Mr. Louis Bucci (University of Western Australia); Dr. Luigi Dallai (University of Rome); Prof. Paul Koch (U.C. Santa Cruz); Prof. Greg Arehart (U. Nevada, Reno); Dr. Simon Poulson (U. Nevada, Reno); Prof. Gunter Oberdörster, D.V.M. (University of Rochester); Dr. Jeffrey Kelly (U.S. Forest Service).

Publications (* indicates student authors)

Sharp, Z.D. Application of stable isotope geochemistry to low grade metamorphic rocks, In Frey, M. and Robinson, D. eds. Low Grade Metamorphism, Blackwell Publishers, London, 227-260.

Sharp, Z.D. Application of stable isotope Geochemistry to Low Temperature Vein Systems, In Wiltschko, D. ed. Analysis of Veins in Low Temperature Environments. Introduction for Structural Geologists. Geol. Soc. Am. Spec. Pub.

41.

Sharp, Z.D., Atudorei, V. and Furrer, H. The effect of diagenesis on the oxygen isotope ratios of biogenic phosphates, Am. J. Sci. 300.

Kirschner, D., Sharp, Z.D., Masson, H. Fluid migration through thrust faults in the Helvetic Alps (Western Swiss Alps). Contrib. Mineral. Petrol. 136, 169-183.

Moecher, D.P. and Sharp, Z.D. Comparison of conventional and garnet-aluminosilicate-quartz O isotope thermometry: Insights for mineral equilibration in metamorphic rocks. Am. Mineral. 84, 1287-1303.

Zheng, Y.-F., Satir, M. Metz, P. and Sharp, Z.D. Oxygen isotope exchange processes and disequilibrium between calcite and forsterite in an experimental C-O-H fluid. Geochim. Cosmochim. Acta 63, 1781-1786.

Tropper, P., Essene, E.J., Sharp, Z.D. and Hunziker, J.C. New pressure constraints in high pressure rocks: Application of K-feldspar-jadeite-quartz barometry to eclogite-facies metagranites and metapelites in the Western Alps. J. Met. Geol. 17, 195-209.

Vannay, J.-C., Sharp, Z.D. and Grasemann, B. Himalayan inverted metamorphism constrained by oxygen isotope thermometry. Contrib. Mineral. Petrol. 137, 90-101.

Research Project in Progress

In press:

Sharp, Z.D. Application of stable isotope geochemistry to fluid inclusion studies. In EMU Notes in Mineralogy (Andersen, Burke, Diamond and Frezzott, eds.).

Frezzotti, M.-L., Dallai, L. and Sharp, Z.D. Fluid inclusion and stable isotope evidence for fluid infiltration and veining during metamorphism in the low and medium grade rocks of the O'Kane Canyon (Priestley metamorphic complex, North Victoria Land, Antarctica). J. Met. Geol.

Submitted:

Atudorei, V., Baud, A., Gradinaru, E., Sharp, Z.D. and Mirauta, E. A carbon isotope excursion across the Lower-Middle Triassic boundary (North Dobrogea, Romania). Geology (submitted).

Camprubí, A., Cardellach, E., Canals, A., Sharp, Z.D. The La Guitarra Ag-Au low sulfidation epithermal system, Temascaltepec district, Mexico: Physiochemical nature of mineralizing fluids and depositional model. Econ. Geol. (submitted).

Dallai, L., Sharp, Z.D, Ghezzo, C. ¹⁸O/¹⁶O isotope evidence for crustal assimilation and magma mixing in the Granite Harbor Intrusive of Northern Victoria Land, Antarctica. Contrib. Mineral. Petrol. (submitted).

Solé, J., Cosca, M. and Sharp, Z.D. ⁴⁰Ar/³⁹Ar dating of hornblende, biotite and K-feldspar from Hercynian plutonic rocks of the Montnegre Massif (NE Spain) with implications for argon loss in K-feldspar. (submitted).

Tritlla, J., Cardellach, E. and Sharp, Z.D. The role of organic matter in the formation of hydrothermal carbonates in Triassic limestones of the Espadan Ranges (Iberian Chain, E of Spain) (submitted).

Valenza, K., Moritz, R., Mouttaqi, A., Fontignie, D. and Sharp, Z. Vein and karstic barite deposits in the Western Jebilet of Morocco: Fluid inclusion and isotope (S, O, Sr) evidence for regional fluid mixing related to the Central Atlantic rifting. Econ. Geol. (submitted).

Other research projects:

A key to better understanding of climate behavior in the Southwest. Z.D. Sharp and D.S. Gutzler, RAC, \$6,799; 6/98-12/98.

Acquisition of a stable isotope mass spectrometer and tandem UV-CO₂ laser extraction line. National Science Foundation, \$369,000; June, 1998 – June, 2000.

Physiological factors controlling the δ^{18} O values of body water for coexisting endotherms and ectotherms. National Science Foundation, \$8,029 Account #3-13811.

Oxygen isotope analysis of mollusks from the Petrified National Forest. Petrified Forest National Park Grant, \$2,251.

Other Projects:

Member of EPA Particulate Matter Center (research into the effects of fine particulate matter on human health).

Member of IGERT team (UNM-U. Alabama).

Isotopic variability of the Rio Grande fish as a monitor of anthropogenic change (W.T. Turner, Dept. Biology).

Characterization of Biomarkers (with J. Papike, Institute for the Study of Biomarkers in Astromaterials).

Paleozoic-Mesozoic chemostratigraphic controls using conodonts and fish (with V. Atudorei; funding proposal anticipated for 1999).

Isotopic signatures of reptiles and mammals (with J. Brown, Dept. Biology; funded by NSF).

Migration patterns of songbirds and raptors using stable isotope geochemistry (with J. Kelly, USDA Forest Service; funded by grant from USDA).

Carbon isotope variability of plants in response to stress (with J. Lefler, Ph.D. student, Dept. Biology).

Origins of hematite iron deposits, Hammersley, Australia (with N. Oliver, James Cook Univ.; funded by Australian NSF).

Effects of deformation partitioning and sequence porphyroblast growth on oxygen isotope compositions (with D. Moecher, U. Kentucky; NSF funding to Moecher).

Carbon isotope stratigraphy across the Cambrian-Ordovician boundary (with P. Myrow, Colorado College).

Oxygen isotope values of the Chinle Group, Petrified Forest, AZ (with C. Whittle, funding from Petrified Forest to Sharp).

Constraints on pathways of ultrafine particles in the human body using stable isotopes (with G. Oberdörster, U. Rochester; funded by NIH).

An isotopic study of the highly metamorphosed rocks of the Koralm/Gleialm Crystalline complex, Austria (with A.Voica Bojar, U. Graz; funded by Austrian NSF).

Oxygen and hydrogen isotope compositions of wild raptors as a monitor of migration patterns (with T. Meeham, student, Dept. Biology).

Advanced Study and Scholastic Honors

Nominated for Councilor of the Society of the Mineralogical Society of America. Awards Committee – MSA award. Life Fellow, Mineralogical Society of America.

Conference, Symposium and Invited Lectures

Conferences: GSA, 1999 (7 abstracts).

<u>Invited Lectures</u>: Short course, GSA veins; Instructor; Short course, Siena, fluid inclusions; Society of Vertebrate Paleontology Annual Meeting; Darthmouth College; Montana State University; U.T. El Paso; New Mexico Tech; New Mexico State University; Arizona State University.

Sabbatical and Travel

Summer research program in Siena, Italy. Professional advisor to the Geology Dept., University of Sienaand research efforts involved in writing a new stable isotope textbook (to be completed Summer, 2000).

Gary A. Smith

Teaching

Courses taught:

Spring: (Sabbatical).

Summer: Guest lecture in Summer Archeology Field Session, Anthropology 375F

Fall: Historical Geology, E&PS 102, (40 enrolled); Guest lectures (2) in Physical Geology, E&PS 101

Graduate Students (* indicates support provided):

<u>Ph.D. advisees</u>: Gordon Keating (co-advised with G.A. Valentine - LANL); Joel Pedersen* (co-advised with F.J. Pazzaglia).

<u>Service on other Ph.D. dissertation or examination committees</u>: Carol Dehler, Michael Timmons; Philip LeTourneau (Anthropology).

M.S. advisees: Claudia Borchert; Jessica Moore; Michael Gaud; Patrick Florence*; Suzanne Lowe.

Service on other M.S. thesis or examination committees: Karen Roche (1999); Michael Timmons; Karl Wegmann.

Senior Honors advisee: Kathleen McLeroy.

Publications (* indicates student authors)

Articles in Refereed Journals:

Sublacustrine-fan deposition in the Oligocene Creed Formation, San Juan Mountains, Colorado. D. Larsen* and G.A. Smith, Journal of Sedimentary Research, v. 69, p. 675-689, 1999.

Nature and origin of cone-forming volcanic breccias, Te Herenga Formation, Ruapehu Volcano, New Zealand. G.A. Smith, M.J. Grubensky*, J.W. Geissman, Bulletin of Volcanology, v. 61, p. 64-82, 1999.

Basaltic near-vent facies of Vulcan cone, Albuquerque volcanoes, New Mexico. G.A. Smith, P.S. Florence*, A.D. Castrounis*, M. Luongo*, J.D. Moore*, J. Throne*, K. Zelley*, New Mexico Geological Society Guidebook, 50th Field Conference, Albuquerque Geology, F.J. Pazzaglia, S.G. Lucas, editors, p. 211-220, 1999.

The nature of limestone-clastic "cycles" in Middle and Upper Pennsylvanian strata, Tejano Canyon, Sandia Mountains, New Mexico. G.A. Smith, New Mexico Geological Society Guidebook, 50th Field Conference, Albuquerque Geology, F.J. Pazzaglia, S.G. Lucas, editors, p. 269-280, 1999.

Geological Maps:

Geologic map of the Santo Domingo Pueblo quadrangle, Sandoval County, New Mexico. G.A. Smith and A.J. Kuhle*, New Mexico Bureau of Mines and Mineral Resources Digital Open-File Map OFDM 15, scale 1:24,000, 1999.

Geologic map of the Santo Domingo Pueblo Southwest quadrangle, Sandoval County, New Mexico. G.A. Smith and A.J. Kuhle*, New Mexico Bureau of Mines and Mineral Resources Digital Open-File Map OFDM 26, scale 1:24,000, 1999.

Other Publications (* indicates student authors):

Geology of Santo Domingo Pueblo and Santo Domingo Pueblo SW Quadrangles, New Mexico. G.A. Smith, A.J. Kuhle*, U.S. Geological Survey Middle Rio Grande Basin Study--Proceedings of the Third Annual Workshop, Albuquerque, New Mexico, February 24-25, 1999; J.R. Bartolino, editor, U.S. Geological Survey Open-File Report 99-203, p. 59-61.

First-day road log, from Albuquerque to Placitas, Hagan basin and Espinaso Ridge F.J. Pazzaglia, S.G. Lucas, J.W. Estep, S.D. Connell, K.E. Karlstrom, B.A. Black, G.A. Smith, J.W. Hawley, P. Johnson, S. Cather, C. Stearns, New Mexico Geological Society Guidebook, 50th Field Conference, Albuquerque Geology, F.J. Pazzaglia, S.G. Lucas, editors, p. 1-26, 1999.

Second-day trip 1 road log, Albuquerque to Tijeras, Cedar Crest and Sandia Crest. S.G. Lucas, A. Read, K.E. Karlstrom, J.W. Estep, B.S. Kues, O.J. Anderson, G.A. Smith and F.J. Pazzaglia, New Mexico Geological Society Guidebook, 50th Field Conference, Albuquerque Geology, F.J. Pazzaglia, S.G. Lucas, editors, p. 27-46, 1999.

Second-day trip 2 road log, Albuquerque to San Ysidro, Loma Creston, La Ceja and Sand Hill fault. F.J. Pazzaglia, S.D. Connell, J.W. Hawley, R.H. Tedford, S. Personius, G.A. Smith, S.M. Cather, S.G. Lucas, P. Hester, J. Gilmore and L.A. Woodward.

New Mexico Geological Society Guidebook, 50th Field Conference, Albuquerque Geology, F.J. Pazzaglia, S.G. Lucas, editors, p. 47-66, 1999.

Technical Reports:

Software Validation Plan for SISIM (v. 2.0) software. G.A. Smith, S.A. McKenna. Sandia National Laboratories, Nuclear Waste Management Program, 10 p., 1999.

Software Validation Plan for SGSIM (v. 2.0) software. G.A. Smith, S.A. McKenna. Sandia National Laboratories, Nuclear Waste Management Program 9 p., 1999.

Validation Document, SISIM (v. 2.0) software. G.A. Smith, S.A. McKenna. Sandia National Laboratories, Nuclear Waste Management Program 4 p., 1999.

28. Validation Document, SGSIM (v. 2.0) software. G.A. Smith, S.A. McKenna. Sandia National Laboratories, Nuclear Waste Management Program 4 p., 1999.

Abstracts:

Tectonics and volcanism of the late Miocene Bearhead magmatic episode in the southeastern Jemez Mountains, New Mexico. G.A. Smith, New Mexico Geological Society Spring Meeting, Socorro, NM, April 1999, New Mexico Geology, v. 21, p. 37-38, 1999.

Mountain-front geology of the Tesuque quadrangle, Santa Fe County, New Mexico. C.I. Borchert*, G.A. Smith, New Mexico Geological Society Spring Meeting, Socorro, NM, April 1999, New Mexico Geology, v. 21, p. 37, 1999.

The Oligocene-early Miocene Abiquiu Formation, northern New Mexico: Evidence for Rio Grande rift initiation synchronous with deposition. J.D. Moore*, G.A. Smith, New Mexico Geological Society Spring Meeting, Socorro, NM, April 1999, New Mexico Geology, v. 21, p. 37, 1999.

Origin of melted sandstone xenoliths at Vulcan cone, Albuquerque Volcanoes, New Mexico. K. McLeroy*, G.A. Smith, New Mexico Geological Society Spring Meeting, Socorro, NM, April 1999, New Mexico Geology, v. 21, p. 35, 1999.

Tracer transport and relative mass-transfer rates in heterogeneous transmissivity and porosity fields. S.A. McKenna, G.A. Smith, American Geophysical Union Spring Meeting, Baltimore, Maryland, May 1999, EOS, Transactions of the American Geophysical Union, v. 80, no. 17, p. S109, 1999.

See-saw subsidence of an accommodation-zone basin: Sedimentologic and geomorphic evidence from the central Rio Grande rift. G.A. Smith, Geological Society of America Annual Meeting, Denver, Colorado, October 1999, Geological Society of America Abstracts with Programs, v. 31, no. 7., p. A-239.

Externally Funded Research

Awards Current in 1999:

Variable hillslope processes and sediment delivery to tectonically quiescent basins: a late Miocene to Quaternary record of buried, relict and modern hillslopes and their deposits. G.A. Smith and F.J. Pazzaglia, National Science Foundation, July 1997-December 1999; \$100,000.

Outcrop characterization of heterogeneity: explicit linkage of hydrological and sedimentological properties. G. A. Smith and M. E. Campana, National Science Foundation, Aug. 1997-July 2000; \$120,000.

Research Projects in Progress

Manuscripts in press:

Ancient hillslope deposits: Missing links in the study of climate signals in sedimentary successions. J.L. Pederson*, F.J. Pazzaglia and G.A. Smith, Geology.

Geology of the Squawback Ridge quadrangle, Deschutes and Jefferson Counties, Oregon. M.L. Ferns, D.E. Stensland and G.A. Smith, Oregon Department of Geology and Mineral Industries Geologic Map Series, scale 1:24,000.

Geologic map of the Bend 30- by 60-minute quadrangle, Deschutes, Jefferson, Lane, Linn and Crook Counties, central Oregon. D.R. Sherrod, E.M. Taylor, M.L. Ferns, W.E. Scott, R.M. Conrey and G.A. Smith, U.S. Geological Survey Miscellaneous Field Investigations Map, scale 1:100,000.

Manuscripts Submitted or in Review:

Geologic map of the Opal City quadrangle, Deschutes and Jefferson Counties, Oregon. G.A. Smith, M.L. Ferns, D.R. Sherrod, K. Lite, Oregon Department of Geology and Mineral Industries Geologic Map Series, scale 1:24,000.

Sedimentological and Geomorphological evidence for see-saw subsidence of the Santo Domingo accommodation zone basin, Rio Grande rift, New Mexico. G.A. Smith, W. McIntosh, A.J. Kuhle*, Geological Society of America Bulletin.

Comment on "The Channeled Scabland: Back to Bretz?". B.F. Atwater, G.A. Smith, R.B. Waitt, Geology.

Sedimentology of alluvial-slope deposits in the Miocene Skull Ridge Member of the Tesuque Formation, Española basin, New Mexico. A.J. Kuhle* and G.A. Smith, New Mexico Geology.

Comparing the modern, Quaternaryand Neogene records of climate-controlled hillslope sedimentation in southeast Nevada. J.L. Pederson*, G.A. Smith, F.J. Pazzaglia, Geological Society of America Bulletin.

Recognition and significance of stream flow-dominated piedmont facies in extensional basins. G.A. Smith. Basin Research.

Conference, Symposium and Invited Lectures

Presented talk, "Tectonics and volcanism of the late Miocene Bearhead magmatic episode in the southeastern Jemez Mountains, New Mexico," New Mexico Geological Society, Socorro, NM, April 9, 1999.

Presented talk, "See-saw subsidence of an accommodation-zone basin: Sedimentologic and geomorphic evidence from the central Rio Grande rift," Geological Society of America Annual Meeting, Denver, CO, October 26, 1999.

Presented talk, "Unraveling the relationships between faulting, sedimentation and volcanism in the central Rio Grande rift, New Mexico", Oregon State University, Department of Geosciences, June 3, 1999.

Presented talk, "Catastrophic floods from glacial Lake Missoula: Recent insights into the awesome geology of the Channeled Scabland of eastern Washington", Los Alamos Geological Society, November 9, 1999.

Co-convener, SEPM/IAS Research Conference, Environmental Sedimentology: Hydrogeologic Processes in Sedimentary Aquifers, scheduled for September 2000

Sabbatical and Travel

Travel:

- Sabbatical, Geohydrology Group, Sandia National Laboratories, Albuquerque, NM, January-July 1999
- Attended USGS Middle Rio Grande Basin Workshop, Albuquerque, NM, February 8-9, 1999.
- Attended Tucson Gem and Mineral Show, Tucson, Arizona, February 10-14, 1999.
- Attended Albuquerque Gem and Mineral Show, March 12-14, 1999.
- Attended New Mexico Geological Society Annual Meeting, Socorro, NM April 9, 1999.
- Co-led field trip for Cochiti Pueblo Environmental Proterozoic Office; hydrostratigraphyal Cochiti Pueblo, May 14, 1999.
- Geologic mapping and field research in the Española Basin, June-August 1999.
- Attended New Mexico Geological Society Fall Field Conference, Albuquerque, NM, September 23-25, 1999.
- Attended Geological Society of America Annual Meeting, Denver, Colorado, October 24-28, 1999.

Activities of the Senior Research Professors

Roger Y. Anderson

Teaching

Courses taught:

Retired from Classroom teaching, 1 July, 1994. Chair, Thesis and dissertation committees. Thomas Loyeland, M.S.

Publications (* indicates student authors)

Geomorphic and Hydrologic Response in Estancia Basin to Late Pleistocene and Holocene Climatic Change, 3rd Day, Trip 2 Road Log. R.Y. Anderson and B.D. Allen, New Mexico Geological Society Guidebook, 50th Field Conference, Albuquerque Geology, p. 75-82, 1999.

Atmospheric and Hydrologic Controls on a High Resolution Lacustrine Record of Late Pleistocene Climate Variability, Estancia Basin, New Mexico. R.Y. Anderson, K.M. Menking, K.H. Syed, N.G. Shafike, B.D. Allen and S.W. Hostetler, Eos, 1999.

Evaporation and Ground Water Discharge From the Estancia Basin Playa Complex, Central New Mexico. B.D. Allen, N.G. Shafike, R.Y. Anderson, K.M. Menking, K.H. Syed and S.W. Hostetler, Eos, 1999.

Externally Funded Research

Awards Current in 1999:

Hydrologically Coupled Estimates of Decadal to Millennial Climate Variability During the Holocene and Late Pleistocene. R.Y. Anderson, National Science Foundation, \$282,000; 1996-2000.

Research Projects in Progress

Rapid Changes in Late Pleistocene Precipitation and Stream Discharge Determined from Medium- and Coarse-Grained Sediment in Saline Lakes. R.Y. Anderson, in A.M. Fard (ed.) Recognition of Abrupt Climate Change in Clastic Sedimentary Environments, Global and Planetary Change, Elsevier.

A Continuous, High-resolution Record of Late Pleistocene Climate Variability from Estancia Basin, NM. B.D. Allen and R.Y. Anderson, Bulletin, Geological Society of America.

Reports

Geochemistry of the Red River Stream system Before and After Open-Pit Mining, Questa Area, Taos County, New Mexico. B.D. Allen, A.R. Groffman, M.C. Molles, R.Y. Anderson and L.J. Crossey, New Mexico Office of Natural Resources Trustee, Report, 89 p., 1999.

Conference, Symposium and Invited Lectures

Invited Speaker, American Geophysical Union, Fall Meeting, Special Session (OS12C01) High Resolution Lake Sediment Chronologies and Reconstruction of Quaternary and Pliocene climate, Title: Atmospheric and Hydrologic Controls on a High Resolution Lacustrine Record of Late Pleistocene Climate Variability, Estancia Basin, New Mexico.

Geological Society of America, member American Geophysical Union

Wolfgang E. Elston

Teaching

Courses taught:

Spring: E&PS 302 - Earth Resources and Man. (21 enrolled); E&PS 492 - Problems (1 enrolled).

Fail: E&PS 491 – Problems (1 enrolled).

Publications (* indicates student authors)

Abstracts:

W.E. Elston, 1999. Catastrophic trigger for the 2.06 Ga Bushveld event, South Africa: Evidence from basal zones of the Rooiberg Group: Geological Society of America, Abstracts with Programs, v. 31, no. 7, p. 261-262.

Private circulation (revision to be submitted for publication to the Council for Geosciences, Geological Survey of south Africa). W.E. Elston, E.G. Deal, M. Caress and S. Sadow, 1999.

Field Guide to the Base of the Rooiberg Group, Eastern Bushveld Complex, South Africa, Part I. Text: University of New Mexico, 10 p.

W.E. Elston, E.G. Deal, M. Caress and S. Sadow, 1999. Field Guide to the Base of the Rooiberg Group, Eastern Bushveld Complex, South Africa, Part II, Plates and Explanations: University of New Mexico, 22 p.

Article (non-technical):

W.E. Elston, 1999. A CCNY experience: Geology in the Forties, alumnus, The City College of New York, v. 95, no. 1, p. 16-17.

Externally Funded Research

Awards Current in 1999:

The Proterozoic Bushveld Catastrophe, South Africa, mainly self-funded. Also grant from the Barringer Foundation, \$50,000, 1999. No closing date. Continuing Research, formerly funded by NASA and NSF.

Mineral Resources of Hidalgo County, New Mexico. Continuing Research, formerly funded by the New Mexico Bureau of Mines and Mineral Resources.

Activities of the Research Professors

Horton Newsom

Teaching

Classes taught:

Spring: Co-taught E&PS 365 - Exploring the Solar System.

Summer: Instructor for E&PS 365 - Exploring the Solar System (55 enrolled).

Fall: Co-taught E&PS 465/565 - Mars Evolution.

Research advisor for the following students:

Undergraduates: Sharon Sparks, Jennifer Kelly (Spring, Summer 1999).

Masters Students: Justin Hagerty

Ph.D. students: Ivan Thorsos, Bill Robertson (College of Education).

Students supported by grants:

Undergraduate students: Sharon Sparks, Jennifer Kelly (Spring, Summer 1999). Graduate students: Justin Hagerty and Ivan Thorsos.

Committee member for the following graduate students: Ph.D. student: Ivan Thorsos.

Publications (* indicates student authors)

Articles in refereed journals:

Newsom, H.E., J. J. Hagerty* and F. Goff, (1999) Mixed hydrothermal fluids and the origin of the Martian soil, J. Geophys. Res. (Planets), 104, 8717-8728.

Cabrol, N.A., Grin, E.A., Newsom, H.E., Landheim, R.and McKay CP (1999), Hydrogeologic evolution of Gale crater and its relevance to the exobiological exploration of Mars Icarus 139, 235-245.

Other Publications

Abstracts:

Newsom, H.E., Hagerty, J.J.* and Goff, F. Mixed Hydrothermal Fluids and the Origin of the Martian Soil: A New Quantitative Model, Lunar and Planetary Science XXX, 1262, (1999).

Newsom, H.E., Hagerty, J.J.*, Spilde, M.N., Adcock, C.T. and Sorge, C., Introducing Planetary Science and Technology to Students from Grades 6-12. Lunar and Planetary Science XXX, 1220 (1999).

Shearer, C.K. and Newsom, H.E, A Short-lived Lunar Magma Ocean. Implications for the Evolution of the Early Lunar Crust Lunar and Planetary Science XXX, 1362 (1999).

Externally Funded Research

Grants and Contracts:

I was principal investigator on the following grants during the last year.

Awards Current 1999:

NASA, Mars Oxidant Experiment Program, Impact Cratering, Volcanism and Volatile Transport on Mars, \$9,566, 2 years, 1997.

NASA, Mars site selection, Site Selection Studies, Parana Basin, Margaritifer Sinus region of Mars, with Jack Farmer, NASA Ames Research Center, \$6,000, two years, 1998.

Johnson Space Center, PreCollege Awards for Excellence in Mathematics, Science, Engineering and Technology (PACE/MSET), \$298,000, three years, 1998.

New Awards in 1999:

New Mexico Collaborative for Excellence in Teacher Preparation, "Exploring the Solar System, a Research and Activity-Based Course for Teachers", \$12,084, one year, 1998.

NASA-Planetary Geology program, Martian impact crater hydrothermal systems, Clues from the Lonar India crater. \$50,721, 2 years, 1999.

Research Projects in Progress

Manuscripts in press:

Walter, M.J., Newsom, H.E., Erterl, W. and Holzheid, A. (1999) Siderophile Elements in the Earth and Moon: Metal/Silicate Partitioning and Implications for Core Formation, The Origin of the Earth and Moon, Univ. of Arizona Press, in press.

Newsom, H.E., Bishop, J.L., Cockell, C., Roush, T.L. and Johnson, J.R. (2000) The search for life on Mars in surface samples, lessons from the 1999 Marsokhod rover field experiment. J. Geophys. Res. (Planets), in press.

Johnson, J.R., Newsom, H.E., et al. (2000) Geological Characterization of Remote Field Sites Using Visible and Infrared Spectroscopy: Results from the 1999 Marsokhod Field Test. J. Geophys. Res. (Planets), in press.

Manuscripts submitted.

Sorge, C., Newsom, H.E. and Hagerty, J.J.* (2000) Fun is not enough - Attitudes of Hispanic middle school students toward science and scientists, submitted to Hispanic Journal of Behavioral Sciences.

Shearer, C. and Newsom, H.E., W-Hf isotope Systematics and the Origin and Early Evolution of the Earth-Moon System, submitted to Geochimica et Cosmochimica Acta.

Unsuccessful proposals.

Principal Investigator Horton E. Newsom. Source: NASA, Mars Data Analysis Program. Title: The Origin and Chemistry of the Martian Soil. Amount requested: \$118,000. Period covered: Mar. 1, 1999 — Feb.28, 2001. Person-months: 2 per year. Location of research: University of New Mexico.

Source: NASA, Cosmochemistry. Title: Clues to the origin and chemistry of the Martian soil from Martian meteorites. Amount requested: \$58,659. Period covered: Jan. 1, 2000 – Dec. 31, 2001. Person-months: One per year. Location of research: University of New Mexico.

Principal Investigator Kathryn Powell. Source: NASA, Minority University Research and Education Division. Title: Recruiting and Training Science Teachers For New Mexico. Amount requested: \$573,400. Period covered: July 1,2000 - June 30, 2003. Person-months: three per year. Location of research: University of New Mexico.

Frans Rietmeijer

Teaching

Tropospheric Dust; E&PS 302 - Environmental Mineralogy. Stratospheric Dust. E&PS 402 - Environmental Mineralogy. Determinative Techniques II; Introduction to Transmission Electron Microscopy (TEM). E&PS 402 - Environmental Mineralogy. Erionite, its fibrous habit and health hazard; E&PS 402 - Environmental Mineralogy (substituted for Prof. C. Klein). Experiments on metastable eutectics: Lessons for interstellar dust: Spring IOM Research Seminar Series. Comets and their dust: A long way to meteorites; E&PS 401 Seminar Lecture, 2/26.

Publications (* indicates student authors)

Articles in refereed journals:

Nanoscale phase equilibrium in a triggered lightning strike experiment. F.J.M. Rietmeijer, J.M. Karner*, J.A. Nuth III and P.J. Wasilewski, European J. Mineral., 41, 181-186.

Metastable eutectics in the $Al_2O_3 - SiO_2$ system explored by vapor phase condensation. <u>F.J.M.</u> <u>Rietmeijer</u> and J.M. Karner*, J. Chem. Phys. 110(9), 4554-558.

Metastable eutectic gas to solid condensation in the FeO - Fe₂O₃- SiO₂ system. <u>F.J.M. Rietmeijer</u>, J.A. Nuth III and J.M. Karner*, Physical Chemistry Chemical Physics, 1, 1511-1516.

Sodium tails of comets: Na/O and Na/Si abundances in interplanetary dust particles. <u>F.J.M. Rietmeijer.</u> Astrophysical J., 514, L125-L127, Metastable non-stoichiometric diopside and Mg-Wollastonite: An occurrence in an interplanetary dust particle. <u>F.J.M. Rietmeijer.</u> Amer. Mineral, 84, 1883-1894.

Metastable eutectic condensation in a Mg-Fe-SiO-H₂-O₂ vapor: Analogs to circumstellar dust. <u>F.J.M. Rietmeijer</u>, J.A. Nuth III and J.M.Karner*, Astrophysical J., 527, 395-404.

Leonid MAC Workshop 1999, April 12-15 (editorial). <u>F.J.M. Rietmeijer</u>, Meteoritics Planet. Sci., 34(4), 495.

Book Chapters:

Interstellar and Interplanetary Grains, Recent developments and new opportunities for experimental chemistry. J.A. Nuth, S.L. Hallenbeck and <u>F.I.M. Rietmeijer</u>, Laboratory Astrophysics and Space Research (P. Ehrenfreund, K. Krafft, H. Kochan and V. Pirronello, eds), 143-182. Kluwer Academic Publ., Dordrecht.

Articles in conference proceedings:

Evolution of condensed pre-solar dust with metastable eutectic smectite dehydroxylate compositions: Truly GEMS. <u>F.I.M. Rietmeijer</u>, Lunar Planet. Sci., XXX, CD ROM #1060, Lunar and Planetary Institute, Houston.

Energy for dust modification in the solar nebula and in the first-formed protoplanets and their present-day survivors. F J.M. Rietmeijer, Lunar Planet. Sci., XXX, CD ROM #1065, Lunar and Planetary Institute, Houston.

A preliminary analytical electron microscope study of experimentally shocked dolomite with emphasis on neoformed carbon phases. <u>F.J.M. Rietmeijer</u>, T.E. Bunch and P.H. Schultz, Lunar Planet. Sci., XXX, CD ROM #1051, Lunar and Planetary Institute, Houston.

Interplanetary dust particles, micrometeorites, mesospheric metals and meteoric dust. <u>F.J.M.</u>
<u>Rietmeijer</u>, Proc. 37th Amer. Inst. Aeronautics Astronautics Meeting & Exhibit, #99-0502, 12p.

Electron microscopy studies on comet dust analogs: A reference frame for "dusty" experiments on-board ROSETTA. A. Rotundi, <u>F.J.M. Rietmeijer</u>, L. Colangeli, V. Menella, P. Palumbo and E. Bussoletti European Geophys. Soc. Meeting, 1, 729.

Simulations of cometary dust: Electron microscope studies to support the planned measurements by the Rosetta space mission (in Italian). A. Rotundi, <u>F.J.M. Rietmeijer</u>, L. Colangeli, V. Menella, P. Palumbo and E. Bussoletti, LXXXV National Congress of the Italian Society of Physics, Pavia, Sept. 22-24, 32.

Externally Funded Research

Sponsored Research/Grants and Contracts Awards Current in 1999:

Mineralogy of fine-grained primitive extraterrestrial materials. <u>F.J.M. Rietmeijer</u> (Principal Investigator). National Aeronautics and Space Administration, Cosmochemistry Program, \$110,000; April 1, 1999 to March 31, 2000.

Awards Continuing in 1999

Mineralogy of fine-grained primitive extraterrestrial materials. F.J.M. Rietmeijer (Principal Investigator), National Aeronautics and Space Administration, Planetary Materials and Geochemistry Program, \$110,000; April 1, 1998 to March 31, 1999.

Research Projects in Progress

Manuscripts in press

Nucleation, growth, annealing and coagulation of refractory oxides and metals: Recent experimental progress and applications to astrophysical systems. J.A. Nuth J.A., <u>F.J.M. Rietmeijer</u>, S.L. Hallenbeck, P.A. Withey and F. Ferguson, Publications of the Astronomical Society of the Pacific.

What we can expect to learn from robotic exploration of a comet nucleus surface. <u>F.J.M.</u> <u>Rietmeijer</u>, Proc. SPACE 2000, 7th International Conference.

Refractory comet dust analogues by laser bombardment and arc discharge production: A reference from for "dusty experiments" on-board ROSETTA. A. Rotundi, <u>F.I.M. Rietmeijer</u>, J.R. Brucato, L. Colangeli, V. Mennella, P. Palumboand E. Bussoletti, Planet. Space Sci.

Laboratory studies of silicate smokes: Analog studies of circumstellar materials. J.A. Nuth III, S.L. Hallenbeck and <u>F.J.M. Rietmeijer</u>, J. Geophys. Res.

Metastable Eutectic Behavior Observed during Dynamic Pyrometamorphism in the Matrix of an Aggregate IDP. F.J.M. Rietmeijer, Lunar Planet. Sci. XXXI, Lunar and Planetary Institute, Houston.

Manuscripts submitted:

Interplanetary Dust Particles. <u>F.J.M. Rietmeijer</u>, McGraw-Hill Encyclopedia of Science and Technology.

Interrelationships among Meteoric Metals, Meteors, Interplanetary Dust, Micrometeorites and Meteorites. <u>F.J.M. Rietmeijer</u>, Meteoritics and Planetary Science.

Metastable Eutectic Equilibrium Brought Down To Earth. <u>F.J.M. Rietmeijer</u> and J.A. Nuth III EOS, Trans., Amer. Geophys. Union.

Unsupported Research:

Analytical and Transmission Electron microscope analyses of airborne dust in Silesia, in cooperation with Prof. J. Janeczek and Dr. M. Jablonska, Faculty of Earth Sciences, The Silesian University, Sosnowiec, Poland.

Petrology of gas-to-solid condensed carbon phases with Dr. A. Rotundi, Osservatorio Astronomico, Naval University of Naples, Italy.

1

Mousumi Roy

Teaching

Course taught:

Spring, 1999: E&PS 548-Strength and Dynamics of the Lithosphere. Reading and discussion seminar on current topics in tectonics for graduate students and advanced undergraduates.

Students Supervised:

N. Natek, Senior Thesis Advisor, University of New Mexico, August 1999 to present.

Publications (* indicates student authors)

Topographic setting of the Rio Grande rift, New Mexico: Assessing the role of flexural "rift-flank uplift" in the Sandia Mountains, New Mexico Geological Society Guidebook. M. Roy, K.E. Karlstrom, S.M. Kelley, F.J. Pazzaglia and S.M. Cather, F.J. Pazzaglia and S. Lucas (eds.), 50th Field Conference, Albuquerque Geology, 1999.

Sandia Mountains and Rio Grande rift: Ancestry of structures (Proterozoic to Laramide) and history of deformation, New Mexico Geological Society Guidebook. K.E. Karlstrom, S.M. Cather, S.A. Kelley, M.T. Heizler, F.J. Pazzaglia and M. Roy, F.J. Pazzaglia and S. Lucas (eds.), 50th Field Conference, Albuquerque Geology, 1999.

The long-term evolution of a strike-slip plate boundary: An analytic model. M. Roy and L. H. Royden in press, Journal of Geophysical Research, 2000.

The long-term evolution of a strike-slip plate boundary: Effects of crustal rheology. <u>M. Roy</u> and L.H. Royden, in press, Journal of Geophysical Research, 2000.

Externally Funded Research

Awards Current in 1999:

Two and three dimensional modeling of gravity, topography and seismic data in the vicinity of the Los Angeles basin, (PI: M. Roy, UNM; co-PI: Robert W. Clayton, Caltech). (\$19,370 to MR; Agency: Southern California Earthquake Center).

Geomorphic and geodynamic response to extension in convergent orogens. (PI: F. Pazzaglia, UNM; co-PI's: M. Roy and J. Selverstone, UNM). (\$15,465 to MR; Agency: National Science Foundation).

Proposals Pending:

Collaborative Research: Exploring the topographic and exhumational signature of collapsing orogens: insights from low temperature thermochronometry and geodynamic models. (PI: <u>M. Roy</u> (UNM), S. Kelley (NM Tech) and M. House (Caltech).) (\$35,045 to MR; Agency: National Science Foundation).

Constraints on the SCEC 3D Velocity Model from Gravity Data. (PI: M. Roy (UNM), R. Clayton (Caltech).) (\$19,376 to MR; Agency: Southern California Earthquake Center).

Publications in progress:

Topographic Evolution of the Sandia Mountains, New Mexico. M. Roy, K. Karlstrom, F. Pazzaglia and S. Kelley.

Uplift and exhumation along the Rio Grande Rift, New Mexico: Implications of apatite fission-track and (U-Th)/He cooling ages. M. House, S. Kelley and M. Rov.

Shear at a strike-slip plate boundary: the stress-heat flow paradox revisited. M. Roy.

Constraints on crust and mantle structure beneath the San Gabriel Mountains, California, derived from gravity and seismic data. M. Roy and R. Clayton.

Conference, Symposium and Invited Lectures

Abstracts at Professional Meetings:

Pazzaglia, F., J. Selverstone, M. Royand K. Steffen, Topographic expression of extension in a convergent orogen: Hillslope and fluvial processes in the central and eastern Alps, Fall Meeting of the American Geophysical Union, December, 1999.

Roy, M. and R. Clayton, Crust and mantle structure beneath the Los Angeles basin and vicinity: Constraints from gravity and seismic velocities, Fall Meeting of the American Geophysical Union, December. 1999.

Roy, M., Flexural uplift of the Sandia Mountains, New Mexico, Annual Meeting of the Geological Society of America, October, 1999.

Roy, M. and R. Clayton, Constraints on crust and mantle structure in the Los Angeles Basin and vicinity from gravity and seismic data, Annual Meeting of the Southern California Earthquake Center, September, 1999.

Other Professional Meetings

Plate Boundary Observatory Workshop (by invitation), Snowbird, Utah, October, 1999. New Mexico Geological Society Fall Field Conference, Albuquerque, NM, September, 1999.

Charles K. Shearer

Teaching

Courses taught:

Spring: E&PS 365 - Exploring The Solar System (25 enrolled)

Graduate Student Committees: Chris Heil, Jim Karner and Chris Herd.

M.S. Advisor: Chris Heil.

ICP-MS Instruction: 8 students, faculty and staff.

Ion Microprobe Instruction: 5 students, faculty, and staff.

1

Publications (* indicates student authors)

Articles in Refereed Journals:

Magmatic evolution of the Moon. Amer. Mineral. 84, 1469-1494, Shearer, C.K. and Papike, J.J. (1999).

Olivine in martian meteorite ALH 84001. Evidence for a high-temperature origin and implications for signs of life. Meteoritics and Planetary Science. Shearer, C.K., Lesson, L.A. and Adcock, C.T., Meteoritics 34, 331-339. (1999).

Systematics of Ni and Co in olivine from planetary melt systems: Lunar mare basalts. Papike, J.J., Fowler, G.W., Adcock, C.T. and Shearer, C.K., Amer. Mineral. 84, 392-399. (1999).

Chemical signals of epiphytic lichens in southwestern North America; Natural versus man-made sources for airborne particulates. Getty, S.R., Gutzler, D., Asmerom, Y., Shearer, C.K. and Free, S.J., Atmos. Environment. In press. (1999).

Abstracts in Conferences and Symposia Proceedings

8th ISAES Conference, Wellington, N.Z.

A150 Grew, E.S. and Shearer, C.K. (1999) Beryllium and boron in the Napier complex, Enderby Land, East Antarctica. 8th ISAES Conference, abstracts with programs. In press.

30th Lunar and Planetary Science Conference, Houston, TX.

Papike, J.J., Fowler, G.W., Adcock, C.T. and Shearer, C.K. (1999), Systematics of Ni and Co in olivine from planetary melt systems: lunar mare basalts. LPSC XXIX.

Shearer, C.K. and Newsom, H.E. (1999), A short-lived lunar magma ocean. Implications for the evolution of the early lunar crust, LPSC XXIX.

Shearer, C.K. and Papike, J.J., (1999) Origin of lunar mare high-Ti basalts. Melting of a deep hybridized source or shallow assimilation of high-Ti cumulates? LPSC XXIX.

A.G.U. Spring Meeting, Boston, Massachusetts

Shearer, C.K. (1999) From central Massachusetts to the Moon. Understanding the evolution of early planetary crusts using the crystal chemistry of the rock forming minerals. EOS.

New Views of the Moon, Flagstaff, Arizona

Shearer, C.K., J.J. Papike and L.R. Gaddis (1999) Mare basaltic magmatism. A View from the sample suite with and without a remote sensing prospective. Abstracts with Program. (invited talk).

G.S.A. National Meeting, Denver, Colorado

Shearer, C.K. (1999), Behavior of Beryllium during solar system and planetary evolution. Evidence from planetary materials. Abstracts with Programs.

Externally Funded Research

Grants and Contracts:

NASA "Microbeam Studies of Planetary Materials"
Various Contracts and Grants for the SIMS Laboratories
NSF Support for An Ion Microprobe Facility
NASA "Deciphering S Isotopic Systematics as Biogenic Markers in Martian Meteorites"
NASA "Planetary Biomarkers"

Conference, Symposium and Invited Lectures

Meetings Attended:

AGU meeting, Boston, MA, May 22-26, 1999.

30th Lunar and Planetary Science Conference, Houston, TX, March 15-20, 1999.

"New views of the Moon: Integrated remotely sensed, geophysicaland sample datasets", Houston, TX, September 17-20, 1999.

GSA National Meeting, Denver, CO., October 18-22, 1999

Activities of the Research Scientists

Viorel Atudorei

Teaching

Courses taught:

Training students in the Stable Isotope Laboratory.

Publications (* indicates student authors)

Proceeding volumes:

Atudorei, V., Baud, A., Gradinaru E., Sharp, Z.D., Shields, G., Gaetani, M., Bucher, H, Stille, P. (1999) Lower and Middle Triassic geochemical events: implications for the biotic recovery from the end-Permian mass extinction. Abstracts with Programs, Geological Society of America Annual Meeting, Denver, p. 326.

Gutzler, D., Sharp, Z.D. and Atudorei, V., Isotopes in precipitation: a new diagnostic tool for research on the North American Monsoon. Proceedings of the Twenty-Fourth Annual Climate Diagnosis and Prediction Workshop, Tucson (in press)

Jensen, M.L.*, Sharp, Z.D. and Atudoreí, V., Evidence for primary oxygen isotope composition in dinosaur tooth enamel. Implications for physiology and behavior, Abstracts with Programs, Geological Society of America Annual Meeting, Denver, p. 97.

Lucchini R., Sharp, Z.D. and Atudorei, V., Analysis of hydrogen and oxygen isotope ratios of water by pyrolysis. Abstracts with Programs, Geological Society of America Annual Meeting, Denver, p. 338.

Sharp, Z.D., Atudorei, V. and Furrer, H. The effects of diagenesis on the oxygen isotopic composition of biogenic phosphates. American Journal of Science, v. 300 (in press).

Research Projects in Progress

Manuscripts submitted:

Sharp, Z.D., Atudorei, V. and Durakiewicz T.A. rapid method for the determination of hydrogen and oxygen isotope ratios from water and solid hydrous substances. (submitted to Geochimica et Cosmochimica Acta).

Kelly, J.F., Atudorei, V., Sharp, Z.D. Finch, D.M. and Cartron, J.-L. (2000) Relationships among breeding latitude, timing of migrationand wintering latitude in Wilson's Warblers as revealed by hydrogen stable isotopes ratios. Ecological Society of America Meeting, Snowbird, Utah.

Ongoing collaborations:

Geochemical characterization of Devonian-Mississippian marine shales: integration of stable isotope geochemistry and organic petrography, with Dr. Sue Rimmer, University of Kentucky, Lexington.

Radiometric calibration of the Triassic timescale, with Dr. Mihai Ducea, University of Arizona.

Sulfur isotope geochemistry of Permian and Triassic evaporites of US Western Interior, with Dr. Spencer Lucas, New Mexico Museum of Natural History, Albuquerque.

Conference, Symposium and Invited Lectures

Attended Annual Meeting of the Geological Society of America, Denyer 24-28, Oct. 99.

Lars Borg

Teaching

Courses taught:

Fall: E&PS 465/565 - Mars Evolution (23 enrolled). E&PS 365 - Exploring the Solar System (25 enrolled).

Publications (* indicates student authors)

Articles in referred journals:

The age of the carbonates in Martian meteorite ALH84001. Borg L.E., J.N. Connelly, L.E. Nyquist, C.-Y. Shih, H. Wiesmann and Y. Reese, Science, v. 268, p. 90-94 (1999).

Isotopic studies of ferroan anorthosite 62236: A young lunar crustal rock from a light rare-earth element-depleted source. Borg L.E., M. Norman, L. E. Nyquist, D. Bogard, G.A. Snyder, L.A. Taylor and M. Lindstrom, Geochimica et Cosmochimica Acta, v. 63, p. 2679-2691 (1999).

Martian soil component in impact glasses in a Martian meteorite. Rao M.N., L.E. Borg, D.S. McKay and S.J. Wentworth, Geophysical Research Letters, v. 26, p. 3265-3268 (1999).

Abstracts in conference and symposia proceedings:

30th Lunar and Planetary Science Conference, Houston, Texas

Pb-Pb age of the carbonates in the Martian meteorite ALH84001. Borg L. E., J.N. Connelly, L.E. Nyquist and C.-Y. Shih, Lunar and Planetary Science Conference XXX Abstract #1430, CD-ROM. (1999).

Martian Meteorities: Where Do We Stand and Where Are We Going? Lunar and Planetary Institute, Houston, Texas.

Rb-Sr formation age of ALH84001 Carbonates. Borg L. E., L.E. Nyquist, C.-Y. Shih, H. Wiesmann, Y. Reese and J. N. Connelly, LPI Contribution #956, p. 5 (1999).

Manuscripts in press:

Re-Os Isotopic systematics of primitive lavas from the Lassen region of the Cascade arc, California. Borg L. E., A.D. Brandon, M.A. Clynne and R.J. Walker, Earth Planetary Science Letters.

Conference, Symposium and Invited Lectures

Meetings attended:

March 15-19: 30th Lunar and Planetary Science Conference, Johnson Space Center (JSC), Houston, TX.

September 21-24: Lunar Initiative Workshop, Flagstaff, AZ October 1-4: Mars 2001 Workshop, LPI, Houston, TX

John Husler

Teaching

Taught two lectures and two labs in: Selected Topics in Geochemistry.

Trained 10-12 students in the use of X-Ray fluorescence and atomic absorption instrumentation.

Aided four students with Senior Thesis Projects.

Gave chemical and occupational safety training to new faculty, staff and students.

Research Projects in Progress

Chemical analysis and collaboration with: SiNaF Products, Lovelace Research Lab, Pacific NW National Laboratory, Superior MicroPowders, UNM Biology cave projects, UNM School of Medicine African Milk study, UNM Center for Radioactive Waste Management, UNM Department of Nuclear and Chemical Engineering, UNM Center for Microengineered Ceramics, Apogee Scientific, Summer and associates, Nanopore, NM Attorney General, NSF Rio Calavaras, Tierra Resources and Adherent Technologies.

Rhian H. Jones

Teaching

Spring: E&PS 365, "Exploring the Solar System". 5 lectures, 1 lab session.

Summer: E&PS 365, "Exploring the Solar System". 1 lecture.

Fall: E&PS 465/565, "Mars Evolution". 3 lectures. E&PS 518 - "Electron microprobe analysis and scanning electron microscopy". 1 lecture. E&PS 519L - "Selected Topics in Geochemistry". 1 lecture.

Publications (* indicates student authors)

Abstracts:

Isolated pyroxene grains in ALHA77307: Derivation from chondrules. R.H. Jones**
Lunar and Planetary Science Conference XXX, Abstract #1420, Lunar and Planetary Institute,
Houston (CD-ROM) (1999).

Research Projects in Progress

Manuscripts in press:

Formation of chondrules and CAIs: Theory versus observation. R.H. Jones**, T. Lee, H.C. Connolly Jr., S.G. Love and H. Shang, In Protostars and Planets IV, University of Arizona Press.

Meteorites. R.H. Jones**, Encycopedia of Physical Science and Technology, Third Edition. Academic Press.

Conference, Symposium and Invited Lectures:

Presented talk, "Isolated pyroxene grains in ALHA77307: Derivation from chondrules." 30th Lunar and Planetary Science Conference. Houston, TX. March, 1999.

Fellow of Mineralogical Society of America and Meteoritical Society.

Member of Mineralogical Society of Great Britain and American Geophysical Union.

Aurora Pun

Teaching

Courses Taught:

Spring: E&PS 101 - Physical Geology (31 enrolled), E&PS 101 - Physical Geology (13 enrolled).

Summer: E&PS 101 - Physical Geology (39 enrolled).

Fall: E&PS 101 - Physical Geology (36 enrolled).

Publications (* indicates student authors)

Articles in Refereed Journals:

Xenolithic evidence for Proterozoic crustal evolution beneath the Colorado Plateau. Selverstone J., Pun A. and Condie, K.C., GSA Bulletin, 111, No. 4, 590-606.

1

Externally Funded Research

Unsuccessful proposals for grants and contracts submitted:

How Does the Earth Work? Alternative Textbook for Introductory College Geology Focusing on Science Relevancy. G.A. Smith and A. Pun, National Science Foundation January 1, 2000 to December 31, 2001, \$74,999.

Michael N. Spilde

Teaching

Guest lecture for Biology 402/502 "Geomicrobiology," Febuary 10 and April 7, 1999.

Guest lecture and SEM/microprobe demonstration for Anthropology 570 "Ceramic Analysis Class," April 22, 1999.

Class co-taught with Adrian Brearley E&PS 518. "Electron Microprobe Analysis and Scanning Electron Microscopy" (10 enrolled) Fall Semester 1999.

Tutorial training On the SEM for 5 UNM graduate students.

On the microprob for 6 UNM graduate students.
On the SEM for 3 UNM faculty/staff and 1 NM Tech faculty.

Publications (* indicates student authors)

Papers in Refereed Journals:

Diogenites as asteroidal cumulates: Insights from chromite chemistry. L.E. Bowman*, <u>J.J. Papike</u>, M.N. Spilde**, American Mineralogist, 84, 1020-1026.

Synthesis and characterization of Uranium (IV)-bearing members of the [NZP] structural family. H.T. Hawkins, D.R. Spearing, D.K. Veirs, J.A. Danis, D.M. Smith, C.D. Tait, W.H. Runde, M.N. Spilde** and B.E. Scheetz, Chemistry of Materials, in review.

Abstracts:

Cave microbes: Microbial mats lining hydrogen sulfide springs. Boston, P.J., Kleina, L., Soroka, D., Lavoie, K., Northup, D. and Spilde, M.**, Abstracts and Programs from the 4th International Symposium on Subsurface Microbiology, p. 36.

Terrestrial cave microbiota: Models of Martian subsurface biology. P.J. Boston, D. E. Northup, M.N. Spilde**and L.D. Hose, Proceedings from the 5th International Mars Science Conference It's alive! Models of Martian biomarkers derived from terrestrial cave microbiota. P.J. Boston, M.N. Spilde** and D. E. Northup, Geological Society of America Abstracts with Programs, v. 31, p. A303.

Geochemistry and mineralogy of secondary mineral deposits, Lechuguilla and Spider Caves, Carlsbad Caverns National Park, NM: Biogeochemical processes in an extreme environment. K.E. Dotson*, R. T. Schelble*, M.N. Spilde**, L.J. Crossey and D.E. Northup, Geological Society of America Abstracts with Programs, v. 31, p. A154.

Geomicrobiological investigations of secondary mineral deposits in the subsurface of Lechuguilla Cave, Carlsbad Caverns National Park, New Mexico. D.E. Northup, L.E. Bean, M.Spilde. ** P.I. Boston, S.M. Barns, C.A. Connolly, M.P. Skupski, D.O. Natvig and C.N. Dahm, Abstracts and Programs from the 4th International Symposium on Subsurface Microbiology, p. 20.

Microbial interactions with the limestone walls of Lechuguilla Cave, Carlsbad Caverns National Park, New Mexico, USA. D.E. Northup, M.Spilde** and P.J. Boston, Journal of Conference Abstracts, v.4(2), p. 951; 11th Bathurst Meeting July 13th-15th, 1999 Cambridge, UK.

Bismuth minerals from the Harding pegmatite: More than just yellow-green grunge. M.N. Spilde**, New Mexico Geology, v. 21, p. 15.

Was it alive? Distinguishing biological from nonbiological mineralization and geological structures, M.N. Spilde**, P.J. Boston and D.E. Northup, Procedings from the 5th International Mars Science Conference

The hunt for red corrosion: A study of microbial rock corrosion in caves. M.N. Spilde**, D.E. Northup and P.J. Boston, Microscopy and Microanalysis 1999, p. 536-537.

Biogenic corrosion of bedrock at Lechuguilla and Spider Caves, Carlsbad Caverns National Park: A stable isotope and trace element study. M.N. Spilde**, C.K. Shearer** and Z. Sharp, Geological Society of America Abstracts with Programs, v. 31, p. A155

Lead availability and distribution in soils at the abandoned Cuba Smelter site, Socorro, New Mexico. Wolf, C.P., Mozley, P.S., Austin, G., Branvold, L. and Spilde, M.**, National Association of Abandoned Mine Land Programs, 20th Annual Conference Proceedings, Eyetts, R., ed.

Externally Funded Research

Continued Grants and Contracts

Geomicrobiological interactions of microbial communities in cave deep subsurface environments: A novel extreme environment.

Investigator with C.N. Dahm, D.E. Northup, L.J. Crosseyand P. Boston National Science Foundation \$292,134; Oct. 15, 1998 to Oct. 15, 2001.

Conference, Symposium and Invited Lectures

Presented poster: "Biogenic corrosion of bedrock at Lechuguilla and Spider Caves, Carlsbad Caverns National Park: A stable isotope and trace element study," 1999 Annual Meeting of the Geological Society of America, Denver, Colorado, October 25, 1999,

Presented talk: "The hunt for red corrosion: A study of microbial rock corrosion in caves," 57th Annual Meeting of the Microscopy Society of America/Microbeam Analysis Society, Portland, Oregon, August 5, 1999.

Sabbatical and Travel

Travel:

- January 23-February 1, 1999. Traveled to Carlsbad Caverns National Park, Carlsbad, New Mexico for presentation and field work in Lechuguilla and Spider Caves.
- May 26-June 3, 1999. Traveled to Tapihulapa, Tabasco, Mexico with National Geographic photographer and writer for field work in Cueva de Villa Luz.

- June 10-12, 1999. Traveled to Carlsbad Caverns National Park, Carlsbad, New Mexico for field work in Spider Cave.
- June 23-28, 1999. Traveled to Carlsbad Caverns National Park, Carlsbad, New Mexico for field work in Lechuguilla Cave.
- August 1-5, 1999. Attended 57th Annual Meeting of the Microscopy Society of America/Microbeam Analysis Society, Portland, Ogegon.
- August 22-27, 1999. Attended 4th International Symposium on Subsurface Microbiology, Vail, Colorado.
- October 1-3, 1999. Traveled to Carlsbad, NM to present research update to NPS Cave Specialist's office. Carlsbad Caverns National Park.
- October 24-28, 1999. Attended 1999 Annual Meeting of the Geological Society of America, Denver, Colorado.

Huifang Xu

Teaching

Courses taught:

Spring: E&PS 538L - Analytical Electron Microscopy (7 enrolled).

Publications (* indicates student authors)

Electron energy-loss spectroscopy (EELS) study of oxidation states of Ce and U in pyrochlore and uraninite - natural analogues for Pu- and U-bearing waste forms. H. Xu**, and Y. Wang, Journal of Nuclear Materials, v. 265, p. 117-123 (1999).

Electron energy loss spectroscopy of nanocrystals of zirconia and sulfated zirconia strong solid-acid. H. Xu**, and X. Song. Materials Research Bulletin, v. 34, p. 527-531, (1999).

Application of a linear free energy relationship to crystalline solids of MO₂ and M(OH)₄. H. Xu**, and Y. Wang, Journal of Nuclear Materials, v. 273, p.343-346, (1999).

Oxidative alteration of Ce-rich pyrochlore: HRTEM/EELS investigation. Huifang Xu**, Yifeng Wang, Scientific Basis for Nuclear Waste Management, v. XXII, p. 149-156, (1999).

Microstructure evolution and weathering reactions of Synroc samples crystallized from CaZrTi₂O₇ melts: EM/AEM investigation and geochemical modeling. Huifang Xu**, Yifeng Wang, Scientific Basis for Nuclear Waste Management, v. XXII, p. 47-54, (1999).

Use of linear free energy correlation to predict Gibbs free energies of formation of pyrochlore phases. H. Xu**, and Y. Wang, Journal of Nuclear Materials, v. 275, p. 216-220, (1999).

Use of linear free energy correlation to predict Gibbs free energies of formation of zirconolite phases. H. Xu**, and Y. Wang, Journal of Nuclear Materials, v. 275, p.211-215, (1999).

Use of linear free energy correlation to predict Gibbs free energies of formation of MUO₄ phases. H. Xu**, and Y. Wang, Radiochimica Acta, v. 87, p. 37-40, (1999).

84

Externally Funded Research

Awards Current in 1999:

HRTEM Study of WIPP Backfill Materials and WIPP-related bacteria. H. Xu, Sandia National Laboratories, \$7.500: 1999.

Acquisition of a FEG Transmission Electron Microscope for Nanostructured Materials and for Earth Sciences Research. A. Datye, J. Papike, and H. Xu, \$997,000; Aug. 1998 - July 2001.

Research Projects in Progress

Manuscript in press

TEM and SFM of exsolution and twinning in an alkali feldspar. H. Xu**, and D. R. Veblen, American Mineralogist, 85.

Coffinitization of uraninite: SEM/AEM investigation and geochemical modeling. Y. Wang, and H. Xu**, Radioactive Waste Management and Environmental Remediation.

Crystallization sequence and microstructure evolution of Synroc samples crystallized from $CaZrTi_2O_7$ and $CaCeTi_2O_7$ systems; HRTEM/AEM investigation. H. Xu**, and Y. Wang, Radioactive Waste Management and Environmental Remediation.

Microstructure and composition of Synroc samples crystallized from a CaCeTi₂O₇ chemical system: HRTEM/EELS investigation. Huifang Xu**, Yifeng Wang, Robert L. Putnam, Jose Gutierriez, and Alexandra Navrosky, Scientific Basis for Nuclear Waste Management, v. XXII.

Thermodynamic stability of actinide pyrochlore minerals in deep geologic repository environments. Yifeng Wang, Huifang Xu**, Scientific Basis for Nuclear Waste Management, v. XXII.

Oxidative alteration of spent fuel in a silica-rich environment: SEM/AEM investigation and geochemical modeling. Y. Wang, and Huifang Xu**, Scientific Basis for Nuclear Waste Management, v. XXII.

TEM Investigation of U⁶⁺ and Re⁷⁺ Reduction by Desulfovibrio desulfuricans, a Sulfate-Reducing Bacterium, Huifang Xu**, Larry L. Barton, Pengchu Zhang, and Yifeng Wang, Scientific Basis for Nuclear Waste Management, v. XXII.

Manuscripts submitted

Predict Gibbs Free Energies of Formation of Perovskite and Ilmenite Phases. Huifang Xu**, and Yifeng Wang, American Mineralogist.

Using Linear Free Energy Relationship to Predict Gibbs Free Energies of Formation for Oxides, Hydroxides, and Aqueous Metal Complexes Containing Trivalent Cations, Huifang Xu**, and Yifeng Wang, GCA.

Use of Linear Free Energy Correlation to Predict Intrinsic Sorption Constants of Radionuclides at Mineral - Water Interfaces. H. Xu**, and Y. Wang, Journal of Contaminant Hydrology

Se-bearing colloidal particles produced by sulfate-reducing bacteria and sulfide-oxidizing bacteria: TEM study. H. Xu**, and L. L. Barton, Journal of Contaminant Hydrology.

IV. FACULTY PROFESSIONAL, COMMUNITY AND UNIVERSITY SERVICE

Faculty Professional. Community and University Service

Yemane Asmerom

Activities in Professional Societies

Proposals reviews: NSF

Manuscript Reviews:

Geochemica Cosmochimica Acta, Earth and Planetary Science Letters; Chemical geology. Other Professional Activities.

Non-Teaching University and Departmental Service

Facilities Committee, Graduate Committee, Search Committee: Volcanology position, Centennial Library Ad-hoc Committee, Library Representative, MEMS, Search Committee: Geomorphology, Computer Committee.

Adrian Brearley

Activities in Professional Societies

Associate Editor, American Mineralogist (1994-2000).
Associate Editor, Mineralogical Magazine (1998-2000).
Abstractor for Mineralogical Abstracts, abstracted papers from Analytical Chemistry.
Member, Meteoritical Society Meteorite Nomenclature Group.
Member, NASA Cosmochemistry Review Panel, Member.
Mineralogical Society Committee on Committees.

Other Professional Activities

Reviewed scientific papers submitted to Meteoritics and Planetary Science (1), American Mineralogist (2), European Journal of Mineralogy (1), Geochimica et Cosmochimica Acta (1) and Mineralogical Magazine (1). Reviewed 4 proposals submitted to NASA Planetary Materials and Geochemistry Program. Reviewed 1 proposals submitted to NASF Instrumentation and Facilities Program. Reviewed 1 proposal submitted to NASA Origins of Solar Systems Program. Reviewed 1 proposal submitted to NASA Exobiology Program. Reviewed 1 proposal submitted to U.K. Natural Environment Research Council.

Non-Teaching University and Departmental Service

Departmental service:

Presented seminar to Department of Physics and Astronomy, UNM 'Life on Mars: Alive and Kicking or Dead in the Water'.

Chairman, Department of Earth and Planetary Sciences Facilities Committee.

Member, Department of Earth and Planetary Sciences Graduate Committee. Member, Department of Earth and Planetary Sciences Long Term Strategic Planning Committee.

Public Service

Participated in meteorite display for Astronomy Day at Winrock Mall, Albuquerque, April, 1999.

Identified numerous suspect meteorites and provided information on meteorites for members of the public from both within and outside New Mexico.

Interviewed numerous times and quoted by papers and press (TV and Radio) regarding publication of paper in Science Magazine in August, 1999.

Michael E. Campana

Activities in Professional Societies

Secretary-Treasurer and Board of Directors, Association of Ground-Water Scientists and Engineers.

Member, Publishing Oversight Committee, National Ground Water Association (publishes the journals Ground Water, Ground Water Monitoring and Remediationand Water Well Journal).

UNM Delegate, Commission on Food, Energy and Renewable Resources, National Association of State Universities and Land-Grant Colleges (NASULGC).

Lead UNM Delegate, Universities Council on Water Resources. Chair, Membership Committee, Association of Ground Water Scientists and Engineers. Member, Credentials Committee, National Ground Water Association. Other Professional Activities.

Associate Editor, Environmental and Engineering Geoscience. Associate Editor, Ground Water. Book Editor, Ground Water.

Fulbright Senior Scholar Peer Review Panel - Caribbean, Central American and Mexico region.

Member, National Research Council Committee on U.S. Geological Survey Water Resources Research.

Member, National Research Council Committee on Opportunities to Improve the U.S. Geological Survey's National Water Quality Assessment (NAWQA) Program.

Participant, International Atomic Energy Agency Coordinated Research Program on Use of isotopes for analyses of flow and transport dynamics in groundwater systems.

Member, Program Development and Review Board, New Mexico Water Resources Research Institute.

Campus Coordinator, U.S. Environmental Protection Agency National Network for Environmental Management Studies (NNEMS) Fellowship Program.

Steering Committee, National Water Initiative Task Force. This is a group of about 15 academicians seeking to increase Federal sponsored research on water resources by \$500,000,000 per year (organized under the aegis of NASULGC)

Other Professional Activities

Reviewed manuscripts for Journal of the North American Benthological Society (1);
Hydrogeology Journal (2);
Hydrological Processes (1);
Water Resources Research (3);
Journal of Hydrology (1);
Environmental and Engineering Geoscience (1);
Journal of Hydraulic and Drainage Engineering (1)

Reviewed proposals for: National Science Foundation (4); Los Alamos National Laboratory (1).

Non-Teaching University and Departmental Service

University:

Director, Water Resources Program. Member, Steering Committee, Water Resources Program. Co-Chair, Faculty Senate Curricula Committee. Member, Senior Promotion Committee, College of Arts and Sciences.

Member, J. Rivera Promotion Committee (full professor) Anderson Schools of Management. Attendee, Utton Transboundary Resources Center retreat, School of Law, January 21-22, 1999.

Departmental:

Committees: Graduate Committee.

Other:

Played major role in developing curriculum for new B.S. in Environmental Science.

Public Service

Provided water resources and related information to the general public. Volunteer, Lifewater Internationaland Team Leader - Panama Project, which seeks to develop potable water supplies for the Epera Indians.

Member, Intel Corporation Community Advisory Panel. Member, ACDI/VOCA (Agricultural Cooperative Development International/Volunteers in Overseas Cooperative Assistance). Member, VITA (Volunteers In Technical Assistance). Member, Partners of the Americas.

Laura J. Crossey

Activities in Professional Societies

Society Committees:

American Association of Petroleum Geologists, Membership Committee (since 1989)

Association for Women Geoscientists (lecturer (since 1989))

Society for Sedimentary Geology, Academic Liaison (since 1991)

Society for Sedimentary Geology, Research Committee (since 1996)

Geochemical Society, Clark Medal Selection Committee (1997-99)

Geological Society of America, Joint Technical Program Committee, Annual Meeting (1998-1999).

Other Professional Activities

Manuscripts (Reviews):

Geological Society of America Bulletin. (2); Geology (3); Clays and Clay Minerals (1).

Proposals:

American Chemical Society/Petroleum Research Fund (1); National Science Foundation (4).

Non-Teaching University and Departmental Service

Department:

Associate Chairman; Alumni Relations Committee; Scholarship Committee.

Department Representative to the Minority Engineering, Math and Science Program College; Associate Dean, Student Academic Affairs.

Public Service

Research trip, Grand Canyon, Arizona, March, 1999. Research trip, Grand Canyon, Arizona, September, 1999.

Maya Elrick

Other Professional Activities

Journal reviews:

Journal of Sedimentary Research (2); Geological Society of America (1); Sedimentology (1); Petrology book Chapter (1).

Proposal reviews:

National Science Foundation (2)

Non-Teaching University and Departmental Service

Departmental Committees: Co-chair Graduate Committee; Graduate Advisor; Chair Scholarship Committee

University Committees: Arts and Science Tenure and Promotion Committee; KUNM Radio Board.

Community: Reviewed science text books for New Mexico public schools.

Peter J. Fawcett

Non-Teaching University and Departmental Service

Department: Member, Computer committee; Member, Graduate committee; Member, Geomorphologist Search Committee; UNIX facility administrator.

Other Activities in Professional Societies

Manuscript Reviews

Reviewed scientific manuscripts submitted to: Paleoceanography (1), Global and Planetary Change (1), Journal of Geophysical Research Atmospheres (2).

Book Review:

Textbook Review for "The Whole Earth: Earth System Science and Global Change by D. Merritts and A. DeWet (W.H. Freeman).

Proposal Reviews:

Reviewed 2 proposals submitted to the National Science Foundation.

Public Service

Interviewed by Science reporter for the Albuquerque Journal.

John W. Geissman

Activities in Professional Societies

Editor, Bulletin, Geological Society of America.

Member, Publications (* indicates student authors) Committee, Geological Society of America.

Associate Editor, Journal of Geophysical Research.

Member, American Geophysical Union "Committee of 50".

University of New Mexico representative, DOSECC, Inc.

Geoscience "consultant", Albuquerque Petroglyphs, U.S. Park Service.

Science Advisor, New Mexicans for Science and Reason.

Co-Chairperson, New Mexico Geological Society 1999 (Golden Anniversary) Fall Field Conference

Member, New Mexicans for Science and Reason and Technical Consultant

Member, Coalition for Excellence in Science Education .

Chair, AGU Public Affairs Committee on Creationism/Evolution Policy Statement

Other Activities in Professional Societies

Reviews of manuscripts and proposals

Reviewed proposals for National Science Foundation (10), American Chemical Society (2), U.S. Geological Survey (1), The Third World Academy of Sciences (3), Lithoprobe, Canada (1), Australian Research Council (1).

Reviewed manuscripts for Journal of Geophysical Research (3), Earth and Planetary Science Letters (1), Geophysical Research Letters (1), Tectonics (1), Canadian Journal of Earth Science (1), Precambrian Research (2), Geophysical International (1), Geology (3), Tectonophysics (1), [note, these do not include manuscripts associated with Associate Editor duties].

1

Consultancies

Adjunct or associate-type positions at other institutions Adjunct Full Professor, University of Michigan, Ann Arbor Technician (balf-time), UNM Paleomagnetism and Rock Magnetism Laboratory.

Non-Teaching University and Departmental Service

University service and activities:

Member, Faculty Senate, 1998President-elect, Faculty Senate, 1999Member, Faculty Senate Budget Committee, 1997Member, Faculty Senate Bovernmental Affairs Committee, 1999Chair, College of Arts and Sciences Junior Promotion and Tenure Committee, 1999-2000
College of Arts and Sciences Graduate Committee
University North Central Association Steering Committee Member

Departmental service:

Department Graduate Committee, Co-Chair, Fall, 1998-Department Facilities Committee, Fall, 1996-Department Long Range Planning Committee, 1999-Department Vehicle Committee, 1999-Department Alumni Affairs Committee, Chair, 1999-

Special Projects:

Administrative Positions.

Public Service

Geoscience Advisor, Albuquerque Petroglyphs National Monument committee.
Geologic field excursion leader, miscellaneous Elementary school groups.
Participant, Jefferson Middle School, Special Educational Events Day.
Participant, Rio Rancho High School Career Days.
Three public interest talks, Elks Club, Rio Grande Civitan Club, Manzano del Sol Retirement Center.
Member, Project Dragonfly, National Forum for Young Investigators.
Member, Coalition for Excellence in Science Education.

David Gutzler

Non-Teaching University and Departmental Service

Departmental committees:

Computer Committee (Chair). Undergraduate Committee. Geomorphology Faculty Search Committee.

I was one of the principal architects of the new E&PS undergraduate degree program (B.A. and B.S.) in Environmental Science (now being reviewed by college and university curriculum committees).

I am principal E&PS representative on an ad hoc planning committee to design video/audio/computer renovations to the Kudo lecture hall, 122 Northrop Hall.

University committees:

Faculty Senate Computer Use Committee (Chair).

As CUC chair I was the principal author of a faculty-wide computer use survey disseminated in October and made numerous appearances before the full Faculty Senate and the FS Operations Committee.

Interviewee, KUNM Radio "University Showcase", 1 October.

Non-Teaching University and Departmental Service

Departmental committees:

Computer Committee (Chair).
Undergraduate Committee.
Geomorphology Faculty Search Committee.

I was one of the principal architects of the new E&PS undergraduate degree program (B.A. and B.S.) in Environmental Science (now being reviewed by college and university curriculum committees).

I am principal E&PS representative on an ad hoc planning committee to design video/audio/computer renovations to the Kudo lecture hall, 122 Northrop Hall.

University committees:

Faculty Senate Computer Use Committee (Chair).

As CUC chair I was the principal author of a faculty-wide computer use survey disseminated in October and made numerous appearances before the full Faculty Senate and the FS Operations Committee.

Interviewee, KUNM Radio "University Showcase", 1 October.

Public Service

Member, Science Advisory Committee for U.S. Rep. Heather Wilson (NM district 1). Presentation and demonstration, "How Clouds Form", to elementary school children associated with the Albuquerque Association for Gifted and Talented Students, Jan 30.

Stephen P. Huestis

Non-Teaching University and Departmental Service

University Service and Activities:

Committees: Arts and Sciences Undergraduate Committee.

Arts and Sciences Curriculum Committee

UNM Scientific and Engineering Computation Program Associated Faculty.

C 1

Other University Activities:

Virginia Creepers String Band university performances: NSF-CONACYT-ISTEC Workshop on Digital Libraries – July 9, 1999 Communication and Journalism Department Anniversary – October 21, 1999

Departmental Service:

Committees:

Undergraduate; Scholarship; E&PS Undergraduate Advisor.

Public Service

Virginia Creepers String Band volunteers performance: Albuquerque Mennonite Church retreat, September 10, 1999.

Karl E. Karlstrom

Activities in Professional Societies

Committee Member:

Member of Editorial Board for Precambrian Research 1-90 to present..

Member New Mexico Geologic Mapping Advisory Board, 1995-present.

Steering Committee and workshop coordinator for U.S. Array, a component of the NSF-Earth scope initiative. 1999-present.

Other Professional Activities

Invited talks:

University of Wyoming, April 5-6, 1999. Northern Arizona University, April 28-29, 1999. University of Michigan, Turner Lecture, November 19, 1999.

Review activities (manuscripts):

Precambrian Research (2); Tectonophysics (1); Geology (2); GSA Bulletin (1); Journal Geophysical Research (1).

1

NSF Proposals: (3)

Newspaper, Magazine articles:

Science Magazine, November 1999, v. 286, p. 1655-1658 (US Array).

Non-Teaching University and Departmental Service

Department service:

Undergraduate committee.

Member: Geomorphology Search committee.

Public Service

Numerous interviews with Albuquerque Journal writer, John Fleck,

Cornelis Klein

Activities in Professional Societies

Treasurer, 1995-2002 of the International Mineralogical Association.

Member of the Commission on History and Teaching, International Mineralogical Association, 1985-2002.

Vice President, Mineralogical Society of America, Oct. 1999-2000and subsequent year (Oct. 2000-2001) President of the Mineralogical Society of America.

Member, Committee on Committees, Mineralogical Society of America. 1999-2000.

Consultant Editor, Merriam Webster Encyclopedia on Geology, Mineralogy and Meteorology, 1997-2000.

Adjunct Curator, New Mexico Museum of Natural History, Albuquerque, New Mexico.

Other Professional Activities

Reviews:

Reviewed proposals for the National Science Foundation, USA and the National Research Foundation of South Africa.

Reviewed manuscripts for Geochimica Cosmochimica Actaand the Proceedings of the National Academy of Sciences.

Reviewed book manuscript for Prentice Hall, Inc.

Non-Teaching University and Departmental Service

Member of the University-wide committee that awards "Outstanding TA award for 1998-1999". Member, Undergraduate Committee, E&PS Member, Collections Committee, E&PS

Public Service

Member of the Albuquerque Rotary Club.

Member of the Program/speakers Committee for the Albuquerque Rotary Club.

Introduced Dr. Harrison Schmitt, November 29, 1999. Talk entitled "Terrestrial Climate Change and Future Energy from the Moon"

Hosted Professor Anthony R. Philpotts as part of our Colloquium series, October 7, 8 and 9, 1999. He gave two talks: "Differentiation of Basaltic Magmas" and "Revolutionary Geological Mapping through the use of the electronic total station and other computer assisted devices".

Participated in the organization of the celebration of "33 years of Outstanding Teaching" May 6, 1999 in honor of the late Albert M. Kudo.

Invited Dr. Lokesh Chaturvedi, Deputy Director, Environmental Evaluation Group, as guest lecturer in E&PS 204 with a lecture entitled "Where is WIPP now?"

Barry S. Kues

Other Professional Activities

Adjunct Curator, N.M. Museum of Natural History and Science.

Reviewed manuscripts for:

Journal of Paleontology (2), California Academy of Science (1), Acta Palaeontologica Polonica (1)

Non-Teaching University and Departmental Service

University: Faculty Senate Library Committee and library budget subcommittee; Provost's ad hoc committee on the UNM libraries; Science-Technology Building advisory committee.

Department: Chair of Earth and Planetary Science Department through June 30, 1999

Public Service

Identified geological specimens and answered geological questions for the public.

Leslie D. McFadden

Professional Activities

Peer Reviews of Articles and Proposals

Reviewed 2 papers for Geology:

Reviewed Chapter, "Sonoran Desert Soils", for the textbook, A Natural History of the Sonoran Desert (S.J. Phillips and P.W. Comus, eds.). Reviewed "A Field Guide to the Geology of Catalina State Park and the Western Northern Margins of the Santa Catalina Mountains."

Contributions to University of New Mexico Publications (* indicates student authors):

1 article concerning the Department of Earth & Planetary Sciences for the Spring, 1999. Issue of "Inside Arts and Sciences.

Editorial Activity

Editorial Board Member, Catena

Off-campus Activity

Panel Member, Roundtable America! Symposium, "Science and the Media", Albuquerque, NM.

Non-Teaching University and Departmental Service

Chair, Undergraduate Committee (through the Spring semester, 1999).

Chair, Volcanology Position Search Committee.

Member, University of New Mexico Academic Freedom and Tenure Committee (through the Spring semester, 1999).

Re-elected to the UNM Faculty Senate.

550

Chairman of the Department of Earth and Planetary Sciences, July 1 1999. Led City of Albuquerque Open Space Division's Sunday Hike. Informal On-Campus Interviews with 2 prospective graduate students. 3th Grade Science Class Attended Civil Rights Training Workshop

Public Service

Volunteer Coach, Garfield Middle School, Fall, 1999.

Participation as member, Coalition for Excellence in Science Education (CESE).

Responded to several requests for advice and assistance from the public concerning issues related to soils and geology.

James J. Papike

Activities in Professional Societies

National committees and offices in societies:

1997 –1999; Member, NASA Mars Expeditions Strategy Group (MESG).
1997-1999; Chair, NASA Curation and Analysis Planning Team for Extraterrestrial Materials (CAPTEM).
1997-1999; Member, NASA Mars Expeditions Strategy Group (MESG).
1998-1999; NASA Mars Program Architecture Study Team for the Next Decade (2001–2010).
1998-1999; NASA Mars Sample Return Architecture Study Team for 2001 – 2005 Missions.
1998-1999; Member, NASA Lunar Data Analysis Review Panel (LDARP).
1998-1999; Member, NASA Mars 2001 Site Selection Committee.
1997-2000; Member, NASA, Cosmochemistry, Management and Operations Working Group (MOWG).
1998-2001; Member, NASA/JSC, Astromaterials Working Group (AWG) Reports to Center Director.

Other Professional Activities

Reviewed ten (10) proposals and seven (7) papers

Non-Teaching University and Departmental Service

University service and activities:

Director, Institute of Meteoritics.

Departmental service:

Director of the Institute of Meteoritics. Member of EPS Facilities Committee. Chair, EPS Long Range Panning Committee.

Public Service

Numerous discussions with the media concerning planetary issues.

1999-2002; Member, NASA Space Science Advisory Committee (SScAC).

Aurora Pun

Conference, Symposium and Invited Lectures

Attended Annual Geological Society of America meeting, Denver, CO, Oct. 1999. Reviewer of textbook, W.H. Freeman and Company. Reviewer of proposals, NASA Cosmochemistry Program.

Other Professional Activities

Adjunct Assistant Professor, Dept. Earth and Planetary Sciences, University of New Mexico.

Non-Teaching University and Departmental Service

Assisted Geology Museum Curator at Tucson Gem and Mineral Show and Albuquerque Gem and Mineral show.

Sabbatical and Travel

Attended Tucson Gem and Mineral Show, Tucson, Arizona, February 1999. Attended Albuquerque Gem and Mineral Show, March 1999.

Public Service

Provided tours of the Meteorite and Geology Museums, Department of Earth and Planetary Sciences.

Jane Selverstone

Activities in Professional Societies

Editorial Board Member, Journal of Metamorphic Geology.

Other Professional Activities

Manuscripts reviewed:

Contributions to Mineralogy and Petrology (1);
Journal of Metamorphic Geology (4);
Geochimica Cosmochimica Acta (1);
Rocky Mountain Geology (1);
European Mineralogy (1);
Science (1); Geology (1);
Understanding Earth textbook – revisions for 3rd edition.

Proposals reviewed:

NSF Tectonics program (2); NSF Petrology and Geochemistry program (4); NSF Continental Dynamics program (1).

4

Non-Teaching University and Departmental Service

Departmental committees:

Long-Range Strategic Planning committee. Search Committee for volcanology faculty position. Undergraduate committee.

University committees:

Research Allocations Committee Editorial Board Member, Journal of Metamorphic Geology. Editorial Board Member, Journal of Metamorphic Geology.

Public Service

Presented 3-hour class on rock formation to 3rd grade class at Manzano Day School Assisted at Manzano Day School Science Fair
Assisted with 5th-grade trail maintenance project in Jemez Mountains, Manzano Day School

Zachary Sharp

Activities in Professional Societies

Reviewed Papers for International refereed journals: 25. Reviewed proposals: Australian Research Council; NERC proposal; 22 NSF Proposal.

Editorships:

Geology American Journal of Science Lithos

Non-Teaching University and Departmental Service

<u>Committees</u>: Building Safety Coordinator; Instrumentation and Facilities; Long Range Planning Committee; Alumni committee; Mineralogical Society of America Awards Committee.

Miscellaneous:

Calibrated new NBS gas for the National Institute of Standards and Technology. Reviewer for Tenure Promotion, ASU (1999). Science teaching at Dennis Chavez elementary school. Lecture (Roswell) for University Outreach Program (UNM Star Scholars Recruitment Campaign. Coordinating development of Departmental brochure. Ran E&PS 401 colloquium.

Gary A. Smith

Activities in Professional Societies

President, New Mexico Geological Society
Associate Editor, Geological Society of America Bulletin

Other Professional Activities

Reviews:

Reviewed manuscripts for Geological Society of America Bulletin (6), Sedimentary Geology (1), Bulletin of Volcanology (2), Geology (1)

Reviewed proposals for the National Science Foundation (2); Adjunct Curator, New Mexico Museum of Natural History and Science; Field Geologist, New Mexico Bureau of Mines and Mineral Resources; Technical Staff (Faculty Sabbatical), Geohydrology Group, Sandia National Laboratories.

Non-Teaching University and Departmental Service

Departmental Service:

Assistant Department Chair, Fall, 1999 Chair, Collections Committee, fall 1999 Chair, Undergraduate Committee, fall 1999 Geomorphology Faculty Search Committee, fall 1999 Advisor, Geology Club, fall 1999

Department of Earth and Planetary Sciences curatorial duties including specimen acquisition and cataloging and preparation of Geology Museum exhibits for the Tucson Gem and Mineral Show and the Albuquerque Gem and Mineral Show.

Public Service

Identification of mineral and fossil specimens for department visitors.

Provision of rock and mineral specimens to Albuquerque Public Schools teachers.

Research Professors

Professional, Community and University Service

Horton Newsom

Conference, Symposium and Invited Lectures

Lunar and Planetary Science Conference, Houston, TX. Abstracts in Papers presented Lunar and Planetary Science Conference (CD), Lunar and Planetary Science Institute, March 14-19, 1999.

Oral Presentations:

Newsom, H.E., Hagerty*, J.J. and Goff, F, Mixed Hydrothermal Fluids and the Origin of the Martian Soil: A New Quantitative Model.

Poster Presentations:

Newsom, H.E., Hagerty, J.J., Spilde, M.N., Adcock, C.T. and Sorge, C. Introducing Planetary Science and Technology to Students from Grades 6-12.

Shearer, C.K. and Newsom, H.E., A Short-lived Lunar Magma Ocean. Implications for the Evolution of the Early Lunar Crust.

Mars 2001: Integrated Science in Preparation for Sample Return and Human Exploration, Lunar and Planetary Institute, Houston, TX., October 2-4, 1999.

Other Professional Activities

Professional Offices held:

Associate Editor, Geochimica et Cosmochimica Acta, Journal of the Geochemical Society and the Meteoritical Society.

Panel member: NASA Non-Advocate Review Committee, Surface systems Thrust of the NASA Cross Enterprise Technology Development Program.

Other activities:

Reviewed scientific papers submitted for publication in Geochimica et Cosmochimica Acta (1 Papers), Journal of Geophysical Research Planets (1).

Reviewed grant proposals submitted to NASA (4).

Member of the scientific team for the 1999 Marsokhod Rover test, Ames Research center,

Publicity:

Dr. Newsom's research about the possibility of hot springs on Mars and published in the Journal of Geophysical Research formed the basis of the newspaper article "Mars data hint at old hot springs" published in the Albuquerque Journal, May 2, 1999,

Interviewed by the New Mexico Daily Lobo for the article, "Data shows Mars was once wet", May 5, 1999.

Interviewed live for the BBC world service radio program regarding the impact of the Lunar Prospector on the Moon, July 29, 1999.

Non-Teaching University and Departmental Service

Member, New Mexico Space Grant Faculty Advisory Board (Facilitated successful application of student Justin Hagerty).

Educational Outreach Coordinator, Institute of Meteoritics.

Presented talk to the Institute of Meteoritics research seminar series, "Educational outreach activities and update on Mars soil formation studies" Jan. 25, 1999.

Presented two invited talks in the Department of Physics and Astronomy, University of New Mexico, Oct. 21, 1999.

Advanced Study and Scholastic Honors

"Exploring Planets in the Classroom", at the University of Hawaii, Manoa, June 21-26, 1999.

Sabbatical and Travel

Travel:

- February 7-10 Ames Research Center, Marsokhod 1999 Field test, Moffett Field, CA.
- March 14-19 Lunar and Planetary Science Conference, Houston, TX.
- April 29 Review committee meeting for the New Mexico Collaborative for Excellence in Teacher Preparation grant, Shiprock, NM.
- July 12-14 Review panel meeting for the NASA Non-Advocate Review Committee, Surface systems Thrust of the NASA Cross Enterprise Technology Development Program, Oxnard, CA.
- October 2-4 Mars 2001: Integrated Science in Preparation for Sample Return and Human Exploration, Lunar and Planetary Institute, Houston, TX.

Public Service

Developed educational outreach and teacher training initiatives for the Institute of Meteoritics: We have received funding from the Space Telescope Science Institute, the New Mexico Collaborative for Excellence in Teacher Preparation and the Minority University Education and Outreach Division of NASA. In particular, the first year of the UNM PACE project has successfully demonstrated the valuable role that our University-based outreach program can have in improving student attitudes about science and technology. The total number of students reached by the program last year was greater than 4,000. We have worked primarily with student groups from the New Mexico Math Engineering Science Achievement (NM MESA) program. The approach takes advantage of the unique facilities at the University of New Mexico, such as the scanning electron microscope and our Meteorite Museum. Our program also provides role models for the students in the form of a diverse population of undergraduates, graduate students and university faculty. An important synergistic element of the program is the inclusion of programs for both students and teachers. Another key element is the use of evaluation instruments to better understand the needs of the students and to guide future efforts.

Frans Rietmeijer

Activities in Learned and Professional Societies (meetings attended, office held, professional papers read, etc.)

Professional Papers Read:

Mesospheric metal abundances, cosmic dust and meteoric dust; A petrologist's view, 37th Amer. Inst. Aeronautics Astronautics Meeting & Exhibit, Reno. Nevada.

Micrometeoroid ablation: Metal abundances and the fate of mesospheric metals, Leonid MAC Workshop, NASA Ames Research Center, Moffett Field, California.

Evolution of condensed pre-solar dust with metastable eutectic smectite dehydroxylate compositions: Truly GEMS, 30th Lunar and Planetary Science Conference, Houston, Texas.

A preliminary analytical electron microscope study of experimentally shocked dolomite with emphasis on neoformed carbon phases, 30th Lunar and Planetary Science Conference, Houston, Texas.

Constraints on the nature of common presolar dust based on observations of collected cosmic dust and vapor condensation experiments, 15th Annual New Mexico Local Symposium, Socorro, New Mexico

Professional Meetings Attended:

- 37th Amer. Inst. Aeronautics Astronautics Meeting & Exhibit, Reno, Nevada, January 11-14
- 30th Lunar and Planetary Science Conference, Houston, Texas, March 15-19
- Leonid MAC Workshop, NASA Ames Research Center, Moffett Field, California, April 12-15
- 15th Annual New Mexico Local Symposium, National Radio Astronomy Observatory, Socorro, New Mexico, October 30

Other Professional Activities

Peer review Scientific Papers:

Icarus, Journal Geophysical Research – Atmospheres, Meteoritics and Planetary Science, Planetary and Space Science.

Proposal Review:

National Aeronautics and Space Administration, Cosmochemistry Program (3). National Aeronautics and Space Administration, Planetary Instrument Definition and Development Program (2). National Aeronautics and Space Administration, MUSES-C International Mission Panel Memberships. National Aeronautics and Space Administration, Cosmic Dust Allocation Committee. 30th Lunar and Planetary Science Conference Program Committee.

Professional Services

Volunteer Editor for the Journal of Geophysical Research, American Geophysical Union

Review of Planetary Petrology and Geochemistry, The Lawrence A. Taylor 60th Birthday Volume, Geological Society of America, International Book Series, Volume 2 G.A. Snyder, C.R. Nealand W. Gary Ernst (Editors), for EOS, Trans., Amer. Geophys. Union, 80(52), 635, 1999.

Sabbatical and Travel

Travel:

- 37th Amer. Inst. Aeronautics Astronautics Meeting & Exhibit, Reno (NV), January 11-14
- 30th Lunar and Planetary Science Conference Program Committee, Houston (TX), January 19-22
- 29th Lunar and Planetary Science Conference, Houston (TX), March 16-20
- Leonid MAC Workshop, Moffett Field (CA), April 12-15
- National Radio Astronomy Observatory, Socorro, New Mexico, October 30

Public Service

Volunteer at the IOM Exhibit at the "Astronomy Day at the Mall", May 22.

Exhibitor at the Edmund G. Ross Elementary School Science Night, December 1.

"Green Chili Seminar" speaker, AP&S Geology Club on "Is there something we should know about comets Halley, Hale-Boppand LINEAR and the Leonid meteors?, December 10.

23

Guided tours of the Meteorite Museum for middle-school students.

Offered advice via e-mail and phone on sample preparation of fine-grained powder samples for transmission and analytical electron microscope analyses.

CBS Radio Broadcast Interview on comet LINEAR, November 11.

Written report to D. Spalding (Sandia National Laboratories, Albuquerque) of the investigation of putative fragments from the Colorado Springs fireball (in collaboration with Dr. R. Jones, IOM).

Advised on the origin of a putative meteorite sample form the Netherlands to Dr. M. Langbroek of the Dutch Meteor Society (The Weert Object: No meteorite, The Journal of the Dutch Meteor Society, Radiant, 21, 124-127 (in Dutch).

Mousumi Rov

Professional Activities

Invited Talks:

Department Seminar, Earth and Atmospheric Sciences, Saint Louis University, March, 1999. Colloquium, Geosciences Department, University of Arizona, April, 1999. Colloquium, Geology Department, University of California, Davis, April, 1999. Colloquium, Geosciences Department, University of South Carolina, Columbia, November, 1999.

Colloquium, Geosciences Department, Pennsylvania State University, State College, December, 1999.

Societies:

American Geophysical Union, 1993-present. Geological Society of America, 1993-present. American Physical Society, 1989-present.

Fieldwork:

Simplon and Brenner Regions, Alps, Summer 1999. Participated in a collaborative field project in the Alps involving structural mapping of faults and geomorphic characterization of drainage networks.

Non-Teaching University and Departmental Service

Voluntary co-management of UNIX computing and related issues in the E&PS Department.

Public Service

Editorial Board, Geology magazine, 1999-present
Served as reviewer for Geophysical Research Letters, Geological Society of America Bulletin and
Geology.

Special Sessions Chaired at Professional Meetings:

American Geophysical Society Spring Meeting, 1999: Co-convener, Special Session on "Fault Interactions Over Inter-Seismic Time Scales"
Geological Society of America Annual Meeting, 1999: Co-convener, Topical Session on "Origin of Orogenic Plateaus"

Charles K. Shearer

Other Professional Activities

National Committees and Offices in Societies:

CAPTEM member.

USRA member of the review committee for the Lunar and Planetary Institute.

Other Activities:

Interviews given to numerous news media. These include interviews with the Associated Press, BBC, NPR, local affiliates for NBC, CBS and ABC, Albuquerque Journal.

Reviewer for Geochimica Cosmochimica Acta, Canadian Mineralogist, Canadian Journal of Earth Science, American Mineralogist, Mineralogical Association of Canada, Nature.

Organizer and Chair for P. Robinson Symposium at Spring 1999 AGU meeting.

Organizer and Chair for "New views of the Moon: Integrated remotely sensed, geophysical and sample datasets" meeting in Flagstaff, AR.

Non-Teaching University and Departmental Service

Manager SIMS laboratory
Department Facilities Committee

Public Service

Board of Directors for Eastdale Little League. Player Agent for Eastdale Little League.

Senior Research Professors

Professional, Community and University Service

Roger Y. Anderson

Other Professional Activities

Consultation on design of field sampling program and equipment related to reconstruction of paleoclimatic records from New England Lakes. Vassar college, Spring, 1999.

Consultation with public interest groups and individuals on geological conditions at the WIPP site, NM.

Wolfgang E. Elston

Activities in Learned and Professional Societies (meetings attended, office held, professional papers read, etc.)

Attended annual meeting, Geological Society of American, Denver, Co., October 25-28, 1999. Read Paper: "Catastrophic trigger for the 2.06 Ga Bushveld event, South Africa, Evidence from basal zones of the Rooiberg Group.

Other Professional Activities

July 13-28, 1999. Geologic field work on the Bushveld Complex, South Africa. Lead a four-day field excursion for researchers from the Smithsonian Institution. NASA Johnson Space Center. Council for Scientific and Industrial Research (South Africa), Council for Geosciences (South Africa). Conferred with the Director and staff scientists. Council for Geosciences-Geological Survey of South Africa; faculty and students, University of Pretoria and University of Witwatersrand.

Reviewed proposal for NSF.

Paper for the New Mexico Geological Society.

Non-Teaching University and Departmental Service

Coordinator, University of New Mexico-Los Alamos National Laboratory Volcanology Program.

Advanced Study and Scholastic Honors

Annual Meeting, Geological Society of America, Denver, Co., October 26, 1999. Topical Session T59: "Multi-Disciplinary Studies in Volcanology, Planetary Geology and Economic Geology: A Tribute to 50 years of Research by Professor Wolfgang Elston, University of New Mexico. Conveners: UNM alumni James M. Aldrich (Los Alamos National Laboratory) and Eugene I. Smith (University of Nevada-Las Vegas). Contributions included 13 papers (2 by UNM faculty, 7 by UNM alumni), 10 posters (2 by UNM alumni).

Ż

Sabbatical and Travel

Travel:

Professional travel to South Africa, July 13-28. Denver, CO., October 25-28.

Public Service

Interviewed for feature story by John Fleck, Albuquerque Journal, December 2, 1999; "Geologist pursues theory of asteroid impact in South Africa".

Gave advice to the public on geology and mineralogy.

Research Scientists

Professional, Community and University Service

Viorel Atudorei

Other Professional Activities

Co-organiser of the Workshop on the Lower-Middle Triassic boundary, Tulcea, Romania, to be held in June, 2000 sponsored by the Subcomission of Triassic Stratigraphy of the IUGS.

Sabbatical and Travel

Professional travel:

- July 21-25, St-George area, Utah, samples collecting.
- · October 24-28, GSA Annual Meeting, Denver, CO.
- October 29-30, Carlsbad area, NM, samples collecting.

James Connolly

Other Professional Activities

UNM Elderhostel Classes (10 hours including field trip):

"Canyons, Mesas and Red Rocks -- The Unique Colorado Plateau", March, June and September, 1999.

John Husler

Conference, Symposium and Invited Lectures

Member of Geostandards International Work Group. Member of American Chemical Society.

Public Service

Assay of ores for prospectors/companies.

Judge, NW Regional Science Fair.

Chemical/Mineral Demonstration for Elementary/Mid and High School Students.

Member Rotary Brass Group.

Volunteer for Waterlines, a non-profit organization bringing potable water to underdeveloped countries (Two projects in Mexico).

Rhian H. Jones

Other Professional Activities

Reviewed 2 manuscripts for Meteoritics and Planetary Science, one book proposal for Cambridge University Press and one science proposal for NASA's Cosmochemistry Program.

Non-Teaching University and Departmental Service

Departmental service:

Manager of Experimental Petrology Laboratory. Curator of Meteorite Collection.

Sabbatical and Travel

Travel:

30th Lunar and Planetary Science Conference. Houston, Texas. March 15-19, 1999.

Public Service:

Coordinated and gave tours of Meteorite Museum for visiting school students, UNM classes and community groups.

Identified about 200 suspect meteorites and answered enquiries about meteorites for members of the public.

Michael N. Spilde

Other Professional Activities

Presented an invited talk (with Dr. Penny Boston and Diana Northup, UNM Biology Dept.): "An update on University of New Mexico research activities at Carlsbad Caverns National Park."

Presented at Carlsbad Environmental Monitoring and Research Center, New Mexico State University at Carlsbad, January 23, 1999.

Interviewed by Chaka Ferguson, Associated Press, January 24, 1999 for an article for Associated Press distribution.

Interviewed by Jeol Achenbach, May 26, 1999 for article in January 2000 National Geographic Magazine.

Worked with a TV film crew from the PBS NOVA series, August 20, 1999 for a show on scientific research in caves to be aired in Fall 2000.

Presented an update on research activities conducted by UNM Departments of Biology and Earth and Planetary Science to personnel at Carlsbad Caverns National Park, October 2, 1999.

Worked with a TV film crew from The Learning Channel, October 10, 1999 for a show on caves to be aired in Spring 2000.

Served as President of the New Mexico Microbeam Users Group, 1999.

Non-Teaching University and Department Service

Manager of the Electron Microprobe and Scanning Electron Microscope Labs. Served on the Department of Earth and Planetary Sciences Computer Committee.

Presented IOM research Seminar Presented IOM research Seminar "Corrosion Residues: Cozy Home or Living Hell for Microbes?" April 19, 1999.

Performed microprobe and SEM analyses for UNM Departments of Anthropology, Biology, Chemical and Nuclear Engineering, Mechanical Engineering, Physics and Astronomy and NM Engineering Research Institute.

Performed microprobe and SEM analyses for NM Attorney General's Office, NM Bureau of Mines and Mineral Resources, Sandia National Lab, Los Alamos National Lab, NM Tech, KOB TVand 4 local businesses.

Conducted training on microprobe software for a representative from Michigan Institute of Mining and Technology.

Performed microprobe and SEM analyses for a grad student from UNLV.

Public Service

Served as Displays Coordinator for the 31st Annual Gem and Mineral Show, Albuquerque Gem and Mineral Club, March 19-21, 1999.

Conducted Microprobe and SEM lab tours and demonstrations for several elementary and junior high school groups.

Conducted SEM demonstrations for Southwestern Junior Science and Humanities Symposium, March 29, 1999.

Examined potential meteorite specimens for the public.

Huifang Xu

Activities in Learned and Professional Societies

Presented talk, "Microstructure and composition of Synroc samples crystallized from a CaCeTi₂O₇ chemical system: HRTEM/EELS investigation" MRS Fall Meeting, Boston, MA, Dec. 1999.

Presented talk, "Se-bearing colloidal particles produced by sulfate-reducing bacteria and sulfide-oxidizing bacteria: TEM study" MRS Fall Meeting, Boston, MA, Dec. 1999.

Presented talk, "Thermodynamic stability of actinide pyrochlore minerals in deep geologic repository environments" MRS Fall Meeting, Boston, MA, Dec. 1999.

Presented talk, "Colloidal particles produced by sulfate-reducing bacteria" Migration of Radionuclides 99, Lake Tahoe, NV, Sep. 1999.

Presented talk, "Using a linear free energy correlation to predict intrinsic sorption constants of radionuclide" Migration of Radionuclides 99, Lake Tahoe, NV, Sep. 1999.

Other Professional Activities

Presented talk, "A unified equation for predicting stability constants of aqueous metal complexes and intrinsic sorption constants at mineral—water interfaces" E&PS, UNM, 1999

Presented talk, "A unified equation for predicting stability constants of aqueous metal complexes of actinides and intrinsic sorption constants of actinide at mineral—water interfaces"

Actinide Workshop of US DOE (Albuquerque), 1999

Presented talk, "Using immobilized sulfate-reducing bacteria to immobilize U, Se, and Re" Actinide Workshop of US DOE (Albuquerque), 1999

Non-Teaching University and Departmental Service

University service.

Department service and activities.

Public Service

Reviewing the Program of ESL for ADO Elementary School.

V. SELECTED DATA CONCERNING STUDENT ENROLLMENTS AND GRANTS AND CONTRACT

V. Selected Data for Student Enrollments, Grants and Contracts

1. Undergraduate Majors per FTE1

$$70/15.75 = 4.44$$

2. Undergraduate(UG) and Graduate SCH (GSCH) per FTE2

$$\frac{\text{UG} + \text{GSCH}}{15.75} = \frac{5809}{15.75} = 368.83$$

$$\frac{\text{UG}}{15.75} = \frac{5124}{15.75} = 325.33 \quad \frac{\text{GSCH}}{15.75} = \frac{685}{15.75} = 43.49$$

3. Grant/Contract/Award per FTE Faculty

4. Total Grant/Contract/Award in E&PS; Faculty and Research Scientists

5. IDC Dollar per FTE Faculty³

6. Total IDC Dollars, Faculty and Research Scientists³

\$205,583

7. Underenrolled classes

Cancelled Classes -

105L.013

105L.014

418.001

Underenrolled classes -

105L.004 (7)	307L.003 (12
105L.005 (6)	400.003 (6)
105L.006 (6)	400.004 (6)
105L.009 (2)	405.001 (10)
105L.011 (9)	405L.002 (7)
105L.012 (11)	472,001 (8)
303L.002 (9)	534.001 (3)
303L.003 (8)	537.001 (1)
303L.004 (8)	548.001 (3)

SUMMER 1999

No cancelled or underenrolled classes.

FALL 1999

Cancelled classes -

103.002** 300.001 400.001 481.001** 481L.002** 531,002 580.001

**due to the departure of Dr. Frank J. Pazzaglia

Underenrolled classes -

102L.004 (11)	304L.001 (8)
105L.001 (12)	304L.002 (12)
105L.006 (11)	402.001 (6)
105L.007 (11)	410.001 (5)
105L.010 (11)	427.001 (4)
105L.012 (9)	433.001 (3)
105L.013 (11)	476.001 (6)
302L.002 (11)	502.001 (1)
302L.003 (10)	- ,

8. Total student credit hours, 19994

E&PS: 6338

E&PS and Natural Sciences: 7406

9. Private Contributions

Geology Alumni Fellowship

Mr. Tobin N. Gerhart

Brookins Memorial Scholarship

Mr. and Mrs. Robert Suda

Geology Chair's Account

Mrs. Susan H. Fullas Mr. Edward Orbock

Mr. Eben G. Crawford

Mr. John W. Husler

Lucent Technologies Foundation

Mr. Ronald L. Hershey

Dr. Kathleen A. Affholter

Wengerd Traveling Fellowship

Exxon Education Foundation Mrs. Florence Wengerd

• 30

¹ Faculty FTE - Calendar Year 1999.

Y. Asmerom	1.0	C. Klein	1.0
A. Brearley	1.0	B. Kudo	.75
M. Campana	.5	B. Kues	.5
L. Crossey	.5	L. McFadden	.5
M. Elrick	1.0	J. Papike	.5
P. Fawcett	1.0	F. Pazzaglia	.5
J. Geissman	1.0	J. Selverstone	1.0
D. Gutzler	1.0	Z. Sharp	1.0
S. Huestis	1.0	G. Smith	1.0
K. Karlstrom	1.0		
			15.75

² Summer SCH not included.

³ Graduate credit hours are 500 and 600 level courses.

⁴ Does not include IAC, returned to the Institute of Meteoritics.

⁵ Includes Summer SCH

VI. GENERAL DEPARTMENTAL INFORMATION

FACULTY AND STAFF

PROFESSORS:

Michael E. Campana, Ph.D., University of Arizona, 1975.

John W. Geissman, Ph.D., University of Michigan, 1980.

Karl E. Karlstrom, Ph.D., University of Wyoming, 1981.

Cornelis ("Kase") Klein, Ph.D., Harvard University, 1965.

Albert M. Kudo, Ph.D., University of California, San Diego, 1967.

Barry S. Kues, Ph.D., Indiana University, 1974.

Leslie D. McFadden, Ph.D., University of Arizona, 1982.

James J. Papike, Ph.D., University of Minnesota, 1964. (Regents Professor)

ASSOCIATE PROFESSORS:

Adrian J. Brearley, Ph.D., University of Manchester, (United Kingdom), 1984.
Laura J. Crossey, Ph.D., University of Wyoming, 1985.
Maya Elrick, Ph.D., Virginia Tech. University, 1990.
David Gutzler, Ph.D., Massachusetts Institute of Technology, 1986.
Stephen P. Huestis, Ph.D., University of California, San Diego, 1976.
Jane Selverstone, Ph.D., Massachusetts Institute of Technology, 1985. (Regents Lecturer)
Zachary Sharp, Ph.D., University of Michigan, 1987.
Gary Smith, Ph.D., Oregon State University, 1986.
Yemane Asmerom, Ph.D., University of Arizona, 1988.

ASSISTANT PROFESSORS:

Peter Fawcett, Ph.D., Pennsylvania State University, 1994.

SENIOR RESEARCH PROFESSORS:

Roger Y. Anderson, Ph.D., Stanford University, 1960. Wolfgang E. Elston, Ph.D., Columbia University, 1953. Lee A. Woodward, Ph.D., University of Washington, 1962.

RESEARCH PROFESSORS:

Horton Newsom, (Institute of Meteoritics), Ph.D., University of Arizona, 1981.
Franciscus J.M. Rietmeijer, (Institute of Meteoritics), Ph.D., Rijksuniversiteit-Utrecht, Netherlands, 1979.
Mousumi Roy, Ph.D., Massachusetts Institute of Technology, 1997 (Caswell Silver Research Professor).
Charles K. Shearer, Jr., (Institute of Meteoritics), Ph.D., University of Massachusetts, 1983.

Ì

PROFESSOR EMERITUS:

Rodney C. Ewing, Ph.D., Stanford University, 1974. J. Paul Fitzsimmons, Ph.D., University of Washington, 1949.

RESEARCH STAFF:

Viorel Atudorei, Research Scientist III, Ph.D., University of Lausanne, Switzerland, 1998.

James Connolly, Research Scientist II, M.S., University of New Mexico, 1981.

John Husler, Research Scientist III, M.S., University of New Mexico, 1968.

Rhian H. Jones, Senior Research Scientist (Institute of Meteoritics), Ph.D., University of Manchester, Great Britain, 1986.

Jennifer Loomis, Post-Doctoral Scientist, Ph.D., University of New Mexico, 1996.

Aurora Pun, Post-Doctoral Scientist, Ph.D., University of New Mexico, 1996.

Nabil Shafike, Post-Doctoral Scientist, Ph.D., University of Arizona, 1994.

Kamran Syed, Post-Doctoral Scientist, Ph.D., University of Arizona, 1999.

Michael N. Spilde, Research Scientist III, (Institute of Meteoritics), M.S., South Dakota School of Mines and Technology, 1987.

Michael Wiedenbek, Senior Research Scientist I, (Inst. of Meteoritics), Ph.D., Australian National University. Huifang Xu, Research Scientist III, Ph.D., Johns Hopkins University, 1993.

ADJUNCT PROFESSORS:

Bruce Allen, University of New Mexico, 1993.

Sidney Ash, Ph.D., The University, Reading, England, 1966.

Warren S. Baldridge, Ph.D., Caltech University, 1978.

M. Susan Barger, Ph.D., Pennsylvania State University, 1982.

James E. Bossert, Ph.D., Colorado State University, 1990.

Tracey Cascadden, Ph.D., University of New Mexico, 1997.

Fraser E. Goff, Ph.D., University of California, Santa Cruz, 1977.

rraser E. Golf, Ph.D., University of Camfornia, Santa Cruz, 1977.

Grant H. Heiken, Ph.D., University of California, Santa Barbara, 1972.

Spencer G. Lucas, Ph.D., Yale University, 1983.

Sean McKenna, Ph.D., Colorado School of Mines, 1994.

Matthew Nyman, Ph.D., Virginia Polytechnic Institute and State University, 1992.

Donald Peterson, Ph.D., Stanford University, 1961.

Victor J. Polyak, Ph.D., Texas Tech University, 1998.

Aurora Pun, Ph.D., University of New Mexico, 1996.

Walter C. Riese, Ph.D., University of New Mexico, 1980.

John Shomaker, Ph.D., University of Birmingham (United Kingdom), 1995.

Daniel B. Stephens, Ph.D., University of Arizona, 1979.

Gregory Valentine, Ph.D., University of California, Santa Barbara, 1988.

Erik Webb, Ph.D., University of Wisconsin, Madison.

Thomas Williamson, Ph.D., University of New Mexico, 1993.

Kenneth Wohletz, Ph.D., Arizona State University, 1980.

STAFF:

Christopher Adcock, Research Technician, Institute of Meteoritics

Mabel T. Chavez, Editorial Technician

Gilbert E. Griego, Harding Mine Maintenance Mechanic

Yongxiang Guo, Senior Research Technician, STEM lab

Sally E. Hayes, Accounting Technician

Paula Holub, Department Administrator

Cindy Jaramillo, Administrative Assistant II

Sara Lentz, Administrative Assistant III, Institute of Meteoritics

Robert Macy, Research Engineer

Mary Marcilla, Administrative Assistant I, Institute of Meteoritics

Florine Rietmeijer, Lab Assistant

Mary Simmons, Editorial Technician Deborah Tull, Natural Science Coordinator Anthony Velardez, Facilities Service Technician

VISITING SCIENTISTS:

Dr. Weiliang Gong, Institute of Geochemistry, Chinese Academy of Sciences

Dr. Barbara Dutrow, Department of Geology and Geophysics, Louisiana State University, January-June, 1999

Dr. Kirsten Menking, Vassar College, June - August, 1999

Fidel Grandia, Autonomous University, Barclona, Spain, January - July, 1999

Dr. Andrew Baker, University of Newcastle Upon Tyne, U.K., March 21, 1998 - April 15, 1999

Dr. Anna Bojnar, Department of Geology and Paleontology, Karl-Franzens, University, May 15-July 15,1999

Dr. Mengist Teclai, University of Eritrea, June - September, 1999

Dr. Gemma Alias, University of Barcelona, November - December, 1999

Dr. Ana Voica Bojar, University of Graz, Research Professor, July-August, 1999

Dr. Hans Peter Boiar, University of Graz, Museum Curator, August, 1999

Louie Bucci, University of Perth, Ph.D. Student, August, 1999

Dr. Luigi Dallai, University of Roma, Research Professor, November, 1999

Dr. Tomasz Durakiewicz, University of Lublin, Assistant Professor, Fall, 1999

Jeffrey Heikoop, Los Alamos, Fall, 1999

Jeffrey Kelly, U.S. Forest Service, Fall, 1999

Dr. Mengist Tekley, University of Asmara, Eritrea, June 15 - September 15.

Fidel Grandia, University of Barcelona, Spain, March 1 - June 15.

Dr. Rhawn Denniston, University of Iowa, March-April.

Dr. Claudia Lewis, Los Alamos.

Dr. Andy Baker, University of New Castle, England, April.

APPOINTMENTS AND SEPARATIONS

APPOINTMENTS TO FACULTY

None

SEPARATIONS FROM FACULTY

Frank J. Pazzaglia, resigned, July, 1999. Albert M. Kudo, retired, October, 1999.

APPOINTMENTS TO STAFF

Viorel Atudorei, Research Scientist III, January 28, 1999.

SEPARATIONS FROM STAFF

Chris Adcock, Research Technician, IOM, April, 1999. Tracey Cascadden, Natural Science Coordinator, May, 1999. Steve Getty, Sr., Research Scientist I, July, 1999. Roberto Molina-Garza, Sr., Research Scientist I, July, 1999. Padinare V. Unnikrishna, Research Assistant Professor, June, 1999.

DEPARTMENTAL COMMITTEES **Spring**, 1999

GRADUATE COMMITTEE

GRADUATE ADVISOR

S. HUESTIS

LIBRARY LIAISON

M. ELRICK

M. FLRICK J.W. GEISSMAN J.W. Geissman Y. Asmerom

A. Brearley

J. Selverstone

M. Campana UNDERGRADUATE ADVISOR P. Fawcett

UNDERGRADUATE COMMITTEE

L.D. McFADDEN HONORS ADVISOR

D. Gutzler S. Huestis L. CROSSEY

K. Karlstrom C. Klein

SCHOLARSHIP COMMITTEE Y. ASMEROM

B. KUDO L. Crossey VEHICLES

M. Elrick S. Huestis M. ELRICK P. Holub

FACILITIES COMMITTEE (Graduate student)

J.W. GEISSMAN Y. Asmerom SAW ROOM A. Brearley

J. Papike J. SELVERSTONE Z. Sharp

SEARCH COMMITTEE COMPUTER COMMITTEE (VOLCANOLOGIST)

D. GUTZLER L.D. McFADDEN J. Connolly Y. Asmerom P. Fawcett A. Kudo F. Pazzaglia J. Papike M. Spilde J. Selverstone (Graduate student)

COLLECTIONS COMMITTEE

C. KLEIN B. Kues

C. Shearer

Goff (LANL) (Graduate student)

DEPARTMENTAL COMMITTEES Fall, 1999

GRADUATE COMMITTEE

M. ELRICK

J.W. GEISSMAN

Y. Asmerom

C. Brearley

M. Campana

P. Fawcett

UNDERGRADUATE COMMITTEE

G. SMITH

D. Gutzler

S. Huestis

K. Karlstrom

C. Klein

J. Selverstone

SCHOLARSHIP COMMITTEE

M. ELRICK

L. Crossey

T. Fischer

S. Huestis

FACILITIES COMMITTEE

A. BREARLEY

Y. Asmerom

J.W. Geissman

J. Papike

Z. Sharp

C. Shearer

COMPUTER COMMITTEE

D. GUTZLER

Y. Asmerom

J. Connolly

P. Fawcett

T. Fischer

M. Spilde

(Graduate student)

COLLECTIONS COMMITTEE

G. SMITH

C. Klein

B. Kues

LONG RANGE STRATEGIC PLANNING COMMITTEE

J. PAPIKE

L.D. McFadden

A. Brearley

J.W. Geissman

Z. Sharp

J. Selverstone

L.J. Crossey

GRADUATE ADVISOR

M. ELRICK

J.W. Geissman

UNDERGRADUATE ADVISOR

S. HUESTIS

HONORS ADVISOR

L.J. CROSSEY

LIBRARY LIAISON

Y. ASMEROM

VEHICLES

J.W. GEISSMAN

P. Holub

(Graduate student)

SAW ROOM

J. SELVERSTONE

ALUMNI RELATIONS

J.W. GEISSMAN

Z. Sharp

L.J.Crossey

VII. FUTURE PLANS

Future Plans

As indicated in previous sections, a new "Long-Range Strategic Planning" Committee (LRSPC) was organized in the Fall of 1999 to address several key issues, most of which were described in the Department's previous (1998-99) Annual Report. Some of these issues included concerns about Department student enrollment numbers, the role of the Natural Sciences Program in the Department, the need for additional technical staff to maximize research and teaching potential, the need for additional space, and the need to develop a new five-year plan. By December of 1999, the LRSPC had substantively addressed several of these issues and presented several proposals to the faculty for general discussion. Several of the proposals were linked specifically to the preliminary outline of a the new 5-year plan, the central part of which identifies a strategy for filling the next three faculty retirements with new faculty members. Other issues to be considered in the plan include plans to modify several classrooms and offices in Northrop Hall to enable development of new and greatly improved computational and microscopy facilities and a new plan to address office space needs and policies related to Senior Research Professors. The goal of the LRSPC was to continue efforts to refine the plan to enable presentation of a draft of the plan to the faculty in April of 2000 and ultimately presentation of the final, faculty-endorsed plan to the Dean in May of 2000.

The LRSPC also made progress in several other areas, including: (1) formulation of a plan to modify the manner in which faculty productivity, salaries and teaching loads are evaluated, through development of a new "Faculty Productivity and Salary Advisement Committee and an algorithm that quantifies teaching efforts per FTE through consideration of course load, course level, independent study and problem involvement, undergraduate and Graduate mentoring activities; and (2) formulation of a plan to retain Dr. Mousumi Roy, our current Caswell Silver Research Professor, in the Department after careful consideration of current faculty research and teaching strengths, Dr. Roy's research and it's impact on faculty research endeavors and other factors. This plan was presented to the faculty, Caswell Silver Foundation Board and Dean Michael Fischer. On the basis of support indicated for the plan by all of the latter groups and the Dean, the Department has decided to move forward to further develop and plan in the Spring of 2000.

APPENDIX MUSEUM AND HARDING PEGMATITE LOG 1999

			IM REGISTER ECEMBER 31,	i egg
DATE	ORGANIZATION		# OF STUDENTS	
1/20/99	Calvary Temple Home Scho	001 1 st -7 th	16	6
1/25/99	Bosque Prep.	8 th	16	2
1/29/99	Monte Vista Elementary	Kinder	17	4
1/29/99	Hubert Humphrey	2 nd	22	6
1/29/99	Monte Vista	Kinder	17	4
	JANUARY, 1999 TOTA		88	22
2/08/99	S.Y. Jackson	5 th	50	4
2/08/99	Daniel Fernandez Elementa	ry 5 th	100	10
2/24/99	Wherry Elementary	3 rd -4 th	20 ,	3
2/24/99	Belen Middle School	8 th	30	5
2/26/99	Chaparral Elementary	1 st	60	5
	FEBRUARY, 1999 TOT	AL CONTRACT	260	27
3/02/99	Inez Elementary	2 nd	30	6
3/05/99	ABQ. Country Day School	3 rd -5 th	10	2
3/09/99	Hogares	9 th -12 th	45	2
3/10/99	Gallup Junior High School	7 th	35	3
3/12/99	UNM Student Teachers		0	21
3/19/99	Truman Middle School	7 th -8 th	30	4
3/19/99	Eight Northern Pueblos	$1^{st}-5^{th}$	35	5
3/19/99	Rio Grande Elementary	5 th	6	1
3/19/99	Kirtland Elementary	1st -2nd	21	7 :
3/23/99	Van Buren Middle School	8 th	28	3
3/24/99	Charter Heights		0	10
3/24/99	Eagle Ridge Middle	6 ^{ւև}	80	5
3/29/99	Charter Heights		20	3
3/29/99	Bosque Prep.	8 th	16	2
3/31/99	Barellas Community Center	pre-school	14	2
	MARCH, 1999 TOTAL		370	76
4/06/99	Washington Middle School	7 th	60	10
4/08/99	Longfellow Elementary	i st	158	15
4/08/99	Washington Middle School	7 th	60	10
4/08/99	Suzy Reyes Marrow	1st-2nd	40	10
4/09/99	Painted Sky Elementary	1st-5th	30	5
4/12/99	Hodgins Elementary	5 th	25	2
4/12/99	Los Padillas	4 th	40	5
4/13/99	Petroglyph	3 rd	20	5
4/14/99	Menaul	9 th -10 th	28	1
4/14/99	Bernalillo Middle School	6 th -8 th	20	2
4/15/99	Inez	3 rd	23	5
4/15/99	Kennedy Middle	7 th -8 th	30	4
4/15/99	Calle Vista	6 th -8 th	60	6
4/16/99	Stapleton Elementary	2 nd	125	25
4/16/99	Ernie Pyle Middle School	7 th	130	15
4/19/99	Inez Elementary	2 nd	30	5

4/21/99	Monte Vista Elementary	1 st -2 ^{no}	20	2
4/21/99	Bosque Farms	4 th	25	4
4/21/99	Los Ranchos	1 st	60	20
4/22/99	Santo Domingo Elementary	3 rd	60	10
4/22/99	St. Therese School	4 th .	20	3
4/23/99	S.Y. Jackson	2 nd	40	10
4/26/99	Menaul	11th-12th	14	1
4/27/99	Manzano Day School	Kinder	15	5
4/28/99 4/28/99	John Baker	Kinder	21	5
4/28/99	Singing Arrow Community	4 th	40	10
7/20/77	A. Montoya	4-	48	10
	APRIL, 1999 TOTAL		1242	205
5/03/99	Wherry Elementary	5 th	50	2
5/03/99	Los Padilla's	4 th	17	5
5/04/99	Lowell Elementary	4 th	17	5
5/06/99	Wherry	3 rd	40	· 5
5/07/99	Mesa Alta Middle	6th-8th	50	10
5/14/99	Monte Vista Elementary	4 th 2 nd -3 rd	17	2
5/17/99	Alvarado	23	28	5
	MAY, 1999 TOTAL		219	34
6/02/99	RAD Camp UNM	5 th — 8 th	20	3
6/15/99	LaPetite Academy	1 st - 4 th	25	4
6/16/99	Hayes Mid/College Enrichment	6 th - 8 th	50	10
6/17/99	Kinder Care	2 nd — 5 th 7 th	20	2
6/18/99	Rio Grande Summer Bridge	7 ^{ւև} 7 ^{ւև} — Ջ ^{ւև}	50	5
6/21/99 6/21/99	Truman Mid/College Enrich. RAD Camp UNM	5 th - 8 th	20 20	3 3
6/23/99	SW Indian Polytech Institute	5 -0	20	25
6/25/99	Rio Grande Summer Bridge	7 th	50	5
6/30/99	UNM Child Care	pre-school	8	10
6/30/99	RAD Camp UNM	5 th – 8 th	20	3
6/30/99	Natural Sciences / UNM			12
	JUNE, 1999 TOTAL	3.44.6	283	85
7-5-99	KIRTLAND AFB YOUTH CTR.	1 ^{sт} -5 [™]	20	4
7-6-99	KIRTLAND AFB YOUTH CTR.	1 ^{sт} -5 [™]	20	4
7-7-99	KIRTLAND AFB YOUTH CTR.	1 ^{sт} -5 [™]	20	4
7-7-99	RAD CAMP (UNM)	1 ^{s⊤} -5 [™]	20	3
7-8-99	KIRTLAND AFB YOUTH CTR.	1 ^{sт} -5™	20	4
7-9-99	KIRTLAND AFB YOUTH CTR.	1 ^{sт} -5 [™]	20	4
7-12-99	BRIGHT BEGINNINGS	PRE-SCH,	15	3
7-19-99	SYETP	12 TH	16	3
7-21-99	RAD CAMP (UNM)	1 st -5 TH	20	3
7-26-99	RIO RANCHO PARKS/REC	1 st -5 TH	13 4	2
THE COURT OF SHARE				

- '.				
8-4-99	RAD CAMP (UNM)	1 ^{sт} -5 [™]	20	3
8-6-99	ST. MARK'S DAY CARE	PRE-SCH.	15	4
8-26-99	ONATE ELEM.	5™	175	15
	AUGUST, 1999 TOTAL		210	22
9-16-99	FREEDOM HIGH SCHOOL	9 [™] -12 [™]	35	2
9-22-99	MITCHELL ELEM.	2 ND	100	10
9-22-99	MORA ELEM.	8™	50	6
9-29-99	MITCHELL ELEM.	3 RD	60	10
9-30-99	LEW WALLACE ELEM.	2 ND	20	5
	SEPTEMBER 1999 TOTA	L .	: 265	33
10-8-99	CARROLL ELEM.	2 ND	50	5
10-13-99	MONTE VISTA ELEM	1 st -2 ND	4	1 '
10-13-99	VICTORY CHRISTIAN	5 ^{тн}	18	4
10-14-99	ROOSEVELT MID	8 ^{тн}	65	3
10-15-99	NASA Pursue	9 [™] -12 [™]	50	3
10-18-99	COLINAS DEL NORTE	1 ^{s⊤} -5 [™]	37	10
10-18-99	CARLSBAD HIGH	11 [™]	45	2
10-18-99	SIERRA VISTA ELEM.	4 [™]	45	8
10-18-99	LAVALAND ELEM.	3 RD -5 [™]	15	2
10-19-99	ERNIE PYLE MID	6 ^{тн} -7 ^{тн}	50	5
10-20-99	MONTE VISTA	1 st -2 ND	4	1
10-22-99	SIERRA V ISTA ELEM.	3 RD	55	10
10-25-99	LAVALAND ELEM.	5™	22	4
10-27-99	MONTE VISTA ELEM.	1 st -2 ND	4	1
10-29-99	EAGLE RIDGE MID.	6™-8™	60	12
10-29-99	MESA VISTA HIGH	9 [™] -12 [™]	40	4
	OCTOBER, 1999 TOTAL		564	75
11-2-99	SOCORRO MIDDLE	6 ^{тн} -8 ^{тн}	60	5
11-3-99	MONTE VISTA ELEM.	1 st - 2 ND	4	1
11-8-99	SIERRA VISTA ELEM.	5 TH	50	10
11-8-99	BELLE HAVEN	4 TH	60	10
11-9-99 11-9-99	MONTE VISTA ELEM. ORTIZ MIDDLE	KINDER 6 TH -8 TH	16 75	4 10
11-9-99	MONTE VISTA ELEM.	KINDER	75 16	4
11-10-99	MONTE VISTA ELEM.	1 st -2 ND	4	1
11-11-99	GEORGIA O'KEEFE	1 st	40	6
11-12-99	GEORGIA O'KEEFE	1 ^{sτ}	40 <i>i</i>	6
11-18-99	MARYANN BINFORD	1 st	50	5
11-23-99	OUR LADY OF FATIMA	8 [™]	20	5
11-23-99	MONTEZUMA ELEM.	4 [™]	25	2

11-29-99 11-30-99	S. Reyes Mormon McKinley Middle	2 ND 6 TH	40 150	6 15
	NOVEMBER; 1999 TOTA	La la je	, 650	30.
12-6-99	OSUNA ELEM.	1 st	25	2
12-7-99	WASHINGTON MIDDLE	7™	50	3
12-8-99	HATCH VALLEY HS	9 [™] -12 [™]	75	3
12-9-99	UNM NATURAL SCIENCE	UNM		20
12-9-99	WASHINGTON MIDDLE	7 ^m	50	3
12-10-99	LOS PADILLA'S ELEM	4 [™]	33	3
12-20-99	ZIA DAY SCHOOL	3 RD	23	5
	DECEMBER, 1999 TOTAL		256	39
JAI	GRAND TOTAL NUARY 1 TO DECEMBER 31	, 1999	2129	742

		i ne		tes UNI	VERSIT	Y.OF.NE	W MEXIC	30° 47¢	21 P.	ATT STATE	100	glift, juri	
			DEPARI	MENI C)F:EAR() RDING:	HIANDIF PEGMAT	PLANE!	KY SUI	NOES		K 20.1		
					Z SAV	SITORS							
			25. 10. 0/	NUARY	151999	TO DEC	EMBER	31,1999	BUILDING	.			
STATE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	STATE I
ARIZONA	2						5						25.5719.0
ARKANSAS				·	11			2	1	7	2		23
CALIFORNIA	5		1		1			l					7.18 7 G
COLORADO			22	. 2	15		11	11	2	3	2		68
CONNECTICUT	2										1		3.4.2
DELAWARE													:32
FLORIDA				3	23		6						7 July 1995
GEORGIA													(2) 1965年1
HAWAII						<u> </u>		<u> </u>					1.5 (g. 17.7 st.)
IDAHO				ļ									图 表现,20
ILLINOIS		16	17		<u> </u>			2	1	4		<u> </u>	· 40, ·/
INDIANA	<u> </u>		2	1	16		<u> </u>		_1	4			11/124
IOWA				<u> </u>	17		<u> </u>					<u> </u>	
KANSAS								3	1		2	<u> </u>	7.946
KENTUCKY													
LOUISIANA			<u> </u>	<u> </u>	14		1	3			1	<u> </u>	. 19
MAINE								<u> </u>					共和省等
MARYLAND		L	1	<u> </u>	ļ	<u> </u>	5		2	<u> </u>			8
MASSACHUSETTS				3	1								4.
MICHIGAN		1		3				<u></u>		5			- 1,8; -, ::
MINNESOTA	4	L	6	4				4				5	23
MISSISSIPPI									<u> </u>				10. 10. 10.
MISSOURI			<u> </u>	5	<u> </u>								3.44 5 13.44
MONTANA						[L		<u> </u>	<u> </u>		yes yes in the second
NEBRASKA		 	<u> </u>					ļ		<u> </u>	2	<u> </u>	2,
NEVADA	<u> </u>				1	<u> </u>			l:	<u> </u>			

STATE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	STATE TOTAL
NEW HAMPSHIRE													3. 16 Abr. 2
NEW JERSEY								1					17 × 14 × 3
NEW MEXICO	46	33	57	72	64		138	29	95	55	40	3	": 632'z'
NEW YORK					1		11						12 1-1
NORTH CAROLINA					46								461 13
NORTH DAKOTA													
OHIO				1	4					2			1.74
OKLAHOMA				2	6		5		1	6			-⊁≯20°5÷
OREGON			1			•							a lay
PENNSYLVANIA					2		8	2					12.
RHODE ISLAND							1						. 15519 . t
SOUTH CAROLINA											2		£ .2 ·
SOUTH DAKOTA													The State of
TENNESSEE					_								7.1
TEXAS		2	8	38	35		70	15	18	_ 9	5		¥ 200÷
UTAH													e e e e e e e e e e e e e e e e e e e
VERMONT													4.6
VIRGINIA								1					(**** 1.* ·
WASHINGTON	3						1		4				* - 28 x
WASHINGTON D.C									2				127
WEST VIRGINIA													12 24 British
WISCONSIN			2				6		4				12
WYOMING~		[_			[
CANADA							1			1			±24t-
GERMANY									5				5 W
MEXICO										1			
MONTHEROTAL #	62	25 l		1841	.≱6t		269	783	G 97		\$7.3 \$7.50		TOTAL NOT NOT NOUNCLUDED

University of New Mexico DEPARTMENT OF EARTH AND PLANETARY SCIENCES HARDING PEGMATITE MINE College / University Visitors 1999

DATE :	Number OF Visitors	College / University
3/04/99	5	New Mexico Tech.
3/06/99	6	University of Minnesota
3/26/99	3	Univ. of NM, Dept. Exercise Science, Contract Archeology
4/30/99	17	Trinity University, Department of Geosciences
5/04/99	17	Iowa State University
5/15/99	16	Indiana University, Northwest
5/16/99	14	University of New Orleans
5/17/99	10	University of Florida, Department of Geology
5/18/99	13	Florida State University, Geology Department
5/21/99	24	University of North Carolina, Fieldcamp
5/22/99	4	Miami University, Geology Department
5/25/99	21	University of North Carolina
7/21/99	. 5	New Mexico Bureau of Mines, Socorro, NM
7/24/99	2	UNIVERSITY OF OKALAHOMA, NORMAN, OK
9/8/99	6	NEW MEXICO HIGHLANDS UNIVERSITY, LAS VEGAS, NM
9/22/99	11	BAYLOR UNIVERSITY DEPARTMENT OF GEOLOGY, WACO, TX
10/4/99	4	UNIVERSITY OF OKALAHOMA, NORMAN, OK
10/10/99	18	UNIVERSITY OF NEW MEXICO, E&PS MINERALOGY CLASS, ALBUQUERQUE, NM
10/23/99	8 ·	WEST TEXAS A&M, DEPT. LIFE, EARTH & ENVIRONMENTAL SCIENCE, CANYON, TX
11/6/99	8	NEW MEXICO STATE UNIVERSITY, DEPT. GEOLOGY, LAS CRUCES, NM
1999	212. 7	COLLEGE / UNIVERSITY VISITORS TOTAL

RECEIVED

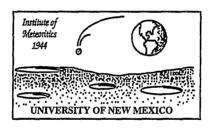
AUG 28 2000

COLLEGE OF ARTS & SCIENCES

The Annual Report of

THE INSTITUTE OF METEORITICS

JULY 1, 1999 THROUGH JUNE 30, 2000



James J. Papike, Director

Institute of Meteoritics
Department of Earth and Planetary Sciences
University of New Mexico
Albuquerque, NM 87131-1126, USA

TABLE OF CONTENTS

			r ag
INI	RO	DUCTION	1
INS	TIT	CUTE OF METEORITICS FACULTY AND STAFF	2
OR	GA]	NIZATIONAL CHART FISCAL YEAR 1999 – 2000	3
I.	RI	ESEARCH	4
	1.	Specific Projects	5
		a. Circumstellar and Interstellar Dust in Primitive Solar System Materials	5
		b. Chondritic Meteorites	6
		c. Microbeam Studies of the Martian Meteorites	6
		d. Lunar Studies	7
		e. Integrated SIMS/TIMS Studies of Martian Meteorites and Lunar Samples	8
		f. Planetary Biomarkers	8
		g. Space Science Education for New Mexico MESA Students	9
		h. Impact Crater Hydrothermal Systems	10
		i. Exploring the Solar System, a Research and Activity Based Course for Teachers	10
		j. Site Selection Studies, Parana Basin, Margaritifer Sinus Region of Mars	11
		k. Geomicrobiological Interactions of Microbial Communities in Cave Deep Subsurface Environments: A Novel Extreme Environment	12
		l. Impact Cratering, Volcanism, and Volatile Transport on Mars	12
	2.	Grants and Contracts	13
		Table 1. Expenditures on Grants and Contracts in Effect for FY 99/00	14
	3.	Papers Published in National and International Journals and Books	15
	4.	Abstracts of Papers Presented at Professional Meetings	18
	5,	Professional Travel by IOM Personnel	24

II.	FACILITIES	27
	1. Curation and Meteorite Museum	28
	2. Experimental Petrology Laboratory	28
	3. Electron Microprobe and Scanning Electron Microscope Laboratories	29
	4. The UNM/SNL Ion Microprobe	30
III.	TEACHING	32
	1. Courses Taught	33
	2. Student Committees	33
	Progress of Earth and Planetary Science Department Graduate Students Supported by IOM	34
IV.	DEPARTMENTAL AND UNIVERSITY ACTIVITIES	36
	Visitors to IOM	38
v.	PROFESSIONAL ACTIVITIES	40
VI.	EDUCATIONAL OUTREACH AND PUBLIC SERVICE	44
	1. Meteorite Museum	45
	2. Public Service	45
VII.	PUBLICITY	48

INTRODUCTION

The Institute of Meteoritics (IOM) founded in 1944, is one of the oldest institutions of its kind in the world. The Institute continues its role as a leading center in research relating to planetary materials and processes. Charter goals of the IOM are:

- 1. To carry out research in the detailed laboratory analysis of meteoritic and other planetary materials and in other fields of planetary sciences.
- To provide materials, facilities, and supervision for research by candidates for advanced degrees in planetary sciences. To offer instruction in areas as may be approved through the appropriate academic procedures and channels.
- 3. To promote the identification and acquisition of meteorites. To participate in exchange programs as may enhance the representative scope and scientific value of the Institute's collections of meteorites. To preserve and place on public exhibition both meteorites and related meteoritic materials and to make these materials available to scientists working in fields closely allied to meteoritics.

Research at the Institute of Meteoritics covers a wide range of problems, including studies of evolutionary processes on meteorite parent bodies (asteroids), the Moon, Mars, and Earth. Our research is aided by collaborations with investigators at other institutions. Our most important tools are microbeam analytical techniques, including electron microprobe (EMP), scanning electron microscope (SEM), transmission electron microscope (TEM), and ion microprobe (SIMS), plus thermal-ionization mass spectrometry (TIMS) and stable isotope measurements. State of the art facilities for all these techniques are available at UNM.

Teaching activities of the staff of IOM consist of both formal courses and informal meetings with graduate and undergraduate students. We emphasize the direction and supervision of student research and encourage presentation and publication of the results of this research at national and international levels. The Meteorite Museum plays an important role in our educational efforts, including organized programs for school groups with tours of the Museum and research laboratories.

INSTITUTE OF METEORITICS FACULTY AND STAFF

(July 1, 2000 – July 1, 2001)

Director, Institute of Meteoritics

Dr. James J. Papike, Regents' Professor of Earth and Planetary Sciences

Research Professors

Dr. Horton Newsom

Dr. Robert Reedy

Dr. Frans Rietmeijer

Dr. Charles Shearer

Senior Research Associates

Dr. Lars Borg

Dr. Rhian Jones

Research Associates

Michael Spilde

Support Personnel

Justin Hagerty, Laboratory Technician
Jim Karner, Laboratory Technician
Sarah Lentz, Administrative Assistant III
Yolanda Skotchdopole, Administrative Assistant I

Graduate Students

Jennifer Edmunson
Justin Hagerty
Christopher Herd
Jim Karner

Additions to Staff

Justin Hagerty, July 1, 2000 Dr. Robert Reedy, July 1, 2000 Yolanda Skotchdopole, July 7, 2000

Separations from Staff

Mary Marcilla, June 9, 2000

J. PAPIKE, DIRECTOR S. LENTZ, ADMIN: ASST. III Y. SKOTCHDOPOLE, ADMIN: ASST. I

FACILITIES/CURATION

CURATOR R. JONES

EXPERIMENTAL PETROLOGY LAB.
R. JONES, MANAGER

ION MICROPROBE FACILITY
C. SHEARER, MANAGER
J. HAGERTY, ASSISTANT

MICROPROBE/SEM LABS.

M. SPILDE, MANAGER
J. KARNER, ASSISTANT

PLANETARY MATERIALS TIMS OPERATIONS L. BORG, COORDINATOR

EDUCATIONAL OUTREACH
H. NEWSOM, COORDINATOR

HORABEEN

RESEARCH STAFF
DIRECTOR
J. PAPIKE
RESEARCH PROFESSORS
H. NEWSOM
R. REEDY
F. RIETMEIJER
C. SHEARER
SENIOR RESEARCH ASSOCIATES
L. BORG
R. JONES
RESEARCH ASSOCIATE
M. SPILDE

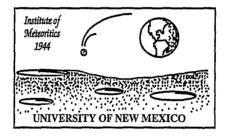
w

LAB TECH
J. HAGERTY
J. KARNER

GRADUATE STUDENTS
PHD
C. HERD
J. KARNER
M.S.
J. HAGERTY
J. EDMUNSON

SECTION I

RESEARCH



I. RESEARCH

Research activities of staff and students of the Institute of Meteoritics cover a wide range of topics, mostly aimed at understanding the origin and early history of our solar system and the evolution of the planets. More specifically, we have major research initiatives to investigate the igneous evolution of chondrite meteorites, martian meteorites, and the Moon, and research into an understanding of early solar system processes through the study of interplanetary dust particles (IDPs) and chondritic meteorites.

Our research during the report period has resulted in the publication of scientific articles in major national and international journals, as well as in the publication of abstracts of papers presented at national and international conferences. The extensive involvement of students in original research projects in the Institute of Meteoritics is particularly important for their education and advanced training.

We continue to be very successful in attracting research grants and contracts to the Institute of Meteoritics in support of the research activities of staff and students. Details are provided in Table I. Funding was provided by the National Aeronautics and Space Administration (NASA), and the National Science Foundation (NSF).

1. Specific Projects

a. Circumstellar and Interstellar Dust in Primitive Solar System Materials (Funded by NASA)

Interplanetary Dust Particles (IDPs) are routinely collected in the Earth's stratosphere between 17-19 km altitude using highflying NASA aircraft. These 2-40 micrometer sized objects include both chondritic aggregates and non-chondritic materials, such as iron-nickel sulfide and Mg, Fe-silicate particles, but both particle types are related to each other. They are the solid debris from asteroids and short-period comets. The unique chondritic aggregate IDPs, typically 10-15 micrometers in size, still show the original accretion texture acquired 4.56G years ago. The chemical and mineralogical properties of principal components (PCs) indicate that they are presolar dusts that accreted in the nebula and that today survive in comet nuclei. The ferromagnesiosilica PCs include two genetically distinct types that formed by aggregation and fusion of metastable eutectic dusts that condensed in the

outflows of AGB stars and in the solar nebula. Each component in aggregate IDPs shows a richness of nanometer-scale detail that is studied by microscope techniques. Experimental analog studies include condensed 'silicate' and 'carbon' dust analogs and serve as the starting point to unravel the complex and chaotic histories of individual IDPs. They thus define the nature of the solids and processes during solar nebula evolution and proto-planet modifications in the early solar system. The study of IDPs provides a unique window to the onset of mineralogical evolution in the solar system and an opportunity for fundamental research in petrology.

b. Chondritic Meteorites (Funded by NASA)

Our studies of chondritic meteorites emphasize petrologic studies of individual chondritic components, particularly chondrules and isolated grains. Our goals are to investigate the early history of the solar system by determining the nature of events that took place in the solar nebula, as well as on chondrite parent bodies after accretion. We include studies of primitive nebular material such as chondrules from carbonaceous chondrites, as well as a study of the nature of thermal metamorphism on chondrite parent bodies. Our studies emphasize microbeam techniques (EMP, SEM, TEM, and SIMS) that enable us to interpret the detailed petrography of complex objects. In addition, we collaborate with other laboratories to obtain isotopic data. This provides powerful insights into the chondrite record of early solar system events. As a complement to these petrologic studies, we also perform experiments that help to interpret mineralogical problems in chondrites and other planetary samples.

c. Microbeam Studies of the Martian Meteorites (Funded by NASA)

This study involves the analysis of spinel group minerals and olivine in the SNC (martian) group of meteorites with EMP, TEM, and SIMS techniques. The objective of the study is to gain insight into martian igneous processes, particularly with regards to oxygen fugacity, trace element distribution, and melt character. Complementary experimental work is being carried out at NASA's Johnson Space Center in Houston.

The primary focus of the research so far has been determining the oxygen fugacity of equilibration of the basaltic shergottites. Oxygen fugacity is

important because variations in oxygen fugacity affect the composition of the melt and coexisting phases, as well as the pressure and temperature of melting. Models for determining oxygen fugacity are based on mineral equilibria that commonly involve spinels. There are two such models applicable to the lithologies represented by the martian meteorites. The first involves spinel and ilmenite, and the distribution of Fe and Ti between them. The second involves spinel, olivine and pyroxene. EMP analysis is the primary means by which compositional information is obtained for these minerals for the purpose of determining oxygen fugacity. We are also using the independent technique of determining ferric iron content with TEM-EELS (electron energy loss spectroscopy).

d. Lunar Studies (Funded by NASA)

Our lunar studies focus upon the use of basaltic magmas to decipher lunar mantle processes. We are addressing several problems: 1) We are studying the melting of hybridized, ilmenite-bearing, mantle cumulates through a quantitative, high-pressure experimental approach. We are examining the relationships between depth of melting, degree of melting, liquidus phases, melt composition, and the trace element composition of the melt. 2) The lunar mantle is heterogeneous with regards to radiogenic W. One major question concerning the notion that the lunar magma ocean (LMO) is responsible for Hf/W fractionation on the Moon is the uncertainty regarding the partitioning of these elements into the phases involved in LMO crystallization. Our observations suggest that ilmenite and clinopyroxene are candidate phases that may account for the fractionation of Hf from W. 3) Determining the relative ratios of highly siderophile elements in planetary mantles may provide valuable information regarding core segregation, crustal evolution, and late accretionary processes. We are examining the Re-Os isotopic systematics of lunar orange and green glasses in order to constrain the Os isotopic evolution of deep lunar mantle reservoirs. 4) After the early anorthositic lunar crust formed and consolidated, it was intruded episodically by slightly younger magmas. One of the products of this younger magmatism is referred to as the Mg suite. Our studies focus upon defining the contrasting primitive and evolved magmatic chemical signatures in mineral phases in a wide range of pristine Mg suite rocks.

e. Integrated SIMS/TIMS Studies of Martian Meteorites and Lunar Samples (Funded by NASA)

The results of geochronological studies are sometimes ambiguous because many samples, such as martian meteorites and lunar highland rocks, have undergone impact metamorphism that may have disturbed their isotopic systematics. As a result, the meaning of ages determined on these samples is often uncertain. It is therefore important to assess the effects of shock metamorphism and secondary alteration on individual samples that have been analyzed for Rb-Sr, Sm-Nd, and U-Pb. We use SIMS, EMP, and thermalionization mass spectrometry (TIMS) in concert on identical mineral fractions of martian meteorites and lunar samples in order to assess the effects of impact metamorphism and secondary alteration on individual Rb-Sr, Sm-Nd, and U-Pb isochrons. From these analyses, we hope to better constrain the timing of volcanism on Mars and the formation of the earliest lunar crustal rocks.

f. Planetary Biomarkers (Funded by NASA)

Carbon, sulfur, hydrogen, and nitrogen isotopes may be used as biomarkers for both martian and terrestrial samples. We are undertaking a multidisciplinary program of assessing isotopic biomarkers in well-characterized terrestrial material. Critical to any study of martian materials will be the ability to determine isotopic heterogeneities at the sub-millimeter scale and to place these within a geological and biological context. We will exploit our world class stable isotope laboratory and SIMS facility to assess heterogeneities in the products of laboratory experiments and in natural materials. Low temperature, kinetic processes can cause extreme isotopic heterogeneities, and ion probe and laser microprobe techniques are invaluable for assessing their fine-scale variability. A less frequently addressed question is the degree to which heterogeneity occurs in rapidly-heated, high temperature chemical breakdown reactions. Can heterogeneities similar to those found in biological materials be produced under rapid, kinetic, high-T conditions? Can isotopic signatures attributed to biogenic activity be preserved in these types of environments? These questions will be addressed using a range of experimental approaches. Our plan of research entails studying natural materials and synthetic analogs in order to determine

characteristic isotopic signals of biomarkers and methods by which such signals may be mimicked by non-biologic processes.

g. Space Science Education for New Mexico MESA Students (A project funded by NASA's Pre-College Awards for Excellence in Mathematics, Science, Engineering and Technology (PACE/MSET) program)

The "Space Science Education for New Mexico MESA Students" project provides 4,800 under represented students and their teachers in NM MESA (New Mexico Math Engineering and Science Achievement) with access to space science resources at the University of New Mexico. NM MESA is a well-established and highly successful program for students of middle and high school age, which encourages them to pursue the pre-college track in math and science.

The project involves both classroom activities and a trip to UNM or access to UNM equipment. The interaction with the students occurs in two primary ways. The first is the Outreach and Laboratory Visit Program for classes that can come to UNM, and the second is the Space Technology Academy for students in outlying regions of the state. Last year we provided in depth programs for 1059 students, a substantial increase over the 500 students reached in the first year. The annual MESA Jamboree provided direct contact between our personnel and the entire MESA student membership of 4,800. In the Outreach and Laboratory Visit (OLV) program, UNM scientists and university students, preferably minority science or engineering students, present and lead inquiry-based activities at the students' schools to teach important concepts and research skills in space science. The classroom activities culminate with a trip to UNM. Teachers receive training during MESA meetings on activities and science content. They learn how to include additional activities and possible extensions in areas such as Math, which can be applied to their regular classes, as well as their MESA groups. In the Space Technology Academy, students in outlying portions of the state participate in activities such as meteorite sample identification. Parent involvement includes content based programs at the Fall open house meetings at individual schools, and involvement in the Space Technology Academy programs.

 Impact Crater Hydrothermal Systems (Funded by NASA - Planetary Geology and Geophysics Program)

This project involves the study of processes involving water and impact craters on Mars, using remote sensing data and terrestrial analogues. Hydrothermal systems are good locations to search for evidence of biotic or prebiotic chemistry. Hydrothermal systems may also be connected with the formation of the Martian soil, and the climate history of Mars. Lakes in large impact craters on Mars could have been associated with hydrothermal systems and heated by impact melt. Finally, impact craters may provide the most accessible samples of hydrothermal systems on Mars for robotic investigation and sample return. Hydrothermal processes on Mars could cause the enrichments of mobile elements in the Martian soil as measured by Viking and Pathfinder. Studies of terrestrial analogue craters can provide important insight and constraints into processes involving impact craters on Mars. Most of the well-studied terrestrial craters are in more siliceous rocks than generally expected on Mars, often with the complication of substantial sedimentary cover. To avoid these problems, we are studying the deposits at the Lonar Crater, India, which is the only large terrestrial crater formed in a basaltic terrain. The investigation of the Lonar Crater impact melts will provide information on the formation of a crater in a basaltic terrain analogous to Mars. The mineralogy and chemical transport processes at the crater will be investigated using well-established techniques, including SEM, EMP, and stable isotope studies. The mineralogy and chemistry of the iron-oxide minerals in the Lonar crater will also be studied in collaboration with Dr. Richard Morris of Johnson Space Center. The data from the Lonar Crater will be compared with data obtained by the Mars Global surveyor and Viking Spacecraft on Mars to better understand aqueous processes involving impact craters on Mars.

 Exploring the Solar System, a Research and Activity-Based Course for Teachers (Funded by the New Mexico Collaborative for Excellence in Teacher Preparation, an NSF supported project)

The course "Exploring the Solar System, a Research and Activity-Based Course for Teachers" was taught July 6, 1999 – July 30, 1999. The goals of the project were to provide planetary science content, and curriculum materials in the form of active learning activities that emphasize investigation

and inquiry. The instruction team included the principal instructor Dr. Horton Newsom, a teaching assistant Mr. Todd Burdalis, and Dr. Kathryn Powell from the College of Education provided oversight on selection and development of curriculum directed at teachers. During the course, at least 16 different activities or demonstrations were conducted, many involving cooperative learning. These activities ranged from an activity with Hula Hoops for understanding eclipses, to a gelatin volcano to understand the role of dikes, to a star party at the campus observatory for actually observing the planets. Evaluation of the success of the course involved pre and post surveys, as well as informal evaluation and interviews. The results of the post-course survey indicated that the emphasis on the use of manipulatives, hands-on demonstrations, and distribution of activities was strongly endorsed by the education students.

j. Site Selection Studies, Parana Basin, Margaritifer Sinus Region of Mars (Funded by NASA, SETI Institute)

This project represents the work on the completion of mapping of hydrothermally influenced impact craters near Parana Vallis, Margaritifer Sinus region of Mars, with Dr. Jack Farmer. We will provide information about the potential for hydrothermal activity involving impact craters in potential Mars Landing sites. Impact craters have the potential to be important sources of near-surface hydrothermal deposits that are key sites for the search for life on Mars. The most likely timeframe for looking for evidence of life on Mars is during the earliest Noachian period on Mars, dating back to the period of heavy bombardment prior to 3.5G years ago, when water was more abundant. During this time when small valley networks formed, surface erosion occurred at a rate 10 to 1,000 times greater than present. A warmer climate and a denser atmosphere is usually assumed for this time period. During this ancient period the formation of impact craters was a major source of heat for hydrothermal systems. In addition to impact melt, the central uplift provides a source of geothermal heat, and may represent the best location to obtain deep mantle samples. The combination of hydrothermal systems and impact crater lakes, where turbidite sedimentation can preserve evidence of life, will be an important environment for future exploration. These hydrothermal systems and lakes will be supplied by ground water that could carry in preexisting organisms from deep aquifers.

Thus, the impact craters could represent Petri dishes for the culturing and preservation of life on Mars.

 k. Geomicrobiological Interactions of Microbial Communities in Cave Deep Subsurface Environments: A Novel Extreme Environment (Funded by Life in Extreme Environments (LEXEN) Program of NSF)

Caves offer accessible subterranean environments in which to study the diversity of microbial life. These ecosystems are exposed to extreme environmental stresses and may be based on inorganic energy sources rather than sunlight. An excellent example of subterranean microbial life is found in Lechuguilla Cave (New Mexico), the deepest cave in the continental United Lechuguilla Cave, an immense, ancient cave in near pristine condition, contains sulfur, iron, and manganese deposits and extremely low nutrient environments harboring diverse microbial life. The carbonate wallrock and overlying corroded limestone provide an excellent model for studying how life has survived, adapted, and altered this rock environment. Preliminary evidence suggests that the diverse community of microorganisms inhabiting corrosion residues includes fungi and bacteria that live by using manganese and iron. As collaborators with Professor Clifford Dahm of the Biology Department, we are investigating the nature of the unusual microorganisms present, the means by which they adapt to their extreme environment, the energy sources that they use, and the overall level of biological activity of the communities. Because of the potential for subsurface life on other planets and possible chemical similarity to Lechuguilla Cave, our research also explores the relevance of cave communities to those that may exist elsewhere, including Mars.

I. Impact Cratering, Volcanism, and Volatile Transport on Mars (Funded by NASA, Jet Propulsion Laboratory).

This project will provide support for the further development of the Mars Oxidation Experiment and is being developed for further flight opportunities. Extensive work on volatile transport involving volcanic and impact crater processes suggests that the martian soil may be a sink for a large number of volatile elements, including trace metals of great health concern to future human exploration. On Mars, hydrothermal systems driven by heat from impacts and volcanism will concentrate volatile elements at the surface. In

contrast to the Earth, these enriched elements will not be transported to the oceans by extensive fluvial action and erosion. This project involves creating a model of the expected enrichments of minor elements in the Mars soil from impact and volcanic processes. The different components include chondritic material, fumarolic deposits, and mobile elements released by chemical alteration and transported into the martial surface. This approach will allow the use of the available Martian and terrestrial analog data to constrain the abundance of elements not directly measured.

2. Grants and Contracts

Table 1 documents that IOM was well funded by NASA and NSF during FY 99/00. Grant contract expenditures totaled \$566,700. IOM continues to enjoy healthy grant/contract support in these times of rigorous competition and limited budgets in the major funding agencies.

TABLE 1: EXP	ENDITURES ON GRANTS	AND CONTRACTS IN	EFFECT FOR FY 99/00
--------------	---------------------	------------------	---------------------

AGENCY	TITLE	P.I./CO. I's	\$ EXPENDED
NASA	Microbeam Studies of Planetary Materials. (MRA 97-282)	J. Papike/Borg, Jones, Shearer	219K
NASA	Petrology of Presolar Dusts and Alteration in Chondritic IDPS (NAGS-4441)	F. Rietmeijer	110K
NASA	Space Science Education for New Mexico Mesa Students (NAG9-1017)	H. Newsom	118K
NASA	Biomarkers in Astromaterials (NAG9-1111)	J. Papike	50K
NSF	Support of UNM/SNL Ion Microprobe Facility. (EAR 9506611)	J. Papike/Shearer	43.8K
NASA	Spinels as Recorders of Planetary Basalt Evolution: Martian Samples (NGT 9-31)	J. Papike/Herd	22K
NSF	Geomicrobiological Interactions of Microbial Communities in Deep Cave Subsurface Environments: A Novel Extreme Environment. (DEB-980906)	Dahm, Boston, Crossey Northrup, Spilde	2.8K
NASA	Martian Impact Crater Hydrothermal Systems-Clues from the Lonar Crater (NAG5-8804)	H. Newsom	1.1K
		TOTAL	566.7K

400

- 3. Papers Published in Peer Reviewed Journals and Books (1999 2000)
 (Members of IOM in bold print; an asterisk [*] used for student authors)
 - Borg, L.E., A.D. Brandon, M.A. Clynne, and R.J. Walker (2000) Re-Os Isotopic systematics of primitive lavas from the Lassen region of the Cascade arc, California. Earth and Planetary Science Letters, 177, 301-317.
 - Borg, L.E., J.N. Connelly, L.E. Nyquist, C.-Y. Shih, H. Wiesmann, and Y. Reese (1999) The age of the carbonates in martian meteorite ALH84001. *Science*, 268, 90-94.
 - Borg, L.E., M. Norman, L.E. Nyquist, D. Bogard, G.A. Snyder, L.A. Taylor, and M. Lindstrom (1999) Isotopic studies of ferroan anorthosite 62236: A young lunar crustal rock from a light rare-earth element-depleted source. *Geochimica et Cosmochimica Acta*, 63, 2679-2691.
 - Bowman*, L.E., J.J. Papike, and M.N. Spilde (1999) Diogenites as asteroidal cumulates: Insights from spinel chemistry. *American Mineralogist*, 84, 1020-1026.
 - Cabrol, N.A., E.A. Grin, H.E. Newsom, R. Landheim, and C.P. McKay (1999) Hydrogeologic evolution of Gale crater and its relevance to the exobiological exploration of Mars. *Icarus*, 139, 235-245.
 - Getty, S.R., D. Gutzler, Y. Asmerom, C.K. Shearer, and S.J. Free (1999) Chemical signals of epiphytic lichens in southwestern North America: Natural versus man-made sources for airborne particulates. *Atmospheric Environment*, 33, 5059-5104.
 - Hawkins, H.T., D.R. Spearing, D.K. Veirs, J.A. Danis, D.M. Smith, C.D. Tait, W.H. Runde, M.N. Spilde, and B.E. Scheetz (1999) Synthesis and characterization of Uranium (IV)-bearing members of the [NZP] structural family. Chemistry of Materials, 11(10), 2851-2857.
 - Jones, R.H., T. Lee, H.C. Connolly, Jr., S.G. Love, and H. Shang (2000) Formation of chondrules and CAIs: Theory versus observation. *Protostars and Planets IV*, (V.G. Mannings, A.P. Boss, and S.S. Russell, eds.) University of Arizona Press, 927-962.

- Jones, R.H., J.M. Saxton, I.C. Lyon, and G. Turner (2000) Oxygen isotopic compositions of chondrule olivine and isolated olivine grains in the CO3 chondrite, ALHA 77307. *Meteoritics and Planetary Science*, 849-857.
- Newsom, H.E., J.J. Hagerty*, and F. Goff (1999) Mixed hydrothermal fluids and the origin of the Martian soil. *Journal of Geophysical Research*, (*Planets*), 104, 8717-8728,1999.
- Nuth III, J.A., S.L. Hallenbeck, and F.J.M. Rietmeijer (2000) Laboratory studies of silicate smokes: Analog studies of circumstellar materials. *Journal of Geophysical Research*, 105(A5), 10,387-10,396.
- Nuth III, J.A., S.L. Hallenbeck, and F.J.M. Rietmeijer (1999) Interstellar and interplanetary grains. recent developments and new opportunities for experimental chemistry. In *Laboratory Astrophysics and Space Research* (P. Ehrenfreund, K. Krafft, H. Kochan, and V. Pirronello, eds.), Kluwer Academic Publications, Dordrecht, 143-182.
- Nuth III, J.A., F.J.M. Rietmeijer, S.L. Hallenbeck, P.A. Withey, and F. Ferguson (2000) Nucleation, growth, annealing and coagulation of refractory oxides and metals: Recent experimental progress and applications to astrophysical systems. In *Thermal Emission Spectroscopy and Analysis of Dust, Disks, and Regoliths* (M.L. Sitko, A.L. Sprague, and D.K. Lynch, eds.), Astronomical Society Pacific Conference Series, 196, 313-332.
- Nyquist, L.E., L.E. Borg, and C.-Y. Shih (1999) The shergottite age paradox and the relative probabilities for Martian meteorites of differing ages. *Journal of Geophysical Research*, 106, 31445-31455.
- Papike, J.J., G.W. Fowler, C.T. Adcock, and C.K. Shearer (1999) Systematics of Ni and Co in olivine from planetary melt systems: Lunar mare basalts. *American Mineralogist*, 84, 392-399.
- Papike, J.J., C.K. Shearer, M.N. Spilde, and J.M. Karner* (2000) Metamorphic diogenite GRO 95555: Mineral chemistry of orthopyroxene and spinel and comparisons to the diogenite suite. *Meteoritics & Planetary Science*, 35, 875-879.

- Rao, M.N., L.E. Borg, D.S. McKay and S.J. Wentworth (1999) Martian soil component in impact glasses in a Martian meteorite. Geophysical Research Letters, 26, 3265-3268.
- Rietmeijer, F.J.M. (1999) Non-stoichiometric Ca, Mg-pyroxenes: An occurrence in a flash-heated interplanetary dust particle. *American Mineralogist*, 84, 1883-1899.
- Rietmeijer, F.J.M., and J.M. Karner* (1999) Metastable eutectics in the Al₂O₃
 SiO₂ system explored by vapor phase condensation. *Journal of Physical Chemistry and Chemical Physics*, 110(9), 4554 to 4558.
- Rietmeijer, F.J.M., J.A. Nuth III, and J.M. Karner* (1999) Metastable eutectic gas to solid condensation in the FeO Fe₂O₃ SiO₂ system. *Journal of Physical Chemistry and Chemical Physics*, 1, 1511-1516.
- Rietmeijer, F.J.M., J.A. Nuth III, and J.M. Karner* (1999) Metastable eutectic condensation in a Mg-Fe-SiO-H₂-O₂ vapor: Analogs to circumstellar dust. *Astrophysical Journal*, 527, 395-404.
- **Rietmeijer, F.J.M.** (2000) What we can expect to learn from robotic exploration of a comet nucleus surface. *SPACE 2000*, Proceedings of the Conference of American Society of Civil Engineers, 695-702.
- Rietmeijer, F.J.M. J.M. Karner*, J.A. Nuth III, and P.J. Wasilewski (1999)

 Nanoscale phase equilibrium in a triggered lightning strike experiment.

 European Journal of Mineralogy, 11, 181-186.
- Rietmeijer, F.J.M. (1999) Interplanetary dust particles, micrometeorites, mesospheric metals, and meteoric dust. 37th American Institute Aeronautics Meeting & Exhibit, #99-0502, 12 p.
- Rietmeijer, F.J.M. (1999) Sodium tails of comets: Na/O and Na/Si abundances in interplanetary dust particles. *Astrophysical Journal*, 514, L125-L127.

- Rotundi A., F.J.M. Rietmeijer, J.R. Brucato, L. Colangeli, V. Menella, P. Palumbo and E. Bussoletti (2000) Refractory comet dust analogues by laser bombardment and arc discharge production: A reference frame for "dusty experiments" on-board ROSETTA. Planetary Space Science, 48(5), 371-384.
- Ruzicka, A., G.W. Fowler, G.A. Snyder, M. Prinz, J.J. Papike, and L.A. Taylor (1999) Petrogenesis of silicate inclusions in the Weekeroo Station IIE iron meteorite: Differentiation, remelting, and dynamic mixing. Geochimica et Cosmochimica Acta, 63, 2123-2143.
- Shearer, C.K., and J.J. Papike (1999) Magmatic evolution of the Moon. American Mineralogist, 84, 1469-1494.
- Shearer, C.K., L.A. Leshin, and C.T. Adcock (1999) Olivine in martian meteorite ALH84001: Evidence for a high-temperature origin and implications for signs of life. Meteoritics and Planetary Science, 34, 331-339.
- Sorge, C.*, H.E. Newsom, and J.J. Hagerty* (2000) Fun is not enough Attitudes of Hispanic middle school students toward science and scientists. *Hispanic Journal of Behavioral Sciences*, 22, 332-345.
- Zolensky, M.E., C. Pieters, B. Clark, and **J.J. Papike** (2000) Small is beautiful: The analysis of nanogram-sized astromaterials. *Meteoritics and Planetary Science*, 35, 9-29.
- Abstracts of Papers Presented at Professional Meetings July 1, 1999 to July
 1, 2000 (Members of IOM in bold print; student authors indicated with [*])
 - Borg, L.E., L.E. Nyquist, H. Wiesmann, Y. Reese, and J.J. Papike (2000) Sr-Nd isotopic systematics of the martian meteorite DaG476. *Lunar and Planetary Science Conference XXXI*, (CD-ROM #1036).
 - Borg, L.E., J.N. Connelly, L.E. Nyquist, and C.-Y. Shih (1999) Pb-Pb age of the carbonates in the Martian meteorite ALH84001, *Lunar and Planetary Science Conference XXXI*, (CD-ROM #1430).

the same

- Borg, L.E., L.E. Nyquist, C.-Y. Shih, H. Wiesmann, Y. Reese, and J.N. Connelly (1999) Rb-Sr formation age of ALH84001 carbonates. Conference on Martian Meteorites: Where Do We Stand and Where Are We Going? Contribution #956, p. 5.
- Boston, P.J., L. Kleina, D. Soroka, K. Lavoie, D. Northup and M.N. Spilde (1999) Cave microbes: Microbial mats lining hydrogen sulfide springs. Abstracts and Programs from the 4th International Symposium on Subsurface Microbiology, 36.
- Boston, P.J., D.E. Northup, M.N. Spilde, and L.D. Hose (1999) Terrestrial cave microbiota: Models of Martian subsurface biology. Proceedings from the 5th International Mars Science Conference.
- Boston, P.J., D.S. Soroka, L.G. Kleina, K.H. Lavoie, M.N. Spilde, D.E. Northup, and L.D. Hose (2000) A garden inside out: Microbial mats in springs, wall muds, and ceiling formations in a sulfur dominated cave, Cueva de Villa Luz, Tabasco, Mexico. 2000 Annual Meeting of the National Speleological Society, Programs and Abstracts.
- Boston, P.J., M.N. Spilde, and D.E. Northup (1999) It's alive! Models of Martian biomarkers derived from terrestrial cave microbiota. *Geological Society of America*, Abstracts with Programs, 31, A303.
- Dotson, K.E., R.T. Schelble,* M.N. Spilde, L.J. Crossey, and D.E. Northup (1999) Geochemistry and mineralogy of secondary mineral deposits, Lechuguilla and Spider Caves, Carlsbad Caverns National Park, NM: Biogeochemical processes in an extreme environment. Geological Society of America, Abstracts with Programs, 31, A154.
- Grew, E.S. and C.K. Shearer (1999) Beryllium and boron in the Napier complex, Enderby Land, East Antarctica. 8th International Symposium on Antarctic Earth Science, Abstracts with Programs.
- Hagerty,* J.J., H.E. Newsom, and M.N. Spilde (2000) Hydrothermal activity at the Lonar Lake Impact Structure: Implications for the formation of the martian soil, 31st Lunar and Planetary Science Conference, (CD-ROM #1686).

- Herd,* C.D.K., and J.J. Papike (1999) Implications for the petrogenesis of Martian Meteorite Dar Al Gani 476 from spinel, olivine and pyroxene compositions. Geological Society of America, Abstracts with Programs, v. 31, No. 7, p. A-44.
- Herd,* C.D.K., and J.J. Papike (1999) Canada's Potential Role in Martian Materials Research: Examples from Petrologic Studies of Martian Meteorites. Proceedings of the Second Canadian Space Exploration Workshop.
- Herd,* C.D.K., J.H. Jones, and J.J. Papike (2000) Experimental constraints on the Cr content, oxygen fugacity and petrogenesis of EETA 79001 Lithology A. Lunar and Planetary Science XXXI, (CD-ROM #1387).
- Herd,* C.D.K., C.K. Shearer, and J.J. Papike (2000) Systematics of Ni and Co in olivine from planetary melt systems: Martian basalts Dar al Gani 476 and EETA 79001. Lunar and Planetary Science XXXI, (CD-ROM #1390).
- Jolliff, B.L., L.P. Keller, G.A. McPherson, C.R. Neal, D. Papanastassiou, G. Ryder, C.K. Shearer, and J.J. Papike (2000) A balanced model for exploration of the terrestrial planets: Lessons from the lunar experience. Lunar and Planetary Science XXXI, (CD-ROM)
- Johnson, J.R., S.W. Ruff, J. Moersch, T. Roush, K. Horton, J. Bishop, N.A. Cabrol, C. Cockell, P. Gazis, H.E. Newsom, and C. Stoker (2000) Geological Characterization of Remote Field Sites Using Visible and Infrared Spectroscopy Results from the 1999 Marsokhod Field Test: Lunar and Planetary Science XXXI (CD-ROM #1370).
- Jones, R.H., and A.J. Schilk (2000) Chemistry and petrology of chondrules from the Mokoia CV chondrite. *Lunar and Planetary Science XXXI* (CD-ROM #1400).
- Klerner, S., R.H. Jones, H. Palme, and C.K. Shearer (2000) Trace elements and cathodoluminescence in refractory forsterites from Allende and Kaba. *Lunar and Planetary Science Conference XXXI* (CD-ROM #1689).

- Neal, C.R., B.L. Jolliff, J.J. Papike, and G. MacPherson (2000) Recommendations for preserving the integrity of samples collected on Mars and returned to Earth for analysis *Lunar and Planetary Science XXXI* (CD-ROM).
- Newsom, H.E., C.S. Sorge*, and J.J. Hagerty* (2000) Addressing the Misconceptions of Middle School Students About Becoming a Scientist or Engineer. Lunar and Planetary Science XXXI (CD-ROM #1515).
- Newsom, H.E., J.J. Hagerty* and I. Thorsos* (2000) Sampling fossil aqueous hydrothermal environments in large Martian impact craters Ist Annual Astrobiology Conference. Programs and Abstracts.
- Newsom, H.E., and I.E. Thorsos* (2000) Sampling Fossil Aqueous and Hydrothermal Environments in a Large Martian Impact Crater in the Isidis Rim (Libya Montes) Landing Zone. Lunar and Planetary Science XXXI, (CD-ROM #1519).
- Newsom, H.E., J.L. Bishop, C. Cockell, T. Roush, and J.R. Johnson (2000) The Search for Life on Mars in Surface Samples: Lessons from the 1999 Marsokhod Field Test. Lunar and Planetary Science XXXI, (CD-ROM #1931).
- Norman, M., L. Nyquist, D. Bogard, L.E. Borg, H. Wiesmann, D. Garrison, Y. Reese, C.-Y. Shih, and C. Schwandt (2000) Age and origin of highlands crust of the Moon: Isotopic and petrologic studies of a ferroan noritic anorthosite clast from Descartes breccia 67215. Lunar and Planetary Science XXXI, (CD-ROM #1552).
- Northup, D.E., M.N. Spilde, and P.J. Boston (1999) Microbial interactions with the limestone walls of Lechuguilla Cave, Carlsbad Caverns National Park, NM. 11th Bathurst Meeting, Journal of Conference Abstracts, v.4(2):951.
- Northup, D.E., M.N. Spilde, R.T. Schelble,* L.E. Bean, S.M. Barns, L. Mallory, P.J. Boston, L.J. Crossey, K.E. Dotson, and C.N. Dahm (2000) Microbial interactions in punk rock and corrosion residues in Lechuguilla Cave, Carlsbad Caverns National Park, New Mexico. 2000 Annual Meeting of the National Speleological Society, Programs and Abstracts.

\$ 300

- Northup, D.E., L.E. Bean, M.N. Spilde, P.J. Boston, S.M. Barns, C.A. Connolly, M.P. Skupski, D.O. Natvig, and C.N. Dahm (1999) Geomicrobiological investigations of secondary mineral deposits in the subsurface of Lechuguilla Cave, Carlsbad Caverns National Park, NM. 4th International Symposium on Subsurface Microbiology, Abstracts and Programs, 20.
- Nuth III, J.A., F.J.M. Rietmeijer, S.L. Hallenbeck, and P.A. Withey (1999) Nucleation, growth, annealing and coagulation of refractory oxides and metals: Recent experimental progress and applications to astrophysical systems. Thermal Emission Spectroscopy and Analysis of Dust, Disks, and Regoliths (A.L. Sprague, ed.), Lunar and Planetary Institute Publication, 969, 22-23.
- Papike, J.J., C.K. Shearer, M.N. Spilde, and J.M. Karner* (2000) Metamorphic diogenite GRO 95555: Mineral chemistry of orthopyroxene and spinel and comparisons to the diogenite suite. *Lunar and Planetary Science XXXI* (CD-ROM #1009).
- Pieters, C., A. Cheng, B. Clark, S. Murchie, J. Mustard, J.J. Papike, and M. Zolensky (2000) Aladdin: Exploration and sample return of the moons of Mars. . Lunar and Planetary Science XXXI (CD-ROM).
- **Rietmeijer, F.J.M.** (2000) Metastable eutectic behavior observed during dynamic pyrometamorphism in the matrix of an aggregate IDP. *Lunar and Planetary Science XXXI* (CD ROM #1051).
- Rietmeijer, F.J.M., and J.A. Nuth III (2000) Hierarchical accretion of nonchondritic circumstellar dusts and parent-body modification: The compositions of cometary nanometer to cm-sized meteors. *Leonid MAC-99 Workshop*, p. 22.
- Rietmeijer, F.J.M., and J.A. Nuth III (2000) Predictable metastable eutectic behavior to constrain the silicate dust in circumstellar atmospheres and interplanetary dust particles with constraints on comet dust analogs. *IAU Colloquium 181*, COSPAR colloquium 11, Dust in the solar system and other planetary systems, p. 64.

- Shearer, C.K., J.J. Papike, and L.R. Gaddis (1999) Mare basaltic magmatism. A view from the sample suite with and without a remote sensing perspective. *New Views of the Moon II*, Meeting Abstracts, 59-61.
- Shearer, C.K., J.J. Papike, and J.M. Karner* (2000) Trace element behavior of Fe-Ti oxides from high-Ti mare basalts. Lunar and Planetary Science Conference XXXI, (CD-ROM #1410).
- Shearer, C.K., and J.J. Papike (2000) Compositional dichotomy of the Mg suite. Origin and implications for the thermal and compositional structure of the lunar mantle. *Lunar and Planetary Science Conference XXXI* (CD-ROM #1405).
- Shearer, C.K., and K. Righter (2000) Tungsten partitioning in silicates. A key to understanding the early evolution of the Moon. *Lunar and Planetary Science Conference XXXI* (CD-ROM).
- Shearer, C.K., M.N. Rao, J.J. Papike, D.S. McKay, and C.S. Schwandt (2000)
 Trace element characteristics of lithology C in martian meteorite EET79001:
 Implications for the composition of martian soils. Astrobiology Science Conference, Meeting Abstracts, 248.
- Spilde, M.N., P.J. Boston, A.J. Brearley, D.E. Northup, and J.J. Papike (2000) Potential biosignatures in caves: Mn-Minerals in Lechuguilla and Spider Caves, NM. 2000 Annual Meeting of the National Speleological Society, Programs and Abstracts.
- Spilde, M.N., A.J. Brearley, and J.J. Papike (2000) Mn-minerals in Lechuguilla Cave, NM: Potential biomarkers. First Annual Astrobiology Conference, Meeting Abstracts, 274.
- Spilde, M.N., P.J. Boston, and D.E. Northup (1999) The hunt for red corrosion: A study of microbial rock corrosion in caves. *Microscopy and Microanalysis* 1999, Supplement 2, 536-537.
- **Spilde, M.N.**, P.J. Boston, and D.E. Northup (1999) Was it alive? Distinguishing biological from nonbiological mineralization and geological structures. Proceedings from the 5th International Mars Science Conference.

Spilde, M.N., C.K. Shearer, and Z. Sharp (1999) Biogenic corrosion of bedrock at Lechuguilla and Spider Caves, Carlsbad Caverns National Park: A stable isotope and trace element study. Geological Society of America, Abstracts with Programs, 31, A155.

5. Professional Travel by IQM Personnel

July 12-14, 1999. Review panel meeting for the NASA Non-Advocate Review Committee, Surface systems Thrust of the NASA Cross enterprise Technology Development Program, Oxnard, CA. H.E. Newsom

July 27-30, 1999. NASA, Space Science Advisory Committee (SScAC) meeting in Washington, DC. J.J. Papike.

August 1-5, 1999. Attended 57th Annual Meeting of the Microscopy Society of America/Microbeam Analysis Society, Portland, OR. M.N. Spilde.

August 22-27, 1999. Attended 4th International Symposium on Subsurface Microbiology, Vail, CO. M.N. Spilde.

September 21-24, 1999. Lunar Initiative Workshop in Flagstaff, AZ. J.J. Papike.

October 1-3, 1999. Field sampling in Spider Cave and presented talk at Carlsbad Caverns National Park. M.N. Spilde.

October 1-4, 1999. Mars 2001 Workshop at Lunar Planetary Institute, Houston. J.J. Papike, and H. Newsom.

October 5-8, 1999. NASA, Mars Exploration Program Advisory Group (MEPAG) Meeting at Jet Propulsion Laboratory, Pasadena, CA. J.J. Papike.

October 14-16, 1999. Meeting with FBI to prepare to testify as an expert witness for the prosecution on a bogus Moon rock sale attempt. J.J. Papike.

October 24-28, 1999. Attended 1999 Annual Meeting of the Geological Society of America, Denver, CO. M.N. Spilde, and C. Herd.

October 28-29, 1999. Attended the Second Annual Canadian Space Exploration Workshop, University of Calgary, Calgary, Alberta, Canada. C.D.K. Herd.

October 30, 1999. Presented a paper "Constraints on the nature of common presolar dust based on observations of collected cosmic dust and vapor condensation experiments" at the 15th Annual New Mexico Local Symposium, the National Radio Astronomy Observatory, Socorro, NM. F.J.M Rietmeijer.

November 1-4, 1999. NASA, Office of Space Science Advanced Planning Meeting in Galveston, Texas. J.J. Papike.

November 10-12 1999. Presided as Chair of the NASA/CAPTEM Meeting at Lunar Planetary Institute, Houston, Texas. J.J. Papike.

November 26-28, 1999. Field sampling in Barrancas Cave, Guadalupe Mountains, New Mexico. M.N. Spilde.

January 10-12, 2000. Mars Exploration Program Advisory Group (MEPAG) meeting at Jet Propulsion Laboratory in Pasadena, CA. J.J. Papike

January 12-16, 2000. Field work in Lechuguilla Cave, Carlsbad Caverns National Park. M.N. Spilde.

February 21-24, 2000. Mars Exploration Program Advisory Group (MEPAG) meeting at Jet Propulsion Laboratories in Pasadena, CA. J.J. Papike.

February 28 – March 2, 2000. Space Science Advisory Committee (SScAC) meeting in Washington DC. J.J. Papike

March 3-5, 2000. Field sampling in several caves, Guadalupe Mountains, New Mexico. M.N. Spilde.

March 11-18, 2000. Attended the 31st Lunar and Planetary Science Conference in Houston, TX. J.J. Papike, F.J.M. Rietmeijer, CK. Shearer, R.H. Jones, C.D.K. Herd, and H.E. Newsom.

March 17-19, 2000. Attended the CAPTEM meeting at the Lunar and Planetary Institute in Houston, TX. C.K. Shearer.

March 18-30, 2000. Use of the experimental petrology laboratory at Johnson Space Center with John Jones. C.D.K. Herd.

April 2-5, 2000. Attended the 1st Astrobiology Science Conference in Moffett Field, CA. C.K. Shearer, and M.N. Spilde.

April 7, 2000. Attended the New Mexico Geological Society Spring Meeting. C.D.K. Herd.

April 10-14, 2000. Attended the COSPAR II, IAU Colloquium #181 "Dust in the solar system and other Planetary Systems", Canterbury, United Kingdom. F.J.M. Rietmeijer.

April 14-16, 2000. Field sampling at Barrancas and Spider Caves and presented talk at Carlsbad Caverns National Park. M.N. Spilde.

April 16-19, 2000. Member of the Scientific Organizing Committee and presenter of an invited lecture at the Leonid 1999-MAC Workshop, University of Tel Aviv (Israel). F.J.M. Rietmeijer.

May 3-5, 2000. Attended the Lunar and Planetary Institute Council. C.K. Shearer.

May 21-23, 2000. Field sampling in Spider Cave, Caverns National Park. M.N. Spilde.

May 25-26, 2000. Mars Briefing at NASA Johnson Space Center in Houston, TX. J.J. Papike.

June 6, 2000. Use of the FEG-TEM for EELS at Arizona State University with L. Garvie. C.D.K. Herd.

June 25-30, 2000. Attended the Annual Meeting of the National Speleological Society, Elkins, WV. M.N. Spilde

SECTION II

FACILITIES



F. .

II. FACILITIES

1. Curation and Meteorite Museum

As in previous years, the Meteorite Museum has been an important educational and recreational attraction on campus and has been visited by many school groups and tourists. Public interest in the museum and meteorites received considerable stimulation as a result of the announcement in August 1996, of evidence for putative life on Mars and this high level of interest continues. Local interest in meteorites also greatly increased following the fall of the Portales Valley meteorite on June 13, 1998, in Eastern New Mexico. The number of visitors to the museum increased as a result. Our faculty, staff, and students conducted tours for elementary and high schools and other interest groups. The continuing popularity of the Museum and our tours emphasizes the important educational role of this facility for the local community.

The Institute's collection has continued to be a very important resource for researchers worldwide, and we have been quite active loaning and providing samples to a number of scientists. In addition, the research agenda and teaching activity within the Institute continues to make extensive use of samples from the collection.

During 1999-2000, the Institute was fortunate to obtain samples of several new meteorites that were not previously represented in the Institute's collection. Several of these samples have been purchased with Institute funds and public donations to the museum. Others have been obtained through exchanges. The Institute's collection now contains samples of approximately 580 meteorite falls and finds from around the world.

2. Experimental Petrology Laboratory

The experimental petrology laboratory includes two vertical muffle tube high temperature furnaces: a Deltech furnace and an Astro furnace. Both have gasmixing capabilities and programmable temperature control, and are operational up to 1600°C under a wide range of oxygen fugacities. Several different types of experiments are being conducted, including 1) an investigation of pyroxene microstructures formed at different controlled cooling rates, and during various annealing conditions, 2) measurement of diffusion coefficients, 3) a kinetic study

of olivine reduction reactions and 4) a study of partial melting of an ordinary chondrite.

3. Electron Microprobe and Scanning Electron Microscope Laboratories

Our JEOL 5800LV scanning electron microscope (SEM) and the JEOL 733 electron microprobe lab provide analytical and imaging services for Institute, Departmental, University and other clients external to UNM. The SEM lab in particular enjoys heavy use, although the aging microprobe continues to provide quality analytical results. In addition to training and assisting users on the two instruments, lab personnel also provide analytical service for academic and non-academic clients on an hourly basis.

IOM personnel provided analytical services for a number of academic and non-academic clients in 1999-2000. Analysis and other work was performed by J. Karner and M.N. Spilde for the following internal academic clients:

- U. Bhimavarapu, Center for Microengineered Materials (microprobe)
- C. Braunbarth, Chemistry & Nuclear Engineering Dept. (SEM & microprobe)
- L. Crossey, Department of Earth & Planetary Science (SEM)
- H. Fan, Chemistry & Nuclear Engineering Department (SEM)
- R. Garza-Molina, Department of Earth & Planetary Science (SEM)
- J. Husler, Department of Earth & Planetary Science (SEM)
- K. Kim, Mechanical Engineering Department (SEM)
- V. King, Anthropology Department (SEM)
- B. Kues, Department of Earth & Planetary Science (SEM)
- R. Lohman, Chemistry & Nuclear Engineering Dept. (SEM & microprobe)
- T. Lowery, Biology Department (SEM)
- J. Luke, NM Engineering Research Institute (SEM)
- T.D. McCarson, Department of Physics & Astronomy (SEM & microprobe)
- H. Newsom, Institute of Meteoritics (SEM)
- J. Pederson, Department of Earth & Planetary Science (SEM)
- N. Olsen, Anthropology Department (SEM)
- Z. Sharp, Department of Earth & Planetary Science (SEM)
- G. Smith, Department of Earth & Planetary Science (SEM)
- J. Zhang, Chemistry & Nuclear Engineering Dept. (SEM & microprobe)
- H. Xu, Department of Earth & Planetary Science (SEM)

Analysis were conducted for the following external academic clients, commercial clients and government agencies:

Cronkite-Ward (for Discovery TV Channel), Washington, DC (SEM)
Environmental Robotics, Albuquerque, NM (SEM)
Innovative Technology Solutions Corp., Albuquerque, NM (SEM)
Los Alamos National Laboratory (SEM & microprobe)
Public Broadcasting Service, Nova Program (SEM)
QM Technologies, Albuquerque, NM (SEM)
Sandia National Laboratory (SEM)
SiNaF, Inc., Albuquerque, NM (SEM)
Solv-Ex, Inc., Albuquerque, NM (SEM)
Sumner Associates, Albuquerque, NM (SEM)
Superior Micropowders, Albuquerque, NM (SEM)
TPL Inc., Albuquerque, NM (SEM & microprobe)
University of Memphis (microprobe)
University of North Dakota (SEM)
Western Illinois University (SEM)

The microprobe currently has thirteen Departmental and IOM users. The SEM has twenty-five users from UNM, NM Tech, Sandia National Lab, NM Museum of Science and Natural History, along with a number of trained commercial users. Seven new users were trained on the microprobe and ten on the SEM this year.

In addition to providing analytical services to the community and training for graduate students and faculty/staff users, the labs are also involved in educational classes and public outreach programs. Presentations of general science interest were given to middle and high school classes and other groups. Throughout the year, we hosted ten different school groups, most of which were part of the MESA Program. In addition, we also hosted a UNM class, and Anthropology 570 (Ceramic Analysis Class), for lectures and demonstrations.

4. The UNM/SNL Ion Microprobe

A CAMECA IMS 4f Secondary Ion Mass Spectrometer (SIMS), originally purchased by Sandia National Laboratories (SNL) in 1989, is located in the Advanced Materials Laboratory on the UNM South Campus. This instrument is used primarily for trace level (ppb range) chemical analyses on small (<30

A. 2. 4

micrometers) areas. In addition, it is also used for determining the isotopic signatures of small domains within geochemically significant specimens. This machine is also used for determining high resolution (< 10 micrometers) chemical depth profiles within geological and engineered materials. This instrument is jointly operated and managed by IOM and SNL Department 1823. The IOM operator is Charles Shearer.

Since mid-1993 the Facility has been funded by the National Science Foundation as an external user facility (Facilities and Instrumentation Program). A request for an extension was submitted to NSF in December 1996 (PIs: Papike and Shearer). This application was successful and the current arrangement is funded through July 2000.

NSF-NASA Users of the Facility: 1 July 1999 - 30 June 2000

Brearley, Adrian, UNM Dyer, M. Darby, Mount Holyoke College Grew, Ed, University of Maine Guidotti, Charles, University of Maine Heikoop, Jeff, Los Alamos National Lab Hickmont, Don, Los Alamos National Lab Jones, Rhian, UNM McKay, D., JSC McKay, Gordon, Johnson Space Center Nielsen, Roger, Oregon State Rao, M.N., JSC Righter, K., University of Arizona Schwandt, Craig, Johnson Space Center Selverstone, Jane, UNM Sours-Page, Rachel, Oregon State Spilde, Mike, UNM Taylor, Larry, University of Tennessee

SECTION III

TEACHING



III. TEACHING

1. Courses Taught

Summer 1999

EPS 365 "Exploring the Solar System", 55 students, taught by H.E. Newsom.

Fall 1999

EPS 465/565 "Mars Evolution", taught by J.J. Papike. Co-taught by L.E. Borg, R.H. Jones, H.E. Newsom, and C.K. Shearer.

EPS 519L "Selected Topics in Geochemistry", one lecture, R.H. Jones.

EPS 402, "Environmental Mineralogy" taught by F.J.M. Rietmeijer (Guest Lectures).

EPS 518, "Electron Microprobe Analysis and Scanning Electron Microscopy" cotaught by Adrian Brearley, and M.N. Spilde, R.H. Jones gave one lecture.

Spring 2000

EPS 365 "Exploring the Solar System", taught by J.J. Papike. Co-taught by L.E. Borg, R.H. Jones, H.E. Newsom, F.J.M. Rietmeijer, and C.K. Shearer.

ANTH 570 "Ceramic Analysis Class" guest lecture and SEM/microprobe demonstration on March 28, 2000. M.N. Spilde

2. Student Committees

Graduate Student Advisement

Student	Committee	10M Committee Members
Justin Hagerty	M.S.	J.J. Papike (Academic Advisor)
		H.E. Newsom (Research Advisor)

Christopher Herd Ph.D.

J.J. Papike (Advisor)

C.K. Shearer (Committee)

Jim Karner

Ph.D.

J.J. Papike (Advisor)

C.K. Shearer (Committee)

Ivan Thorsos

Ph.D.

H.E. Newsom (Research Advisor)

Undergraduate Student Advisement

Student

IOM Advisor

Rae Carey

R.H. Jones

Cindy Gallagher

H.E. Newsom

Jennifer Kelly

H.E. Newsom

Rachel Shelble

M.N. Spilde

Sharon Sparks

H.E. Newsom

3. <u>Progress of Earth and Planetary Sciences Department Graduate Students Supported by IOM</u>

<u>Justin Hagerty</u> completed the second year of his Master's degree program and intends to graduate in December 2000. The focus of his research is to use the Lonar Lake impact structure in Maharashtra, India as an analogue for similar craters on the surface of Mars. This work will provide information concerning hydrothermal alteration products and the formation of the Martian soil. Justin also worked in conjunction with Dr. Horton Newsom to create and provide educational outreach activities for middle school students.

Justin attended the 31st Lunar and Planetary Science conference in Houston, Texas where he gave an oral presentation titled, "Hydrothermal activity at the Lonar Lake impact structure: Implications for the formation of the Martian soil." He also presented a poster titled "Addressing the misconceptions of middle school students about becoming a scientist or engineer."

<u>Chris Herd</u> is actively pursuing his Ph.D, and expects to graduate in the spring of 2001. He has completed the first section of his dissertation, focusing on the oxygen fugacity of the martian basalts, and has submitted the results to American Mineralogist for publication. Ion Probe work on Ni and Co in martian olivines continues, with initial results presented at the Lunar and Planetary Science Conference in Houston in March. Experiments with Dr. John Jones at Johnson Space Center continued after the March meeting, with results expected to produce a paper in the near future. Development of spinel standards for Ion Probe analysis is in progress.

A poster presentation titled, "Systematics of Ni and Co in olivine from planetary melt systems: martian basalts Dar al Gani 476 and EETA 79001" was given at the 31st Lunar and Planetary Science Conference.

An oral presentation was given at the Geological Society of America Annual Meeting titled, "Implications for the petrogenesis of martian meteorite Dar al Gani 476 from spinel, olivine and pyroxene compositions".

An oral presentation was given at the 2nd Canadian Space Exploration Workshop titled "Canada's Potential Role in Martian Materials Research: Examples from Petrologic Studies of Martian Meteorites".

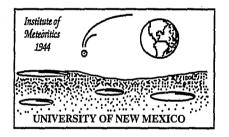
An oral presentation was given at the 31st Lunar and Planetary Science Conference titled, "Experimental constraints on the Cr content, oxygen fugacity and petrogenesis of EETA 79001 Lithology A."

Jim Karner is currently working on his dissertation while working part time as the laboratory technician in the Microprobe and SEM labs. His dissertation focuses on the major, minor, and trace element chemistry of silicate minerals in basalts in a comparative planetology study. Jim was recently awarded a New Mexico Space Grant Consortium fellowship that will help fund his research.

Jim also volunteers his time to a couple of the Institute's public outreach activities. He works with Dr. Horton Newsom and Justin Hagerty in designing and implementing space-based inquiry activities for middle school students involved in the MESA program. Jim also assists Dr. Rhian Jones in analyzing and identifying suspect meteorite samples as a public service to anyone who brings or sends their samples in.

SECTION IV

DEPARTMENTAL AND UNIVERSITY ACTIVITIES



IV. DEPARTMENTAL AND UNIVERSITY ACTIVITIES

R.H. Jones

Manager of Experimental Petrology Laboratory

Curator of Meteorite Collection

H.E. Newsom

Member, New Mexico Space Grant Faculty Advisory Board

Educational Outreach Coordinator and Director of TOPPS (Training and Outreach Programs in Planetary Science), for the Institute of Meteoritics

Research Scientist Representative to Earth and Planetary Science Faculty Meetings, Fall, 1999

Graduate Committee Member for the following *College of Education* Ph.D. graduate students: Bill Robertson and Carmen Sorge.

October 29, 1999, Presented two invited talks in the Department of Physics and Astronomy, University of New Mexico. The talks were entitled "Hot springs on Mars? Recent work on aqueous environments suitable for the origin of life on Mars, and aspects related to the origin of the Martian soil", and "University based educational outreach programs, what is our role?"

J.J. Papike

Director of the Institute of Meteoritics

Member of Earth and Planetary Sciences Facilities Committee

Chair, Earth and Planetary Science Long Range Planning Committee

F.J.M. Rietmeijer

December 10, 1999 "Green Chili Seminar" speaker, presented a talk "Is there something we should know about comets Halley, Hale-Bopp, and LINEAR and the Leonid meteors?"

C.K. Shearer

Manager, SIMS Laboratory

Member of Earth & Planetary Sciences Facilities Committee

M.N. Spilde

Manager of the Electron Microprobe and Scanning Electron Microscope Labs

Served on Department of Earth & Planetary Sciences Computer Committee

Visitors to IOM

August 5, 1999. Scott Messenger visited the Institute of Meteoritics.

September 15, 1999. Bruno Giletti visited the Institute of Meteoritics.

September 29, 1999 – December 24, 1999. Susanne Klerner, PhD student, University of Köln, Germany. Visited Rhian Jones to collaborate on chondrite research.

October 11-13, 1999. Professor Ulf von Zahn, Director of the Leibnitz-Institute of Atmospheric Physics in Kuehlungsborn, Germany presented a talk entitled "Studies of the densities of Fe, Ca, and K atoms in Meteor trails by ground-based LIDARS".

October 12, 1999. Dr. Ed Murad, Space Hazard Branch, Air Force Research Laboratory, Hanscom AFB, Massachusetts.

October 12, 1999. Dr. Roger Wiens, Los Alamos National Laboratory presented a talk and met with IOM personnel.

October 27-30, 1999. Professor Janusz Janeczek, Faculty of Earth Sciences, The Silesian University, Katowice, Poland, presented a talk entitled "Natural Fission Reactors at Oklo two billion years later — What we have learned about their Mineralogy and Geochemistry".

November 9, 1999. Michael Henderson of the University of Manchester, UK.

November 21-24, 1999. Dr. Leslie Melim of Western Illinois University, collaborated with M.N. Spilde on geomicrobiological research on the SEM.

December 2-3, 1999. Dr. Alan Boss of the Carnegie Institute of Washington, presented a joint talk with the Department of Physics and Astronomy and met with IOM personnel.

February 14, 2000. Richard Herd of Canadian Geological Survey.

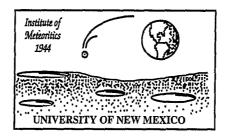
March 2, 2000. Dr. Nicolaus Hanowski, Earth and Planetary Scientist, German Aerospace Center (DLR), Germany.

April 21, 2000. Robert Reedy of Los Alamos National Laboratory.

May 5, 2000. Jamie Gilmour of the University of Manchester. Visited Rhian Jones to discuss chondrite research.

SECTION V

PROFESSIONAL ACTIVITIES



V. PROFESSIONAL ACTIVITIES

In addition to the activities listed below, members of IOM reviewed numerous manuscripts for international journals and proposals submitted to federal funding agencies.

R.H. Jones

Wrote an article entitled "Meteorites" for the *Encyclopedia of Physical Science* and *Technology*, Third Edition. Academic Press. In press, 2000.

H.E. Newsom

Associate Editor, *Geochimica et Cosmochimica Acta*, Journal of the Geochemical Society and the Meteoritical Society.

Review panel member, NASA Non-Advocate Review Committee, Surface Systems Thrust of the NASA Cross Enterprise Technology Development Program.

Review panel member, NASA Office of Space Sciences Education and Public Outreach Program, Spring 2000.

Scientific team member for the 1999 Marsokhod Rover test, Ames Research Center.

Spring 2000, Audited Civil Engineering 551-011 Geochemistry of Mine Waste Management.

Spring 2000, Audited Earth and Planetary Science 505, Stable Isotope Geochemistry.

May 16, 2000, Presented a talk at the New Mexico Museum of Natural History "Where to look for life on Mars".

J.J. Papike

Member, NASA Mars Expeditions Strategy Group (MESG) 1997-1999.

Chair, NASA Curation and Analysis Planning Team for Extraterrestrial Materials (CAPTEM) 1997-1999.

NASA Mars Program Architecture Study Team for the Next Decade (2001-2010) 1998 ~ 1999.

NASA Mars Sample Return Architecture Study Team for 2001-2005 Missions 1998 - 1999.

Member, NASA Lunar Data Analysis Review Panel (LDARP) 1998-1999.

Member, NASA Mars 2001 Site Selection Committee 1998-1999.

Member, NASA Cosmochemistry, Management and Operations Working Group (MOWG) 1997 – 2000.

Member NASA/JSC, Astromaterials Working Group (AWG) Reports to Center Director 1998 – 2001.

Member, NASA Mars Exploration Architecture Replacing Peer Review Group 1999-2000.

Received Outstanding Achievement Award from the University of Minnesota, 1999.

Member NASA Space Science Advisory Committee (SScAC) 1999 – 2002.

F.J.M. Rietmeijer

Panel Member, NASA Johnson Space Center Cosmic Dust Working Group, 2000.

Panel Member, 31st Lunar and Planetary Science Conference Program Committee, 2000.

English Language Volunteer Editor for the American Geophysical Union.

Fire in the Sky: The 1999 Leonid Multi-instrument Aircraft Campaign (MAC). *Meteoritics & Planetary Science*, 35, 647 (2000).

C.K. Shearer

USRA member of the review committee for the Lunar and Planetary Institute.

Organizer for AGU theme session, "Peter Robinson Symposium" and MSA Associate Editor.

Convener and organizer for Moon II Workshop held in Flagstaff, Arizona, September, 1999.

Convener and organizer for Moon III Workshop to be held in Houston, Texas, October, 2000.

Member, NASA Curation and Analysis Planning Team for Extraterrestrial Materials (CAPTEM) 2000.

Member, NASA Cosmochemistry Review Panel (CCRP) 2000.

Mike Spilde

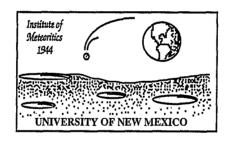
Served as President of the New Mexico Microbeam Users Group.

SECTION VI

EDUCATIONAL OUTREACH

AND

PUBLIC SERVICE



VI. EDUCATIONAL OUTREACH AND PUBLIC SERVICE

1. Meteorite Museum

The Meteorite Museum is the most important focus of the Institute of Meteoritics' educational outreach. Several thousand people of all ages visit the Museum each year and many school parties visit the Museum to enhance scientific projects in Earth Sciences and Solar Systems studies. IOM personnel commonly volunteer to give guided tours of the Museum and laboratories to groups of visiting students, from preschool age to senior citizens.

Several members of IOM have visited schools in the area to give talks on various aspects of planetary sciences. IOM had a meteorite exhibit at the Albuquerque Gem and Mineral Club Show March 23-26, 2000. We also participated in Astronomy Day held at Coronado Center on April 29, 2000, and the exhibit generated considerable interest. In addition to the public education provided by the Museum, we are routinely consulted by members of the public to help identify suspect meteorites and to provide information on meteorites and associated phenomena. During the period of this report, we examined over 200 samples, five of which have proved to be meteorites. We have met and corresponded with numerous people from all over the world in providing this service.

2. Public Service

J. Hagerty

Coordinated and conducted tours of SEM laboratory and meteorite museum.

Traveled to local middle schools (Albuquerque, Socorro, Belen) to conduct inquiry-based outreach activities.

Represented the Institute of Meteoritics at the MESA Jamboree.

C. Herd

Assisted with Astronomy Day activities at Coronado Mall, April 29, 2000.

R.H. Jones

Coordinated and conducted tours of the Meteorite Museum for visiting schools, UNM students, as well as other interested groups.

Identified numerous suspect meteorites received in the mail from members of the public and answered telephone and e-mail queries. Also, met with people who personally brought in samples for examination.

Set up and coordinated the IOM meteorite exhibit at Astronomy Day, Coronado Mall on April 29, 2000.

Worked with the Lodestar Astronomy Center at the NM Museum of Natural History and Science to obtain a lunar rock sample for exhibition. Also provided a martian meteorite sample from the IOM collection for display.

Set up a meteorite exhibit at the Albuquerque Gem and Mineral Club show, March 23-26, 2000,

Jim Karner

Identified numerous suspect meteorites received in the mail from members of the public and answered telephone and e-mail queries. Also, met with people who personally brought in samples for examination.

Assisted in developing and performing educational outreach activities for the MESA program, a science and math initiative for middle school students.

H.E. Newsom

Educational Outreach Coordinator, Institute of Meteoritics.

Developed educational outreach programs for the Institute of Meteoritics, funded by NASA (see description of funded programs under "Research").

Assisted with Astronomy day activities at Coronado Mall, April 29, 2000.

Assistant Scoutmaster, Space Sciences and Astronomy Merit Badge Advisor, Boy Scout Troop 119, Albuquerque, NM.

Met with numerous members of the public who brought in suspect meteorites.

J.J. Papike

Numerous discussions with the media concerning planetary issues.

F.J.M. Rietmeijer

"Astronomy Day in the Mall" a UNM initiative, 2000.

Science Night exhibit for the E.G. Ross Elementary School, Albuquerque, NM, December 1, 1999.

C.K. Shearer

Conducted tours of ICP-MS and SIMS labs.

M.N. Spilde

Assisted two film crews with on-site filming of the SEM and provided SEM images for several publications and TV programs.

Presented a program for Cave Resources Office at Carlsbad Caverns National Park (co-presented with Dr. Penny Boston and Diana Northup), October 2, 1999.

Presented a public talk at Carlsbad Caverns National Park: "The search for life on other planets, right here at Carlsbad Caverns," as part of the Park Week Program, a series of public lectures presented by the National Park Service, April 16, 2000.

Served on Cave Conservation Panel at the National Speleological Society 2000 Meeting, Elkins, WV, June 26.

Presented a talk to state and national cave resource managers: "Geologic and mineralogic significance of caves" at the National Speleological Society 2000 Meeting, Elkins, WV, June 28.

41 x 6

SECTION VII

PUBLICITY



VII. PUBLICITY

1. Departmental Activities

During the year, IOM has seen a continued increase in the number of inquiries concerning suspect meteorites, as well as general information concerning the composition of meteorites, where to search for meteorites, etc. This in turn has created media attention toward our department. Our staff participates and cooperates with the various newspapers, periodicals, radio and television requests to the best of our ability and resources.

Rhian Jones

September 27, 1999. Interviewed by Channel 4 News concerning possible fireball in Colorado.

March 1, 2000. Interviewed by Bill Wood, Channel 13, in Meteorite Museum.

Horton Newsom

Discussed background science for different topics with reporters from the BBC, and with Science Reporter John Fleck of the Albuquerque Journal.

F.J.M. Rietmeijer

The LINEAR meteor shower, CBS Radio Broadcast interview, November 11, 1999.

M.N. Spilde

Appeared in the January 2000 issue of the National Geographic Magazine in an article entitled: "Life Beyond Earth."

Filmed by PBS TV film crew as part of a NOVA program on cave research, August 20, 1999. The program is expected to air in 2001.

Filmed by Cronkite-Ward independent film crew as part of a Discovery Channel program on caves, October 5, 1999. Program will be aired in July 2000.

Scanning electron micrograph appeared on the cover of the Journal of Cave and Karst Studies, vol 62, April 2000.

Interviewed by Houston Chronicle for an article in the Sunday Special "Texas" Section on cave research. Will be published in July 2000.

Subject of article in High Country Herald (South Dakota) about cave research, February 2, 2000.

ANNUAL REPORT

Department of Economics University of New Mexico

July 1, 1999 – June 30, 2000

Richard Santos Chair

THE ANNUAL REPORT OF THE DEPARTMENT OF ECONOMICS

July 1, 1999 – June 30, 2000 Richard Santos, Chair

1. Significant Developments During the 1999-2000 Academic Year

Received funding grant from NSF to upgrade computer lab. Acquired 21 workstations, experimenter's station, and server. Other items for purchase consideration include projector and screen.

Professor Donald V. Coes joined the Economics Faculty, January 2000. His academic line was transferred from the Anderson School of Management to the Economics Department. His specialties are macroeconomics and international, with an emphasis on Latin American Economics.

David S. Brookshire completed his term as Department Chair, effective July 2000. Richard Santos will be the new Department Chair, effective August 2000.

2. Significant Plans and Recommendations for the Near Future

Graduate Program Review scheduled for Fall 2000. Major effort this summer to prepare for review including creation of self-study.

3. Publications

Twelve of the department faculty had 15 journal articles in the 1999 calendar year.

Deborah J. Anderson, D. D. Goldhaber, D. J. Brewer. 1999. "A Three-Way Error Components Analysis of Educational Productivity" *Education Economics* 7(3): 199-208.

Robert P. Berrens, Alok Bohara, A. Baker, K. Baker. 1999. "Revealed Preferences of a State Bureau: Case of New Mexico's Underground storage Tank Program" *Journal of Policy Analysis & Management* 18(2): 303-326.

Robert P. Berrens, Michael McKee, M. Farmer. 1999. "Incorporating Distributional Issues in the Safe Minimum Standard Approach: Endangered Species and Local Impacts" *Ecological Economist* 30:461-474.

Robert P. Berrens, D. Scrogin. 1999. "Determinants of Lottery participation for Big-Game Hunting Privileges: Resident versus Nonresident Elk Hunters in New Mexico" *Human Dimensions of Wildlife* 4(1): 36-49.

Melissa Binder, D. Scrogin. 1999. "Labor Force Participation and Household Work of Urban School Children in Mexico: Characteristics and Consequences" *Economic Development and Cultural Change* 48(1): 123-154

Melissa Binder. 1999. "Trends in Schooling Indicators during Mexico's 'Lost Decade'" Economics of Education Review 18:183-199.

Melissa Binder. 1999. "Community Effects and Desired Schooling of parents and Children in Mexico" *Economics of Education Review* 18:311-325.

Alok K. Bohara, R. G. Krieg. 1999. "A Simultaneous Probit Model of Earnings, Migration, Job Change, and Wage Heterogeneity" *The Annals of Regional Science* 33:453-467.

David S. Brookshire, S. Ben-David, Stuart Burness, Michael McKee, C. Schmidt. 1999. "Heterogeneity, Irreversible Production Choices, and Efficiency in Emission Permits Markets" *Journal of Environmental Economics and Management* 38:176-194.

Janie Chermak, J. Crafton, S. M. Norquist, R. H. Patrick. 1999. "A Hybrid Economic-Engineering Model for Natural Gas Production" *Energy Economics* 21:67-94.

Kishore Gawande, W. Hansen. 1999. "Retaliation, Bargaining, and the Pursuit of 'Free and Fair' Trade" *International Organization* 53:117-159.

Micha Gisser. 1999. "Dynamic Gains and Static Losses in Oligopoly: Evidence from the Beer Industry" *Economics Inquiry* 37.

Michael McKee, R. Fullerton, B. Linster, S. Slate. 1999. "An Experimental Investigation of Research Tournaments" *Economic Inquiry* 37:624-636.

Michael McKee, R. Fullerton, B. Linster, S. Slate. 1999. "Acquisition Reform: Theory and Experimental Evidence for Tournament Sponsors" *Acquisition Review Quarterly* 6:169-178.

Richard Santos, M. Cifaldi, C. Gregory, P. Seitz. 1999. "Economic Outcomes of a Targeted Intervention Program: The costs of Treating Allergic Rhinitis Patients" *The American Journal of Managed* Care 5(4).

4. Outside Professional Activities

Ten faculty members presented fifteen papers at professional meetings in the 1999 calendar year.

Brookshire D. (with R. Berrens, A. Bohara, P Ganderton, M, McKee, S Stewart, C. Silva, and H. Jenkins-Smith). 1999. "Mechanism Effects and the CVM: A Learning Design Incorporation Economic Experiments" Southern Economics Association, Annual Conference, New Orleans, November.

Bohara, A (with R. Berrens, H. Jenkins-Smith, and K. Gawande). 1999. "Further Investigation of voluntary Contribution Contingent Valuation: Fair Share, Time of contribution, and Respondent Uncertainty" SEA Conference, New Orleans, November

Bohara A. (with R. Berrens and D Scrogin). 1999. "Policy Changes and the Demand for Lottery-rationed big-game Hunting Licensees" W-133 Annual Meetings, Session VIII: Valuing Changes in Recreational Access (Section C), Tucson, AZ, February.

Bohara A. (with R. Berrens and d. Scrogin). 1999. "Public Valuation of Basic Health Care Services in New Mexico" Presented to State of New Mexico Health Policy Commission, August

Berrens R. (with T. Cavlovic, K. Baker, and K Gawande). 1999. "A Meta-Analysis of Environmental Kuznets curve Studies" Boulder Workshop on Environmental Economics, Boulder, CO, July.

Berrens R. (with A. Bohara and J. Kerkvliet). 1999. "Addressing Negative WTP in Dichotomous Choice CV: A Monte Carlo Simulation" Pacific Northwest Conference on Environment and Resource Economics, Eugene, OR, May.

Chermak, J. (with R. Boyd). 1999. "The Real Price of Oil: A Dynamic CGE Model of US Oil Policy" Proceedings of the 22nd International Conference of the International Association for Energy Economics.

Chermak, J. 1999. The 12th annual Western Conference of the Advanced Workshop in Regulation and competition, San Diego, CA, July

Chermak J. (with Krause C). 1999. "Product Pricing and the Impact of Heterogeneous Demand for Environmental Goods" CU Environmental and Resource Economic, Boulder, CO, July

McKee, M. 1999. Tax Certification Workshop at KazGAU, Almaty, Kazakhstan, September.

McKee M. (with Alm J.). 1999. "Tax Compliance as a coordination Game" Southern Economics Association, New Orleans, November.

Krause, C. 1999. "Altruistic Behavior in Children: An Experimental Study" Allied Social Science Association meeting, New York, January.

Krause, C. 1999. "The Economic World of Children" Transition from Childhood to the Workforce conference sponsored by the National Science Foundation, Birmingham, Alabama, August.

Santos, R. (with P. Seit). 1999. "Benefit coverage for Latino and Latina Workers" Southwestern Social Sciences Meeting, San Antonio, Texas, April.

Sauer, C. 1999. "Underdevelopment Traps: Empirical Evidence on Threshold Externalities in Emerging Economies" Midwest Economics Association annual Meeting, Nashville, March.

Nine faculty members were invited speakers to universities in the 1999 calendar year.

Anderson, D. (with K. Krause and M. Binder). 1999. "The Motherhood Wage Penalty Revisited: Are Big Kids to Blame?" Labor Economics Workshop at Cornell University, November.

Bohara, A (with K. Gawande and A. Islas). 1999. "Stochastick Volatility Models of Latin American Stock Markets" De Tella University, Buenos Aries, Argentina, July

Bohara, A. 1999. "Further Investigation of Voluntary Contribution Contingent Valuation: Fair Share, Time of Contribution, and Respondent Uncertainty" GSU Environmental and Econometrics seminar series. November.

Ganderton P. (with Brookshire D., McKee M., Stewart S. and Thurston, H.). 1999. "Buying Insurance for Disaster-Type Risks: Experimental Evidence" Stanford Geography Department, May.

Ganderton P. (with Brookshire D., McKee M., Stewart S. and Thurston, H.). 1999. "Buying Insurance for Disaster-Type Risks: Experimental Evidence" University of Western Australia Economics Department, July.

Gawande K. (with Sauer C., and Li, G.). 1999. "Tests of Hypotheses of Threshold Externalities in Development" Claremont Graduate School, Department of Economics, March.

Gawande K. (with Sauer C., and Li, G.). 1999. "Tests of Hypotheses of Threshold Externalities in Development" University of Washington, Seattle, Department of Economics, October.

McKee M. (with Cummings R., Laury S., and Taylor L.). 1999. "Laboratory Investigations of Referenda Settings" University of Colorado Workshop on Environmental Economics, July.

Sauer, C. 1999. "Exchange Rate Volatility and Exports" University of Hannover, Department of Economics, Germany, July.

Other Outside Professional Activities for 1999 Calendar year.

Berrens R. 1999. Research Associate for Center for Economic Research at U. Rochester

Berrens R. 1999. Invited Panel member for Task Force on the "Focus 2050 Project" Middle Rio Grande Council of Governments, Summer

Brookshire D. 1999. Program Reviewer for Environmental Protection Agency, integrated Assessment of the Positive and negative Consequences on the United States of Climate Change and Climate Variability.

Chermak J. 1999. Member, Second World congress of Environmental and Resource Economists Site Selection committee.

McKee M. 1999. Invited Panel member for Task Force on the "Focus 2050 Project" Middle Rio Grande Council of Governments, Summer.

Sauer C. 1999. Invited Lecturer "the Global Financial Situation" Albuquerque Committee on Foreign Relations, September.

Sauer C. 1999. Invited Lecturer "Germany's Prospects and Problems in the global Economy" German club of Los Alamos and Santa Fe, May.

Sauer C. 1999. Panelist "The Euro at the Tender Age of 10 Months" International Roundtable conference of the Austrian-American council of North America, November.

5. Research Grants and Contracts Funded

The department received the following grants to fund faculty and graduate research during this academic year. Total of \$464,005.00

National Science Foundation

"Effectiveness of Safety Regulation: A study of US Coast Guard Inspections, Detection of Violations, and Occurrence of Casualties" Bohara, A. and Kishore, G.

\$69,607.00

June 1999 - August 2000

Water Resources Research Institute

"The Impact of Heterogeneous consumer Response on Water conservation Goals" Chermak J. and Krause, C. \$14,998.00
1999-2000

US Geological Survey

"Economic Modeling Frameworks Utilizing Earth Science Information for hazard Mitigation" Brookshire, D. and Ganderton, P.

\$200,000.00

October 1999 - October 2000

University of New Mexico Resource Allocation Committee

"An experimental test of Family Bargaining Theory: Investment in Risky Assets" Krause C.

\$2,400.00

November 1999 - September 2000

National Oceanic and Atmospheric Administration

"An Exploratory Assessment of the Potential for Improved Water management by Increased use of Climate Information in Three Western States"

Brookshire D., Howe C., McCool D.

\$177,000.00

1999 - 2000

Research Grants and Contracts Funded – Submitted by other departments or institutions that include Investigators and Research Scientists from the Department of Economics

National Science Foundation

"Informing Contingent Valuation Methods with Internet Surveys" Submitted by David Weimer Bohara, A., Berrens R., Jenkins-Smith H., Silva C. \$240,000.00
June 1999 – June 2001

John D. and Catherine T. MacArther Foundation

"The Development of Gender Differences in Risk Taking Behavior" Krause C. and Harbaugh W. and Vesterlund L. \$5,000.00
July 1999 - December 1999

Office of Naval Research (via Battelle)

Rutstrom, L. (University of South Carolina) McKee, M

6. Attachments

Bachelor of Arts Degrees Conferred

35 Bachelor of Arts degrees conferred in 1999-2000 academic year.

Master of Arts Degrees Conferred

Henry Bruner Xiaoguo Hu Michael Jones Ji Ying

Doctoral Degrees Conferred

Therese Cavlovic (Berrens) "Valuing the Loss in Access: An Institutional and Welfare Analysis of Rock-Climbing on U.S. Public Lands"

Alejandro Islas-Camargo (Bohara) "On the Measurement of Stock Market Co-Movement: The Case of Latin America and the United States"

J. Raymond Stuart Award

Graduate Students: Calvin Blackwell, Maurice Moffett, and Manuel Valenzuela. Undergraduate Student: Ramona Murvin.

Distinguished Alumnus:

Stephen McKernan, CEO, University Hospital

Number of Majors

Academic Year	Undergraduate	Graduate
1987-88	132	40
1988-89	N/A	44
1989-90	74	N/A
1990-91	133	41
1991-92	121	43
1992-93	103	49
1993-94	97	57
1994-95	88	48
1995-96	72	48
1996-97	86	54
1997-98	124	40
1998-99	115	44
1999-2000	147	39

Fall Credit Hours by Course Level 1990-1998

,	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
100	381	360	438	237	219	168	261	2694	3048	3684
200	3564	3492	3189	2892	2814	2952	2802	105	87	192
300	2859	2928	2523	2523	2133	1902	1410	1659	1365	1011
400	355	227	231	267	178	267	234	220	192	281
500	222	237	276	316	330	339	314	227	192	212
600	42	78	75	111	96	75	84	108	0	123
Total	7423	7322	6732	6346	5770	5703	5105	5015	4884	5503

Spring Credit Hours by Course Level 1990-1998

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
100	372	222	156	177	0	0	0	0	2874	3033
200	3489	3834	3537	2985	3066	3168	3033	2652	195	231
300	2895	2886	2949	2271	2340	2055	1440	1506	1368	1311
400	387	234	175	346	366	176	221	228	174	129
500	177	229	268	332	291	283	299	264	270	180
600	36	60	66	75	108	117	78	75	117	54
Total	7356	7465	7151	6186	6171	5799	5071	4725	4998	4938

ANNUAL REPORTDEPARTMENT OF ENGLISH

July 1, 1999 - June 30, 2000

Scott P. Sanders, Chair

This year the annual report covers the dates above in most categories. In some categories — such as faculty publications, grants, and awards — this report covers the calendar year of 1999. The uncertainty about the dates to be covered in this report stems from former Dean Fischer's request in March that annual reports be for the calendar year, and later advice that the University would prefer that we use the fiscal year noted above. So I will do both, using either the fiscal or the calendar year where appropriate.

In last year's annual report, we were looking ahead optimistically to continued increases in Freshman enrollments for Fall 1999 and the beginning, in Spring 2000, of larger classes at the 200 and above level owing to the Freshman class increases of the two prior years. Fall 1999 saw the continued increase in Freshman enrollments, and Spring 2000 saw increased enrollment in 200 level classes, especially in English 219, Technical Writing, and in 220, Expository Writing, classes that fulfill core curriculum requirements.

These increased enrollments brought welcome increases in our production of undergraduate Student Credit Hours (SCH); they also strained our ability to meet student demand in our lower division undergraduate offerings. Where the year before we had hired two Visiting Assistant Professors to meet enrollment increases, in this year we hired eight fulltime lecturers teaching 4-3 loads entirely in Freshman English and core curriculum courses. Even with this augmentation of our faculty, we hired more per-course Part Time Instructors (PTI) than we have ever hired in the past. Our total PTI budget, which covers all instruction by anyone other than tenure track faculty, was significantly greater than has been in years past.

The demand for Freshman English and core curriculum classes should level out if projections of future Freshman enrollments are correct; however, if the percentage of students in these larger classes who choose to be English majors and minors remains what it has been in the past, we will soon see proportionately increased pressure across our undergraduate offerings from lower to upper division levels as more majors and minors move through our curricula.

The fundamental conclusion to draw from this annual report is that our departmental resources are stretched very thin, yet we are amazingly productive in every area of our mission. We staff service courses to meet demand; we staff undergraduate major and minor and graduate courses also to meet demand; we develop innovative approaches to teaching that are delivered on-campus, over the

internet, and in special seminars for a variety of audiences; we publish significant research and creative works in books, refereed journals, and other outlets; we sponsor innovative outreach programs that bring expertise from every area of specialization in our department to the non-academic community; and we win grants, fellowships, and other forms of outside support for all of these efforts.

In the parlance of the business world, we are a very lean and mean organization that relies heavily on outsourced labor (visiting and Emeritus professors, full-time lecturers, PTIs, TAs) to teach nearly all of our service courses and increasingly more courses in our major, minor, and graduate programs. To readers outside the department, the lists of our achievements in this report must seem something in which we would take pride and be quite satisfied to congratulate ourselves on our "productivity." No. I sense that, as a department, the "lean and mean" quality I point to above is on the verge of making us just plain mean, and angry.

I field comments from discouraged colleagues almost daily to the effect that, in the past several years, they have been asked continually to do more with less, and I agree with that assessment: we have done more and more with less and less for year after year over the past decade.

We face this dispiriting fact at nearly every turn nearly every day, from the seemingly minor request that we photocopy out of our departmental budget memos from administrative offices that they request be distributed to the department, to the very major, disturbing reality that in this year four regular faculty members and one crucial half-time faculty member have left our department, and we will hire in two new faculty for Fall 2001, with the promise that one more line out of this group should come in Fall 2002, and the near certainty that one regular faculty line from this group is gone, the money reallocated somewhere else in the university's budget. The need for more fulltime faculty teaching broadly across our curriculum is greater than it has ever been. That need is, in my judgment, the most urgent problem facing the department. We cannot continue to increase the "outsourcing" of our faculty if, for one thing, the quality of the Freshman and Sophomore experience at UNM — the core curriculum — is meant to include, as administrators tell us it should and we agree, significant contact with regular faculty members.

"Teaching broadly across our curriculum" also includes graduate teaching, where we face problems created by the separation of key faculty. When we cannot even hire to keep our strength standing in place, the demands that enrollments make on our undergraduate programs, on Freshman English, and on our core curriculum offerings must be weighed against our need to offer a viable graduate program, not only in the areas we wish to emphasize, but also across the breadth of the study of language and literatures in English and in rhetoric and writing that a university PhD program of our stature should offer.

With the faculty numbers we have now, addressing the curricular demands of our broadly defined mission is just barely possible. In the year ahead, our department

will engage in discussions aimed at re-assessing our strengths and our weaknesses and, in that context, possibly re-defining our mission. It may be that we will decide to do less in the broad sense so that we can do more in selected areas of emphasis; then again, we may find some other course to follow. We will have to wait and see what action may come from our self-assessment. The information gathered in this report should help guide our departmental discussions.

The information below is organized first according to the headings suggested by Dean Fischer's outline for Departmental Annual Reports distributed in Spring 2000 and, second, in edited versions of reports prepared by the Directors of our several departmental programs.

Departmental Program Directors

Gail Houston (Graduate Director), Charles Paine (FE Director), and Mary Power (Undergraduate Director) completed their first years as directors. Professional Writing Director Rick Johnson-Sheehan and Creative Writing Director Sharon Warner continued in their posts during the period of this report.

Department Staff

DeeDee Lopez took over undergraduate advisement from Ona Savage in a gradual process that began in Spring 1999 and was completed by the beginning of the Fall term. Anh Quach was hired in the late summer 1998 to serve the Department as our Accountant. She took maternity leave early in the Spring 2000 term, and decided not to return to the university. We had not hired a replacement Accountant by the end of the reporting period. Christine Jaramillo was hired as an Administrative Assistant II in August of 1999. Margaret Shinn continued as Department Administrator; Matt Allen continued as Technical Writer.

Faculty Separations, Retirements, Hiring

Professors Patrick Gallacher and David McPherson retired in July 2000; Professor Louis Owens resigned, effective that same date, as did Arts and Sciences Dean Michael Fischer, also a member of our department who, in fact, taught the undergraduate honors seminar (411H) in F99 and was scheduled to teach a 400/500 level course in F2000. Marcia Southwick, for eight years teaching full-time in Creative Writing (poetry) in the fall term only, resigned, effective F2000.

Two newly hired, tenure-track Assistant Professors, Claire Waters (British Literature) and Jesse Aleman (American Literature) joined the faculty in Fall 1999.

Catherine Ramirez (American Literature) taught for the department as a PTI during the academic year, and, through a spousal hiring process offered to the department by the Dean of Arts and Sciences (her husband, Professor Eric Porter, is an Assistant Professor in the American Studies Department), was offered a tenure-track line to begin Fall 2000, which she accepted in April:

In May, Professor Susan Romano accepted appointment as an advanced Assistant Professor of rhetoric and writing, coming to our department from the University of Texas, San Antonio where she had been the Director of Composition. Dr. Romano's hire ended a national search for this position.

Professor Richard Peck, formerly President of UNM, returned from sabbatical leave taken after he stepped down from the presidency to teach American literature and playwrighting for the department in Fall 1999. Dr. Peck was absent in Spring 2000, leaving UNM to be Acting President of the University of South Florida. He returned to our faculty for the Fall 2000 term.

Full-time lecturers hired for the academic year were Rebecca Aronson, Brian Crane, Anne Foltz, Sherri Metzger, Kate Mortellaro, SueAnn Schatz, Jack Trujillo, and Wes Muckelroy. Dan O'Brien joined the faculty for the S2000 term as the Visiting Writer.

Tenure and Promotion

Charles Paine and Sharon Warner were tenured and promoted to the rank of Associate Professor.

Programs and Initiatives

Age of Aquarius festival. Professors David Jones and Barry Gaines successfully coordinated a spring semester exploration over several weeks of the culture of the 1960s in America that included weekly lectures and culminated in the Fine Arts Department's production of the musical "Hair," directed by Professor Jones. English graduate students working as Department Fellows assisted in this work, which was widely supported by our department and several other departments and colleges at UNM and by a grant from the New Mexico Endowment for the Humanities.

Albuquerque Teachers Institute. Directed by Wanda Martin, this program, which is funded by a grant from Yale University, offered seminars taught by UNM faculty in a variety of disciplines to high school teachers in Albuquerque.

Taos Writers' Conference. The first UNM Taos Writers' Conference, held in July 1999, was very successful. Throughout the year interest in the conference has increased, and more participants attended the July 2000 conference. Having initially received start-up assistance from the Department and other sources, the conference was, finally, entirely self-supporting, repaying all of the assistance extended to it and making a small profit. See below under "Creative Writing" for more information.

Other Outreach Activities. The Medieval Studies outreach program visited public schools in the Albuquerque area during the year and presented successful lecture series in both the fall and the spring terms. The "Hair"/1960s festival

included lectures and presentations for the public schools, including a performance of the musical "Hair" specifically for APS students. Tony Mares received two grants to design and direct his "Wired Inn," an internet-based writer's workshop that initially brought the creative work of Garfield Middle School (Albuquerque) students to the attention of Professor Mares and graduate creative writing students who would read and comment on it over the internet. This program has since evolved into an internet-based poetry workshop that students in our curriculum take as part of their requirements in Creative Writing (both undergraduate and graduate) and it has received outside funding support. Similarly, Rick Johnson-Sheehan offered an internet-only section of his popular proposals and grants writing class and is developing an internet-based version of his hypertext class. David Dunaway has won grants from state Humanities Endowments to support his "Route 66" radio documentary project. Sigma Tau Delta, the undergraduate honorary, continued working with ReadWest, a group promoting adult literacy.

Still more programs and initiatives are described below in the information provided by Departmental Directors.

Administrative Initiatives

Information Gathering. In December, the department adopted a form and a series of deadlines for gathering information to be used in Annual Biographical Supplements and in Annual Reports.

Assistant Professor Annual Review Process. The department adopted a formal process for reviewing Assistant Professors annually involving the Chair and selected members of the Executive Committee. The process includes classroom observations of teaching, review of publications, and review of service work.

Associate Professor Promotion Review Process. The department adopted a formal process for reviewing the progress of Associate Professors during the five years between promotion to Associate and normal eligibility for promotion to Full Professor. The process involves members of the Executive Committee, the Chair, and Departmental Directors.

Setting Hiring Priorities. The department adopted a formal procedure for setting hiring priorities that involves a series of discussions among interest groups who recommend hires to the Executive Committee who then recommend a hiring proposal to the department for discussion and amendment or approval.

Grants, Awards, Publications

Professor Gail Houston received one of two Outstanding Teacher of the Year Awards for 1999-00 given to faculty across the university. Departmental awards for excellence in teaching and research activity went to David Dunaway (Wertheim Award) and Julie Shigekuni (Keleher Award).

Specific citations of faculty publications are collected in the Annual Biographical supplements, so I will not repeat them here. An overview shows that in 1999 English Department faculty published eight books or book-length works; more than two dozen articles, short stories, and essays collected in refereed journals or anthologies; a dozen poems; and more than a dozen reviews. There were also several reprints of books, articles, creative works, and essays.

Faculty received thirteen grants during the calendar year 1999; some faculty received more than one (see the table below).

Funding Source	Faculty	Project	Amount
NMEH	Gaines/Jones	The Hamlet Festival	\$5000
NMEH	Damico	Vikings/Saga in Classroom	\$1867
NMEH	Damico	Viking and Culture	\$5000
NMEH	Warner	Taos Writers Conf	\$1750
Witter Bynner	Mares	Writers Inn (Internet)	\$5000
Texas Hum Cncl	Dunaway	Across the Tracks	\$5241
RAC	Torres	Interviews w/Writers	\$1967
RAC	Fresch	Milton Variorum	\$6226
RAC	Scharnhorst	Life of Kate Field	\$960
RAC	Dunaway	Route 66 Story	\$2673
TAC	Beene	Lang/Culture in Film	\$2474
TAC	Witemeyer	Developing Film Libr	\$1000
TAC	Johnson-Sheehan	Hypertext Teaching Aps	\$1200

Still more faculty and student grants, awards, and publications are described below in the information provided by Departmental Directors.

Graduate Studies

Gail Houston, Director

New Master's Program

The Graduate Program in English continues to implement the new Master's Program (described in prior annual reports) established in Fall 1998. We received our second and third sets of Master's Portfolios in Fall 1999 and Spring 2000, and we gave the third and fourth Master's examinations based on the 50-item reading list. The Portfolio has demonstrated its value, giving faculty an opportunity to evaluate and require improvements in graduate student writing. Professor Carolyn Woodward successfully offered the first M.A. colloquium (on epic literature) in Spring 2000, the term in which the class matriculating in Fall 1998 reached its fourth semester. Preliminary indications (i.e., the large graduating class of 2000) are that the new MA program encourages students to finish within the recommended two-year period.

Graduate Director's Goals Achieved

The Graduate Director, Graduate Advisor, and Graduate Committee have implemented a number of policies and actions in order to improve the quality of the Graduate Program. They include the following:

Improvement of Communication

- *The Access Database for tracking of students is in the process of being set up; once established, it will make routine many tasks that take much longer to complete at the present time. This project will be the top priority for 2000-2001.
- *The Graduate Committee approved a proposal that graduate students must submit all their Independent Study and Problems (597 and 598) courses to the graduate director for approval in order to ensure quality and appropriate use of said courses, as well as to track these often anomalous courses.
- *The Graduate Director has implemented weekly meetings with the Graduate Advisor and EGSA President in order to maintain good communication and efficiency.
- *A list-serv for graduate students, established in fall 1999 and maintained by the Graduate Advisor, has dramatically improved communication between the Graduate Director, graduate students, and the Graduate Advisor.
- *The Graduate Advisor is in the process of completing graduation and admissions packets that include all required materials and instructions for filling them out; this replaces the previous mode of distributing forms as requested sporadically and haphazardly by students.
- *The Graduate Director has presented a session to the McNair Scholars Program at UNM (in April 2000) in order to make contact with these designated superior scholars in order to encourage said students to apply to our graduate program.
- *The Graduate Advisor cleared graduate bulletin boards outside the advisor's office and outside the director's office; previously cluttered, unsightly, and, therefore, unused, these boards, are now organized and monitored on a regular basis so that the information there on jobs, deadlines, scholarships, etc., is always timely.
- *The Graduate Director is in the process of maintaining a binder with written policies and procedures in order to avoid administration by flat or word of mouth as much as possible.

Improvement of Graduate Student Preparation for Exams, Dissertation, and so on

*The Graduate Director has created guidelines that are distributed to students taking the 50-item MA exam and fulfilling the portfolio requirement. These guidelines

allow for better communication of expectations and create a means of answering common questions regarding these requirements.

*The Graduate Director is working on creating a set of guidelines for students who are in the dissertation phase to help them understand their professional role, duties, and rights in this phase of their Ph.D.

*Guidelines have been prepared to help prospective students understand explicitly what makes a strong application to our graduate program—these are included in materials we distribute to applicants.

*The Graduate Director has written a set of guidelines for writing a prospectus; she has also obtained a sample prospectus to lend to graduate students who have just finished their comprehensive exams.

*At the request of the EGSA, all the items on the MA 50-item list have been put on reserve in Zimmerman library for students studying the exam. This should be an ongoing project.

*The First Annual Scholar's Retreat was held in January 2000 for five days with five English Department Ph.D.s attending the camp: Lori Mehl, Juli White, Kristen Hague, Bill Waters, and Andrea Penner. A follow-up mini-camp occurred in March 2000 with the same students. All of the students involved in the retreat were very enthusiastic about how this program helped them to make dramatic progress on their dissertations. As a result of the success of this bootcamp, an English Department faculty member and 3 students are taking the summer 2000 scholar's retreat being offered by Sonja Foss, Director of the Scholars' Retreat. Our use of these bootcamps was featured positively and prominently in an article that appeared in *The Chronicle of Higher Education* on March 24, 2000. This retreat should have an immediate impact on our high ABD population.

Development and Outreach

*With the help of GA Scott Rode, the Graduate Director was able to establish a development program for the graduate program. We have officially established an existing departmental award account, the Carl Grabo Award, as dedicated to supporting graduate students doing research on their dissertations. The Grabo award will be offered under its new designation in F2000; the graduate committee tentatively decided to apportion between \$250 and \$500 to winners of this award.

*The Graduate Director submitted an application to the McCune Foundation to fund two of our graduate students, establishing a relationship with this large foundation. We did not receive the funding but were encouraged to apply again.

*The Graduate Director submitted a letter of inquiry to Steven Spielberg asking that he consider funding Native American Literature hires at UNM. Mr. Spielberg

declined to underwrite such an effort, but he graciously acknowledged the importance of the proposal.

*Scott Rode and the Graduate Director consulted with Eric Sedillos, Development Director of the College of Arts and Sciences; Mr. Rode prepared written descriptions of development projects that Mr. Sedillos can distribute to interested donors.

*Undergraduate Director Mary Power and the Graduate Director are working on internal and external avenues of development for achieving an endowed Chair for Native American Literature hires, including approaching the All Indian Tribal Council and establishing a subcommittee on said effort under the auspices of the upcoming planning efforts directed by Provost Brian Foster.

*The Graduate Subcommittee on High School Outreach, chaired by Julie Shigekuni, has met a number of times in the 1999-2000 academic year to establish ties with local high schools in order to let our graduate students have teaching experiences there. Using Professor Damico's outreach program as our model, graduate students in fields other than medieval will have the opportunity to gain teaching experience in their field of expertise and reach out to interact with area high schools.

Graduate Director's Goals and Suggestions for 2000-2001

Continue to Improve Communication

*In order to improve the rigor and quality of our graduate program, we must implement yearly evaluations of graduate students done by faculty in conjunction with the Graduate Director. This will help both faculty and students know and meet professional expectations. It can also take care of problems students might be having early on. This can occur once the database is established.

*Once the database is established, the Graduate Advisor will create and distribute regular yearly progress reports on graduate students to their directors, again, as a means of preempting problems and maintaining regular communication.

*The Graduate Advisor will initiate meetings with Ph.D. students who have finished exams to give them guidelines for working on the prospectus, dissertation, and carrying on a professional relationship with their committees.

Improvement of Quality of Graduate Program

*The Graduate Director will continue analysis and discussion in the graduate committee about courses offered in split 400/500 level sections.

*The Graduate Director will initiate discussions with the Graduate Committee about increasing the rigor of our program through increasing the amount of seminars required of students.

*The graduate Director will propose to the Graduate Committee that the theory course, 510, be considered a two-part course that focuses on covering theory from Plato to the present, rather than using it as a course to focus on specific theories; this will give students better preparation in theory.

*The Graduate Director will encourage the establishment of a Concentration in Cultural Studies.

*The Graduate Director will continue to proactively support the establishment of a strong Southwest Literature Studies element of the graduate program, to include Chicano/a Literature, Native American Literature, and other literatures associated with the Southwest.

*The Graduate Director will work with the graduate committee on a proposal to help deal with the problem of overlap experienced by students taking the MA portfolio and 50-item exam in the same semester.

Recruitment/Retention

The Graduate Director sent letters to three McNair Scholars in the field of English encouraging them to apply to our program: two of the scholars have met with Dr. Houston to discuss this possibility. We also again participated in the recruitment sessions for Evening Programs hosted by David Stuart's office, and we have maintained and improved our graduate program information on our web site. From June 1999 through April 2000, we received 341 inquiries about our graduate programs, compared to 662 from June 1998 through May 1999. Thus, the number of inquiries about our program decreased. Our graduate homepage has been accessed 10,412 times since its inception.

Colloquia/Lectures/Symposia

The English Graduate Office continued its efforts to stimulate discussion and community among faculty and graduate students. Graduate students Michael Moghtader and Todd Tietchen put on a well attended colloquia in the fall of 1999 (4 sessions) on teaching. In the winter of 2000 the EGSA put on a colloquia series that focused on teaching in the composition classroom, race issues in the classroom, and others topics of interest. The EGSA also offered the "Southwest Symposium," which is discussed below. Graduate students also successfully directed and organized a major international scholarly conference in September for the 18th and 19th Century British Women Writers Association. Two dissertation workshops were presented, one in fall 1999 (Professors Gwin and Woodward) and one in spring 2000 by the graduate students who went to the scholar's retreat

Job Placement

Gail Houston and Rick Johnson-Sheehan offered a bi-weekly series of job placement workshops aimed primarily at those graduate students seeking employment

through the MLA and 4Cs conferences. Five Ph.D. students participated regularly in these workshops. (See "Job Placement" below for more detail.)

Research/Dissertation support

The Graduate Director provided supplemental and travel grants from \$25 to \$210 to students who were giving papers at conferences in their fields. (See details below under "Graduate Student Awards.")

Curriculum Development

The Graduate Committee and the department approved a new course, "Teaching Literature and Literary Studies," English 592, which is described as "Practicum on teaching literature and literary studies. Study of theoretical discourses about teaching also included. Topics vary." This new course has been approved by the Senate Graduate Committee and will go before the Senate Curriculum Committee and the Faculty Senate for approval in the fall of 2000. In fall 1999, the graduate committee decided not to create a new course in academic publishing; however, the committee voted to approve a trial course (Eng 590) to be offered in fall 2000 by Professor Jesse Aleman, who will then report to the graduate committee on his recommendations regarding the advisability and efficiency of offering such a course to graduate students. The English Department Curriculum Committee has implemented the department's recently approved policy of having advanced graduate students teaching lower division literature courses. Graduate students have taught Eng 294, 295, 296, and 297 in 1999- 2000.

Graduate Committee

Gail Houston, Director of Graduate Studies for 1999-2000, was chair. Voting members of the graduate committee for 1999-2000 were: Professors Jesse Aleman, Wanda Martin, Carolyn Woodward, Julie Shigekuni, Hector Torres (fall 99 only) and Rick Johnson-Sheehan (spring 2000 only); the EGSA graduate student representative was Miriam O'Kane; and the ex-officio members were Chuck Paine, Director of Freshman English; Sharon Warner, Director of Creative Writing; and Helen Damico, Director of Medieval Studies. The Graduate Committee voted on a number of policy issues (see "Policy Decisions" below); approved the Fall, Spring and Summer M.A. and Ph.D. Comprehensive Examinations; reviewed applications for fellowships; reviewed applications for admission; revised and approved the 50-item Master's Examination List, which will go into effect Spring 2002 (Houston, Johnson-Sheehan, Woodward); held a dissertation writing workshop (Gwin and Woodward).

Policy Decisions of the Graduate Committee

Fall 1999

*In fall 1999, the Graduate Committee and department approved the optional Ph.D. Comprehensive Examination Process initiated and written under the previous graduate director, Gary Harrison. Thus, there are now two types of exam; in the

future faculty in consultation with students will choose the option most appropriate for the student.

*The Graduate Committee recommended a pay increase for ABDs with approved prospectuses.

*The Graduate Committee approved the new pedagogy course in literature Eng 592.

Spring 2000

*In Spring 2000, the Graduate Committee approved the following policies:

- 1.) Formal GRE scores must be submitted and received at UNM by the November 1 and February 1 deadline in order for the student application for admission to be considered.
- 2.) The Graduate Director may set deadlines by which time faculty and student evaluators must have evaluations of prospective graduate students submitted to the Graduate Director. If said deadline is not met, evaluations will be based upon evaluations that have been submitted by the deadline.
- 3.) Ph.D. students may take their comprehensive exams in the summer as long as the full committee agrees to be there to grade the exams. It is suggested that students only take one exam per week if taken in the summer. It is also suggested that student, in general, should take their exams during the regularly scheduled exam periods in September and February.
- *The Chair, Scott Sanders, approved a pay increase for of \$500 a year (in payments of \$250 a semester) for ABDs with approved prospectuses.
- *The Graduate Committee approved graduate student Andy Flood's proposal for a Hypertext reading list for the Ph.D. Rhetoric examination. This option now becomes available for all who wish to take that examination.

*The Graduate Committee approved use of the Carl Grabo Fund for graduate students doing dissertation research.

Graduate Student Awards

During the 1999-2000 academic year, English Department graduate students won the following awards, fellowships, and scholarships.

Departmental Awards:

Buchanan-Arms Award for Outstanding Achievement in Grad Study: Rick Mott Graduate Service Award: Franci Washburn
Graduate Professional Writing Award: Craig Springer
Creative Writing Fellowship: Seth Biderman
D.H. Lawrence Fiction Award: Tamara Brenno

New Mexico Folklore Prize: Lille Norstad

G.A. to David Leeming, Distinguished Professor of English/PNM Chair Hossein Ordoubadian

Graduate Academic Program Scholars: Bill Waters, Andrea Penner Mary M. McDonald Scholarship: Deborah Hoffmann

College /University Awards:

A&S Dean's Dissertation Fellowship Winner: Anne Van Arsdall

Outstanding Teaching Assistant Award Nominees: Martha Ninneman, Michael Moghtader, Kristen Hague, Bill Waters; Martha Ninneman won an Award 3% Scholarship: (Nominees are Dani Ortega, Craig Springer, Nancy Fong, Virginia Hampton, Jody Ipsen)

Graduate Dean's Dissertation Award Winner: Jennifer Timoner

Research, Project, Travel (RPT) Grants:

Several graduate students received RPT grants to deliver papers at conferences and do dissertation research in academic year 1999-2000. These students are:

Fall 1999

Maggie Harada	\$1,000	Dissertation Research and seminar in Ireland
Spring 2000		
Anita Daniels	\$375.00	Deliver paper
Andrea Penner	\$310.00	Deliver paper
Scott Rode	\$300.00	Deliver paper
Miriam O'Kane	\$237.00	Deliver paper
Richard K. Mott	\$750.00	Deliver paper

RPT Supplemental Departmental Travel Grants

Because RPT Grants are so limited, the Graduate Director provided supplemental travel grants to recipients of RPT awards as follows:

Rick Mott	\$ 7 5
Andrea Penner	\$50
Miriam O'Kane	\$30
Scott Rode	\$50
Anita Daniels	\$50

Departmental Travel Grants

These one-time travel grants of \$25 to \$210 each were awarded on a competitive basis to provide modest support to those who had applied for but were denied RPT funding.

Eileen Garvin	\$100	Deliver paper at MELUS Conference, Colorado
Anne Bartlett	\$1.00	Deliver paper at MELUS Conference, Colorado
Linda Norris	\$220	Deliver paper at VISWAS Conf, Portland, Or
Miriam Schacht	\$260	Deliver paper at VISWAS Conf, Portland, Or

Juli White	\$25	Scholar's Retreat, Albuquerque
Lori Mehl	\$25	Scholar's Retreat, Albuquerque
Dennis Lensing	\$210	Deliver paper

Graduate Admissions

Nationwide, applications to English graduate programs continue to decline. Our applications were down from the 1998-1999 year. The English Graduate Program received 85 completed applications for its programs in academic year 1999-2000. This number represents a decrease of approximately 15% from applications received for academic year 1998-99 of 103 completed applications.

Of the 43 (out of 85) applicants to whom we offered admission, 21 have already matriculated for Spring 2000 or have expressed their intent to matriculate in Fall 2000. That amounts to a 49% acceptance ratio as compared to the 1998-99 ratio of 78% acceptance rate and the 60% acceptance rate from academic year 1997-98, and 32% acceptance rate in 1996-97.

We had a 100% acceptance rate for those applying for Spring 2000 (6 students); but for Fall of 2000 the top five Ph.D. candidates accepted offers elsewhere (1 accepted our offer and then had to renege because her husband got a job in Washington D. C.); the next four on our Ph.D. list did accept our offers. Among the Master's applicants, of the top nine MA Lit students one accepted our offer. One of the four applicants to the Ph.D. in Writing and Rhetoric accepted our offer; two of the four MA PW candidates we accepted took our offer. Of the ten MA CW offers made, seven were accepted.

As the figures show below, we continue to lose many of our top-ranked applicants to other universities that offer better compensation and support for their graduate students in English. The situation continues to be as Gary Harrison, previous Graduate director, described it in a prior annual report: "If we want to recruit the top students among our applicants, the Department of English and University of New Mexico must make efforts to reduce teaching loads for our Teaching Assistants, increase their stipends, and we must find fellowship money to supplement our offers for those students we regard most highly." The new health benefits and pay increases offered to students this year should help with recruitment, but we still must be able to offer a better overall package, including a lower teaching load, higher pay, and more scholarship/fellowship support.

The figures below show preliminary admissions statistics for students applying for Spring 2000 and Fall 2000.

Applying for Spring 2000

Number of applicants:	10	Offered	l admission: 6	Accepted admission: 6
PhD MA Lit	0 2	0 1		0

MA CW	4	3	3
MA PW	4	2	2
Applying for Fall 2000			
Number of applicants:	<i>7</i> 5	Offered admission: 37	Accepted admission: 18
PhD -	23	13	6
MA Lit	20	11	3
MA CW	29	11	7
MA PW	3	2	2

Graduation/Degrees Granted. The English Department conferred seven Doctor of Philosophy and thirteen Master of Arts degrees from Summer 1998 through Spring 1999, as follows:

Summer 1999	Fall 1999	Spring 2000
Ph.D. Graduates Anne Foltz Wes Muckleroy Denise Tillery	Debra Thornton Darrell Peters	Margaret Harada William Waters
M.A. Graduates Sonnin Dahl Michelle Pierce	Todd Tietchen Erin Roth	Anne Bartlett Jonathan Briggs Monique Hyman Susie Keller Victoria Kittredge Shannon McCabe Elise McHugh Kellie S. Meyer Emily Spiegelman

Enrollment. As of Spring 2000, the Department of English enrolled a total of 123 graduate students, broken down as follows:

Ph.D.	64	(ABD: 40)
MA Lit	25	
MA CW	22	
MAPW	12	

Of the 64 Ph.D. students, 40 are ABD enrolling only in dissertation hours. Thus 62% of our Ph.D. population is ABD, down from 75% in Spring 1999. We hope that the implementation of the scholars' retreat and the creation of guidelines for writing prospectuses and the written guidelines regarding professional rights and duties of graduate students doing their dissertations will help to reduce our ABD population. In addition, regularly scheduled dissertation writing workshops are designed to deal

with this problem. Furthermore, the Department's approval of an optional process for administering the Ph.D. Comprehensive Examinations, which links the submission of the dissertation prospectus to the examination, should also help to move students along more quickly.

Among the 34 students enrolled in the Master's Program in Writing (PW and CW), only 5 were enrolled in thesis hours only, and 2 of those students graduated in Spring 2000. Thus, counting the 3 students who did not graduate, only 9% of MA students in writing were working on thesis hours only. This represents a decrease from the 17% rate of Spring 1999.

lob Placement

The MLA Census of PhD Placement for 1996-97 shows that our placement rate of 33% that year was higher than the 26% rate for our peer institutions and exactly comparable to the national average (33%).

The Graduate Director and Professor Rick Johnson-Sheehan held bi-weekly workshops for PhD students seeking employment in tenure-track jobs in English. Five students actively participated in the placement workshops this year. One was interviewed at the Modern Language Association meeting. One had phone interviews from which a tenure-track job was offered and accepted. Two candidates had on-site interviews at several community colleges in Oregon and California; one had a campus visit at Stephen Austin College. Of the five students actively on the market, one (as of 6/12/00) has obtained a tenure-track job; this represents a 20% placement rate. However, two of our students, who less actively participated in the placement workshops (they essentially applied for only 1 or 2 jobs) received tenure-track jobs and another received renewal of his non-tenure track job that has the possibility of becoming tenure-track. Including these students in the results, our placement rate is 50%.

PhD students in tenure-track positions since May 1999:

Anita Daniels University of Miami Liz Wright Penn State Ḥazelton Alanna Cotch Prairie State College

Andy Smith Lafayette College, Easton, Pa.

(renewed for a second year, may become tenure-track job).

We continue to have difficulty tracking our Master's program graduates, who have found employment in a variety of teaching, editing, and non-academic jobs. Two of our recent MA students, Todd Tietchen and Miriam Schact, received a number of attractive offers (from UC Davis, Syracuse, and UC Santa Cruz) and accepted lucrative packages from University of Washington and the University of Texas, Austin, respectively, to do Ph.D. work; Susie Keller (our top PhD applicant), also a UNM MA graduate, will be doing PhD work at UC Santa Barbara; Shannon McCabe and Anne Bartlett have been accepted into the PhD program at UNM. Chris

Pusateri, a recent MA CW graduate, won a poetry chapbook contest; his *Magnetic North*—based on his MA thesis—will be published by Saki Press. He currently teaches English and writing in Mexico City.

English Graduate Student Association (EGSA)

The Graduate Director supervised the EGSA in a number of activities again this year, including hosting departmental colloquia, new student orientation, and the Southwest Symposium, and helping to host the international 18th and 19th Century British Women Writers Association Conference. EGSA president for academic year 1999-2000 was Nicole Desjeunes; the president-elect for 2000-2001 is Miriam O'Kane.

This year's co-directors of the Southwest Symposium were Linda Norris and Amberley Pyles. Participants came from out of state, as well as from UNM. The plenary address by Simon Ortiz, Professor of English, University of California, Riverside was well attended by members of the UNM community at large and from the Albuquerque community. This year the SWS was held in conjunction with a UNM conference on Chicano/a detective novel writers, put on by Teresa Marquez of Zimmerman Library. The 18th and 19th Century British Women Writers Association Conference proved, once again, that our graduate students are skilled organizers and offer extraordinary service to the profession: Mary Rooks, Kristen Hague, Martha Ninneman, and Scott Rode were Co-Chairs of this international conference.

Undergraduate Studies

Mary Power, Director

We awarded 103 degrees to English majors at the convocation ceremony on May 13, 2000. This figure is down from 175 degrees awarded the previous year. At the same time, the number of honors graduates rose: twenty-one students received degrees with special merit, four more than were awarded honors last year.

Deleting our 103 graduates from the active files, we find that at the beginning of the Fall 2000 term, a conservative estimate based on active files on hand suggest that there are about 400 or so students majoring in English; 164 are working on English minors. Of the majors, about 160 are in the Liberal Arts concentration, 128 in Creative Writing, 34 in pre-Law, 33 in pre-Grad, and 15 are in the English/Philosophy double major program. Among the minors, 142 are English minors, 24 are Professional Writing minors. All told, some 565 or so students are majoring or minoring in English at this time.

The following students were cited at the May departmental graduation ceremony for special distinction:

Dale and Ivan Melada Scholarship in Professional Writing: Sandra Chavez Beidleman Memorial Scholarship: Dani Ortega, Christy Churchwell Mary M. McDonald Scholarship: Kara McKinney Irene B. Kimball Endowed Scholarship: Andy Harvey Undergraduate Study Awards: Andrea Briscoe, Madeleine Cast

In November 1999, the Undergraduate Program sponsored a reception to recognize and honor Undergraduate English majors graduating in December. The reception also served to acquaint English majors with one another and inform them of the opportunities that exist for English majors. About twenty five students attended.

Sigma Tau Delta (STD), the English Honor Society, had another good year. The College of Arts and Sciences aided the group with an Excellence in Undergraduate Education (EUEP) grant of \$2,000. About ten members received special training courses, and then taught in an adult literacy program. Members were also most generous in staffing the departmental library, and these same students assisted Professor Lynn Beene in cataloguing the growing collection. In early May, the students held a book sale of discarded books which was most successful. Five students gave papers in Savannah, Georgia at the National Sigma Tau Delta Conference. Last year's chapter president, Leslie Chick, also served as Southwest District Representative and participated in two STD executive committee meetings. A member of STD, Jocelyn Tafoya, was awarded a \$90,000 Fellowship to the University of San Diego Law School.

Creative Writing

Sharon Oard Warner, Director

The Creative Writing Program continues in a state of transition. Despite dwindling numbers of faculty—poet Joy Harjo resigned in 1996 and has not been replaced; David Johnson retired in the spring of 1999; Louis Owens and Marcia Southwick resigned this past spring—student enrollment and interest continue to grow. So, too, do Program initiatives. We are accomplishing a great deal under difficult circumstances. At present, the CW Program has four faculty members who teach principally in CW—Jim Colbert, Tony Mares, Julie Shigekuni and Sharon Oard Warner—and two other colleagues who teach in CW also teach in other areas in the departmental curriculum—Lee Bartlett and Pat Smith.

Enrollment

About 400 undergraduates are presently majoring in English, and of that number somewhat more than one-fourth are enrolled in the Creative Writing Concentration (see the Undergraduate Program discussion above). Creative writing classes also attract students from other majors as well as non-degree students seeking instruction in writing. Undergraduate and graduate CW classes tend to fill quickly and close. In the Fall 1999 semester, we offered 19 undergraduate classes in CW and 5 graduate courses. In the Spring 2000 semester, we offered 20 undergraduate and 5 graduate classes.

The graduate program in Creative Writing is flourishing as well. Between 25-30 students are presently working toward their Master's degree. Of this number, most

are working in fiction. Graduate applications for Fall 2000 (see under Grad programs above) illustrate the importance of CW to graduate enrollment; 32 students applied to CW, more than double the next highest number for a specific MA program and 50% more than the 22 students who applied to the PhD program. Given the demands on our small faculty, we were forced to cap graduate enrollment this year. We offered admission to only five fiction writers and four poets, turning away a number of well-qualified candidates. Unless we are able to hire additional faculty in coming years, we will have to continue to impose caps.

Program Initiatives

The Writers' Inn, an internet-based community service program for creative writers, provides a place for writers to share poetry, fiction, and creative nonfiction. Students and professors evaluate and respond to the individual writer's work. The Writers' Inn, begun in January 1998 by Professor Tony Mares, creates opportunities for undergraduates and graduate students. It has been well received by the public and is being supported by several substantial grants.

UNM's Taos Summer Writers' Conference is in its second year. The first year was, by all accounts, a success. The conference attracted 70 participants from around the country and featured workshops in poetry, fiction, and creative non-fiction. This year's Conference includes three weekend workshops in addition to the week-long workshops. At present, the Conference has over 100 registrations, with participants coming from as far away as Canada and Alaska. The 2000 Conference will reinstate the D. H. Lawrence Fellowship, which has been suspended since 1992. In addition, it will also offer two scholarships, one in fiction and one in poetry. Three graduate students will receive tuition, lodging, and meals in return for their work in organizing this year's proceedings.

Works-in-Progress Series continues to attract large and enthusiastic audiences. This monthly event pairs graduate student and faculty readings at R. B. Winnings Coffee Shop. Elise McHugh, a graduate student in poetry, took charge of organizing these events.

The Writers' Harvest Reading, held at the end of October, was our most successful yet. Organized by Professor Julie Shigekuni and graduate student Elise McHugh, the event featured an all-day reading with undergraduates, graduate students, and professors reading in ten-minute intervals from 9 a.m. to 6 p.m. The event, part of a national initiative to help the hungry and the homeless, raised over \$1,000 for state hunger-relief organizations.

Blue Mesa Review attracted several hundred submissions of poetry, fiction, and creative nonfiction for its annual issue. This year's editor was Professor Jim Colbert, and the BMR editorial fellow was Miriam Schacht. Blue Mesa Review is entering its thirteenth year of publication with a new editor, Professor Julie Shigekuni, who will assume her duties in the fall of 2000.

Creative Writing Pedagogy Meetings, established in 1998-99, continued this year. These meetings, held monthly in conjunction with the Works-in-Progress Readings, offer graduate students, part-time instructors, and regular faculty members an opportunity to discuss issues involved in teaching creative writing. Some meetings are focused on a single issue while others are open-ended discussions.

Contest Winners in 1999-2000

Lena Todd Memorial Prizes

Poetry: 1st Place Scott Pierce (Instructor: Tony Mares)

2nd Place Noel Navaez-Barnes (Instructor: Marcia Southwick)

Fiction: 1st Place Kate Smith (Instructor: Julie Shigekuni)

2nd Place Mike Wolff (Instructor Whitney Woodward)

D. H. Lawrence Fiction Contest

1st Place Tamaro Brenno

2nd Place Martha Bearden Parham

American Academy of Poets Contest

1st Place Julie Dunlop 2nd Place Mara Gould

The CW Program also nominated two students for the Associated Writing Programs Intro Awards. Graduate Student Seth Biderman, next year's Creative Writing Fellow, was a finalist in the second annual Prentice Hall Student Writing Contest.

Professional Writing Program

Richard Johnson-Sheehan, Director

The 1999-2000 year was a building year for the Professional Writing Program. We made positive strides in a variety of different areas, strengthening and expanding our curriculum and our faculty.

The Rhetoric and Writing program, of which Professional Writing is a part, hired Dr. Susan Romano (PhD, UT-Austin) to strengthen our offerings in composition, professional writing, visual rhetoric, and ethics. Dr. Romano's research on computer-aided instruction has been published widely in our field. Also, she is currently researching the history of the teaching of rhetoric in the southwest.

This year we began offering courses through the internet on a trial basis. Our Hypertext course (English 420/520) was initially offered to students at UNM-Los Alamos. Students from other parts of New Mexico also completed the course. We will continue testing whether we can offer our courses, especially at the Masters level, through the internet.

The Rhetoric and Writing brochure (24pp.) was published this year. It describes our curriculum, courses, and faculty. It will be one of our main vehicles for encouraging interest and applications to our programs at the graduate level. Currently we have 12 people registered as MA candidates with professional writing emphasis. We have 11 people registered as Rhetoric and Writing PhD candidates.

A website for our internship program was created. Starting with the Fall 2000 semester, the website will list our internships and offer tips for writing and designing resumes and application letters. The site will eventually serve as a networking tool for our students, allowing them to contact our graduates and professional organizations that can help them find jobs in professional writing.

Professors Sanders and Johnson-Sheehan participated in the recruitment of returning students and graduate students at the twice-yearly open house hosted by Associate Vice President David Stuart. The Professional Writing program was highlighted in advertisements announcing the open house.

We are having increased success placing our students in internships and writing-related jobs. This year all of our students looking for internships found meaningful employment. Several of our graduating seniors found writing jobs before they graduated.

The Melada Scholarship in Professional Writing was awarded to Sandra Chavez, a junior in Professional Writing. Craig Springer was awarded the Graduate Award in Professional Writing.

The main problem facing the Professional Writing program is the enrollment growth in Technical Writing (English 219), a core curriculum course also required in numerous majors across the university, from nursing to engineering. We do not now have enough faculty or graduate students to teach these courses, nor will we in the future if we do not hire more faculty or instructors in professional writing, so we must depend on the good work of Part Time Instructors to fill out our ranks.

Freshman English

Charles Paine, Director

Fall 1999

Courses Taught Fall 1999 at 21 days

Course	sections	total enrollment	SCH	% capacity
101	93	2137	6411	99.9%
102	41	873	2619	92.6%

Taught by:

Teaching assistants 51

- Full-time Lecturers	6
Part-time Instructors	17
Regular Faculty	4

Other courses numbered above FE taught by TAs and non-tenure track faculty: nine 219s, four 220s, two 321s, two 240s, one 290, one 296.

Grades in English 101 and 102

Data for Spring 2000 is not yet available.

Signal Achievements

The second edition of *La Puerta* was used by all sections of English 102. The ESL Program has a half-time graduate student director, Julie Mars, who placed students with a standardized test, which resulted in a cut of 33% in students and courses (from 6 courses to 4). The curriculum across all ESL sections was also standardized by Ms. Mars.

In April, a roundtable discussion about the issue of "Nature and Nurture" was held as part of the University-wide reception of *Frankenstein*, the newest central text for 102; over 100 students attended this event.

A new text for English 102, Culture Jam, was piloted and will be available to 102 teachers for the 2000–2001 school year.

The Writing Proficiency Portfolio program continues to grow (passing rates have not been calculated). The FE Program has begun a significant effort to encourage more students to choose the portfolio option instead of 102.

Department of Foreign Languages & Literatures

July 1, 1999 - June 30, 2000

Submitted by: Walter Putnam

The Department of Foreign Languages & Literatures has completed its eighth year as a separate unit formed out of the division of the Department of Modern & Classical Languages. The department offers a Ph.D. in French Studies, M.A. degrees in Comparative Literature and Cultural Studies, French and German and B.A. degrees in Classical Studies, Comparative Literature and Cultural Studies, French, German, Modern Languages and Russian. The department faculty also collaborates with interdisciplinary programs around campus such as European Studies, Asian Studies, Russian Studies and Women Studies by offering cross-listed courses and by sharing faculty resources and expertise. Alongside the national language and literature degree programs, the interdisciplinary graduate program in Cultural Studies has proven to be a big success in terms of student interest as well as in creating an intellectual community at UNM. The Wednesday lecture series has become a regular feature of a large but loose network of faculty and students who gather to hear a weekly lecture in the University Art Museum.

The department maintained its administrative structure with Walter Putnam serving his final year as Chair. Elections were held in the Spring and Dean Michael Fischer appointed Monica Cyrino to become Chair beginning with the 2000-01 AY. Warren Smith and Byron Lindsey served as Co-Directors of Undergraduate Studies, Natasha Kolchevska as Director of Graduate Studies and Pamela Cheek as Director of Comparative Literature and Cultural Studies. The appointment of Professor Kolchevska represented the first time that a faculty member outside of a graduate program had headed up this important area. We also formed an advisory committee made up of four faculty members representing the four major divisions in the department. This committee met periodically to discuss policies and procedures. For example, we drafted and passed a department policy on tenure and promotion for evaluating upcoming candidates. The department also sponsored the highlysuccessful Language Expo in March that was coordinated by Marina Peters-Newell, Lower Division Coordinator for French. Specific language instructors were responsible for handling student advising in each of the major and minor language units. Office operations were supervised by the Department Administrator, Wilma Williams, aided by Diane Slack and Susanne Knoblauch. These latter two positions are half-time and Ms. Knoblauch works more specifically on the German Summer School. The remaining staff position vacated by the departure of Lisa Stewart has not yet been filled. The monies from that position were needed to fund important instructional items not covered in the A&S allocation. Once the Francophone Summer School gets revived, it will be important to secure some administrative support without which that program cannot run. We were very fortunate to have an excellent group of work-study students to help with various office duties.

Individual faculty distinguished themselves in many areas: Susanne Baackmann (Associate Professor of German) took a year-long sabbatical to work on her book project on memory and war; Lorna Brau (Visiting Instructor of Japanese) continued to develop successful courses on Japanese language and culture for a growing audience; Pamela Cheek (Assistant Professor of French) taught a Freshman seminar on utopias while continuing work on her book manuscript dealing with sexuality in 18th-century France; Monica Cyrino (Associate Professor of Classics) received the Excellence in Teaching Classics award from the American Philosophical Association and was on sabbatical in Fall; Deborah Jenson (Assistant Professor of French) completed revisions on her book manuscript on social mimesis to be published by Johns Hopkins Press; Byron Lindsey (Associate Professor of French) led a group of students on the summer Moscow program; Peter Pabisch (Professor of German) continued to develop the Atlantic Bridge on the Camino Real through the College of Continuing Education: Walter Putnam (Professor of French) served out his final year as Chair of FLL; Diana Robin (Professor of Classics) published a co-authored book on third world cinema and published widely in the area of Renaissance women writers; Katrin Schroeter (Assistant Professor of German) successfully passed her mid-tenure review; Warren Smith (Professor of Classics) sponsored and directed several productions of classical plays on the UNM campus.

Our non-faculty instructors continued their stellar job in their respective programs: Machiko Bromberger (Japanese), Rachele Duke (Italian), Marina Peters-Newell (French Lower Division Coordinator) and Jian Zhu (Chinese).

The department conducted a tenure-track search and hired Stephen Bishop to begin in 2000-01 as Assistant Professor of French.

FLL continued to teach a variety of courses in English that were cross-listed and attracted students from other departments across campus. We conducted outcomes assessments on the undergraduate and graduate levels and determined that our programs are meeting the standards we expected. The healthy concentration of literary and cultural theory has given our graduate programs a boost and increased the opportunities for our best M.A. students to enter nationally recognized doctoral programs. The department also helped to sponsor an array of invited lectures, film series and presentations throughout the year. All in all, FLL seems to be fulfilling its obligations to UNM students on both the graduate and undergraduate levels. With the implementation of the new core curriculum and the addition of specific courses taught within the department, we hope to continue to expand our offerings to an even broader audience.

B. REFEREED JOURNAL ARTICLES AND BOOK CHAPTERS

Baackmann, Susanne

Book Review of Hans Hoeller, Ingeborg Bachmann: Letzte unveroeffentlichte Gedichte. Entwuerfe und Fassungen. Frankfurt a. M.: Suhrkamp, 1998. For Sichtungen. Archiv-Bibliothek-Literaturwissenschaft 2. Jg. (1999); pp. 228-31

Kolchevska, Natasha

Book chapter-"Anastasia Verbitskaia" in Russian Women Writers, C. Tomei, ed., 1999,pp. 658-666 (book received the AAASS-AWSS "Best Book in Slavic Women's Studies Award for 1999)

A. Verbitskaia, "My Autobiography," (excerpt) translation in Russian Women Writers, C. Tomei, ed., 1999, pp. 666-681.

Book review-Intimacy and Terror: Soviet Diaries of the 1930s, in Canadian-American Slavic Studies, 1999.

Lindsey, Byron

"The Greek Version", Viktor Pelevin, short story, translation in AGNI, 50, Boston University Press: Boston, pp. 146-155.

Pabisch, Peter

"Zu diesem Werk," in: Ludwig Soumagne. Rief fuer de Insel. Krefeld: von Acken, 1999.1.

(with Tina Edsall) "The So-Called Huning-Letters. Note and Translation," New Mexico Historical Review, April 1999, 74, 2, pp. 209-219.

Wortort Tarock Unter Anderem. Gedichte und Gesichte. Vermillion: University of South Dakota, 1999. 75 pp.

Putnam, Walter

"A Translator's Correspondence: Philippe Neel to Joseph Conrad." *The Conradian* 24:1 (Spring 1999): pp. 59-91

Robin, Diana

Book: Redirecting the Gaze: Gender, Theory, and Cinema in the third World. Edited by Diana Robin and Ira Jaffe. With an introduction by the editors. SUNY series in Cultural Studies. Albany: State University of New York Press, 1999. 377 pp. Cloth and paper.

Book chapter: Diana Robin, "Culture, Imperialism, and Humanist Criticism in the Italian City States." In *The Cambridge History of Literary Criticism. Vol. III. The Renaissance*. Cambridge: Cambridge University Press, 1999. Pp.355-63.

ŧ

Schroeter, Katrin

Book Review: "Arbeitslosigkeit und gesundheitliche Folgen in Ostdeutschland – eine Studie im Freistaat Sachsen" Harych, Horst and Peter Harych in *German Studies Review* Vol. XII

Smith, Warren

"Recent Lucretian Scholarship," review article in Ancient Philosophy 19 (Fall 1999); pp. 1-9.

"Juan Maldonado's *Bacchanalia* and the Young Lazarillo," monograph with introduction, new edition of Latin text of Maldonado, English translation, and commentary, in *Humanistica Lovaniensia* (Leuven, Belgium) Dec. 1999, pp. 160-241. Co-authors: Clark Colahan and Alfredo Rodriguez.

"The Narrative Voice in Apuleius' *Metamorphoses*," 1972 article reprinted with new introduction in Oxford *Readings in the Roman Novel* ed. S.J. Harrison (Oxford 1999), pp. 195-216).

Purpose and Cause in Pauline Exegesis: Romans I.16-4:25 and a New Approach to the Letters by Wndy Dabourne (Cambridge 1999). Reviewed in Bryn Mawr Classical Reviews, July 1999 (3 pages).

Apuleius: The Golden Ass. Translated with Introduction and Explanatory Notes by P.TG. Walsh (Oxford 1994). Reviewed in International Journal of the Classical Tradition 4.4 (Spring 1998; published 1999), pp. 632-634.

Terence: The Brothers. Translated With an Introduction by Charles Mercier (Newburyport 1998), Reviewed in Bryn Mawr Classical Reviews, Jan. 1999 (3 pages)

Propertius: The Poems. Translated with Notes by Gny Lee (Oxfored 1994). Reviewed in International Journal of the Classical Tradition 4.3 (Winter 1998; published 1999) pp. 472-474.

Baackmann; Susanne. December 1999. "Occupations: the Choreography of Post War in Bachmann and Rosenberg." Modern Language Association, Chicago, IL.

Bishop, Stephen. April 2000. "Writing Against the Law: Kamerunian Resistance to Cameroonian (In)Justice." African Literature Association Conference, Lawrence, KS.

Bishop, Stephen. May 2000. "Contemporary Conflict of Legal Traditions in Cameroun: Opinions from Those Who Create Them." Law & Society Conference, Miami, FL.

Cheek, Pamela. February 2000. "The Ideal Brothel: the Male Body and the Institution Imagined in Enlightenment Prostitution Reform Plans." American Comparative Literature Association, Las Vegas, NV.

Cyrino, Monica. April 2000. "Under Cover Goddess: Aphrodite's Robe in the Homeric Texts." Classical Association of the Middle West and South. Knoxville, TN.

Jenson, Deborah. September 1999. "Moreline Desbordes-Valanire's 'Crefe Poetics'". Bloomington, IN.

Jenson, Deborah. February 2000. "Fatal Virginity: Unconsumated Cultural Critique in Paul et Virginie."

Western Eighteenth Century Conference. Las Vegas, NV.

Kolchevska, Natasha. November 1999. "Word and Image in Gulag Memoirs" National Meeting of the American Association for the Advancement of Slavic Studies, St. Louis, MO.

Lindsey, Byron, November 1999. "On Dimitri Bakin: Style and Problems." National Meeting of the American Association for the Advancement of Slavic Studies, St. Louis, MO.

Robin, Diana. November 1999. "Prostitutes and Celebrity Culture in Renaissance Venice: The Case of Tullia d"Aragona." Newberry Library, Chicago, IL.

Smith, Warren. November 1999. "Authors' Self-Introductions in Narrative." Pacific Coast Ancient and Modern Language Association, Portland, OR.

UNM ANNUAL REPORT DEPARTMENT OF GEOGRAPHY July 1, 1999 to June 30, 2000 Olen Paul Matthews Chair

1. SIGNIFICANT DEVELOPMENTS

1.1 COMPLETION OF PROGRAM REVISIONS

In the 1994 five-year plan, the Department changed the focus of its curriculum to emphasize environmental analysis using geographic information technologies. The plan was based on recommendations from a graduate program review in 1992. The implementation of the plan was substantially completed in the past year except for the additional faculty members in the plan and implementation of the PhD program. The Department has evolved into one that is substantially different from that of 1992. Four new faculty members have been added, significant computing power for teaching and research has been installed, and Geography and the Earth Data Analysis Center (EDAC) are co-located.

Today the Department has an emphasis on environmental systems analysis to which all faculty members contribute. Environmental systems analysis integrates biotic, hydrologic, and climatic systems and evaluates how humans interact with these systems in order to solve complex problems. The key to our approach is integration, and our tool is Geographic Information Technology (GIT). GIT includes remote sensing, spatial statistics, and geographic information systems (GIS). GIT is heavily computer oriented, but field studies and field-based tools are often used to provide the data required for analysis.

The Department made environmental systems analysis its focus because an integrated approach is needed to understand and solve many of today's problems. The scientific community has discovered that looking at problems from a single discipline's perspective ignores significant aspects that must be included if a problem is to be understood and solved. In addition, the scientific community has recognized that an understanding of how humans interact with the environment is essential if sound policies are to be developed and impacts assessed. Until recently, integrated modeling lacked the computing power to be successful at anything but a very coarse scale or very limited area. Today, improved computer systems and improved GIT software make such modeling possible. The Department is committed to developing environmental modeling techniques that operate using GIT and that are useful for policy analysis and impact assessment. Our curriculum is designed to provide students the tools, scientific background, and policy understanding to become geographers capable of environmental systems analysis.

In the spring of 2000, the Department began working on a federally funded three-year research project that uses an integrated approach. This is the first step in the Department's combined research agenda. The project illustrates the Department's future direction in teaching and

research. The research is at the interface of water resources, biology, and climatology and will be used for environmental policy analysis. The modeling approach will operate within a GIS rather than using GIS simply for display purposes. This research is innovative and holds great promise for problem solving. Additionally, the results will be incorporated into our courses, directly benefiting students in our program.

1.2 SPATIAL DATA ANALYSIS LABORATORY

The Spatial Data Analysis Laboratory was successfully funded under NSF DUE-9551046: "Instrumentation for an Undergraduate Spatial Data Analysis Laboratory." Equipment for the lab was purchased, and it was used for the first class in the fall semester 1995. In June 2000 the Department was able to purchase new equipment to replace the equipment obtained under the NSF grant. The equipment includes three Sun Ultra 10 workstations, along with 10 Sunray terminals and an additional 218 GB of storage. These additions once again make the Department's equipment "state of the art." In addition, the Department was able to assemble a 10 seat PC lab that is used to teach our physical geography labs and several other courses. Few Geography Departments in the country can match our equipment. We have two major concerns-adequate system's administration and a crowded PC lab. The current PC lab needs to be expanded to 20 seats and put in a larger facility. Demand for all courses is high and these problems need to be resolved because they remains a threat to the quality of our programs.

1.3 RESEARCH GRANTS

Perhaps the most significant development within the Department has been our success in obtaining grants. During the period for this report every grant application has been successful. As a result, the Department now has grants for over \$1.1 million. If EDAC grants are included, the figure is well over \$5.0 million. The grants reflect the Department's new programmatic direction.

1.4 EARTH DATA ANALYSIS CENTER (EDAC)

EDAC was co-located with the Geography Department two years ago. This has created space problems, but the increased opportunities for interaction are beneficial. EDAC is engaged in remote sensing and geographic information systems (GIS) development and serves as a focal point for graduate and undergraduate student employment. As of July 1, 1999, EDAC was made part of Arts and Sciences. Their budget is separate from Geography's, and the Director of EDAC reports to the Dean of Arts and Sciences.

2. SIGNIFICANT PLANS

The Five year plan the Department developed in 1994 is now out of date. During September 2000 the Department went through another graduate program review. When the results of that evaluation are finalized, the Department will create another plan based upon their recommendations. The primary goal as set forth in the 1994 Five-Year Plan is to continue to strengthen the program so it will be in the position to offer a PhD program in the very near

future. Preliminary indications from the graduate review committee indicate the Department should have a PhD program in place in 3-4 years.

3. STAFF APPOINTMENTS AND SEPARATIONS

The faculty was composed of 4.5 salaried members in the Fall, 1993. The faculty is now at 7 FTE. Four of the seven faculty have been hired since 1993. No changes have occurred during the past year.

4. PUBLICATIONS AND PROFESSIONAL ACTIVITIES

4.1 PUBLICATIONS AND PRESENTATIONS

Publications

Snell, Seth E., S. Gopal, and R. K. Kaufmann, "Spatial Interpolation of Surface Air Temperatures Using Artificial Neural Networks: Evaluating Their Use for Downscaling GCMs," Journal of Climate 13(5): 886-895 (2000).

Scuderi, L.A. The Holocene climate of North America. A.R. Orme (ed.), <u>The Physical Geography of North America</u>. The Oxford Regional Environments Series, Oxford University Press. Chapter 4, 24 pp. (2000).

Bradley T. Cullen. "Is Land Degradation an Issue in Western Australia?" <u>Papers and Proceedings of the Applied Geography Conferences</u>, Vol. 22, 1999, pp. 146-150.

Kaufmann, Robert K., S. E. Snell, R. Dezzani, and S. Gopal, "The Significance of Synoptic Patterns Identified by the Kirchhofer Technique: A Monte Carlo Approach," <u>International Journal of Climatology</u> 19(6) 619-626 (1999).

Bradley T. Cullen. "Attitudes Toward Land Degradation In Western Australia" <u>Papers and Proceedings of the Applied Geography Conference</u>, North Carolina, October, 1999.

Michael E. Campana, Olen P. Matthews, Richard M. DeSimone, and Doris J. DeSimone (eds), <u>Policy Conflicts and Sustainable Water Resources Development in New Mexico's Rio Grande</u> <u>Basin.</u> Master of Water Resource Administration Program, University of New Mexico, <u>Publication No. WRP-2</u> (2000).

Olen Paul Matthews, Michael Campana, and Richard DeSimone (eds), <u>Sustainable Water Resources Issues: Case Studies from New Mexico</u>, Master of Water Resources Administration Program, University of New Mexico, Publication No. WRP-1 (1999).

Presentations

Cullen, Bradley T., "How Should the Land Be Used? Perceptions of Rural Western Australians," Annual Meeting, Association of American Geographers, Pittsburgh (2000).

Cullen, Bradley T., "A River Divides Them: The Quality of Life In Albuquerque, NM," Applied Geography Conference, Charlottle, NC (November, 1999).

Cullen, Bradley T., "Is Land Degradation An Issue In Western Australia," Applied Geography Conference, Charlotte, NC (November, 1999).

Gregory, Kirk, "Strategies for Regional-Scale Hydrologic Modeling in a GIS Environment." 22nd Annual Applied Geography Conference, Charlotte, NC (1999).

Matthews, Olen Paul, "The Changing Paradigm in Federal Land Management," Association of American Geographers, Pittsburgh (2000).

Matthews, Olen Paul, "Who Owns the Water in Elephant Butte Reservoir?" Applied Geography Confernce, Charlotte (1999).

Matthews, Olen Paul, "More Basic Geography: Title to Land Water and Minerals in New Mexico," Southwest Association of American Geographers, San Marcos (1999).

Morain, Stanley A. and Budge, Amelia M., "Land Economics on Rangeland," NASA Earth Science Applications Research Program (ESARP), Washington, D.C. (October, 1999).

Morain, Stanley A., "Potential Impacts of Climate Change and Climate Variability on Southwest Native Peoples and Their Homelands," NASA Earth Science Applications Research Program (ESARP), Washington, D.C. (February, 2000).

Morain, Stanley A. and Chiu, Long, "Satellite-based Prototype Image Products for Water Resource Managers in the Middle Rio Grande Basin," 4th Annual U.S. Geological Survey, Middle Rio Grande Basin Workshop, Albuquerque, NM (February, 2000).

Morain, Stanley A., "Southwest Assessment of Potential Impacts of Climate Variability/Change," 8th Biennial Forest Service Remote Sensing Applications Workshop, Albuquerque, NM (April, 2000).

Morain, Stanley A., "The New Mexico Consortium for Remote Sensing Research Related to Safety, Hazards, and Disaster Assessment in Transportation Lifelines," American Society for Photogrammetry and Remote Sensing Annual Meeting and Exhibition, Washington, D.C. (May, 2000).

4.2 OUTSIDE PROFESSIONAL ACTIVITIES

Dr. Cullen ended his position as National Counselor (Board of Directors) for the Association of American Geographers in June, 2000. He continues as Associate Editor for <u>The Social Science Journal</u>, Associate Editor for <u>Southwestern Association of American Geographers Journal</u>, and Board of Directors of the Applied Geography Conferences

Dr. Matthews served and continues to serve on several professional boards including: Advisory Board, Interamerican Dialog on Water Management; Shared Use of Transboundary Water Resources Task Committee, American Society of Civil Engineers; and Water Regulatory Standards Committee, American Society of Civil Engineers.

Dr. Morain's outside professional activities include: Editor-in-Chief Photogrammetric Engineering and Remote Sensing; Committee on Data Preservation and Archiving (ASPRS); ASPRS liason to American Academy of Sciences; Editorial Board, International Journal of Remote Sensing; Editorial Board, GeoCarto International: An International Journal of Remote Sensing; ISPRS Science Advisory Committee; ASPRS Committee on Data Preservation and Archiving; ESIP Federation Executive Committee; Chair New Mexico Geographic Information Council Framework Committee; and reviewer of numerous journal manuscripts.

Dr. Scuderi is currently reviewing articles that appear in the following journals: Arctic and Alpine Research (multiple papers); Quaternary Research; and The Annals of the Association of American Geographers. Dr. Scuderi is also a reviewer for NSF proposals in: Solar Terrestrial; Climate Dynamics; Geography and Regional Science; Polar Programs and Geophysical Research Letters.

Dr. Williams organized and operated the Fourteenth Annual Southwest Institute, hosted in 1999 by the New Mexico Museum of Natural History. Graduate and undergraduate credits in Geography were offered by this department. In conjunction with the two field courses a collection of readings and reference material was organized and edited. A field Guide was also created for each course. Future plans include developing a series of guidebooks on the Southwest.

Dr. Snell is currently reviewing articles in the Journal of Applied Meteorology.

4.2 OUTSIDE SPONSORED RESEARCH

Morain, Stanley, PI. "RS Applications in Transportation," U.S. DOT, \$3,000,000 (2000-2004)

Gregory, Kirk and Snell, Seth, Co-PI's, "A Flash Flood Prediction Model for Rural and Urban Basins in New Mexico," New Mexico Water Resources Research Institute, \$24,759 (2000-2001).

Matthews, Olen Paul, Michael Campana, and David Brookshire Co-Pi's, "Valuing Water for Sustainable Development," N.O.A.A. \$20,000 (2000-2001).

Matthews, Olen Paul and David Brookshire Co-PI's, with Louis Scuderi, Bradley Cullen, Kirk Gregory, Seth Snell, Michael Campana, Jainie Chermack, and Kate Krause Co-investigators, "An Integrated GIS Framework for Water Reallocation and Decision Making in the Upper Rio Grande," E.P.A. \$410,000 (2000-2003).

Scuderi, Louis P.I., with Olen Paul Matthews, Kirk Gregory, Seth Snell, Michael Campana, David Brookshire and Janie Chermack Co-investigators, "A Quantitative Assessment of the Economic and Institutional Impacts of Climate Change on the Upper Rio Grande Valley Using an Integrated GIS Framework," N.S.F. \$675,000 (2000 – 2003).

Matthews, Olen Paul and Michael Campana Co-PI's, "Policy Conflicts and Sustainable Development in New Mexico's Rio Grande Basin," N.O.A.A. \$21,000 (1999-2000).

Donation to Department of Geography, Film Recorder from Exon, \$300,000 (1999).

Morain, Stanley, "Earth Science Information Partner," NASA, \$2,045,517 (1998-2002)

Morain, Stanley, "Affiliated Research Center," NASA, \$600,000 (1998-2001)

Scuderi, L.A., Trimble Center for Excellence in GPS: Trimble Navigation, Inc., 1996-ongoing, \$90,000 (equipment and supplies for GPS, updated semiannually).

Scuderi, L.A., "Geographic Information System Support," U.S. Army National Guard, \$45,000 (1999-2000).

Scuderi, L.A., "SUN Computer Matching Grant," Sun Microsystems (for equipment purchases), \$21,000 (2000).

ANNUAL REPORT

DEPARTMENT OF HISTORY

1. Program Improvements

A. New Undergraduate Courses:

Summer Seminar in Greece. (Richard Berthold)

- 320. Latin American Labor History (Elizabeth Hutchison)
- 320. History of Latin American Religions (Elizabeth Hutchison)
- 320. Native American Southwest (Samuel Truett)
- 366. Race in the Twentieth Century United States (David Farber)
- 380. Hispanic Frontiers in North America (Samuel Truett)
- 492. Atomic America (Timothy Moy)
- 492. United States and the Pacific Rim (Noel Pugach)
- B. New Graduate Courses:
- 510. Race, Ethnicity and National Identity in Latin America (Judy Bieber)
- 510. European Expansion in Asia (Jonathan Porter)
- 568. America in the 1960s (David Farber)
- 581. From Indian to Peasant and Back Again (Kimberly Gauderman)
- 582. Military and Society in Latin America (Elizabeth Hutchison)

2. Student Achievements

A. Awards, Fellowships, Prizes:

Chamberlain, Kathleen

Tom L. Popejoy Dissertation Prize

Key, M. David

Frederick G. Bohme Memorial Prize

Kleiner, Catherine

Dorothy Woodward Memorial Fellowship

Marrah, Jennifer

American History Scholarship from the National Society of Colonial Dames of America.

Solomon, Carlos

Joseph M. Montoya Fellowship

B. Placement

Carey, Elaine

University of Detroit Mercy

Davis, Jerry

The Oakridge School, Arlington, TX

3. Faculty Achievements

A. Faculty Publications:

Berthold, Richard

Review of The Power of Money. Coinage and Powers in the Athenian Empire, by T. Figueira. In History 28 (Winter 1999): 81-88.

Review of *The Associations of Classical Athens*, by N.F. Jones. In *History* 28 (Fall 1999): 39.

"Black Athena. A Criticism of Martin Bernal." In *La Puerta*, (Reprinted) ed. W. Martin, et al. 19-26. Dubuque: Kendall/Hunt, 1999.

"A Response to Technology Use." Teaching Excellence 7.2 (1999) 1-2.

Bieber, Judy

Power, Patronage and Political Violence: State Building on a Brazilian Frontier. Lincoln, Nebraska University of Nebraska Press, 1999.

Review of Conquistador in Chains, by David A. Howard. In the New Mexico Historical Review 74 (January 1999): 81.

Review of Blackness in Latin America and the Caribbean, by Norman Whitten Jr. and Arlene Torres, eds. In Canadian Journal of Latin American and Caribbean Studies 2 (Fall 1999): 299-301.

Bokovoy, Melissa

Review of Women in the Politics of Postcommunist Eastern Europe, by Marilyn Rueschemyer. In Nationalities Papers 27 (April 1999): 340-341.

Review of *Prince of Fire: Contemporary Serbian Short Stories*, by Radmila J. Gorup and Nadezda Obradovic's. In internet review H-Habsburg (April 1999):

Connell-Szasz, Margaret

Review of Geronimo's Kids: A Teacher's Lessons on the Apache Reservation, by Robert S. Owe and H. Henrietta Stockel. In Journal of the West 38 (October 1999): 101.

Review of Cherokee Women: Gender and Culture Change, 1700-1835, by Theda Perdue. In The American Historical Review 105 (December 1999): 1659-1660.

"Samson Occom: Mohegan Leader and Cultural Broker." In *The Human Tradition in Colonial America*, eds. Ian K. Steele and Nancy L. Rhoden, 237-256. Wilmington, Delaware: Scholarly Resources, Inc. 1999.

"Listening to the Native Voice: American Indian Schooling in the Twentieth Century." In *The American Indian, Past and Present*, ed. Roger L. Nichols, 267-278 New York: McGraw Hill College 1999.

Editor. Education and the American Indian. 3rd edition Albuquerque, New Mexico: University of New Mexico Press, 1999.

Etulain, Richard

Editor. Does the Frontier Experience Make America Exceptional? Boston: Bedford Books, 1999.

Co-edited with Jeronima Echeverria. Portraits of Basques in the New World. Reno: University of Nevada Press, 1999.

Co-edited with Glenda Riley. With Badges and Bullets: Lawmen and Outlaws in the Old West. Golden, Colorado: Fulcrum Publishing, 1999.

Telling Western Stories: From Buffalo Bill to Larry McMurtry. Albuquerque, New Mexico: UNM Press, 1999.

"Robert Laxalt: Basque Writer of the American West." In *Portraits of Basques*, eds. Richard Etulain and Jeronima Echeverria, 212-29. Reno: University Nevada Press, 1999.

"Billy the Kid: Thunder in the West." In With Badges and Bulless, eds. Richard Etulain and Glenda Riley, 123-38. Golden, Colorado: Fulcrum Publishing, 1999.

ut.

"Introduction," to Owen Wister, Salvation Gap and Other Stories (Lincoln: Nebraska University of Nebraska Press, 1999), vii-xv.

Introduction, " to Walter Noble Burns, The Saga of Billy the Kid (Albuquerque, New Mexico: UNM Press, 1999), ix-xvii.

"Changing Cultural Inventions of the Columbia," in Great River of the West: Essays on the Columbia River, 126-43 Reno: University of Nevada Press, 1999.

Review of The Southwest in American Literature: The Rise of a Desert Aesthetic, by David W. Teaque. In Journal of Arizona History 39 (Winter 1998): 435-36.

Review of Billy the Kid: His life and Legend, by Jon Tuska. In Great Plains Quarterly 19 (Spring 1999): 142-43.

Review of Let the Cowboy Ride: Cattle Ranching in the American West, by Paul F. Starrs. In American Historical Review 104 (October 1999): 104-5.

Farber, David

"Street Heat in Seattle," TomPaine.com: A Journal of Opinion (e-journal) December 2, 1999, 4 pp.

"New Histories of the American Sixties," "The Sixties Issue," Mid-America: An Historical Review 81 (Fall 1999): 227-231.

"Democratic Subjects in the American Sixties: National Politics, Cultural Authenticity, and Community Interest," *Mid-America: An Historical Review* 81 (Fall 1999): 319-332.

"New Wave Sixties Historiography," Reviews in American History, 27 (June 1999): 298-305.

"Alfred P. Sloan of General Motors: Corporate Citizenship and Civil Society in the New Deal Era," Working Paper Series, Aspen Institute Nonprofit Sector Research Fund, Washington D.C., (1999): 51.

And Timothy Moy and Virginia Scharff. "History After The Geographic Turn." Rethinking History 3 (Winter 1999): 85-93.

Feller, Daniel

"Benjamin Tappan." In American National Biography, ed. John A. Garraty, vol. 21, 312-314. New York: Oxford University Press, 1999.

Review of The Papers of John C. Calhoun. Vol. 24, ed. by Clyde N. Wilson. In South Carolina Historical Magazine 100 (January 1999): 80-82.

Review of *The Battle of Glorieta*, by Don E. Alberts. In *Military History of the West* 29 (Spring 1999): 95-96.

Review of Manifest Destiny and Empire, by Sam W. Haynes and Christopher Morris. In The Journal of Arizona History 40 (Spring 1999): 103-104.

Hall, Linda

And Don M. Coerver. Tangled Destinies: Latin America and the United States.

Albuquerque, New Mexico: University of New Mexico Press, 1999.

Hutchison, Elizabeth

Review of The Gendered Worlds of Latin American Women Workers; From Household and Factory to the Union Hall and Ballot Box, by John D. French and Daniel James, eds. In Bulletin of Latin American Research 18 (April 1999): 263-65.

Review of Women Through Women's Eyes: Latin American Women in Nineteenth-Century Travel Accounts, by June H. Hahner. In the New Mexico Historical Review 10 (July 1999): 328.

Review of Contested Communities: Class, Gender, and Politics in Chile's El Teniente Copper Mine, 1904-1951, by Thomas Miller Klubock. In the Journal of Latin American Studies 31 (October 1999): 756-57.

Moy, Timothy

"A View from Across the Hall: Problems of Delineation and Value in Nature and Human Nature." In Human Nature: Biology, Culture, and Environmental History, eds. John P. Herron and Andrew Kirk, 134-45. Albuquerque, New Mexico: University of New Mexico Press, 1999.

Porter, Jonathan

2nd edition. Macau: The Imaginary City. Boulder: Westview Press, 1999

"The Troublesome Feringhi: Late Ming Chinese Perceptions of the Portuguese and Macau." In *Portuguese Studies Review*, 7 (Spring-Summer 1999): 11-35.

"A Question of Sovereignty," in *China Perspectives* (November-December 1999): 8-17. Also published as "Les akéas de la souveraineté." In *Perspectives Chinoise (Spécial*) 55 (September-October 1999): 8-17.

Review of Political Development in Macau, by Lo Shiu-hing. In The China Journal, 41 (January 1999): 233-236.

Review of The Golden Ghetto: The American Commercial Community at Canton and the Shaping of American China Policy, 1784-1844, by Jaques M. Downs. In American Historical Review, 104 (February 1999): 160-161.

Review of The Chan's Great Continent: China in Western Minds, by Jonathan Spence. In History: Reviews of New Books 27 (Spring 1999): 133-134.

Review of Chinese Modernity and the Peasant Path: Semicolonialism in the Northern Yangzi Delta, by Kathy Le Mons Walker. In History: Reviews of New Books 28 (Fall 1999): 37.

Pugach, Noel

Review of East and West China, Power and the Future of Asia, by Christopher Patten. In Albuquerque Journal (January 1999): F5.

Review of Sino-American Relations, 1944-1949, by George Wei. In American Historical Review 104 (February 1999) 219-20.

Review of About Face: A History of America's Curious Relationship with China, From Nixon to Clinton by James Mann. In Albuquerque Journal (August 1999): F5,

Review of Defiant Peacemaker: Nicholas Trist in the Mexican War, by Wallace Ohrt. In New Mexico Historical Review 74 (July 1999): 330-31.

Risso, Patricia

Review of Port Cities and Intruders: The Swahili Coast, India, and Portugal in the Early Modern Era, by M.N. Pearson. In Journal of Asian Studies 58 (August 1999): 874-875.

Rubenstein, Jay

"Liturgy against History: The Competing visions of Eadmer and Lanfrance of Canterbury." Speculum 74 (1999): 279-309.

Review of A Monk's Confession: The Memoirs of Guibert of Nogent, by Paul J. Archambault. In Religion and the Arts 3 (Winter 1999): 121-123.

Review of The Journey of the Magi: Meanings in History of a Christian Story, by Richard Trexler. In Religion and the Arts 3 (Spring 1999): 272-274.

Scharff, Virginia

"Man and Nature! Sex Secrets of Environmental History." In *Human Nature: Biology, Cultural and Environmental History*, eds. John P. Herron and Andrew Kirk, 31-48. Albuquerque: New Mexico University of New Mexico Press, 1999, 31-48.

"Lighting Out for the Territory: Women, Mobility, and Western Place." In Power and Place in the North American West, eds. John Findlay and Richard White, 287-303. Seattle, Washington: University of Washington Press, 1999.

"Spectacle and Emancipation." In *La Puerta* (2nd edition), eds. Wanda Martin et. al., 183-201. Dubuque, Iowa: Kendall/Hunt Publishing Company, 1999.

"Femininity and the Electric Car." In Sex/Machine: Readings in Culture, Gender and Technology ed. Patrick D. Hopkins, 75-88. (Bloomington: Indiana University Press, 1998.

"Ghostly Past, Ghostly Future," Albuquerque Tribune, December 29, 1999.

Review of Frontiers of Historical Imagination: Narrating the European Conquest of Native America, by Kerwin Lee Klein. In Western American Literature 34 (1) (Spring 1999): 94-95.

Slaughter, Jane

Review of Prison of Women: Testimonies of War and Resistance in Spain, 1936-75, by Tomasa Cuevas. In Choice 36 (January 1999): 2969.

Review of Fighting for American Manhood, by Kristin L. Hoganson. In Choice 36 (May 1999): 5267.

Review of Imagining Home: Gender, "Race" and National Identity, 1945-64. In Choice 37 (October 1999): 1156.

Spidle, Jake

"The Historical Roots of Managed Care." In Managed Care: Financial, Legal and Ethical Issues, ed. David Bennahum 11-21. Cleveland: Pilgrim Press, 1999.

Steen, Charlie

"Ceremony and Order in the Court of Louis XIV." Proceedings of the Western Society for French History 26 (December 1999): 291-301

Szasz, Ferenc

Introduction. In Cannon Fodder: From Basic to Purple Heart, Letters to Home. ed. James El. Hildbrand, xi-xiii. Las Cruces, NM: Yucca Tree Press, 1999.

"Peter Williamson and The Eighteenth-Century Scottish American Connection." Northern Scotland 19 (1999): 47-61.

Review of Holding the Line: The Telephone in Old Order Mennonite and Amish Life, by Diane Zimmermann Umble. In The Journal of American Ethnic History 18 (Fall 1998): 153-4.

Review of All at Sea: Coming of Age in World War II, by Louise R. Harlan and Tales of Los Alamos: Life on the Mesa, 1943-1945 by Bernice Brode. In New Mexico Historical Review 74 (January 1999): 94-95.

Review of Seventh-Day Adventism in Crisis: Gender and Sectorian Change in an Emerging Religion, by Laura L. Vance. In Choice 36 (June 1999): 98.

Review of European Immigrants in the American West; Community Histories, by Frederic C. Luebke. In South Dakota History 29 (Fall 1999): 250-251.

Review of The Cold War American West, 1945-1989, by Kevin Fernlund. In New Mexico Historical Review 74 (October 1999): 441-442.

Review of Growing Up Religious: Christians and Jews and their Journeys of Faith, by Robert Wuthnow. In Choice 37 (November 1999): 1509.

Yazawa, Melvin

"Republican Expectations: Revolutionary Ideology and the Compromise of 1790." In A Republic for the Ages: The United States Capitol and the Political Culture of the Early Republic, ed. D.R. Kennon, 3-35. University Press of Virginia, 1999.

"The North and South Poles of the American Revolution." In Reviews in American History 27 (July 1999): 373-381.

Review of The Americas in the Age of Revolution, 1750-1850, by Lester Langley. In New Mexico Review 86 (July 1999): 338-339.

Review of Literary Federalism in the Age of Jefferson William C. Dowling and American Plutarch, by Russell M. Lawson. In Journal of the Early Republic 19 (Winter 1999): 544-547.

B. Conference and Other Presentations:

Bokovoy, Melissa

"Whose Dead? Remembering the Fallen in Serbia and Croatia, 1919-1929." American Association for the Advancement of Slavic Studies, St. Louis, November 1999.

Connell-Szasz, Margaret

"Scottish Highlanders and Native Americans: Encounters with Eighteenth-Century School Masters." Department of History Seminar, University of Aberdeen, Scotland, November, 1999.

Etulain, Richard

"Telling Western Stories." Lecture of the Year, NMSU, Las

Cruces, March 1999.

"Western Stories for the Next Generation." Presidential Address, Western History Association, Portland, October, 1999.

"Billy the Kid: Man and Mystery." Eastern New Mexico University, Portales, March 1999.

"Calamity Jane: Life and Legends." Pioneer Museum, Lander, WY, September 1999,

Farber, David

"Sixties Historiography." Fairfield University, Faculty Summer Seminar, July 1999.

"Keynote Address." Annual Meeting, Connecticut History, November 1999.

"Teaching the 'Sixties." Connecticut on Social Studies, November 1999.

Feller, Daniel

"A Brother in Arms: Benjamin Tappan and the Anti-Slavery Democracy." Society for Historians of the Early American Republic, Lexington, KY, July 1999.

Gauderman, Kimberly

"Women, Indian, Entrepreneur: Indigenous Market Women in Seventeenth-Century Quito." Rocky Mountain Latin American Studies Association, Santa Fe, December 1999.

Hall, Linda

"Oil, Banks and Politics: The United States and Post-Revolutionary Mexico"; "Sacred Landscapes: The Virgin Mary in Reconquest Spain and the Conquest of Latin America"; "Evita and Mary: Religious Image and Political Resonance in Argentina." Three Lectures at the University of Texas, El Paso, October, 1999.

"The Virgin Mary and Migration on the U.S.- Mexican Border: Aspects of National Identity and Cultural Dissemination." Conference on Dimensions of Integration in NAFTA and Mercosur, Torcuata De Tella University, Buenos Aires, Argentina, December 1999.

Hutton, Paul

"Roosevelt's Rough Riders." Ron Bishop Film Festival, Buffalo Bill Historical Center, Cody, WY, February 1999.

"Col. Crockett's Exploits in Texas: The Story of a Book." Banquet Address, Book Club of Texas, Lubbock TX, April 1999.

"Reconsidering the West." Seminar for National Park Service Interpreters, NPS and Gilder Lehrman Institute of American History, Santa Fe, May 1999.

"The Western Hero." Larom Summer Institute, Buffalo Bill Historical Center, Cody, WY, June 1999.

"The Invention of Buffalo Bill." Buffalo Bill Wild West Conference, Royal Armouries Museum, Leeds, England, July 1999.

"Theodore Roosevelt, the Rough Riders and the Spanish American War." Colorado State University, Fort Collins, July 1999.

Wyatt Earp." Autry Museum of Western Heritage, Los Angeles, CA, September 1999.

"Phil Sheridan and the Red River War." Order of the Indian Wars Symposium, Amarillo, TX, September 1999.

Moy, Timothy

"Science and Creationism: Seeking Common Ground." NMSU, Las Cruces, February 1999.

Porter, Jonathan

"The Troublesome Feringhi: Late Ming Perceptions of the Portuguese and Macau." International Conference on Macau and the Maritime Silk Route, Macau, March 1999.

Rubenstein, Jay

"Guibert of Nogent, the Fall of Jerusalem, and the End of the World." Medieval Academy of America Conference, Washington, DC, April 1999.

"The Medieval Psychology of Guibert of Nogent's Monodies." International Congress on Medieval Studies, Kalamazoo, May 1999.

"Prophecy Fulfilled: Raised Expectations and Disillusionment Surrounding the Success of the First Crusade." New England Medieval History Conference, Boston, December 1999.

Scharff, Virginia

"Generations of Women's Historians." Organization of American Historians, Toronto, Canada, April 1999.

Slaughter, Jane

"Gender and the 'Good Life'." Women's History Conference,

Rochester, NY, June 1999.

"War and Gender: Memory and Experience." Marquis Lecture Series, Coe College, Cedar Rapids, IA, March 1999.

Spidle, Jake

"Pioneer Physicians and Surgeons of Luna County." Deming/Luna County Historical Society, Deming, January 1999.

St Vincent's Hospital: An Overview History." Santa Fe County Medical Society, Santa Fe, February 1999.

"The Early History of Surgery in New Mexico." Albuquerque Surgical Association, Albuquerque, April 1999.

"Coughing and Spitting in New Mexico History. The Story of New Mexico Program, UNM Division of Continuing Education, October 1999.

"A Look at the Florey Papers." The Royal Society, London, England, October 1999.

Szasz, Ferenc

"Religion and Manifest Destiny." American West Programme, Colorado State University, Fort Collins, CO, July 1999.

"Atomic Comic Books." American Heritage Annual Symposium, Laramie, WY, September 1999.

"Atomic New Mexico." Museum of New Mexico, Santa Fe, October 1999.

"Scots in the American West, 1820s -- 1914." Conference on the Scottish Diaspora, Aberdeen, Scotland, November 1999.

"Tony Hillerman's Vision of the American Southwest." New Mexico Judicial Education Program, Santa Fe, December 1999.

Yazawa, Mel

"The Historical Context of the Second Amendment." Annual Meeting of the N.M. Chapter of the American Civil Liberties Union, April 1999.

C. Prizes and Awards:

Berthold, Richard

El Paso Natural Gas Foundation Faculty Achievement Award,

Bokovoy, Melissa

Barbara Jelavich Prize for Distinguished Monograph on Any Aspect of Southeast European or Habsburg Studies since 1600 or on Nineteenth or Twentieth-Century Ottoman or Russian Diplomacy.

Awarded by the American Association for the Advancement of Slavid Studies.

Connell Szasz, Margaret

"All Our Relations Award" UNM Native American Scholarship and Research Council. Recognizing her "commitment to the academic success of Native American students."

Etulain, Richard

President, Western History Association

Hall, Linda

Chosen 1999-2000 Snead-Wertheim Lecturer

Hutton, Paul

Western Heritage Award, National Cowboy Hall of Fame

Elected Vice President of Western Writers of America

4. Faculty Professional, Community and University Service

A. Professional:

Berthold, Richard

President, New Mexico Association of Scholars

Bieber, Judy

Editorial Board, Colonial Latin American Historical Review

Evaluator, Summer Stipend Applications, Latin America, Asía and Africa, National Endowment for the Humanities

Bokovoy, Melissa

Editorial Board, H-Habsburg

Editorial Board, Nationality Papers

Connell-Szasz, Margaret

Panel of Reviewers, <u>Journal of American Indian Education</u>

Board of Editors, Montana, The Magazine of Western History

Etulain, Richard

President, Western History Association

Farber, David

Editorial Board, Mid-America

Feller, Daniel

Conference Coordinator, Society for Historians of the Early American Republic

Hall, Linda

Nominating Committee, American Historical Association

Hutton, Paul

Executive Director, Western History Association

Executive Board, Western Writers of America

Spur Awards Chairman, Western Writers of America

Editorial Board, Indiana Magazine of History

Member, Little Bighorn Indian Memorial Advisory Committee

Risso, Patricia

Review Committee, Summer Applications, National Endowment for Humanities

Scharff, Virginia

Executive Committee, Pacific Coast Branch, American Historical Association

Advisory Board, Society for the History of Technology

Nominating Committee, Western History Association

Spidle, Jake

Fulbright Selection Committee, Germany Program

Steen, Charlie

Treasurer, Western Society for French History

Yazawa, Mel

Panel Member, Fellowships for University and College Teachers,

National Endowment for the Humanities

B. Community

Moy, Timothy

Member, Coalition for Excellence in Science Education

Pugach, Noel

Consultant, Sandia National Laboratories, Pilot Training Project on Emerging Threats

Slaughter, Jane

Member, Board, Albuquerque Teacher's Institute

Spidle, Jake

Historian/Consultant, New Mexico Medical History Program

Yazawa, Mel

Board of Directors, American Civil Liberties Union, New Mexico

C. University:

Berthold, Richard

Member, Athletic Council

Bokovoy, Melissa

Co-Chair, European Studies Committee

Member, Faculty Senate Athletic Council

Member, Russian Studies Committee

Connell-Szasz, Margaret

Member. Native American Studies Faculty Curriculum Committee

Member, International Programs Faculty Advisory Committee

Etulain, Richard

Member. Search Committee for UNM Provost

Member, UNM Press Committee

Member Research Allocations Committee

Farber, David

Member, A&S Senior Promotion Committee

Member, University Curricula Committee

Gauderman, Kimberly

Member, LAII Grants and Awards Committee

Member, UNM Fulbright Commission

Hall. Linda

Director Latin American Studies, LAII

Member, Task Force on Graduate Enrollment

Hutchison, Elizabeth

Member, Interdisciplinary Committee on Latin American Studies, LAII

Secretary, Faculty Concilium on Latin America and Iberia

Moy, Timothy

Participant, LOBOrientation Program for In-Coming Freshmen

Pugach, Noel

Member, Asian Studies Committee

Member, UNM Library Committee

UNM Representative, Atlantic Council Academic Associates

Member, UNM Phi Beta Kappa Selection Committee

Porter, Jonathan

President, UNM Faculty Senate

Member, UNM Faculty Senate Operations Committee

Risso, Patricia

Member, Asian Studies Committee

Member, Medieval Studies Committee

Member, Religious Studies Advisory Committee

Member, A&S Graduate Advisors Committee

Rubenstein, Jay

Member, Religious Studies Committee

Member, Medieval Studies Committee

Scharff, Virginia

Chair, A&S Junior Tenure and Promotion Committee

Vice-Chair, UNM Press Board

Slaughter, Jane

Director, Feminist Research Institute

Member, Women Studies Executive Committee

Chair, University Faculty Governance Committee

Chair, Ad Hoc Committee to Revise Faculty Handbook

Member, Government Relations Committee

Co-Chair, European Studies Committee

Steen, Charlie

Member, A&S Curriculum Committee

Member, UNM Undergraduate Committee

Chairman, University Admissions and Registration Committee

Member, Task Force on Advising

Truett. Samuel

Member, Program Committee, Latin American and Iberian Faculty Concilium

Yazawa, Mel

Member, Academic Freedom and Tenure Committee

Member, UNM Scholarship Committee

Faculty Senate

Member, Faculty Senate IDC (Overhead Revenues) Committee

5. Faculty/Staff Appointments and Separations

Jay Rubenstein. Appointed Assistant Professor, Medieval History Lynn Schibeci. Appointed Assistant Professor, Modern European History

6. Future Plans

Department plans include continued efforts to improve undergraduate and graduate instruction by offering more courses. We hope to do this by making a new appointment in the field of U.S. Late Nineteenth-Early Twentieth-Century history, a area which has been vacant since 1998. We expect that our new hire in Chicana/o history will strengthen our U.S. and Western History programs. We also hope to quickly replace Robert Kern, whose recent death has created a significant gap in both European and Latin American programs.

Annual Report Department of Linguistics 1999-2000

Joan L. Bybee, Regents' Professor and Chair

1. Program improvements

- During this year we turned our attention to our lower division undergraduate courses and worked on a proposal to revise our 200-level introduction to linguistics. We also added sections of 101 at prime times. We will continue to work on these proposals.
- We offered an extra session of LING 440 in conjunction with the English as a Second Language Workshop offered by the College of Education. We plan to collaborate further with the COE on this course in the future, increasing our enrollment.
- We offered a special course on ASL phonology with a visiting faculty member from Purdue University. This course served both our students and faculty interested in ASL and those interested in phonology.
- We have also developed a concentration at the MA and PhD level in Computational Linguistics, an area of great demand currently. This fall we are offering, together with Computer Science, a course in Computational Linguistics. Caroline Smith of Linguistics and George Luger of Computer Science are co-teaching the course, both overload.
- We have now acquired our long-awaited first floor space, which provides muchneeded facilities for the Signed Language Interpreting Program, including administrative and faculty offices, seminar and other meeting rooms.
- The new space opens up room for the long-promised labs for Assistant Professors, Jill Morford and Caroline Smith, who are now able to proceed full force with their research programs.
- We developed an advertising poster to mail out to related programs in the hopes of recruiting more students, especially at the graduate level. Even without advertising, graduate enrollment is at a high level. We now have 22 MA students and 13 Ph.D. students

2. Student Achievements

Publications by students
 Joanne Scheibman published one article in Linguistics with Joan Bybee and another in Journal of Pragmatics.

Scheibman, Joanne. 2000. *I dunno*: A usage-based account of the phonological reduction of *don't* in American English conversation. *Journal of Pragmatics* 32.105-124.

· Conference presentations

Catie Berkenfield, MA student, presented a paper at the Linguistic Association of Canada and the US, at the University of Alberta in August 1999.

Jordan Lachler, PhD student, presented a paper, "The native languages of New Mexico: A census report." With M. Axelrod and J. Gómez de García. At the Stabilizing Indigenous Languages Conference in Toronto, Canada last winter. At the Mid-America Linguistics Conference in Lawrence, KS in November of 1999, he presented "Jicarilla Apache language preschool immersion program" and a paper on "Verb Stem Ablaut in Navajo".

Michelle Coronado, a major in the Signed Language Interpreting program, presented "Elements of Grammaticalization Specific to American Sign Language" at the Research Opportunity Program Colloquium on Sept 4, 1999.

Anna Vogel Sosa, Li Hsiang Chang and James MacFarlane presented papers at the Third Annual High Desert Linguistic Society Conference in April of 2000.

· Honors, awards, fellowships

Jordan Lachler received an NSF dissertation improvement grant: BCS-0079190, Dissertation Research: A Grammar of Laguna Keresan, \$8000. Funding period: 6/1/00 - 12/30/02. Advisor: Melissa Axelrod.

Michelle Coronado, an undergraduate student, was awarded a Bill Gates Millenium Scholarship.

Naomi Yao, an undergraduate major, was accepted into the UNM Research Opportunity Program this summer. She is scheduled to present "American, French, and Catalan Sign Language: An Exploration of Development Through an Educational Perspective" at the UNM Student Research Fair on Sept 14, 2000.

Dan Parvaz, an MA student, worked during the summer on a project at LANL as a graduate student under the science education program with CIC-3, Los Alamos National Laboratory in the Distributed Knowledge Systems and Modeling team. The project is part of an agreement between LANL and the Xerox Palo Alto Research Center.

· Community service

Laurel Standley, doctoral student in Educational Linguistics, serves on the NM State Bar Committee on Delivery of Legal Services to Persons with Disabilities, 1998-present. She also received Special Certification from the Registry of Interpreters for the Deaf for Legal settings.

Dan Parvaz, MA student, served as President of New Mexico Registry of Interpreters for the Deaf Advisory Committee, as a member of the Community Outreach Program for the Deaf; he was also State Legislative Leader of the Juvenile Diabetes Foundation and a member of the Deaf Advisory Group, Los Alamos National Lab. Dan also designed and maintained Web Pages for UNM Deaf and Hard-of-Hearing Services and the International Cognitive Linguistics Association.

Barbara Shaffer, doctoral student in Educational Linguistics, coordinated the statewide Educational Interpreting Inservice Training program at the New Mexico School for the Deaf in June 2000.

Elisa Maroney, doctoral student, is the Region IV Representative to the Conference of Interpreter Trainers (CIT).

Student Organization

The High Desert Linguistic Society, mounted a very successful conference, April 7-9, 2000 on the UNM campus. Out of 30 abstracts received, 28 papers were accepted for presentation. The participants came from all of the US, and included international participants from France, Denmark and Finland. Keynote speakers were John Haiman, Macalester College and Colette Grinevald, University of Lyons, II. Eleven papers were accepted for publication in the proceedings, which is being edited by K. Aaron Smith and Dawn Nordquist, doctoral students.

· Placement of graduates.

All three of our Ph. D. recipients have been placed in excellent university positions: **Dagmar Jung** as an assistant professor of linguistics at the University of Cologne and **Joanne Scheibman** as an assistant professor of English at Old Dominion University. **Terry Janzen** is a visiting assistant professor at the University of Manitoba.

3. Faculty Achievements

- Melissa Axelrod and Phyllis Wilcox were promoted to Associate Professor with tenure.
- New faculty hired: Barbara Shaffer, Assistant Professor, Bonnie Rudy, Lecturer II.
- Books edited by faculty: Two edited volumes in which faculty members Sherman Wilcox and Jill Morford collaborated with researchers at other universities have appeared:

Chamberlain, C. D., Morford J. P., & Mayberry, R. I. (eds.) 2000. Language Acquisition by Eye. Mahdah, NJ: Lawrence Erlbaum Associates.

Hiraga, Masako, Sinha, Chris and Sherman Wilcox (eds.) 1999. Cultural, psychological and typological issues in Cognitive Linguistics. Amsterdam: John Benjamins.

Articles in refereed journals

Bybee, Joan. 1998. A functionalist approach to grammar and its evolution. *Evolution of Communication* 2.2.249-278. (Appeared, June 2000)

Bybee, Joan and Joanne Scheibman. 1999. The effect of usage on degrees of constituency: the reduction of *don't* in English. *Linguistics* 37-4.575-596.

- Book chapters: Faculty members published a total of eleven book chapters during the year. See the Annual Biographical Reports.
- Conference presentations: Faculty members presented a total of seventeen papers or
 posters at national and international conferences. See the Annual Biographical
 Reports Caroline Smith gave an invited lecture at USC.

Grants awarded

Caroline Smith was awarded an NSF grant 'Modeling durational patterns in connected discourse' \$127,804, 36 months.

RAC grants; Jill Morford, 'Sign frequency in ASL: A tool for linguists and psycholinguists. Wilcox & Bybee 'A cross-linguistic study of the grammar of singed languages: a pilot study of Catalan Sign Language.'

Awards and honors

Phyllis Wilcox received the Outstanding Service Award from the Registry of Interpreters for the Deaf for service on the Ethical Practices Review Board.

4. Faculty Professional, Community and University Service.

· University service

Eduardo Hernández-Chávez serves as the Director of the Chicano Studies Program.

Jill Morford served on the Faculty Senate
Garland Bills served on the Faculty Senate Budget Committee and plays various
roles in the Latin American and Iberian Institute.

Community service

Melissa Axelrod organized and conducted Teacher Training and Curriculum Development Workshops, Jicarilla Apache Tribe, Dulce, NM, and participated in the Summer Language Immersion Camp.

Eduardo Hernández-Chávez participates in various community and educational organizations concerned with the maintenance and role of Spanish in the US.

Phyllis Wilcox served on the Governor's Task Force SJM44 (Teaching ASL as a foreign language in secondary schools) and other community organizations.

Editorial work

Joan Bybee is on the board of editors for Linguistics and Studies in Language.

Alan Hudson is on the editorial board of Language, learning and curriculum and Second Language Learning and Acquisition Abstracts.

Phyllis Wilcox is on the editorial board of Sign Language Studies and Sign Language and Linguistics.

Sherman Wilcox is the general editor of the journal Evolution of Communication, associate editor of Sign Language Studies and on the editorial board of Journal of Interpretation.

5. Other Data

Enrollment

We continue to have very few undergraduate majors in linguistics per se: eight for the current year. However the Sign Language Interpreting Program is once again near capacity with about 32 majors, after a dip in enrollment due to faculty and administrative problems.

Enrollment at the graduate level is up, with 22 MA students and 13 Ph.D. students.

We had nine applicants for the Ph.D. program for fall of 2000; we accepted five of these and four have enrolled. Of eleven MA students admitted for fall of 2000, eight have accepted.

Enrollment in LING 101 is up to about 300 students per semester; about 200 other undergraduates enroll in Linguistics courses each semester.

· Fund Raising

This year our fundraising activities focussed on raising money for furniture and equipment for the new space occupied by the Sign Language Interpreting Program. We were able to raise a total of \$11,603 in this effort.

We continue to receive annual contributions from Robert W. Bybee which are matched by the Exxon Foundation for a total of \$10,000.

6. Staff Appointments

The only new staff appointment for the year was the half-time appointment of Darynda Jones to replace Ariane Batton as Administrative Assistant to the Coordinator of the Sign Language Interpreting Program.

7. Public presentations sponsored by the Department of Linguistics

Colloquia with outside speakers

Terry Janzen, University of Manitoba, 'Word order in an ASL Narrative Text' October 8, 1999

Nuria Sagarra, Department of Spanish and Portuguese, UNM, 'Working memory and second language acquisition' October 22, 1999

Roger Fouts, Central Washington University, 'Ape language and the implications for science and ethics' November 5, 1999

Judith Viera, MA, RSC, 'Sociolinguistics of transliteration' November 5, 1999.

Oswald Werner, Northwestern University, 'On translation: especially ethnographic translation' November 19, 1999.

Bernard Spolsky, Bar Ilan University, 'The language situation in Israel' January 25, 2000.

Bernd Heine, University of Cologne, 'On the evolution of reflexive markers' February 25, 2000.

Doctoral dissertation defenses

Dagmar Jung 'The dynamics of polysythetic morphology: person and number marking in Athabaskan' July 30, 1999.

Joanne Scheibman 'Structural patterns of subjectivity in American English conversation'. June 30, 2000.

MA Thesis defense

Catie Berkenfield, 'The roles of grammaticization and frequency in describing the category structure of English *that*.' November 12, 1999.

Dissertation proposal presentations

Alfred Jana Matiki, 'Language planning and social change in Malawi' July 14, 1999.

K. Aaron Smith, 'The development of the Modern English Progressive' March 24, 2000.

Brown Bag Series

Josep María Segimón, Centre d'Estudis de la Llegua de Signes Catalana, Barcelon, Spain 'Signed languages in Catalonia' September 8, 1999.

Jill Morford and Caroline Smith, UNM, 'Locating jobs and preparing a CV' October 20, 1999.

Jill Morford and Caroline Smith, UNM, 'Applying for an academic job: preparing your application and job talk' October 27, 1999.

Donna Cromer, UNM Libraries, 'Linguistics information in the UNM General Library and beyond' November 17, 1999.

Interviewee presentations

Terry Janzen, University of Manitoba, 'Speaker stance and language structure in interpretation' January 21, 2000.

Barbara Shaffer, UNM, 'Modality, context and interpreting' January 28, 2000.

8. Future plans

The Sign Language Interpreting Program seeks to offer a master's degree in signed language interpreting. They are currently preparing a proposal. The State Department of Education supports this plan and has offered to contribute to the salary of a new assistant professor over a period of three years.

. .

College of Arts and Sciences

Department of Mathematics and Statistics

Annual Report 1999/00

Ronald M. Schrader, Chair

The Department of Mathematics and Statistics continued to meet the demands of its broadly defined missions in education, research, and service during the 1999-00 academic year.

1. Program Improvements

Curriculum and Course Changes: The department has been working with the Registrar for the last year to install I-TEL UNM pre-requisite checks for Math 120 through Math 181. This new system will enable the students to be routed electronically to the class that corresponds with their ACT/SAT scores as well as their previously completed classes. This should help considerably with retention and passing rates in our courses.

The revised descriptions for our curriculum are as follows: (1) In order to take Math 150, "the student must have a grade of C (not C-) or better in Math 121"; (2) The catalog has been changed to allow "credit for both Math 121 and 150." This should help better prepare students for calculus.

Efforts to Strengthen Teaching: Dr. Arthur Bukowski was a team member on the New Mexico-CETP grant that allowed him a course release to survey existing programs for teaching algebra and pre-calculus classes. Our current course structure is rather classical and lecture based so these courses will be modernized to provide a better education for the students.

The department requests that all foreign students, who are teaching assistants, be tested for intelligibility at the Speech and Hearing Department. If the student has a low intelligibility level, the student is asked to take an accent reduction problems class in the Speech and Hearing Department as part of his/her course work.

TARC or ITARC is a required course for our new teaching assistants to enhance their teaching skills. Our class coordinators visit every new teaching assistant and part-time instructor's class during the first four weeks of the semester to ensure that the instructor has good teaching methods. If an instructor is found to be deficient in these skills, then the coordinator works with the instructor by providing methods to enhance his/her skills.

Opportunities made available to students outside the classroom, such as honors programs, field schools, laboratory or other research opportunities, collaboration with faculty, internships: The Statistics Clinic, a consulting service directed by Professors Bedrick and Christensen, has been operational for two and one-half years. It has been staffed by statistics faculty and graduate students and offers statistical services without charge to students at UNM in support of their academic research. This service is funded by the College of Arts and Sciences, the Department of Mathematics and Statistics, the UNM Office of Research Services, and CIRT.

Efforts to Improve Student Recruitment and Retention: Ms. Roxanne Littlefield, our academic advisor, is on Associate Provost Peter White's Core Retention Committee. This

committee is charged with improving the retention rate at the undergraduate level and with accommodating the entry-level student. Also, Provost Peter White has a faculty retention team called the Rapid Response Team. Ms. Laura Cameron, Lecturer III, is on this team that deals with issues of total enrollments, closed classes and general preparations for predicted number of freshmen.

2. Student Achievements

Publications: Igor Nazaroy - (and Nedorezoy L. V.), "Continuous-discrete models of dynamics of isolated population and two competing species," (in Russian), Journal of General Biology. Dimitriy Panchanko - "Bounding the generalization error of convex combinations of classifiers: balancing the dimensionality and the margins." in preparation (with V. Koltchinskii and F. Lozano); "Empirical margin distributions and bounding the generalization error of combined classifiers," (submitted with Vladimir Koltchinskii); "Bounding the generalization error of neural networks and combined classifiers," in Proc. of the Second ICSC Symposium on Neural Computation, Berlin (with Vladimir Koltchinskii); "Rademacher Processes and Bounding The Risk of Function Learning In High Dimensional Probability," with E. Gine, D.Mason and J. Wellner, (with V.I. Koltchinskii); "Improved Sample Complexity Estimates for Statistical Learning Control of Uncertain Systems," IEEE Transactions on Automated Control, (with V. I.Koltchinskii, C. T. Abdallah, M. Ariola, P.Dorato); "Statistical Controller Design for the Linear Benchmark Problem," Proceedings IEEE Conference on Decision and Control, Phoenix, AZ, (with V. Koltchinskii, C. T. Abdallah, M. Ariola, P. Dorato); "Statistical Learning Control of Uncertain Systems: It is better than it seems," Technical Report, UNM, 1999, (with Koltchinskii, V., Abdallah, C. T., Ariola, M., Dorato, P.).

Conference Presentations: Alice Yuen – participant in the Complex Systems Summer School sponsored by the Santa Fe Institute; Elizabeth Burroughs – participant in the SIAM national conference; Lyudmila Sakhanenko – participant in Second International Conference on High Dimensional Probability and the 5th World Congress of the Bernoulli Society. Dimitriy Panchanko - The Second International Conference on High Dimensional Probability, Seattle, "Local Rademacher penalties and convergence rates in risk minimization"; 5th World Congress of the Bernoulli Society for Probability and Mathematical Statistics, Mexico, "Local Rademacher penalties and convergence rates in risk minimization."

External Funding: Ben Jones - National Foundation Brain Imaging; Igor Nazarov - NASA; Alice Yuen - Albuquerque High Performance Computing Center & Sandia National Laboratories; Elizabeth Burroughs - Sandia National Laboratories; Melissa Morris - SNL & LANL; and Ann Kaul - SNL & LANL; and Hwa Chi Liang - LANL; Ruhai Zhou - Albuquerque High Performance Computing Center; and Paul Bennett - Albuquerque High Performance Computing Center.

Awards, Fellowships, Prizes: Anthony Malerich and Derek Martinez received a \$1,500 scholarship from the department's Efromyson Scholarship Fund. Anthony Malerich – NSF award to study in Japan during the summer 2000; Mei Qiu – one of five students who won the Ellis Ott Fellowship from the American Society for Quality Control; Elizabeth Burroughs – NSF graduate research fellowship; and Anthony Malerich – Teaching Assistant of the Year Award.

•

The Department of Physics and Astronomy and the Department of Mathematics and Statistics held a joint graduation ceremony on May 12, 2000. We awarded a total of 20 BS degrees, 12 MA degrees, and 1 Ph.D. degree for AY 1999-00. The number of BS and MA degrees were very close to last year's numbers, and the Ph.D. degrees dropped from 11 to 1. The following awards were presented: Outstanding Graduate Teaching Asisstants: Benjamin Jones, Tony Malerich, Derek Martinez, and Lyudmila Sackhanenko; Outstanding Graduating Seniors: George Bissias, Michael Goodrich, Isaac Block, and Kenneth Tapia; Professor Walter T. Kyner Award for an Outstanding Doctoral Student: Melissa Morris; and Outstanding Teaching Awards: Elizabeth Malloy, Cathy Gosler and Charles Boyer.

Community, University, or Professional Service: Anthony Malerich, Beth Burroughs, Andrey Glubokov, Dmitriy Panchenko, Melvin Lewis, Sarah Rich, Alice Yuen, Stanislaw Dolega, Derek Martinez, Nate Tymes, Laura Ring and Pablo Silva participated in grading for the PNM/UNM Math Contest. Anthony Malerich proctored for the Putnam contest.

Placement Upon Graduation: <u>Amber Anderson</u> graduated in December 1999 with a Ph.D. in statistics and is working as a statistician with SmithKline Beecham in Philadelphia, PA.

3. Faculty Achievements

Publications: Aceves, Alejandro B. "Hamiltonian averaging in soliton-bearing systems with periodically varying dispersion," *Physical Review E.* 59 (1999), 3843-3846. Co-authors: S.K. Turitsyn, C.K.R.T. Jones, V. Zharnitsky, and V.K. Mezentsev. "Interaction of Bragg solitons in fiber gratings," *Journal of the Optical Society of America B.* 16 (1999), 18-25. Co-authors: N.M. Lichinitser, B.J. Eggleton, C.M. de Sterke, and G.P. Agrawal.

Bedrick, Edward J. "A survey of some new alternatives to Wald's variance component test," Tatra Mountains Mathematical Publications 17 (1999), 91-102. Co-author: R. Christensen. "Injury severity scoring." In Current Therapy of Trauma, 4th ed., D. Trunkey and F. Lewis, eds. St. Louis, MO: Mosby (1999), 10-17. Co-authors: T. Osler and L. Nelson. "Injury severity scoring," Journal of Intensive Care Medicine 14 (1999), 9-19. Co-authors: T. Osler and L. Nelson. "Is the modified AP the answer?" Journal of Trauma 47 (1999), 446-447, Co-author; T. Osler. "Properties and applications of the generalized likelihood as a summary function for prediction problems," Scandinavian Journal of Statistics 26 (1999), 593-609. Co-author: J. R. Hill. "The effect of non-normality on near replicate lack of fit tests," Canadian Journal of Statistics 27 (1999), 471-486. Co-author: R. Christensen. Buium, Alexandru "Differential algebraic geometry and differential algebraic groups." In Collected Works of Ellis Kolchin, American Mathematical Society (1999), 567-637. Co-author: P.J. Cassidy. Christensen, Ronald "A survey of some new alternatives to Wald's variance component test," Tatra Mountains Mathematical Publications 17 (1999), 91-102. Co-author: E.J. Bedrick. "The effect of nonnormality on near replicate lack of fit tests," Canadian Journal of Statistics 27 (1999), 471-486. Co-author: E.J. Bedrick. Coutsias, Evangelos A. "Decaying two-dimensional turbulence in bounded flows," 1988 ICPP and 25th EPS Conference on Controlled Fusion and Plasma Physics, Praha, 29 June-3 July, P. Paylo, ed., European Physical Society, H058PR, ECA vol. 22C (1998), 2346-2349. Appeared in 1999. Co-authors: A.H. Nielsen and D.J. Torres. "Pseudospectral solution of the two-dimensional Navier-Stokes equations in a disk," SIAM Journal on Scientific Computing 21, no. 1 (1999), 378-403. Co-author: D.J. Torres. Efromovich, Sam "Best Fourier approximation and application in efficient blurred signal reconstruction,"

Computational Analysis and Applications 1 (1999), 43-62, Co-author: M. Ganzburg, "How to overcome the curse of long-memory errors," IEEE Trans. Inform. Theory 45 (1999), 1734-1741. Nonparametric Curve Estimation: Methods, Theory, and Applications, monograph, NYC: Springer (1999), "On rate and sharp optimal estimation," Probability Theory and Related Fields 113 (1999), 415-419. "Quasi-linear wavelet estimation," JASA 94 (1999), 189-204. Ellison, James A. "From symplectic integrator to Poincaré map; Spline expansion of a map in Cartesian coordinates," Applied Numerical Mathematics 29 (1999), 89-98. Co-author: Robert L. Warnock. "Noise effects in accelerators." In Beam Measurement, S. Kurokawa, S.Y. Lee, E. Pereredentsev, and S. Turner, eds. Singapore: World Scientific (1999), 428-450. "Orbital eigen-analysis for electron storage rings." In Handbook of Accelerator Physics and Engineering, A.W. Chao and M. Tigner, eds. Singapore: World Scientific (1999), 53-55. Co-authors: H. Mais and G. Ripken. Gibson, Archie G. "General N-body theory of nonrelativistic quantum scattering," Few-Body Systems 27 (1999), 207-249. Co-author: Colston Chandler. "Uniform approximation of functions with discrete approximation functionals," Journal of Approximation Theory 100 (1999), 233-250. Co-author: Colston Chandler, Hagstrom, Thomas "High order implementations of accurate boundary conditions," AIAA 99-1942, Aeroacoustics Conference, 1999. Co-author: John Goodrich, "Locating the discontinuities of a bounded function by the partial sums of its Fourier series," J. of Scientific Computing 14, no. 4 (1999). Co-authors: G. Kvernadze and H. Shapiro. "Radiation boundary conditions for the numerical simulation of waves." Acta Numerica 8 (1999), 47-106. "Simulation of unsteady combustion phenomena using complex models," AIAA 99-2397, Joint Propulsion Conference, Co-authors: K. Radhakrishnan, S. Steinberg and R. Zhou. Huzurbazar, Aparna V. "Flowgraph models for generalized phase type distributions with nonexponential waiting times," Scandinavian Journal of Statistics 26 (1999), 145-157. "Survival and hazard functions for progressive diseases using saddlepoint approximations," Biometrics 55 (1999), 198-203. Co-author: S. Huzurbazar. Kapitula, Todd M. "The Evans function and generalized Melnikov integrals," SIAM J. Math. Analysis 30, no. 2 (1999), 273-297. Lorenz, Jens "Hyperbolic systems with relaxation: Characterization of stiff well-posedness and asymptotic expansion," J. Mathematical Analysis and Applications 235 (1999), 497-532. Co-author: J. Schroll. "Hyperbolic systems with relaxation: Symmetrizers and entropies." In Hyperbolic Problems: Theory, Numerics, Applications, Fey and Jeltsch, eds., Basel: Birkhäuser, ISNM vol. 130 (1999), 823-832, Co-author; J. Schroll. "On stability of conservation laws," SIAM J. Math. Analysis 30, no. 2 (1999), 401-430. Co-authors: G. Kreiss and H.-O. Kreiss. "Stability of traveling waves; Dichotomies and eigenvalue conditions on finite intervals." Numer. Funct. Analysis and Optimization 20, no. 3-4 (1999), 201-244. Co-author: W.-J. Beyn. Loring, Terry A. "Computing contingencies for stable relations," Internat. J. Math. 10, no. 3 (1999), 301-326. Coauthor: Soren Eilers. "Fragility of subhomogeneous C*-algebras with one-dimensional spectrum," Bull. London Math. Soc. 31, no. 3 (1999), 337-344. Co-authors: Soren Eilers and Gert K. Pedersen. "Morphisms of extensions of C*-algebras: Pushing forward the Busby invariant," Adv. Math. 147, no. 1 (1999), 74-109. Co-authors: Soren Eilers and Gert K. Pedersen. Nitsche, Monika "Axisymmetric vortex sheet motion: Accurate evaluation of the principal value integral," SIAM J. Scientific Computing 21, no. 3 (1999), 1066-1084. Pereyra, M. Cristina "Haar multipliers, paraproducts, and weighted inequalities," chap. 10 in Analysis of Divergence, W. Bray and C. Stanojevic, eds. Boston: Birkhäuser (1999), 145-170. Co-author: N.H. Katz. "Multiwavelets on the interval and divergence-free wavelets." In Wavelet Applications in Signal and Image Processing VIII, M.A. Unser, A. Aldroubi, and A.F. Laine, eds. Proceedings of SPIE 3813 (1999), 162-173. Co-author: J.D. Lakey. Qualls, Clifford R. "CSFSNAP-25 in

schizophrenia bipolar illness - A pilot study," Neuropsychopharmaco-logy 21, no. 6 (1999), 712-22. Co-authors: P.M. Thompson and C. Rosenberger. "Cyproheptadine treatment of nightmares associated with posttraumatic stress disorder," J. Clin. Psychopharmacology 19, no. 5 (1999), 486-7. Co-authors: R.D. Clark, J.M. Canive, L.A. Calais, R.D. Brugger, and T.B. Vosburgh. "Divalproex in posttraumatic stress disorder: An open-label clinical trial," J. Traumatic Stress 12.2 (1999), 395-401. Co-authors: R.D. Clark, J.M. Canive, L.A. Calais, and V.B. Tuason. "Hypertension comorbidity with diabetes - quantative analysis," Diabetes Control Program, N.M. Dept. of Health (1999), 1-40. "In-house versus on-call attending trauma surgeons at comparable level I trauma centers: A prospective study," J. Trauma 46, no. 4 (1999), 535-40. Co-authors: G.B. Demarest, G. Scannell, Sanchez, A. Dziwulski, C.R. Schermer, Albrect. "Lung biopsy: Is it necessary?" J. Thoracic and Cardiovasc. Surgery 118, no. 6 (1999), 2097-1100. Coauthors: R.T. Temes, N.E. Joste, N.L. Allen, R.E. Crowell, H.A. Dox, and J.A. Wernly, "Stance balance control with orthoses in a group of children with spastic cerebral palsy," Developmental Medicine & Child Neurology 41 (1999), 748-57. Co-authors: P.A. Burtner and M.H. Woolacott. Steinberg, Stanly L. "Let's do some analysis," chap. 10 in Computer Algebra Systems: A Practical Guide, Michael J. Wester, ed. Chichester, England; John Wiley & Sons (1999), 171-189. "The accuracy of numerical models for continuum problems." In Error Control and Adaptivity in Scientific Computing, H. Bulgak and C. Zenger, eds., NATO Science Series, ser. c (Mathematical and Physical Sciences), 536 (1999), 299-323. Stone, Alexander P. "Synthesis of purely dielectric lenses." In Ultra-Wideband, Short-Pulse Electromag-netics 4, E. Heyman et al., eds., NYC: Kluwer Academic/Plenum Publishers (1999), 203-212. Co-author: C.E. Baum. Sulsky, Deborah L. "Modeling failure of grain boundaries as a strong discontinuity with the material point method, in constitutive and damage modeling of inelastic deformation and phase transformation," Proceedings of Plasticity 99: The Seventh International Symposium on Plasticity and its Current Applications. Ed. A.S. Khan, Fulton, MD: NEAT Press (1999), 831-834. Co-authors: H.L. Schreyer and S.-J. Zhou. "Modeling material failure as a strong discontinuity with the material point method." In Mechanics of Quasi-Brittle Materials and Structures: A Volume in Honor of Professor Bazant's 60th Birthday, G. Pijaudier-Cabot, Z. Bittnar, and B. Gerard, eds., Paris: Hermes Scientific Publishing (1999), 307-329. Co-authors: H.L. Schreyer and S.-J. Zhou. "The material point method for simulation of thin membranes," International Journal Numerical Methods in Engineering 44 (1999), 1429-1456. Co-authors: A.R. York and H. Schreyer, Wofsy, Carla_"Analysis of fluorescence energy transfer on a small diameter sphere," Biophys. J. 76 (1999), 517-527. Co-authors: G.M. Jones, C. Aurell, and L.A. Sklar. "A quantitative approach to signal transduction," Immunol. Letts. 68 (1999), 53-57. Co-authors: H. Metzger, H. Chen, B. Goldstein, H. Haleem-Smith, J.K. Inman, M. Peirce, C. Torigoe, and B. Vonakis. "Dissociation of HIV-1 from follicular dendritic cells during HAART: Mathematical analysis," Proc. Natl. Acad. Sci. USA 96 (1999), 14681-14686. Co-authors: W.S. Hlavacek and A. Perelson, "Effective rate models for the analysis of transport-dependent biosensor data," Math. Biosciences 159 (1999), 123-144, Co-authors: T. Mason, A.R. Pineda, and B. Goldstein. "One Lyn molecule is sufficient to initiate phosphorylation of aggregated highaffinity IgE receptors," Proc. Natl. Acad. Sci. USA 96 (1999), 8615-8620. Co-authors: B.M. Vonakis, H. Metzger, and B. Goldstein. "The influence of transport on the kinetics of binding to surface receptors: Application to cells and BIAcore," J. Molecular Recognition 12 (1999), 1-7. Co-authors: B. Goldstein, D. Coombs, X. He, and A.R. Pineda.

Conference Presentations, Readings, and Invited lectures: Laura Cameron - "Pattern Blocks and Multiplication and Division of Fractions," New Mexico Association of Two Year Colleges at the annual meeting in May 1999. Laura Salter - "Algorithms for Phylogenetic Tree Estimation," International Conference on Mathematics and Engineering Techniques in Medicine and Biological Sciences, Las Vegas, NV, June, 2000; "A Stochastic Search Strategy for Estimation of Maximum Likelihood Phylogenetic Trees", Arizona State University, April, 2000"; Maximum Likelihood Estimation of Phylogenetic Trees and Associated Substitution Model Parameters", Ohio State University Department of Statistics Silver Anniversary Conference, October, 1999; "A Stochastic Search Strategy for Estimation of Maximum Likelihood Phylogenetic Trees", Joint Statistical Meetings, August, 1999 (special topic contributed session). Terry Loring - Lecturer on Operator Algebras at the Calsberg Academy in Copenhagen. Alexandru Buium - invited lecturer at three AMS meetings in Austin, Salt Lake City, and Providence, Fall 1999, invited lecture in a workshop at University of Illinois, Urbana (Fall 1999); invited lecturer for five lectures at the University of Montreal (Spring 2000). <u>Vakhtang Putkaradze</u> - invited lecturer in the Department of Mathematics, MIT; Annual meeting of American Physical Society; Lecture at Dynamics Days 2000, "Non-uniform flow from a point source." Thomas Hagstrom - lecturer on "Experiments with stable, high-order difference approximations to hyperbolic initial-boundary value problems," International Conference on Mathematical and Numerical Aspects of Wave Propagation Problems, Santiago de Compostela, Spain. Alex Stone - URSI General Assembly, University of Toronto, URSI National Meeting, University of Colorado, EUROEM, Edinburgh, Scotland. Wojciech Kucharz - invited lecturer for International Conference on Polynomial Automorphisms in Poland; Vrije Universiteit in Amsterdam, Polish Academy of Sciences, Poland; Max-Planck Institute fur Mathematik in Germany. Krzysztof Galicki - "New Einstein Metrics on 5-Manifolds," Arthur Besse Seminar, Ecole Polytechnique, Paris, France, "Killing Spinors, Einstein Manifolds, and Contact Geometry," invited lecturer at the conference on {\it Generalized Dirac Operators and Their Geometric Scattering Theory), Warsaw, Poland; International Stefan Banach Center of the Polish Academy of Sciences, "Sasakian-Einstein Manifolds, Killing Spinors, and Near Horizon Geometries," Humboldt University at geometry seminar, Berlin, Germany, July 13, 1999. Cristina Pereyra - third New Mexico Analysis Seminar, Las Cruces, NM; Special Session on Wavelets and Approximation Theory in the 948th AMS Meeting, Austin, Texas; colloquia at Instituto de Matematicas, Unidad Cuernavaca; UNAM, Mexico, Instituto de Matematicas, UNAM, Ciudad de Mexico; Universitat Autonoma de Barcelona, Spain; seminar talks at Instituto de Matematiacas, UNAM, Ciudad de Mexico and Kolmogorov Seminiar, UNM, Albuquerque, NM. Jens Lorenz - "Invariant curves of planar maps," at the conference Perspectives in Mathematics; "Discrete Structures in Mathematics," Bielefeld, Germany; "Patterns in low-Mach-number flows at the Dynamics of Patterns in Parabolic Systems," Conference in Thurnau, Germany; and "Slight compressibility as a singular perturbation," at the conference on Singular Perturbations at the Turning Point of the Millenium, Renss. Poly. Inst. Charles Boyer - Invited talk at the Erwin Schr\"odinger Institute, Vienna, Austria, "Einstein Metrics via Contact Geometry"; Invited talk in the Special Session on Differential Geometry of the Joint Amer. Math. Soc.-Scandanavian Math. Soc., "Sasakian Geometry and Links of Hypersurface Singularities."; Stanly Steinberg - Keynote Speaker for ASCI -- the Advanced School for Computing and Imaging conference in Lommel, Belgium; Accuracy of Numerical Methods for Continuum Models for the Numerical Partial Differential Equations seminar, UNM.

Collaborations with Faculty in Other Departments and/or Universities: Edward Bedrick -Joe Powell in Anthropology, UNM, Bill Gannon and Carla Restropo in Biology, UNM, Alok Bohara and Kishore Gawande in Economics, UNM, Bill Brooks and Bill Sibbitt at the Clinical and Magnetic Resonance Research Center, UNM, Chris Stidley and Krisitne Tollestrup in Family and Community Medicine, UNM, Leah Albers in Nursing, UNM, Rick Crowell in Internal Medicine, UNM, Harriet Smith in Obstetrics and Gynecocoly, UNM, Cozette Wheeler in the Cancer Center, UNM, Susan Atlas at the High Performance Computing Center, UNM. Vakhtang Poutkadaze - Technical University of Denmark, Dept., Prof. Tomas Bohr, Ibaraku University; Dept of Mathematics (Japan), Prof. Shinya Watanabe; University of Chicago, Dept of Mathematics, Prof. Peter Constantin. Thomas Hagstrom - Brad Alpert, NIST Boulder; John Goodrich, NASA Glenn Research Center; Leslie Greengard; Courant S. I. Hariharan, The University of Akron; Jan Nordstrom, FFA (Aeronautical Research Institute of Sweden. Alex Stone - C. E. Baums (AFRL). Wojciech Kucharz - J. Bochnak in Amsterdam, K. Rusek in Poland, T. Mostowsk in Warsaw, Krzysztof Galicki - Prof. Paolo Piccinni, University of Rome "La Sapienza". Jens Lorenz - Prof. H. O. Kreiss, UCLA; KTH (Stockholm) Prof. W. J. Beyn, Universitaet Bielefeld, Germany; Prof. K.D. Edoh, Elizabeth City State Univ.; NC Prof. H. J. Schroll, NTNU Trondheim, Norway. Charles Boyer - Jacques Hurtubise from McGill Univ; Univ de Montreal, Centre de Recherche Matematiques (currently Director); R.J. Milgram from Stanford University. Stanly Steinberg - José Castillo: Grid Generation, Finite Volume Methods; Pedro Espinoza: Mimetic Methods, Nonlinear Elliptic and Parabolic PDEs; Hoon Hong: Quantifier Elimination Applied to Numerical PDEs; Mac Hyman: Mimetic Discretizations; Elaine Kant: Scicomp, Inc., AI and CA Technologies for Code Generation; Pat Knupp: Grid Generation; Richard Liska: Computer Algebra, Numerical; Tom Robey: Finite Elements; Misha Shashkov: Support Operator Discretizations; Burt Wendroff: Numerical Methods; Michael Wester: Computer Algebra; and Paulo Zingano, TVD and Algebraic Differential Equations; Michael Nakamaye - AMS meeting Austin Texas; AMS meeting Charlotte, NC; Colloquium at University of Utah; Number Theory Seminar at Brown; Number Theory Seminar, ETH Zurich.

The Statistics Clinic has a mission to improve the quality of research at UNM, as well as to enrich the education and training of statisticians through their involvement in statistical consulting. Consultants in the clinic met with clients over 377 times during AY 1999-00. We had appointments with clients from Psychology, Pharmacy, Biology, History, Education, Economics, Linguistics, Nursing, Sociology, Computer Science, Business, Physical Therapy, Anthropology, Geography, English, Parks and Recreation, Nutrition, Surgery, Neurology, Spanish and Portuguese, Public Health, and Family and Community Medicine. As in previous years, Biology made the most use of our services with large numbers of meetings with the Medical school, Anthropology, Education, Psychology, and Linguistics. In addition we worked with external agencies such as the New Mexico Lottery, The New Mexico Dept. of Fish and Wildlife, and the Albuquerque Transit Authority.

New Grants or Contracts: The following faculty members were awarded new grants: Professors Boyer, Buium, Efromovich, Galicki, Hagstrom (3), Loring, Sulsky (2), Stone, Poutkaradze (2), and Salter.

Ongoing External Funding: The following faculty members received ongoing external funding: Efromovich, Ellison, Embid, Hagstrom, Kapitula, Koltchinskii, Kovanis, Lorenz, Loring, Nitsche, Pereyra, Salter, Steinberg (3), Stone, Sulsky (2), and Wofsy.

Election to National Scholarly or Disciplinary Societies: Edward Bedrick - President Elect of the Western North American Region (WNAR of the International Biometric Society);

Prizes, Awards, or Fellowships: <u>Krzysztof Galicki</u> - NSF Award in Geometric Analysis, Contact Geometry and Einstein Manifolds, (with C. P. Boyer); Spring 2000 - UNM A&S Senior Professor Research Semester Award. <u>Cristina Pereyra</u> - visiting fellow at the Centre de Recerca Matematica, Barcelona, Spain (summer 1999). <u>Charles Boyer</u> - Outstanding Graduate Teaching award.

Citations: Thomas Hagstrom was cited in 19 published articles by other authors, Other authors cited Stanly Steinberg and P. Knupp 38 times in publications.

4. Faculty Professional, Community, and University Service

Edited or Served on Editorial Boards of Journals: Laura Salter - Reviewed papers for Bioinformatics and JASA. Edward Bedrick - Associate Editor, The Americana Statistician, through June 2000 and member of a NIH panel. Vakhtang Poutkaradze - Organized the Kolmogorov Seminar at the Mathematics and Statistics Department at the University of New Mexico; referee for Physica Scripta. Wojciech Kucharz - member of the Scientific Committee of Revista Matematica Complutense. Jens Lorenz - Mathematical and Computer Modelling Board. Stanly Steinberg - Senior Editor for computer algebra for MATCOM, Mathematics and Computers in Simulation, (IMACS Journal) since 1997; leader and creator of the International Applied Computer Algebra technical group since 1995.

Served as Officers or Members of Key Committees in National or Regional Professional Organizations: Laura Salter - WNAR program chair for SSC-IMS-WNAR meeting to be held in June 2001; Program committee member for ICCS (International Conference on Computational Science) to be held in May 2001. Alex Stone - member, International Committee for EUROE meeting in Edinburgh. Krzysztof Galicki - "Haolonomy Groups in Differential Geometry" Erwin Schr\"odinger Institute, Vienna, Austria; grant for the proposal funded by the Society of the International Erwin Schr\"odinger Institute (with D. Alekseevsky, and C. LeBrun).

Participated in Site Visits to Other Universities on Behalf of Granting Agencies, accrediting bodies, or program review organizations: Thomas Hagstrom served on an NSF panel reviewing ITR proposals.

Represented their discipline or the university before Legislative Bodies: None.

Spoken to Community Organizations Concerning Disciplinary or University Issues: None.

Participated in Outreach Activities (for example, guest lectures, classroom visits, demonstrations, science fairs) in Primary or Secondary Schools: Cathy Gosler - participated as a judge in the Northwestern New Mexico Regional Science Fair on March 17, 2000, and has given several math art presentations to school groups who visit the campus. Stanly Steinberg - participated as a judge in the Science Fair at Zia Elementary School.

Cristina Pereyra and Cathy Gosler continued the UNM Mathematics Contest with funding (\$11,000 per year) from the Public Service Company of New Mexico Foundation. Prizes, including books, cash, and scholarships, were awarded at a banquet for contest winners in May 2000. Professor Serge Lang, Yale University, a world-renowned mathematician, gave an entertaining pair of general interest lectures in connection with the contest. Dr. Pereyra designed the exams and organized the public lectures for Professor Serge Lang. Luis Mata-Lorenzo, Laura Cameron, Cristina Pereyra, Cathy Golser, David Blankenbaker, Ralph DeMarr, and Adriana Aceves graded the exams with the help of many of our teaching assistants and high school teachers from Albuquerque. Dr. Arthur Bukowski contributed financial support to the contest. Phil Herlan is the state director of American Mathematics Competitions for New Mexico. This annual AMC contest is in its sixteenth year and covers material normally associated with the middle school mathematics curriculum. The participants are accelerated fifth and sixth grade students.

Given on-campus Tours, Workshops, Performance, or Other Activities for Community Members: Cathy Gosler and has given several math art presentations to school groups who visit the campus.

Served on Departmental, College, or University Committees or Held Administrative Positions Outside the Department: Alex Stone - Staff Benefits Committee. Laura Salter - Search Committee Member, UNM Mathematics and Statistics Department, 2000. Search Committee Member, UNM Biology Department, 1999. Edward Bedrick - Served on Medical School hiring committee for a Biostatistician. Alex Stone - department liaison to MAA, member, UNM faculty-Staff Benefits Committee. Cristina Pereyra - Hiring Committee for two lecturer positions, Graduate Committee, member of the subcommittee responsible for writing and grading the Real Analysis Qualifying exam, reviewer for Mathematical Reviews; organized the Third New Mexico Analysis Seminar (joint NMSU/UNM) at NMSU, Las Cruces, NM.

5. Data

Undergraduate Majors per FTE Faculty: Our department had 122 majors FY 1999-2000. Thirty-three research faculty members divided by 122 = 3.70 students per FTE.

Undergraduate and graduate Student Credit Hours per Faculty: Our department had a total of 37,750 undergraduate student credit hours or 1,143.94 undergraduate student credit hours per faculty member. The graduate student credit hours were 1,135 or 34.30 graduate student credit hours per faculty member.

Grant/Contract/Award Dollars per FTE Faculty: Total research funding from July 1, 1999 to June 30, 2000 was \$608,46,1. Thirty-three research faculty members divided by \$608,461 = \$18,438 per faculty member.

IDC Dollars per FTE Faculty: The IDC for CY 99 was \$154,692. Thirty-three research faculty, members divided by \$154,692 = \$4,688 per faculty member.

Private Contributions: The department received \$45,000 from an anonymous donor in Spring 2000.

Underenrolled Classes: There were a few underenrolled section among courses cross-listed with math but not taught by us, as well as a few sections of courses taught as overloads for the faculty member. The only true underenrolled courses were Math 309-001 (10 students) and Math 181-004 (9 students), both in Fall 1999, and Math 521-001 (4 students) in Spring 2000.

- 6. Faculty/Staff Appointments and Separations: Three professors, who were hired in spring 1999, began their appointments in fall 1999: Drs. Nakamaye, Poutkaradze, and Salter. There was one new hire to the tenure track faculty, Dr. Timothy Hanson, who will begin in fall 2000. The following lecturers were hired: Dr. Arthur Bukowski, Lecturer III, in August 1999; Dr. Kristin Umland, Lecturer III, January 2000; and Mr. Jurg Bolli, Lecturer III, January 2000. Professor Luis Mata-Lorenzo from La Universidad de Simon Bolivar was a visitor and Part-time Instructor in the department during the academic year 99-00. Dr. William Zimmer retired from the department at the end of spring semester 2000. Dr. Aruthur Bukowski resigned his position as a Lecturer III in May 2000 to take a position at New Mexico School of Mining and Technology. Charles Mader, Systems Analyst II, resigned his position in April 2000 to take a position at CASAA. Susan Pinter, Technical Writer, resigned her position in June 1999 and accepted a position as Department Administrator in the Department of Anthropology. Trevor Bilmes was hired as an Accounting Technician effective September 1999. Linda Cicarella was hired as a Technical Writer effective August 1999. Kathleen Hall resigned her position as Administrative Assistant I in April 2000. She had been with the department for 19 years.
- 7. **Future Plans:** We would like to restructure the course numbering systems at the UNM Branch Colleges so that all math courses will carry the same catalog numbers as UNM main campus. We are desperate for more faculty. We have approval for three positions: (1) statistics, (2) applied analysis, and (3) applied computational mathematics. We need to hire in many consecutive years in order to come back to a critical mass. Regular faculty should be teaching courses from the level of calculus and beyond, but we have many part-time faculty members teaching calculus and even 300-level or graduate courses. We had a total of 34 part-time instructors who taught 74 sections in fall 1999, and 26 part-time instructors who taught 48 sections in spring 00. Graduate offerings are slim to nonexistent in key areas. Only tenure stream faculty can maintain the health of our programs. We need to develop a coherent strategic plan to guide our next several hires.

Advisement needs to be tightened up at both the graduate and undergraduate levels. The graduate committee, headed by Professor Aceves, and the undergraduate committee, headed by Professor Coutsias, will work with the staff to improve the situation. Students are taking too long to complete a degree; these efforts should help improve that situation.

We need to develop assessment for our huge service courses. These multi-section courses need to be better coordinated with respect to syllabi, homework, and exams. We may need to examine our extensive use of part-time faculty in those courses to see if improvements in staffing are possible.

The Plan I MS degree is new for our department. It should provide a means for an attractive terminal professional degree, but we need to work carefully on implementation.

Several undergraduate curriculum change proposals need to be discussed and implemented. A promising one is a fifth year teaching certificate program joint with College of Education, possibly evolving into a Master of Arts in Teaching. Some convergence of pure and applied mathematics programs seems possible.

We need to continue expanding our efforts for training TA's and part-time instructors.

Dept. of Philosophy Annual Report for 1999-2000 Submitted by Barbara Hannan, Chair

Significant Developments During Academic Year 1999-2000

The Philosophy Department conducted an extensive international search for a promising young Assistant Professor in the field of 19th and 20th Century Continental Philosophy. This search culminated in the hiring of Iain Thomson (Ph.D 1999, University of California, San Diego). Prof. Thomson specializes in the philosophy of Martin Heidegger.

During the search process, we had several finalists come to campus and give talks. These included:

Iain Thomson (U. Cal. San Diego), "Heidegger's Ontotheology" (12/16/99)

Michelle Kosch (Columbia), "Schelling's Conception of Freedom" (12/20/99)

Alan Kim (McGill University), "Two Theories of Objective Being" (12/22/99)

Steven Affeldt (Johns Hopkins), "Moral Exercises in Wittgenstein's Philosophical Investigations" (2/10/00)

Hans Lottenbach (Princeton), "Fichte's Theory of Intersubjectivity" (2/14/00)

Iain Macdonald (McGill University), "Semblance and Truth in Art: Hegel, Adorno, and Yves Klein" (2/18/00)

These were an outstanding pool of applicants. Each of these talks provoked much discussion. In addition to search-related talks, the regular departmental colloquium series brought the following speakers to campus:

Denis McManus (University of Southampton and University of Chicago), "Wittgenstein, Meaning, and Metaphysics" (10/29/99)

Christopher Hookway (University of Sheffield), "Truth and the Convergence of Opinion: Some Pragmatist Themes" (11/10/99)

Michael Bratman (Stanford), "Valuing and the Will" (11/19/99)

C. Stephen Evans (Yale Univ. and Calvin College), "Kierkegaard's View of the Self" (1/28/00)

Igal Kvart (Hebrew Univ. of Jerusalem), "A Theory of Cause" (2/7/00)

John Haugeland (University of Chicago), "Two Dogmas of Rationalism" (4/20/00)

Clifton Perry (Äuburn University), "The Influence of Health Insurance on Medical Liability in Managed Care Organizations" (4/28/00)

Several speakers from UNM's own faculty and graduate students also joined the colloquium series. These included:

Leora Weitzmann (UNM Visiting Professor), "Our Knowledge of Our Own Mental States" (3/3/00)

Fred Schueler (UNM Professor), "What's Wrong With the Practical Syllogism" (9/17/99)

Steve Scholz (UNM Ph.D candidate), "Forgiveness as Absolution" (12/10/99)

As we do every year, we hosted the O'Neil Memorial Lectures in the History of Philosophy, an endowed lecture series. In 2000 our speaker was Terence Penner of the University of Wisconsin, Madison. He gave three talks:

- 1. "Two Belief/Desire Psychologies of Action and Their Ethical Consequences" (3/6/00)
- 2. "Kant, Reasons Theories, and Practical Reason" (3/7/00)
- 3. "Socratic Egoism With Some Incidental Remarks on Aristotelean Practical Reason" (3/8/00)

The University of New Mexico Philosophy Dept. also played host to the Pacific Division of the American Philosophical Association at its annual meeting in spring 2000. The meeting was held at the Hyatt Regency Hotel in downtown Albuquerque, and was attended by philosophers from all over the United States. The dates of this convention, featuring a full schedule of papers and seminars, were April 5-8, 2000.

Dan Zupan, one of our Ph.D students (and also an Army Airborne officer) successfully defended his dissertation in spring 2000. He wrote on "Autonomy and Noncombatant Immunity: An Investigation in Just War Theory." This dissertation was judged excellent by Zupan's committee, and Zupan was awarded his degree with distinction. Prof. Zupan will be teaching philosophy at the United States Military Academy at West Point.

Prof. John Bussanich, whom we were afraid we had lost to James Madison Univ. in Virginia, decided to come back to UNM in spring 2000. We are very pleased to have him back.

The Religious Studies Program, which is affiliated with the Philosophy Dept., was able to move out of the Humanities Building and into its own quarters in Hokona Hall. This freed up much-needed office space for philosophy faculty and graduate students. We hope this represents another step toward the creation of a separate Religious Studies Department.

Significant Plans and Recommendations for the Near Future

The Philosophy Department is currently experiencing difficulty covering all our courses with qualified faculty. Every semester we rely on temporary/part-time instructors to teach standard undergraduate courses such as Critical Thinking, Introduction to Philosophical Problems, Contemporary Moral Issues, Introduction to Existentialism, Professional Ethics, and so on. Some of these temporary/part-time people are only marginally qualified, but if we did not hire them, hundreds of students would not be able to take courses they want and need. The proliferation of temporary/part-time instructors across the university is a worrisome trend. The hiring of temporary/part-time instructors, while it may save the institution money in the short term, is detrimental in the long term to higher education. If young scholars perceive that their only future in academia is to be an overworked, poorly-paid, non-tenured instructor with no benefits and no respect, few talented people will enter academia, and the quality of higher education will continue to decline. The philosophy dept. seeks to hire more highly-qualified, tenure-track assistant professors so that we may continue to offer a full spectrum of quality courses while not exploiting the available pool of Ph.Ds. The hiring of Iain Thomson last year was a step in the right direction, but we need to continue on that path.

One initiative which I have taken on as a personal project is to acquire Prof. Clifton Perry of Auburn University, a distinguished medical ethicist and scholar of Native American law, as a "special opportunity" hire. Prof. Perry gave an impressive talk here last year, and also served on Dan Zupan's Ph.D committee. He has made it known that he very much desires to live and work in New Mexico, and his research interests complement two of New Mexico's strengths (our fine medical school, and our Native American programs). If Prof. Perry could be hired in a senior position, this would increase the prestige and visibility of the philosophy department, alleviate some of our teaching problems, and encourage interdisciplinary collaboration among the medical school, the law school, the Native American Studies program, and the philosophy department. I intend to work on this initiative during the coming year.

Another important future goal is the creation of a Religious Studies department entirely separate from the Philosophy Department. Currently, several of our faculty (Andrew Burgess, Fred Sturm, and John Bussanich) teach many of their courses in Religious Studies rather than Philosophy. This reduces the number of courses in Philosophy that may be offered in any given semester. Philosophy and Religious Studies are separate disciplines, with different training and commitments. The continued affiliation of the two at UNM is a source of conflict and strain. Ideally, the Philosophy Dept. would like to divorce itself from the Religious Studies program without losing any faculty lines, and see the creation of a Dept. of Religious Studies.

Appointments to Faculty/Staff

As mentioned above, Iain Thomson (Ph.D 1999 Univ. of California, San Diego) joined our faculty as Assistant Professor, effective fall 2000.

Separations of Faculty/Staff

Jennifer Nagel, an Assistant Professor on a half-time appointment, accepted a tenure-track position at the University of Toronto. Her husband Sergio Tenenbaum, an Assistant Professor on a regular tenure-track line, took a LWOP and went to the University of Toronto as a visiting assistant professor. It is unclear whether Nagel and Tenenbaum will return to UNM. (Nagel did not resign her half-time position here at UNM before accepting the tenure-track job at Toronto, so her situation is somewhat irregular. Like Tennenbaum, she is officially on leave. This arrangement was made by the former Chair Fred Schueler and the former Dean Michael Fischer.)

Publications by Faculty

Burgess, Andrew

Two articles:

"Knowedge," in *Dictionary of Existentialism*, ed. Haim Gordon (Westport, Conn.: Greenwood Press, 1999), pp. 246-250.

"Kierkegaard's Concept of Redoubling and Luther's Simul Justus," in Works of Love: International Kierkegaard Commentary, Vol. XVI, ed. Robert Perkins (Macon, GA: Mercer University Press, 1999), pp. 39-55.

Bussanich, John

Two articles:

"Socrates the Mystic," in *Studies in Plato and the Platonic Tradition: Essays Presented to John Dillon*, ed. John Cleary (Ashgate, 1999).

Articles on "Happiness" and "Goodness" in Saint Augustine Through the Ages: An Encyclopedia, ed. Allen Fitzgerald (Eerdmann's, 1999).

Several brief book reviews in Choice.

Goodman, Russell

Two substantial book reviews:

Review of Jonathan Lear, *Open Minded: Working Out the Logic of the Soul* (Cambridge: Harvard Univ. Press, 1998), in *Metaphilosophy*, Vol. 30, No. 3 (July, 1999), pp. 231-236.

Review of Thomas P. Kasulis and Robert Cummings Neville, *The Recovery of Philosophy in America: Essays in Honor of John Edwin Smith* (Albany: SUNY Press, 1997), in *Philosophy East and West*, Vol. 49, No. 4 (Oct. 1999), pp. 519-520.

Hannan, Barbara

One article and one substantial book review:

"Language and Animal Rationality: A Critique of Sellars," forthcoming, Pacific Phil. Quarterly.

Review of John Bickle, *Psychoneural Reduction: The New Wave* (MIT Press, 1998), in *Philosophical Books* Vol. 41, No. 1 (Jan. 2000), pp. 53-54.

Nagel, Jennifer

One article:

"The Empiricist Conception of Experience," forthcoming, Philosophy.

Schueler, Fred

One article:

"Why is Modesty a Virtue?" Ethics, July 1999 (pp. 835-841).

Tenenbaum, Sergio

One article:

"Judgment of a Weak Will," *Philosophy and Phenomenological Research* Vol. 59, No. 4, pp. 875-912 (Dec. 1999).

Yaqub, Aladdin

One substantial book review:

Review of Marian David, Correspondence and Disquotation: An Essay on the Nature of Truth (Oxford Univ. Press, 1994), in Notre Dame Journal of Formal Logic Vol. 39 (Spring 1998), pp. 279-285.

Outside Professional Activities of Faculty

Burgess, Andrew

Member, Planning Committee for AAR/SBL regional Rocky Mountain convention.

Presented paper at regional Rocky Mountain convention of AAR, "Kierkegaard's Discourses on 'Every...Perfect Gift' As Love Letters to Regine," Colorado Springs, CO, April 1999.

Presented paper, "Patience and Expectancy in Kierkegaard's 'Upbuilding Discourses 1843-44," at Research Seminar 1999 of the Soren Kierkegaard Center, Copenhagen, Denmark, August 1999.

Attended convention of the AAR (American Academy of Religion), Boston, MA, November 1999.

Served as outside evaluator for Husain Sarkar, promotion candidate at Louisiana State University.

Served on selection committee for Fulbright Awards in five-country Scandinavian area.

Bussanich, John

Attended Annual Meeting of the American Academy of Religion, Boston, MA, Nov. 1999.

Presented Invited Lecture Series, "Plotinus and Augustine in Late Antique Philosophy," Brigham Young University, March 1999.

Served as co-editor, Ancient Philosophy (journal).

Served as anonymous reader of book manuscripts for SUNY Press, Oxford University Press, Prentice-Hall, and Eerdmann's.

Goodman, Russell

Presented paper, "Useless Ignorance: Reflections on Thoreau's Walking," Society for the Advancement of American Philosophy, Eugene, OR, Feb. 1999.

Presented paper, "Cavell on Pragmatism," Univ. of Southampton and Univ. of Herfordshire, England, May, 1999.

Presented paper, "James and Wittgenstein on Language," Univ. of Sheffield, England, and Univ. of Pennsylvania, USA, Nov. 1999.

Presented paper, "What Wittgenstein Learned From William James," Temple University, Nov. 1999.

Served as reader for Vanderbilt University Press and SUNY Press.

Hannan, Barbara

Presented Paper, "Truth, Autonomy, and the Value of Psychoanalysis: Grunbaum versus Lear," INPC Conference (Inland Northwest Philosophy Conference, jointly sponsored by Univ. of Idaho and Washington State University, Moscow, ID and Pullman, WA), spring 2000.

Commented on paper, "Knowing What It's Like: Phenomenal Consciousness and its

Attributions," Pacific Div. APA meeting in Albuquerque, April 2000.

Served as referee for *Psyche*. Title of manuscript: "Functionalism and the Reification of Awareness."

Nagel, Jennifer

Commented on paper, "Hume's Systematic Skepticism," at INPC Conference, Pullman, WA, April 1999.

Successfully defended Ph.D thesis, "The Role of Necessity in Empirical Knowledge," Univ. of Pittsburgh, April 2000.

Schmitter, Amy

Presented Paper, "The Conception of Simple Natures in Descartes's Regulae," meeting of APA Pacific Div., Berkeley, CA, April 1999.

Visiting Scholar, Univ. of Cal., Berkeley, 1999-2000 (on Sabbatical Leave from UNM).

Schueler, Fred

Chaired session on "Collective Intentionality" at APA Pacific Div. Meeting in Berkeley, CA, April 1999.

Taber, John

Presented paper, "Kumarila and Dharmakirti Once Again," American Oriental Society annual meeting, Baltimore, MD, March 1999.

Tenenbaum, Sergio

Presented paper, "Desire and the Good," INPC Conference, Pullman, WA, April 2000.

Presented paper, "Kant, Happiness, and the Principle of Happiness," NEASECS Annual Meeting in Durham, New Hampshire, Dec. 1999.

Commented on paper, "Counterfactual Consequences," at Seminar on Rationality and Intentions, Amsterdam, Oct. 1999.

THE REPORT OF

THE DEPARTMENT OF PHYSICS AND ASTRONOMY

1 JULY 1999-30 JUNE 2000

John K. McIver, Chairman

Status of the Department

The number of faculty members remained constant at twenty-eight full-time tenured or tenure-track members. In addition, there were two full-time lecturers, Mr. J. Caffo and Mr. Boyd M. Odom. Mr. Odom is responsible for the undergraduate laboratories in Regener Hall while Mr. Caffo teaches several of the 100-level classes. Doctors Dimiduk and Cardimona were hired as part-time instructors. We were also fortunate to have Dr. Ledlow here as a visiting professor and available to teach one section each semester of Astro 101.

Space continues to be a major problem in this department. This summer a number of projects were begun to renovate graduate students offices to both improve working conditions and to make more efficient use of the existing space. Also renovation of some of the labs was begun to make more effective use of the space. This necessitated moving several projects to smaller laboratories and combining several projects into one room. In addition, two laboratories have had to undergo major renovations in order to comply with dust standards imposed by the research projects. The majority of these renovations have been financed with departmental funds. Although these projects have been accommodated with some sacrifice, we are fast approaching the position where we will be unable to accept further research projects if they require additional space. As it is, the building is already unsuited to some forms of research because of the inability to control dust and poor vibration isolation. The limits of the electrical power coming into the building is also being pushed.

The biggest concern remains the abatement of the asbestos ceiling tiles. Parts of the building have been without adequate cooling this summer and will probably suffer from inadequate heating this coming winter. The problem remains that access to many of the pipes, valves and blowers requires removal of the tiles which cannot be done until the tiles are abated and replaced.

In fall 1999 there were 112 graduate students in this department including those registered in the Optical Sciences Program. This was an increase of 16 graduate students over the previous year. One should not interpret this as an upward trend since the current enrollment for fall 2000 is 96. The difference is primarily due to the graduation of a number of PhD and Masters students.

We were advising approximately 64 undergraduates who declared physics or astrophysics as a major at the beginning of the 98/99 academic year. This represents a drop of 12 students from the previous year. These numbers are somewhat misleading because by the end of the academic year we were advising nearly 120 students who had declared their intent to major in physics or astrophysics.

One major problem is the aging of the faculty. There are only two assistant professors remaining in the department. One of these will be put forward for tenure and promotion this year with the other following a year later. In order to maintain a strong graduate and research program as well as a healthy department, it is imperative that we be permitted to hire several junior faculty over the next few years even if this means mortgaging these hires against future retirements. Another reason to hire is for the department to build expertise in new and developing areas of physics and astronomy.

Program Improvements

The department has continued to focus its efforts and finances on improving the undergraduate laboratories given in conjunction with the introductory sequences. These laboratory courses are Astr 101L, Phys 102L, Phys 106L, Phys 108L, Phys 151L and 152L as well as Phys 160L, 161L and 262L.

The department continued to spend a significant amount of time and money on the undergraduate laboratories associated with the introductory courses. Overall supervision of the upgrades remains the responsibility of Prof. John Panitz who continued as an Associate Chair. He is assisted by Boyd M. Odom and W. Miller. For the academic year 99/00 a new laboratory course, 161L was introduced. This filled a gap in the laboratory sequence for the calculus-based physics sequence. Professor Panitz created this course from scratch using the novel idea of a focused-concept laboratory. Preliminary indications based upon ICES scores and comments of students are that this is a successful laboratory. The introduction of this course necessitated a restructuring of the following course in the sequence, Phys 262L. The restructuring begun last year with plans to finish implementing the changes in fall 2000. Most of the upgrades and restructuring of the 150 and 160 sequence of laboratory courses were completed last academic year. As noted above, the only major work remaining is on 262L which will be completed next year.

The work on the new course Phys 161L continues and is aided by an NSF grant awarded to Prof. Panitz to develop this course. The additional funds available for equipment have permitted the introduction of further innovations that were either not possible under the previous plan or were to be implemented at a much later date.

Improvements in the astronomy 101L labs were also begun last year. As was true of the previous laboratory upgrades, this process is planned to occur over a two-year period. After a careful review of the current state of the 101 labs it was decided to completely scrap the previous labs and start from scratch. Professor Duric was excused from normal teaching duties and assigned to overseeing the design and implementation of the labs. Last year the first phase of the new process was completed. This included the purchase of new computers for the laboratories and the implementation of a web-based curriculum. Although there are some problems with specific exercises, the overall response by the students and TAs has been positive. There have even been requests from several other universities to use the new laboratory course at their institutions.

Although the majority of our efforts have directed towards our service courses and Astr 101L, we have not totally neglected the other 100 level laboratory courses. The only reason that they have not received the same attention as the service courses and Astr 101L is a lack of resources, monetary as well as personnel. After reviewing enrollment records for the last several years, it was noticed that there have been significant decreases

in the Musical Acoustics course, 108, and its corresponding laboratory, 108L, as well as Light and Color, 106 and 106L. It was decided to concentrate on 108 and 108L last year. Both the course and the corresponding laboratory course were redesigned with partial implementation occurring during the spring semester. Further work on these two courses is continuing.

Prof. Chandler designed a new course sequence that may ultimately replace the three-semester calculus-based physics sequence required for engineers or may serve as an advanced section of the older courses. This sequence reduces the number of semesters for the sequence from 3 to 2, but requires that students take both the laboratory course and a tutorial. Unlike the current courses, the laboratories as well as the tutorials are an integral part of the course. The tutorial sections are based upon those developed at the University of Washington. Because of the compression of material and the decision to delete certain topics, the laboratories for these courses required modifications. A presentation to the engineering departments met with cautious approval so the new sequence will be offered on a trial basis for the next two years so that its effectiveness can be assessed. Enrollments will be restricted to twenty students each semester during the trial. Implementation of the tutorials required that two TAs as well as two professors be sent to a training workshop during the summer of 2000.

Another change in the service courses was the introduction of web based homework. This was tested during the previous academic year to find out if it fit with our teaching philosophy and if the students liked it. The experiment was deemed enough of a success that it will be required in the fall for all 160 classes and will be continued for several others. One benefit has been that it reduced the number of hours of TA time that must be assigned for grading these courses.

Although we are beginning to see signs of improved enrollments, particularly at the undergraduate level, we are not yet convinced that we are successfully competing for the best graduate and undergraduate students on a national or international level. The previous year we started an aggressive advertising campaign for our graduate programs. This included redesigning a number of brochures and posters for our various degree programs and research groups. This was not a successful strategy.

Last year the departmental web page was completely redesigned. This was done so that the academic programs and research in the department were more clearly explained and so that the amount of paper produced in the department could be reduced. In order to improve access to the web, the Department of Physics and Astronomy and Department of Biology purchased a new computer to act as a web server. This machine is currently operational and jointly administered by the two departments. The new department web page was brought on line in the summer of 2000.

Our greatest success has been in increasing the number of undergraduate majors and then retaining them. Most of this success can be directly attributed to the undergraduate advisement scheme that was instituted roughly three years ago and the development of a comprehensive database. The advisement process assigns each declared major to one of a carefully chosen set of faculty advisors. Each student must meet with his or her advisor before registering. This is guaranteed to occur because a lock is put on each student's registration which can only be removed by the advisor. During this meeting, the advisor

can access the student database which not only contains demographic information on the student but also the grades and comments enter by the advisor or the academic coordinator. Furthermore, each student is encouraged to meet with his or her advisor whenever they encounter a problem with their program. Another key to the successful operation of this program is our dedicated and competent academic advisor, Mary DeWitt. She not only keeps the database up to date but also insures that each student is in compliance with the department and university regulations.

The results of the new advisement process as well as assigning the best instructors to the introductory courses and the courses for physics and astrophysics majors has been satisfactory. In the fall of 1998, there were 74 majors being advised by the department. By the fall of the following year this number had dropped to 64 mostly due to graduating the largest class we had seen in the recent past. By the end of last academic year this number had grown to about 120 and is still increasing.

Last year, a new program to grant a MS in Optical Sciences and Engineering was completed and received overwhelming endorsement from the Departments of Physics and Astronomy and Electrical and Computer Engineering and is now proceeding through the various approvals required within the University. The program has also received strong support from the Air Force Research Laboratory, Sandia National Laboratory, Los Alamos and a wide range of industries as well as the New Mexico Optical Industry Association. The department is already receiving inquiries about this program from interested students. It is believed that this program will attract approximately 15 additional students per year.

Graduate recruitment remains our biggest problem. This includes not only quantity but quality.

Student Achievements

A number of our undergraduate and graduate students have received awards. Robert Ward was one of 40 seniors in the United States to win a Marshall scholarship. Robert graduated in May 1999 and went to Oxford to begin his graduate work in physics. Also, he was awarded a NSF grant to continue his graduate education after the Marshall scholarship runs out. Another undergraduate student, Mr. Mendel-Gleasen was selected by the Council for Undergraduate Research to present a poster on his research at the *Undergraduates on the Hill* in Washington, DC. The title of his poster was *Studies of the Strong Force*. In addition, Douglas Hope was one of four students in the United States who was awarded a NASA JPL Michelson Fellowship to pursue his graduate education.

Students who won departmental awards included:

- 1. Brian Oetiker, Durward Young, Jr. Award for best dissertation
- 2. Christopher R. Schultz, Feynman Award for Best Student in Contemporary Physics
- Ian M. Hoffman, Nichole W. Hoffman, Matthew Semak, Mohit Adhikari, and Thien Trang Thi Dang, William G. Larson Award for Best Teaching Assistants
- 4. Robert G. Ward, Eoin Gray Award for Best Graduating Senior

Another graduate student, T. Burdullis performed exemplary service by coordinating and running the campus observatory. He not only hosted the Friday night open house but also held special sessions for public school classes and other private groups. He was assisted by all of the astronomy TAs and several undergraduate physics majors.

Faculty Achievements

Last calendar year the tenured or tenure-track faculty of the Department of Physics and Astronomy published 72 articles in refereed journals, 45 articles in conference proceedings, presented 84 papers at conferences of which 24 were invited and presented 35 seminars or colloquia outside of UNM. In addition, two faculty members were coeditors of books and one faculty member applied for two patents. A list of the publications is included in the appendix.

There were 51 grants or contracts active in the department during the academic year bringing in \$3,777,284. This includes an NSF CAREER grant to Prof. Rand. A detailed list of the awards is included in the appendix.

The research activities in the department involved a wide range of collaborations both within this university and outside. Prof. Bassalleck works closely with Brookhaven National Laboratory and is responsible for the design and construction of the PHENIX detector for the new Relativistic Heavy Ion Accelerator that is just coming on line. Prof. Matthews is one of the major collaborators on two high-energy gamma ray experiments. Pierre Auger and HiRes. Prof. Duncan is working with both NASA and the Jet Propulsion Laboratory at the California Institute of Technology on a microgravity experiment, DYNAMX. It is worth noting that last November this fundamental physics experiment was advanced to space-flight status after a rigorous review and down selection. There are four professors in this department that are collaborating with the Air Force Research Laboratory at Kirtland Air Force Base on experiments. They are Profs. Rudolph, McIver, Gregory and Prasad. Both Prof. Henning and Prof. Price have strong collaborative projects with an observatory, CSIRO, in Australia. In addition there are collaborative projects between professors in this department and the Departments of Mathematics and Statistics, Electrical and Computer Engineering, and Biology as well as the High Performance Computing Center and the Foundation for Functional Brain Imaging.

The only outstanding award to a faculty member was the election of Prof. Sheik-Bahae as a Fellow of the Optical Society of America. In addition, two faculty members received adjunct appointments from other universities, Prof. Duncan at the California Institute of Technology and Prof. Kenkre at the University of Pune, India.

Faculty Professional, Community, and University Service

All faculty members served on at least on department committee. In addition, a number of faculty served on university committees. These were:

- Prof. J. Panitz, Faculty Senate and Chair of A&S Senior Tenure and Promotion Committee
- 2. Prof. R. Duncan, Athletic Council

- 3. Prof Bassalleck, Senate Graduate Committee and Chair of Honorary Degree Subcommittee
- 4. Prof. Seidel, Faculty Senate and A&S Junior Promotion and Tenure Committee
- 5. Prof. Ahluwalia, Research Allocations Committee
- 6. Prof. Finley, Department Liaison with CSEL
- 7. Prof. Chandler, Academic Freedom and Tenure
- 8. Prof. Diels, University Patent Committee
- 9. Dr. Dimiduk, Teaching Enhancement Committee
- Prof. Zeilik, Student Outcomes Assessment Committee and Student Outcomes Coordinator

Several faculty members served in various capacities in professional or honorary societies:

- 1. Prof. Ahluwalia, Regional Coordinator for Sigma Xi
- 2. Prof. Dunlap, Zone Councilor for Society of Physics Students, American Physical Society
- 3. Prof. Prasad, Symposium Co-Chair, SPIE Regional Opto-Southwest Symposium, April 10-11. Albuquerque

All faculty members served as referees for one or more professional journals. In addition, nearly all faculty members participated in outreach programs. Several of the more notable contributions to outreach include:

- The LodeStar program. Professors McGraw, Duric, Rand, Seidel and Gregory
 as well as many graduate students made the major contributions to this
 project. Their activities included visits to classrooms, participation in the Ask
 an Astronomer Program and numerous special viewing nights.
- 2. Prof. Seidel was a Co-PI on Research Experience for Undergraduates: The Los Alamos Summer School from NSF. She was also one of the two organizers of this summer school.
- 3. Profs. Wolfe and Dunlap also held a Research Experience for Undergraduates grant from NSF. This grant sponsored a summer research experience for undergraduates in this department. In addition to the principals, five faculty members not only worked with these undergraduates in this program but also supplied funds to support their stipends.
- Prof. Deutsch organized a department open house in which both undergraduates from UNM as well as high school physics students were invited.

Data

- 1. Number of undergraduate majors per FTE
 - 1.1. At the beginning of the academic year—64 majors/28 faculty = 2.3 majors/FTE
 - 1.2. At the beginning of academic year 00/01—120 majors/ 28 faculty = 4.3 majors/FTE
- Number of credit hours per FTE faculty = 13467 CR/ 30 faculty = 449 CR/FTE.
 In this case the two lecturers have been included
- Grant/contract/award dollars per FTE faculty = \$3,777,284/28 faculty = \$130,251/FTE. This includes one research faculty member who has a funded contract.
- 4. IDC Dollars per FTE faculty = \$392,070/29 faculty = \$13,520/FTE. This includes one research faculty member who has a funded contract.
- 5. Private contributions were negligible.

Faculty/Staff Appointments and Separations

There were three changes in the staff. One of the machinists, John DeMoss retired in December. This position may remain vacant pending the outcome of a study of shop usage and the future role of the machine shop in the department. One of the front office staff also transferred and to a position with the DYNAMX project. She was replaced after a conventional search. Finally, the person responsible for the demonstrations in Regener Hall joined the LodeStar staff at the museum. He was replaced in May. Further details of the staff appointments and separations are in the appendix.

There were no changes in the number of faculty members.

Future Plans

The department of physics and astronomy will be focusing on several important projects next year. These are:

- 1. Completion of a long-range plan for the department. This plan is to include a comparison of this department with departments in peer universities as well as a comparison with other departments at UNM. It will identify strong points as well as deficiencies within the department. We are also interested in assessing the impact that this department has on the university, state and national level as well as looking at our teaching. Finally, we will assess the quality and effectiveness of the major research groups in the department. The outcome of this exercise will be a blunt assessment of the department, plans for addressing any weaknesses and the identification of research directions in which the department should consider moving.
- Continue improving the undergraduate laboratory courses. The major improvements in 150 and 160 series laboratory courses will be completed this year. Work will continue on the upgrades to 102L, 106L and 108L with primary

- emphasis on 108L. Also, the changes to Astro 101L are expected to be completed next year.
- 3. Develop a plan to improve the junior and senior laboratory courses and as well as the optics lab. Implementation of approved changes will begin in 2001/2002. We will also be assessing the demonstrations that are used in the Regener Hall for the introductory and service courses and developing a plan to repair and upgrade existing demonstrations as well as develop new ones.
- Review of comprehensive exam. The current procedure was adopted five years ago. We now have enough date to assess its effectiveness and identified problems that must be addressed.
- 5. Review of graduate curriculum. Four years ago a new graduate curriculum was introduced. Several of the premises that lead to its adoption appear to be flawed and there are indications that the students are not learning the basic material as well as we feel they should. We will attempt to quantify these impressions and take corrective action.
- 6. Assessment procedure for undergraduate laboratories. Even though we feel that we have improved the undergraduate laboratories and there is circumstantial evidence to support this impression, there is no quantitative data to support it. A method for the assessing the effectiveness of the laboratories will be developed with implementation to begin in the spring semester.
- A new advisement procedure for graduate students. This will be along the lines of our highly successful undergraduate procedure.
- 8. Development of new strategies for graduate student recruitment. There is a general impression that the quality of the average graduate student has been decreasing. This needs to be verified and methods developed to improve the quality of the applicants as well as convincing the top candidates to accept our offer.
- Continue to push for the approval of the Masters Degree in Optical Science and Engineering.
- 10. Complete development of the department's web page.

FACULTY DEPARTMENT OF PHYSICS AND ASTRONOMY 1999-2000 John K. McIver, Chair

PROFESSORS

Ahluwalia, Harjit S., Ph.D., Gujarat, 1960.

Bassalleck, Bernd, Ph.D., Karlsruhe, 1977.

Cahill, Kevin, Ph.D., Harvard, 1967.

Caves, Carlton M., Ph.D., California Institute of Technology, 1979.

Chandler, Colston, Ph.D., California, Berkeley, 1967.

Diels, Jean-Claude, Ph.D., Brussels, 1973.

Duric, Nebojsa, Ph.D., Toronto, 1984.

Finley, Daniel, Ph.D., California, Berkeley, 1968.

Kenkre, V. M., Ph.D., SUNY, Stony Brook, 1971.

Matthews, John A. J., Ph.D., Toronto, 1971.

McGraw, John T., Ph.D., Texas, 1977.

McIver, John K., Ph.D., Rochester, 1978. Department Chairman.

Panitz, John A., Ph.D., Pennsylvania University, 1969.

Prasad, Sudhakar, Ph.D., Harvard, 1983.

Price, R. Marcus, Ph.D., Australian National University, 1966.

Rudolph, Wolfgang G., Ph.D., University of Jena, 1985.

Wolfe, David M., Ph.D., Pennsylvania, 1966.

Zeilik, Michael II, Ph.D., Harvard, 1976.

ASSOCIATE PROFESSORS

Campbell, Belva G., Ph.D., Arizona, 1984.

Duncan, Robert V., Ph.D., California, Santa Barbara, 1988.

Dunlap, David H., Ph.D., Rochester, 1987.

750

Gold, Michael S., Ph.D., California, Berkeley, 1986.

Gregory, Stephen A., Ph.D., Arizona, 1974.

Henning, Patricia A., Ph.D., Maryland, 1990.

Seidel, Sally C., Ph.D., Michigan, 1987.

Sheik-Bahae, Mansoor, Ph.D., SUNY, Buffalo, 1987.

ASSISTANT PROFESSORS

Deutsch, Ivan H., Ph.D., California, Berkeley, 1992.

Rand, Richard J., Ph.D., California Institute of Technology, 1991.

UNIVERSITY PROFESSOR

Gell-Mann, Murray, Ph.D., Massachusetts Institute of Technology, 1951.

LECTURERS

Caffo, John A., M.S., Air Force Institute of Technology, 1969.

Dimiduk, Kathryn, Ph.D., Stanford, 1983.

Odom, Boye M., M.S., University of Texas at El Paso, 1981.

RESEARCH PROFESSORS

Emin, David, Ph.D., Pittsburgh, 1968.

Lowe, James, Ph.D., Birmingham, 1959.

Wodkiewicz, Krzysztof, Ph.D., Rochester, 1977.

RESEARCH ASSOCIATE PROFESSORS

Atlas, Susan R., Ph.D., Harvard, 1988.

Moore, Gerald, Ph.D., Brandeis, 1969.

RESEARCH ASSISTANT PROFESSORS

Fields, Douglas, Ph.D., Indiana University, 1991.

Schwoebel, Paul, Ph.D., Cornell, 1987.

VISITING ASSISTANT PROFESSOR

Ledlow, Michael J., Ph.D., University of New Mexico, 1994.

ACTIVE PROFESSORS EMERITI

Beckel, Charles L., Ph.D., Johns Hopkins University, 1954.

Bryant, Howard C., Ph.D., Michigan, 1960.

Dieterle, Byron D., Ph.D., California, Berkeley, 1967.

Hull, McAllister H., Ph.D., Yale, 1951.

Swinson, Derek B., Ph.D., University of Alberta at Calgary, 1965.

JOINTLY APPOINTED FACULTY

Brucck, Steven R. J., Ph.D., MIT, 1971 (primary appointment in Electrical Engineering and Computer Engineering (EECE)).

Jain, Ravinder K., Ph.D., California, Berkeley, 1974 (primary appointment in EECE).

Jungling, Kenneth, Ph.D., University of Illinois at Urbana-Champaign, 1970 (primary appointment in EECE).

Kelsey, Charles A., Ph.D., Notre Dame, 1962 (primary appointment in Radiology).

Osiński, Marck, Ph.D., Polish Academy of Sciences, 1979 (primary appointment in EECE).

ACTIVE ADJUNCT FACULTY

Herling, Gary H., Adjunct Professor, Ph.D., Yale, 1961.

MacCallum, Crawford, Adjunct Professor, Ph.D., University of New Mexico, 1962.

Stephenson. Gerard J., Adjunct Professor, Ph.D., Massachusetts Institute of Technology, 1964.

DEPARTMENT OF PHYSICS AND ASTRONOMY 1999-2000 John K. McIver, Chair

APPOINTMENTS TO FACULTY/STAFF

FACULTY

Odom, Boye M., Lecturer III, August 16, 1999

POS'T-DOCTORAL ASSOCIATES

Apostolova, Tzveta, February 1, 2000

Bruner, Nichelle, August 16, 1999

Gorelov, Igor, July 1, 1999

STAFF

Keim, Amanda, Administrative Assistant I, July 26, 1999

Sexson, Nelson E., Instrumentation Tech, May 1, 2000

DEPARTMENT OF PHYSICS AND ASTRONOMY 1999-2000 John K. McIver, Chair

FACULTY/STAFF SEPARATIONS

FACULTY

Ledlow, Michael J., Visiting Research Assistant Professor, May 31, 2000

POST-DOCTORAL ASSOCIATES

Chigarev, Nikolay, December 1, 1999

Ehrlich, Jeffrey, November 15, 1999

Riley, Steven R., May 31, 2000

Straka, Petr, December 31, 1999

STAFF

DeMoss, John, Prototype Machinist, retired October 29, 1999

Gallegos, John A., Instrumentation Tech, transferred to LodeStar staff February 7, 2000

Ortiz, Sandra, Administrative Assistant II, transferred to DYNAMX staff May 11, 2000

Turner, Theodore S., Senior Research Scientist II, November 30, 1999

FACULTY PUBLICATIONS DEPARTMENT OF PHYSICS AND ASTRONOMY 1999-2000 John K. McIver, Chair

. .

Ahluwalia, Hariit S.

The development of solar cycle 23, J. Geophys. Res., 104, 2559-2561, 1999.

Galactic cosmic ray transport in the heliosphere: Diffusive anisotropy 1965-1994, Adv. Space Res., 23, 475-481, 1999. Solicited Paper, 32nd COSPAR Scientific Assembly, Nagoya, Japan. Coauthors: S.S. Xue and M.M. Fikani.

Three cycle quasiperiodicity in solar wind from polar coronal holes and the size of solar activity cycle 23. *Solar Wind Nine, American Inst. Phys. Conf. Proc. 471*. Eds. S. Habbal, R. Esser, J. Hollweg, P. Isenberg, M. Lee, M. Guhathakurta, pp. 415-418, 1999.

Present status of our prediction for solar cycle 23 maximum activity. Twenty-sixth Intern. Conf. Cosmic Rays, Salt Lake City, UT. Conf. Papers, 6, 260-263, 1999.

Onset of galactic cosmic ray modulation for cycle 23. Twenty-sixth Intern. Conf. Cosmic Rays, Salt Lake City, UT. Conf. Papers, 7, 91-94, 1999. Coauthor: M.D. Wilson.

Predicted galactic cosmic ray modulation at solar cycle 23 maximum. Twenty-sixth Intern. Conf. Cosmic Rays, Salt Lake City, UT. Conf. Papers, 7, 159-162, 1999.

Diffusive and convective anisotropies of high rigidity galactic cosmic rays. Twenty-sixth Intern. Conf. Cosmic Rays, Salt Lake City, UT. Conf. Papers, 7, 267, 1999. Coauthor: M.M. Fikani.

Solar cycle 23 activity: Current status and implications, EOS. Trans. Am. Geophys. Union, 80, 825, 1999.

Bassalleck, Bernd

New measurement of the properties of the rare decay $K^+ \rightarrow \pi^+ e^+ e^-$, R. Appel et al., *Phys. Rev. Lett.* 83, 4482-4485 (1999).

 Σ^+p elastic scattering in the region of $300 < p_{\Sigma} < 600 \, MeV/c$ with a scintillating fiber target, J.K. Ahn et al., *Nucl. Phys.* A648, 263-279 (1999).

Results from PS185, T. Johansson et al., Nucl. Phys. A655, p.173c-178c (1999).

Recent results from BNL E865", A. Sher et al., *Heavy Quarks at Fixed Target*, AIP Conf. Proc. 459, ed. H.W.K. Cheung and J.N. Butler, 431-440 (1999).

Bryant, Howard C.

A conference experience for undergraduates, L. A. Collins, N. H. Magee, H. C. Bryant, M. Zeilik, *American Journal of Physics* 67, 685-691 (1999).

Studies of non-resonant excess photon detachment of negative hydrogen ions," M. S. Gulley, Xin Miao Zhao, H. C. Bryant, Charlie E. M. Strauss, David J. Funk, A. Stintz, D. C. Rislove, G. A. Kyrala, W. B. Ingalls, and W. A. Miller,

Cahill, Kevin E.

Density operators for fermions, K. Cahill and R. J. Glauber, Phys. Rev. A 59, 1538 (1999).

Lattice effective actions and light-quark confinement, K. Cahill and G. Herling, Nucl. Phys. B (Proc. Suppl.) 73, 886 (1999).

Caves, Carleton M.

Quantum logic gates in optical lattices, G. Brennen, C. M. Caves, P. S. Jessen, and I. H. Deutsch, *Physical Review Letters*, Vol. 82, 1060-1063 (1999).

Separability of very noisy mixed states and implications for NMR quantum computing, S. L. Braunstein, C. M. Caves, R. Jozsa, N. Linden, S. Popescu, and R. Schack, *Physical Review Letters*, Vol. 83, 1054-1057 (1999).

Quantum error correction and reversible operations, C. M. Caves, *Journal of Superconductivity*, Vol. 12, 707-718 (1999).

Classical model for bulk-ensemble NMR quantum computation, R. Schack and C. M. Caves, *Physical Review A*, Vol. 60, 4354-4362 (1999).

Separable states of N quantum bits, R. Schack and C. M. Caves, *ISTET99*, *Proceedings of the Tenth International Symposium on Theoretical Electrical Engineering*, edited by W. Mathis and T. Schindler (Otto-von-Guericke University, Magdeburg, Germany, 1999), pp. 73-78.

Chandler, Colston

The impossibility of distinguishing between identical particles in quantum collision processes, Gy. Bencze and Colston Chandler, *Physical Review A*, Vol. 59, 3129-3132 (1999).

Uniform approximation of functions with discrete approximating functionals, Colston Chandler and Archie G. Gibson, *Journal of Approximation Theory*, Vol. 100, 233-250 (1999).

General N-body theory of nonrelativistic quantum scattering, Colston Chandler and Archie G. Gibson, Few-Body Systems, Vol. 27, 207-249 (1999). This last paper was a review invited by the editor of the journal.

Deutsch, Ivan H.

Quantum logic gates in optical lattices, Gavin K. Brennen, Carlton M. Caves, Poul S. Jessen, and Ivan H. Deutsch, *Physical Review Letters*, 82, 1060 (1999). This article has been highlighted by:

- 1. Quantum logic with an optical lattice, Meher Antia, *Physical Review Focus*, http://publish.aps.org/Focus/v3/st7.html;
- 2. Quantum computing: A step closer to reality?, "Scatterings," Optics and Photonics News, 10 (1999).

Spatial correlation diagnostics for atoms in optical lattices, John Grondalski, Paul M. Alsing, and Ivan H. Deutsch, Optics Express, 5, 249 (1999).

Sideband cooling and quantum logic in optical lattices, Ivan H. Deutsch, Gavin K. Brennen, John Grondalski, Carlton M. Caves, Poul S. Jessen, Steven E. Hamann, David L. Laycock, and Gerd Klose, *Proceedings of the International Conference on Laser Spectroscopy*, ed. R. Blatt, World Scientific (2000) - Invited publication.

Diels, Jean-Claude

Laboratory tests of laser induced lightning discharge, P. K. Rambo, J. Biegert, V. Kubecek, J. Schwarz, A. Bernstein, J. C. Diels, R. Bernstein, and K. Stahlkopf, *Journal of Optical Technology*, 66:194-198 (1999).

Mutual Kerr-lens mode-locking, M. J. Bohn, R. J. Jason, and J.-C. Diels, Opt. Comm., 170:85-92 (1999).

Duncan, Robert V.

PdMn and PdFe: New materials for temperature measurement near 2K," B. J. Klemme, M. J. Adriaans, P. K. Day, D. A. Sergatskov, T. L. Aselage, and R. V. Duncan, *Journal on Low-Temperature Physics* 116, 133-146 (1999).

Science Requirements Document (Final) for Critical Dynamics in Microgravity (Official NASA Publication JPL D-18698). November 30, 1999.

Experiment Imprementation Plan (Final) for Critical Dynamics in Microgravity (Official NASA Publication JPL D-17090), November 30, 1999.

Dunlap, David H.

Papers in Journals and Proceedings:

What is behind the \sqrt{E} ?, D. H. Dunlap, V. M. Kenkre, and P. E. Parris, J. Imag. Sci. Tech., 43(5), 437-443 (1999).

Computer simulation of photecurrent transients for charge transport in disordered organic materials containing traps, S. V. Novikov, D. H. Dunlap, V. M. Kenkre, and A. V. Vannikov, SPIE Proceedings, vol. 3799, pps. 94-101, 1999.

Photoinducted charge transport in molecular solids: The question of polaron formation, D. H. Dunlap, P. E. Parris, and V. M. Kenkre, SPIE Proceedings, vol. 3799, pps. 88-93, 1999.

Volumes Edited:

Organic Photorefractives, Photoreceptors, Waveguides, and Fibers, SPIE Proceedings, vol. 3799, eds. S. Ducharme, D. H. Dunlap, and R. A. Norwood.

Duric, Nebojsa

Refereed:

A new sample of radio-selected and optically confirmed supernova remnants in M33, Gordon, Shawn M.; Duric Nebojsa; Kirshner, Robert P.; Goss, W. Miller, Viallefond, Francois, ApJS 120, 247 (1999).

Millimeter observations of variable radio sources in the galactic plane," Tsutsumi. T., and Duric, N., Adv. Space. Res. 23,

Non-refereed:

Galactic cosmic rays and magnetic fields, in New Perspectives on the Interstellar Medium, Duric, N., eds. Taylor, Landecker and Joncas, ASP Conference Series, 168, 161 (1999).

Image recovery using phase diversity, Durie, N. and Dorf, M. in Adaptive Optics and Interferometry in the 21st Century, eds. Restaino, Junor and Durie, ASP Conference Series, 174, 87 (1999).

Characterization of atmospheric turbulence at four mesa-top sites in New Mexico, Duric, N. et al., in Adaptive Optics and Interferometry in the 21st Century, eds. Restaino, Junor and Duric, ASP Conference Series, 174, 95 (1999).

The square kilometer array and its optical and infrared counterparts, Duric, N., in Science with the Square Kilometer Array, eds. Taylor and Braun (1999).

Books edited:

Adaptive Optics and Interferometry in the 21st Century, eds. Restaino, S., Junor, W. and Duric, N. ASP Conference Series, Volume 174.

Other:

Article on campus observatory for UNM's "Inside Arts and Sciences."

Emin, David

Enhanced Seebeck effect from carrier-inducted vibrational softening, Physical Review B, 59, 6205-6210 (1999).

Encyclopedia article:

Seebeck effect, major article (50 pages) for Wiley Encyclopedia of Electrical and Electronics Engineering.

Finley, James Daniel

Estabrook-Wahlquist prolongations and infinite-dimensional algebras, in Symmetry Methods in Physics, vol. 1, Joint Institute for Nuclear Research, Dubna, Russia, pp. 203-211 (1999).

Gold, Michael S.

Measurement of the B0 B-bar0 oscillation frequency using l- D*+ pairs and lepton flavor tags, T. Affolder et al., the CDF Collaboration, *Phys. Rev. D* 60, 112004 (1999).

Search for the flavor-changing neutral current decays B+ - mu+ mu- K+ and B0 - mu+ mu- K*0, T. Affolder et al., the CDF Collaboration, *Phys. Rev. Lett.* 83, 3378 (1999).

A measurement of b quark fragmentation fractions in the production of strange and light B mesons in p anti-p collisions at s**(1/2) = 1.8 TeV, F. Abe et al., the CDF Collaboration, *Phys. Rev. D* 60, 092005 (1999).

Measurement of the B0(d) B-bar0(d) oscillation frequency using dimuon data in p anti-p collisions at $s^{**}(\frac{1}{2}) = 1.8 \text{ TeV}$, F. Abe et al., the CDF Collaboration, *Phys. Rev. D* 60, 051101 (1999).

Search for B(s)0-anti-B(s)0 oscillations using the semileptonic decay B(s)0 - - psi l+ X(nu), F. Abe et al., the CDF Collaboration, *Phys. Rev. Lett.* 82, 3576 (1999).

Kinematics of ttbar Events at CDF, F. Abe et al., the CDF Collaboration, Phys. Rev. D 59, 092001(1999).

Scarch for third-generation leptoquarks from technicolor models in ppbar collisions at s**(1/2) = 1.8 TeV, F. Abe et al., the CDF Collaboration, *Phys. Rev. Lett.* 82, 3206 (1999).

Measurement of the B(s)0 meson lifetime using semileptonic decays, F. Abe et al., the CDF Collaboration, *Phys. Rev. D* 59, 032004 (1999).

Searches for new physics in diphoton events in ppbar collisions at s**(½) = 1.8 TeV, F. Abe et al., the CDF Collaboration, Phys. Rev. D 59, 092002 (1999).

Measurement of Z0 and Drell-Yan production cross section using dimuons in p anti- p collisions at $s^{**}(1/2) = 1.8$ TeV, F. Abe et al., the CDF Collaboration, *Phys. Rev. D* 59, 052002 (1999).

Search for new particles decaying to b anti-b in p anti-p collisions at $s^{**}(\frac{1}{2}) = 1.8$ TeV, F. Abe et al., the CDF Collaboration, *Phys. Rev. Lett.* 82, 2038 (1999).

Measurement of the B0(d) - anti-B0(d) flavor oscillation frequency and study of same side flavor tagging of B mesons in p anti-p collisions, F. Abe et al., the CDF Collaboration, *Phys. Rev. D* 58, 032001 (1999).

Measurement of the top quark mass with the collider detector, F. Abe et al., the CDF Collaboration, *Phys. Rev. Lett.* 82, 271 (1999).

Gregory, Stephen A.

A new set of SOI filters determined from SILC data, S. A. Gregory, T. E. Payne, D. M. Payne, and D. Sanchez, *Proceedings of the 1999 AMOS Technical Conference*, page number not yet available.

Space object identification of geosynchronous satellites, T. E. Payne, S. A. Gregory, D. J. Sanchez, L. G. Finkner, D. M. Payne, L. Kann, C. K. Davis, *Proceedings of the 1999 AMOS Technical Conference*, page number not yet available.

Henning, Patricia A.

The HI Parkes Zone of Avoidance Shallow Survey, Henning, P.A., Staveley-Smith, L., Kraan-Korteweg, R.C., and Sadler, E.M., *Publications of the Astronomical Society of Australia*, 16, 35-37 (1999).

Galaxies detected by the Dwingeloo Obscured Galaxies Survey, Rivers, A. J., Henning, P. A., and Kraan-Korteweg, R. C., Publications of the Astronomical Society of Australia, 16, 48-52 (1999).

First results from the HI Parkes Zone of Avoidance Survey, Henning, P.A., Staveley-Smith, L., Kraan-Korteweg, R.C., and Sadler, E.M., International Astronomical Union Colloquium 171, "The Low Surface Brightness Universe," *Astronomical Society of the Pacific Conf. Ser.*, 170, eds. J.I. Davies, C. Impey, and S. Phillips, 331-333, 1999.

Results from the Dwingeloo Obscured Galaxies Survey, Rivers, A.J., Henning, P.A., Kraan-Korteweg, R.C., Lahav, O., and Burton, W.B., International Astronomical Union Colloquium 171, "The Low Surface Brightness Universe," *Astronomical Society of the PacificConf. Ser.*, 170, 334-336 (1999).

New HI-detected galaxies in the Zone of Avoidance, Juraszek, S., Staveley-Smith, L., Ekers, R.D., Henning, P.A., Kraan-Korteweg, R.C., Koribalski, B.S., Green, A.J., Sadler, E.M., Price, M., Haynes, R.F., and Schroder, A., Bulletin

of the American Astronomical Society, 31, 3, page 827 (1999).

New galaxies discovered in the first blind HI survey of the Centaurus A Group, Banks, G.D., Disney, M.J., Knezek, P.M., Jerjen, H., Barnes, D.G., Bhatal, R., de Blok, W.J.G., Boyce, P.J., Ekers, R.D., Freeman, K.C., Gibson, B.K., Henning, P.A., Kilborn, V., Koribalski, B., Kraan-Korteweg, R.C., Malin, D.F., Minchin, R.F., Mould, J.R., Oosterloo, T., Price, R.M., Putman, M.E., Ryder, S.D., Sadler, E.M., Staveley-Smith, L., Stewart, I., Stootman, F., Vaile, R.A., Webster, R.L., and Wright, A.E., Astrophysical Journal, 524, 612-622 (1999).

Herling, Gary H.

Lattice effective actions and light-quark confinement, Nucl. Phys. B (Proc. Supl.) 73, 886 (1999).

Junor, William

Formation of the radio jet in M87 at 100 Schwarzschild radii from the central black hole, Junor, William, Biretta, John A., and Livio, Mario, Nature, 401, 891 (1999).

Results of VLBI monitoring of 3C273 at 22 GHz and 43 Ghz, Mantovani, F., Junor, W., Valerio, C., and McHardy, I., New Astronomy Reviews, 43, 737 (1999).

Large differential Faraday rotation in the compact steep-spectrum quasar 3C 147 and jet-medium interactions, Junor, W., Salter, C. J., Saikia, D. J., Mantovani, F., and Peck, A. B., *Monthly Notices of the Royal Astronomical Society*, 308, 955 (1999).

VLBI observations of 3C 273 at 22 GHz and 43 GHz. I. Search for short time-scale structural variation, Mantovani, F., Junor, W., Valerio, C., and McHardy, I., Astronomy & Astrophysics, .346, 397 (1999).

Catching the perfect wave: Adaptive optics and optical Interferometry for the 21st. century, Restaino, S.R., Junor, W., and Duric, N. (editors), Astronomical Society of the Pacific Conference Series, Vol. 174, ASP, San Francisco, 1999.

Kenkre, V. M.

Quantum versus semiclassical description of self-trapping: Anharmonic effects, with Raghavan S. and Bishop, A. R., *Physical Review B*, 59(15), 9929-9932, Apr. 15, 1999.

Transitions in coherent oscillations between two trapped Bose-Einstein condensates, with Raghavan, S. and Smerzi, A., *Physical Review A*, 60(3), R1787-R1790, Sept. 1999.

Quantum coherence effects in the scanning tunneling microscope: A simple interpretation of contact resistance experiments, with Biscarini, F., Surface Science, 426(3), 336-344, May 20, 1999.

Nature of transitions in augmented discrete nonlinear Schrodinger equations, with Amritkar, R. E., *Physical Review E*, 59(6), 6306-6311, June 1999.

What is behind the square root of E?, with D. H. Dunlap, P. E. Parris, *Journal of Imaging Science and Technology*, 43(5), 437-443, Sept./Oct. 1999.

Lowe, James

(a) Papers

Oscillations of recoil particles against mixed states, H. Burkhardt, J. Lowe, G.J. Stephenson Jr., T. Goldman, *Phys. Rev.* D 59, 54018 (1999).

Der Londoner Hornklang auf CD, J. Lowe, Wiener Waldhorn Verein Blaetter, 35D, 28 (1999).

A new measurement of the properties of the rare decay $K^+ \sim \pi^+ e^+ e^-$, R. Appel, G.S. Atoyan, B. Bassalleck, D. Bergman, D.N. Brown, N. Cheung, S. Dhawan, H. Do, J. Egger, S.W. Eilerts, C. Felder, H. Fischer, M. Gach, W. Herold, V.V. Issakov, H. Kaspar, D.E. Kraus, D.M. Lazarus, L. Leipuner, P. Lichard, J. Lowe, J.A. Lozano, H. Ma, W. Majid, W. Menzel, S. Pislak, A.A. Poblaguev, V.E. Postoev, A.L. Proskurjakov, P. Rehak, P. Robmann, A. Sher, T.L. Thomas, J.A. Thompson, P. Truol, H. Weyer, and M.E. Zeller, hep-ex/9907045; *Phys. Rev. Lett.* 83, 4482 (1999).

(b) Published conference contributions

Analysis of the decays $K^* \rightarrow \pi^* e^+ e^-$ and $K^* \rightarrow \pi^* \mu^* \mu^*$, M.E. Zeller, N. Cheung, R. Appel, D.N. Brown, C. Felder, M. Gach, P. Lichard, D.E. Kraus, A. Sher, J.A. Thompson, D.M. Lazarus, L. Leipuner, H. Ma, P. Rehak, G.S. Atoyan, V.V. Isakov, A.A. Poblaguev, A.L. Proskurjakov, B. Bassalleck, S.W. Eilerts, H. Fischer, J. Lowe, R.W. Stotzer, J. Egger, W. Herold, H. Kaspar, W. Menzel, H. Weyer, D. Bergman, S. Dhawan, H. Do, J.A. Lozano, W. Majid, S. Pislak, P. Robmann, March/April APS meeting, 1999.

A new measurement of the $K^+ \sim \pi^+ \pi^- e^+ \nu$ decay, S. Pislak, N. Cheung, R. Appel, P. Lichard, D.E. Kraus, A. Sher, J.A. Thompson, D.M. Lazarus, H. Ma, G.S. Atoyan, V.V. Isakov, A.A. Poblaguev, S.W. Eilerts, J. Lowe, H. Kaspar, D. Bergman, H. Do, J.A. Lozano, W. Majid, M.E. Zeller, P. Truoel, March/April APS meeting, 1999.

 $K^+ \sim \pi^+ \mu^+ \mu^-$ in E865 at BNL, J.A. Thompson, J. Lowe et al., Workshop on Weak Interactions and Neutrinos, Cape Town, 1999.

Recent results from BNL E865, A. Sher, R. Appel, G.S. Atoyan, B. Bassalleck, D.N. Brown, D. Bergman, N. Cheung, S. Dhawan, H. Do, J. Egger, S. Eilerts, C. Felder, H. Fischer, M. Gach, W. Herold, V.V. Isakov, H. Kaspar, D.E. Kraus, D. Lazarus, L. Leipuner, J. Lowe, J.A. Lozano, H. Ma, W. Majid, W. Menzel, S. Pislak, A.A. Poblaguev, A.L. Proskurjakov, P. Rehak, P. Robmann, R.W. Stotzer, J.A. Thompson, P. Truol, H. Weyer, M.E. Zeller, paper presented at *Heavy Quarks at Fixed Target*, AIP Conference Proceedings 459, 431 (1999).

Experimental status of semileptonic K decays, J. Lowe, Proc. Third Workshop on Physics and Detectors for Dafne, Frascati, Italy, November 16 - 19, 1999, Frascati Physics Series, XVI, (1999).

Matthews, John A. J.

Measurement of the $B_D^0 - \overline{B_D^0}$ flavor oscillation frequency and study of same side flavor tagging of B Mesons in \overline{DD} collisions, the CDF Collaboration, F. Abe, et al. Phys. Rev. D59, 032001 (1999).

Measurement of the B_S^0 meson lifetime using semileptonic decays, the CDF Collaboration, F. Abe, et al, *Phys. Rev.* D59, 032004 (1999).

Measurement of the top quark mass with the collider detector at Fermilab, the CDF Collaboration, F. Abe, et al, *Phys. Rev. Lett.* 82, 271-276 (1999).

. .

Measurement of Z^0 and Drell-Yan production cross-section using dimuons in $p\bar{p}$ collisions at \sqrt{s} = 1.8TeV, the CDF Collaboration, F. Abe, et al, *Phys. Rev.* D59, 052002 (1999).

Kinematics of $t\bar{t}$ events at CDF, the CDF Collaboration, F. Abe, et al, *Phys. Rev.* D59, 092001 (1999).

Searches for new physics in diphoton events in $p\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV, the CDF Collaboration, F. Abe, et al, *Phys. Rev.* D59, 092002 (1999).

Search for new particles decaying to $b\bar{b}$ in $p\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV, the CDF Collaboration, F. Abe, et al, Phys. Rev. Lett. 82, 2038-2043 (1999).

Search for third generation leptoquarks from technicolor models in $p\bar{p}$ collisions at \sqrt{s} = 1.8 TeV, the CDF Collaboration, F. Abe, et al. *Phys. Rev. Lett.* 82, 3206 (1999).

A search for $B_S^0 - \overline{B_S^0}$ oscillations using the semileptonic decay $B_S^0 - \phi l^* X \nu$ in $p\overline{p}$ Collisions at $\sqrt{s} = 1.8$ TeV, the CDF Collaboration, F. Abe, et al., *Phys. Rev. Lett.* 82, 3576-3580 (1999).

Measurement of the $B_D^0 - \overline{B_D^0}$ oscillation frequency using dimuon data in $p\overline{p}$ collisions at \sqrt{s} = 1.8 TeV, the CDF Collaboration, F. Abe, et al, *Phys. Rev.* D60, 051101 (1999).

Measurement of the $B^0\overline{B^0}$ flavor oscillations using jet charge and lepton flavor tagging in $p\overline{p}$ collisions at $\sqrt{s} = 1.8$ TeV, the CDF Collaboration, F. Abe, et al, *Phys. Rev.* D60, 072003 (1999).

Measurement of the associated $\gamma + \mu^*$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV, the CDF Collaboration, F. Abe, et al, *Phys. Rev.* D60, 092003 (1999).

Measurement of *B*-quark fragmentation fractions in the production of strange and light *B*-mesoms in $p\bar{p}$ collisions at \sqrt{s} = 1.8 TeV, the CDF Collaboration, F. Abe, et al, *Phys. Rev.* D60, 092005 (1999).

Measurement of the $B^{0}\overline{B^{0}}$ oscillation frequency using D^{*} pairs and lepton flavor tags, the CDF Collaboration, F.

762

Abe, et al, Phys. Rev. D60, 112004 (1999).

Search for R-parity violating supersymmetry using like sign di-electrons in $p\bar{p}$ collisions at \sqrt{s} = 1.8 TeV, the CDF Collaboration. F. Abc. et al. *Phys. Rev. Lett.* 83, 2133-2138 (1999).

Search for a technicolor omega_r particle in events with a proton and a *B*-quark jet at CDF, the CDF Collaboration, F. Abe, et al, *Phys. Rev. Lett.* 83, 3124-3129 (1999).

Search for the flavor changing neutral current decays $B^+ \rightarrow \mu^+ \mu^+ K^+$ and $B^0 \rightarrow \mu^+ \mu^+ K^{-0}$, the CDF Collaboration, F. Abe, et al. *Phys. Rev. Lett.* 83, 3378-3383 (1999).

Steerable Laser System for UV Atmospheric Monitoring at the High Resolution Fly's Eye, L.R. Wiencke, et al, Proc. of SPIE's (International Society for Optical Engineering) 44th Annual Meeting, Denver, CO, July 18-23, 1999.

McIver, John K.

Although this was published in 1998 I did not receive word that it was published until the summer of 1999

Gas-plasma and superlattice free-electron lasers exploiting a medium with periodically modulated refractive-index, V. V. Apollonov, A. I. Artemyev, M. V. Fedorov, J. K. McIver, and E. A. Shapiro, *Lasers and Particle Beams*, 16, 267-276 (1998).

Panitz, John A.

The archetypal atom-probe, Mater. Charact. (1999).

Analysis of bistable noise from microfabricated field emission cathodes, with R. T. Olson, G. R. Condon, and P. R. Schwoebel, *J. Appl. Phys.* (1999).

Mapping the tunneling barrier of the organic molecule copper phthalocyanine, G. R. Condon and J. A. Panitz, JVST (1999).

Prasad, Sudhakar

Dynamics of turbulence-induced noise in image deconvolution with support constraint, *J. Opt. Soc. Am. A*, 16, 1769-1778 (1999).

Information theoretic perspective on the formation, detection, and processing of images from a seeing-limited telescope, *Proceedings of the 1999 AMOS Technical Conference*, Maui, HI, 339-349 (1999).

Information dynamics in constrained image deconvolution, S. Prasad and D. Tyler, Selected Reprints and Summaries of the Fundamental Issues in Image Formation, Detection and Processing Workshop, UNM, February 6-7, 1999, 1-6.

Optics is for seeing clearly: The University of New Mexico story, S. Prasad and A. Guenther, SPIE's OE-Reports, August 1999, p. 7.

Noise transport and removal in a speckle imaging system, D. Tyler and S. Prasad, Paper MU3, p. 66, *Program of the Annual Optical Society of America Meeting*, Santa Clara, September 26-30, 1999.

Coherent radiation by an extended resonant medium, S. Prasad and R. Glauber, Paper ThCC5, p. 143, *Program of the Annual Optical Society of America Meeting*, Santa Clara, September 26-30, 1999.

A new cross-disciplinary MS program in optical science and engineering, Paper ThY4, p. 142, Program of the Annual Optical Society of America Meeting, Santa Clara, September 26-30, 1999.

Price, R. Marcus

New galaxies discovered in the first blind HI survey of the Centaurus A Group, Banks, et al, Astrophysics Journal 524, 612, 1999.

Rand, Richard J.

The eastern arm of M83 revisited: High-resolution mapping of CO 1-0 emission, Rand, R. J., Lord, S. D., and Higdon, J. L., ApJ, 513, 720 (1999).

Diffuse ionized gas in edge-on spiral galaxies: Extraplanar adn outer disk H-alpha emission, Hoopes, C. G., Walterbos, R. A. M., and Rand, R. J., ApJ, 522, 669 (1999).

Rudolph, Wolfgang

Characterization of sub-10 fs focusing with high-numerical aperture microscope objectives, J. Jasapara and W. Rudolph, Optics Letters 11/24, 777-77 (1999).

Automodulations in Kerr-lens modelocked solid-state lasers, J. Jasapara, V. L. Kalashnikov, D. O. Krimer, G. Poloyko, M. Lenzner, and W. Rudolph, J. Optical Society of America B, Dec. (1999).

Autocorrelation measurement of femtosecond laser pulses by use of a ZnSe two-photon detector array, A. Gutierrez, P. Dorn, J. Zeller, D. King, L. F. Lester, W. Rudolph, and M. Sheik-Bahae, Opt. Lett. 24, 1175-1177 (1999).

Synchronously pumped H2 Raman laser, P. Straka, J. W. Nicholson, and W. Rudolph, *Opt. Commun.*, submitted 1999.

Full-field characterization of femtosecond pulses by spectrum and cross-correlation measurements, J. W. Nicholson, J. Jasapara, W. Rudolph, F. G. Omenetto, and A. J. Taylor, *Opt. Lett.* 24, 1774 (1999).

Stabilization of frequency-phase and repetition rate of a train of ultrashort pulses, J. Jones, J.C. Diels, J. Jasapara, and W. Rudolph, Opt. Commun. (1999).

Seidel, Sally C.

Measurement of b quark fragmentation fractions in the production of strange and light B mesons in $p - \bar{p}$ collisions at $\sqrt{s} = 1.8 \text{ TeV}$, F. Abe et al., CDF Collaboration, Phys. Rev. D 60 (1999) 092005.

Measurement of the $B^0 - \overline{B^0}$ oscillation frequency using / D** pairs and lepton flavor tags, T. Affolder et al., CDF Collaboration, *Phys. Rev. D.* 60 (1999) 112004.

Search for R parity violating supersymmetry using like sign dielectrons in $p - \bar{p}$ collisions at $\sqrt{s} = 1.8 \text{ TeV}$, F. Abe et al., CDF Collaboration, *Phys. Rev. Lett.* 83 (1999) 2133-2138.

Searches for new physics in diphoton events in proton-antiproton collisions at \sqrt{s} = 1.8 TeV, F. Abe et al., CDF Collaborations, *Phys. Rev. D.* 59 (1999) 092002.

Measurement of the $B_d^O \bar{B}_d^O$ flavor oscillation frequency and study of same side flavor tagging of B mesons in p-p collisions, F. Abe et al., CDF Collaboration, *Phys. Rev. D* 59, (1999) 032001.

764

Search for the flavor changing neutral current decays $B^+ - \mu^+ \mu^- K^+$ and $B^0 - \mu^+ \mu^- K^{\pm 0}$, T. Affolder et al., CDF Collaboration, *Phys. Rev. Lett.* 83 (1999) 3378-3383.

Measurement of the B_0^0 \bar{B}_0^0 oscillation frequency using dimuon data in $p - \bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV, F. Abe et al., CDF Collaboration, *Phys. Rev. Lett.* 60 (1999) 051101.

Measurement of $B^0 - \overline{B^0}$ flavor oscillations using jet charge and lepton flavor tagging in $p - \overline{p}$ collisions at $\sqrt{s} = 1.8$ TeV, F. Abe et al., CDF Collaboration, *Phys. Rev. D* 60 (1999) 072003.

Measurement of the associated $\gamma + \mu^{\pm}$ production cross section in $p - \bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV, F. Abe et al., CDF Collaboration, *Phys. Rev. D* 60 (1999) 092003.

A search for $B_{\nu}^{0} - \bar{B}_{\nu}^{0}$ oscillations using the semileptonic decay $B_{\nu}^{0} - \varphi t^{+} X \nu$, F. Abe et al., CDF Collaboration, *Phys. Rev. Lett.* 82 (1999) 3576-3580.

A search for third generation leptoquarks from technicolor models in $p - \bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV, F. Abe et al., CDF Collaboration, *Phys. Rev. Lett.* 82 (1999) 3206.

Kinematics of $t - \bar{t}$ events at CDF, F. Abe et al., CDF Collaboration, Phys. Rev. D. 59 (1999) 092001.

Search for a technicolor Ω , particle in events with a photon and a b quark jet at CDF, F. Abe et al., CDF Collaboration, *Phys. Rev. Lett.* 83 (1999) 3124-3129.

Measurement of the top quark mass with the collider detector at Fermilab, F. Abe et al., CDF Collaboration, *Phys. Rev. Lett.* 82, (1999) 271-276.

Measurement of \mathbb{Z}^n and Drell-Yan production cross-section using dimuons in $p - \overline{p}$ collisions at $\sqrt{s} = 1.8$ TeV, F. Abe et al., CDF Collaboration, *Phys. Rev. D.* 59 (1999) 052002.

Search for new particles decaying to $B-\bar{B}$ in $p-\bar{p}$ collisions at $\sqrt{s}=1.8$ TeV, F. Abe et al., CDF Collaboration, *Phys. Rev. Lett.* 82 (1999) 2038-2043.

Measurement of the B, meson lifetime using semileptonic decays, F. Abe et al., CDF Collaboration, *Phys. Rev. D* 59 (1999) 032004.

Sheik-Bahae, Mansoor

Autocorrelation measurement of femtosecond laser pulses by use of a ZnSe two-photon detector array, A. Gutierrez, P. Dorn, J. Zeller, D. King, L. F. Lester, W. Rudolph, and M. Sheik-Bahae, Opt. Lett. 24, 1175-1177 (1999).

Quantum interference control of current in semiconductors: Universal scaling and polarization effects, M. Sheik-Bahae, *Phys. Rev. B, Rapid Communications* 60, 11258-11260 (1999).

(BOOK CHAPTER) Third order optical nonlinearities, M. Sheik-Bahae and M. P. Hasselbeck, in *OSA Handbook of Optics*, Vol. III, McGraw-Hill (Will be published in 2000).

Stephenson, Gerard J.

Oscillations of recoil particles against mixed states, with H. Burkhardt, J. Lowe and T. Goldman, *Physical Review D* 59, 054018-1 through 054018-7 (1999).

Wodkiewicz, Krysztof

Testing quantum nonlocality in phase space, K. Banaszek and K. Wodkiewicz, Phys. Rev. Lett. 82, 2009 (1999).

Nonlocality of the Einstein-Podolsky-Rosen state in the phase space, K. Banaszek and K. Wodkiewicz, *Acta Phys. Slov.* 49, 491 (1999).

Direct measurement of the Wigner function by photon counting, K. Banaszek, C. Radzewicz, K. Wodkiewicz, and J. S. Krasinski, *Phys. Rev. A* 60, 674 (1999).

Determination of the Wigner function from photon statistics, K. Banaszek, C. Radzewicz, K. Wodkiewicz, and J. S. Krasinski, *Acta Phys. Slov.* 49, 643 (1999).

Operational Time of Arrival in Quantum Phase Space, P. Kochanski and K. Wodkiewicz, *Phys. Rev. A* 60, 2689 (1999).

Zeilik II. Michael

Modeling energy outflow in stars, The Physics Teacher, vol. 37 (4), 236 - 237 (1999).

Investigating Astronomy, Zeilik, M. and Schrandt, B., RonJon Publishing, 1999.

A conference experience for undergraduates," Collins, L.A., Magee, N. H., Bryant, H.C., and Zeilik, M., American Journal of Physics, vol. 67 (8), 685-691 (1999).

Conceptual astronomy. II. Replicating conceptual gains, probing attitude changes across three semesters," Zeilik, M., Schau, C., and Mattern, N., American Journal of Physics, vol. 67 (10), 923-927 (1999).

Using balloons to measure the moon, The Science Teacher, vol. 66 (9), 23-25 (1999).

STAFF OUTSIDE PROFESSIONAL ACTIVITIES DEPARTMENT OF PHYSICS AND ASTRONOMY 1999-2000 John K. McIver, Chair

Gallegos, John A., Instrumentation Technician

Featured in UNM's Campus News "Spotlight" column which highlighted his contributions as the instrumentation technician responsible for classroom demonstrations.

Wonn, Marla F., Department Administrator

Serves as a volunteer on the Program Committee of the Mid-Rio Grande YWCA.

Serves as a member of the organizing committee for the newly formed UNM Department Administrator Professional Network.

SPONSORED RESEARCH AWARDS DEPARTMENT OF PHYSICS AND ASTRONOMY 1999-2000

John K. McIver, Chair

Total Awards for FY00: \$3,777,284

Ahluwalia, Harjit S.

Sponsor:

National Science Foundation

FY00 Amount:

\$39,946

Title:

Galactic Cosmic Ray Modulation Studies at High Rigidities

Dates:

6/1/99 - 5/31/02

Bassalleck, Bernd

Sponsor:

Brookhaven National Laboratory

FY00 Amount:

\$33,400

Title:

Station 1 PHENIX Muon Tracker

Dates:

1/1/96 - 12/31/96

Sponsor: FY00 Amount:

Brookhaven National Laboratory \$52,000

Title:

Station 1 PHENIX Muon Tracker

Dates:

1/1/96 - 12/31/96

Co-PI: Sponsor: David M. Wolfe Department of Energy

FY00 Amount: \$343,000

Title:

Strange Particles and Heavy Ion Physics

Dates:

12/1/96 - 11/30/99

Boyd, Stephen T.

Sponsor:

NASA - Lewis

FY00 Amount:

\$89,000

Title:

New Phenomena in Strongly Counterflowing He-II Near TA

Dates:

10/1/96 - 9/30/00

Sponsor: FY00 Amount: Jet Propulsion Lab

\$4,900

Title:

Pilot Project for LTMP Charged Particle Heating

Dates:

8/1/99 - 9/24/99

Brandt, John

Sponsor:

Jet Propulsion Lab

FY00 Amount:

\$10,290

Title:

The Planetary Astronomy Program/Management Operations Working Group

Dates:

4/1/00 - 6/1/01

768

Bryant, Howard C.

Sponsor:

National Science Foundation

FY00 Amount: Title:

\$98,983

Pan-American Advanced Study Institute: "Atoms and Molecules in a New

Dates:

9/1/99 - 11/30/00

Caves, Carleton

Sponsor: FY00 Amount: Office of Naval Research \$100,000

Title:

Theoretical Investigations in Quantum Information Science

Dates:

4/1/00 - 3/31/03

Deutsch, Ivan H.

Co-PI: Sponsor: P. Alsing National Science Foundation

FY00 Amount:

\$19,992

Title:

Quantum State Control of Atomic Motion in Optical Lattices.

Dates:

5/1/98 - 4/30/01

Sponsor: FY00 Amount: Office of Naval Research

Title:

\$100,000

Quantum Logic for Neutral Atoms in Optical Lattices

4/1/00 - 3/31/03 Dates:

Diels, Jean-Claude

Sponsor: FY00 Amount: National Science Foundation \$95,749

Title:

Optical Instrumentation Photon Lifetime

Dates: 4/1/99 - 9/30/99

Dieterle, Byron

Department of Energy Sponsor:

FY00 Amount:

\$148,000

Title:

Nuclear Physics at Intermediate Energies

Dates:

12/1/99 - 11/30/00

Duncan, Robert V.

Sponsor:

Sandia National Laboratories

FY00 Amount:

\$25,000 Statistical & Thermodynamic Models for Robotic Control

Title: Dates:

2/1/98 - 9/30/98

Sponsor:

Karmanos Cancer Institute

FY00 Amount:

\$42,113

Title:

Development of a Distributed Impedence Analyzer

Dates:

7/1/99 - 8/31/99

Duric, Nebosja

Sponsor: Smithsonian Astrophysical Observator

FY00 Amount: \$18,656

Title: Proposal to Study the Hot Gas Interior of a Supergiant

Dates: 12/3/98 - 12/2/99

Co-PI: R. V. Duncan

Sponsor: National Renewable Energy Laboratory

FY00 Amount: \$44,910

Expert Panel Review of Solar Mirror R&D

Dates: 12/1/99 - 3/1/00

Gold, Michael S.

Title:

Sponsor: Fermi Laboratory

FY00 Amount: \$3,000

Title: MOU: CDF SVX II Silicon Vertex Detector Upgrade Project

Dates: 3/12/98 - 6/30/99

Gregory, Stephen

Sponsor: Air Force Research Laboratory

FY00 Amount: \$37,414

Title: IPA 082 for Steven Gregory: 2000-2001

Dates: - 2000-2001

Henning, Patricia

Sponsor: National Science Foundation

FY00 Amount: \$35,320

Title: The Distribution of Optically Obscured Galaxies and Asymmetric

Isolated Galaxies

Dates: 10/1/95 - 9/30/00

Junor, William

Co-PIs: N. Duric and S. Restaino

Sponsor: NASA - Washington

FY00 Amount: \$9,640

Title: Catching the Perfect Wave: The Application of Adaptive Optics to

Optical Interferometry in the 21st Century

Dates: 2/1/98 - 7/30/98

Kenkre, Vasudev M.

Sponsor: U.S.-Mexico Foundation

FY00 Amount: \$9,985

Title: Collaboration between Mexican and USA Scientists via Consortium of the

Americas for Interdiseptinary Science

Dates: 12/1/99 - 11/30/00

Ledlow, Michael J.

Sponsor:

NASA - Washington

FY00 Amount:

\$50,200

Title:

The X-Ray Properties of Rich Clusters from Z=0-0.2 Using the ROSAT

All-Sky-Survey

Dates:

10/1/97 - 9/30/00

Matthews, John

Co-Pls: Sponsor: M. Gold and S. Seidel Department of Energy

FY00 Amount: Title: \$24,000 New Mexico Center for Particle Physics: Studies of Fundamental

Interactions

Dates:

7/1/92 - 2/28/97

Co-PIs:

M. Gold and S. Seidel Department of Energy

Sponsor: FY00 Amount:

\$485,000

Title:

New Mexico Center for Particle Physics: Studies of Fundamental Interactions

Dates:

7/1/92 - 2/28/01

Sponsor:

Fermi Laboratory

FY00 Amount:

st: \$6,700

Title:

Construction of Equipment Items: WBS#1.2.1 & 1.3.5

Dates:

Not available

Sponsor:

Fermi Laboratory

FY00 Amount:

\$18,770

Title:

Construction of Equipment Items: WBS#1.2.1 & 1.3.5

Dates:

Not available

Sponsor:

Fermi Laboratory

FY00 Amount:

\$25,700

Title:

Construction of Equipment Items: WBS#1.2.1 & 1.3.5

Dates:

Not available

McGraw, John T.

Sponsor:

NM Tourism Department

FY00 Amount:

\$10,000

Title: Dates: LodeStar Project 12/28/99 - 6/30/00

McIver, John K.

Sponsor:

Boeing Company

FY00 Amount: \$31,815 Solid-State Laser Materials for the Mid-Infrared

Title:

Dates: 10/1/99 - 9/30/00

Sponsor: Air Force Research Laboratory

FY00 Amount: \$52,037

IPA 156 for John Telle Title: 11/8/99 - 11/7/00 Dates:

Air Force Research Laboratory Sponsor:

FY00 Amount: \$53,493

Title: IPA 102 for James Welch 00-01

3/1/00 - 2/28/01 Dates:

Sponsor: Air Force Research Laboratory

FY00 Amount: \$74,617

Title: IPA 207 for Dr. Hasselbeck, 2000-2001

Dates: 4/1/00 - 3/31/01

Sponsor; Air Force Research Laboratory

FY00 Amount: \$61.866

Title: IPA 239 for John McCord

Dates: 4/19/00 - 4/18/01

Air Force Research Laboratory Sponsor:

FY00 Amount: \$24,358

Title: IPA 241 for John McIver May-Aug 00

5/15/00 - 8/15/00 Dates:

Panitz, John A.

Sponsor: National Science Foundation

FY00 Amount: \$65,287

Title: Visual Electricity and Magnetism: A Focused Concept Laboratory

Dates: 10/1/99 - 9/30/00

Prasad, Sudhakar

Sponsor: Air Force Office of Scientific Research

FY00 Amount: \$12,235

Title: Information Dynamics in Image Deconvolution

3/1/97 - 2/28/98 Dates:

Rand, Richard J.

National Science Foundation Sponsor:

FY00 Amount: \$286,979

Title: CAREER: The Interstellar Disk-Halo Connection in Edge-On Galaxies:

Bringing Research to a Large Audience

Dates: 9/1/00 - 8/31/05

Rudolph, Wolfgang

772

Co-PI: J. McIver

Sponsor: Applied Research Association, Inc.

FY00 Amount: \$24,000

Title: Research on Optically Pumped Molecular Lasers

Dates: 1/4/99 - 12/31/99

Sponsor:

Anteon Corporation

FY00 Amount: \$9,427

Title: Laser Physics and Engineering Course

Dates: 4/1/00 - 6/30/00

Sponsor:

Directed Energy Professional Society

FY00 Amount:

\$9,487

Title:

Sealable Molecular Lasers

Dates:

4/1/00 - 12/31/00

Seidel, Sally

Co-PI:

H. Bryant

Sponsor:

National Science Foundation

FY00 Amount:

\$61,827

Title:

Research Experiences for Undergraduates: The Los Alamos Summer School

Project

Dates:

1/1/99 - 12/31/01

Sponsor:

Brookhaven National Laboratory

FY00 Amount:

t: \$30,000

Title:

Electrical Engineering for the ATLAS Experiment

Dates:

3/1/00 - 9/30/00

Sharma, Mohinder Pau

Sponsor:

Air Force Research Laboratory

FY00 Amount:

\$24,739

Title:

IPA 028 10/99 through 9/00

Dates:

10/1/99 - 9/30/00

Sponsor:

Air Force Research Laboratory

FY00 Amount:

\$43,074

Title:

IPA 028 10/99 through 9/00

Dates:

10/1/99 - 9/30/00

Sheik-Bahae, Mansoor

Sponsor:

National Science Foundation

FY00 Amount:

\$40,000

Title:

Investigation of Femtosecond Dynamics and Optical Switching in Active

Semiconductors

Dates:

7/1/96 - 6/30/01

Sponsor:

National Science Foundation

FY00 Amount:

\$50,000

Title:

Investigation of Femtosecond Dynamics and Optical Switching in Active

Semiconductors

Dates:

7/1/96 - 6/30/01

Co-PI: Sponsor: W. Rudolph

National Science Foundation

FY00 Amount:

\$144.578

Title: Dates: MRI: Instrument Acquisition for Ultrafast Spectroscopy and Imaging 9/1/99 - 8/31/00

Sponsor:

Los Alamos National Laboratory

FY00 Amount: Title:

\$45,000 NUCOR: Optical Refrigeration in Semiconductors

Dates:

8/15/99 - 8/15/00

Wolfe, David

Co-PI:

W. Rudolph

Sponsor:

National Foundation for Functional B \$71.859

FY00 Amount:

Title:

Medical Physics

Dates:

4/1/99 - 9/30/99

Zeilik, Michael

Sponsor: Title:

National Science Foundation

FY00 Amount:

National Dissemination of Field-Tested Classroom Assessment Techniques

in SMET for Postsecondary Faculty

Dates:

1/1/00 - 12/31/02

\$538,992

TEACHING LOAD REPORT DEPARTMENT OF PHYSICS AND ASTRONOMY 1999-2000 John K. McIver, Chair

TOTAL 1999-2000 ENROLLMENT: 5,518
TOTAL 1999-2000 STUDENT CREDIT HOURS: 13,467

1999 SUMMER SCHEDULE OF CLASSES

COURSE	COURSE NAME	INSTRUCTOR	DAY	TIME	CREDIT HOURS	NO. ENR.	TOTAL HOURS
P650-029	Research	Atlas	ARR	ARR	v	01	06
P452-003 P699-003	Research Methods Dissertation	Bassalleck Bassalleck	ARR ARR	ARR ARR	v v	01 02	03 06
P699-037	Dissertation	Brueck	ARR	ARR	v	01	03
A101-001	Introduction to Astronomy	Campbell	M-R	1230-1345	03	62	186
P151-001	General Physics	Cardimona	M-R	1610-1725	03	41	123
P552-013	Problems	Caves	ARR	ARR	v	02	06
P650-005	Research	Deutsch	ARR	ARR	v	02	06
P650-040 P699-040	Research Dissertation	Diels Diels	ARR ARR	ARR ARR	v v	01 01	03 03
P452-051	Research Methods	Dimiduk	ARR	ARR	03	03	09
P650-047	Research	Duncan	ARR	ARR	٧	01	06
P451-007	Problems	Dunlap	ARR	ARR	v	09	23
P552-012	Problems	Finley	ARR	ARR	v	01	03
P699-032	Dissertation	Gold	ARR	ARR	v	02	09
P699-016	Dissertation	Gregory	ARR	ARR	v	01	06
A101L-002	Astronomy Laboratory	Guo	MW	1400-1600	01	19	19
P552-025	Problems	Henning	ARR	ARR	v	01	03
P551-337	Problems	Jain	ARR	ARR	v	01	03
P552-022	Problems	Matthews	ARR	ARR	v	02	06
P552-033 P650-033 P699-033	Problems Research Dissertation	McGraw McGraw McGraw	ARR ARR ARR	ARR ARR ARR	V	01	03 03 06
P551-056 P699-024	Problems/Comp Class Dissertation	McIyer/Semak McIver	ARR ARR	ARR ARR			30 06
P551-331	Problems	Osinski	ARR	ARR	v	01	03
P699-	Dissertation	Panitz	ARR	ARR	v	01	03

COURSE	COURSE NAME	INSTRUCTOR	DAY	TIME	CREDIT HOURS	NO. ENR.	TOTAL HOURS
P151L-002 P151L-003 P160L-002	Gen. Physics Lab Gen. Physics Lab Gen. Physics Lab	Phillips Phillips Phillips	MW TR TR	1300-1600 1300-1600 1300-1600	01 01 01	14 06 06	14 06 06
P699-036	Dissertation	Prasad	ARR	ARR	v	01	03
P650-048	Research	Rand	ARR	ARR	v	01	03
P551-023 P552-023 P599-023 P699-023	Problems Problems Master's Thesis Dissertation	Rudolph Rudolph Rudolph Rudolph	ARR ARR ARR ARR	ARR ARR ARR ARR	v v v	01 01 01 01	03 02 01 03
P452-027 P699-027	Research Methods Dissertation	Seidel Seidel	ARR ARR	ARR ARR	v v	01 01	03 03
P552-018 P699-018	Problems Dissertation	Sheik-Bahae Sheik-Bahae	ARR ARR	ARR ARR	v v	01 01	03 03
P451-020	Problems	Wolfe	ARR	ARR	v	03	09
P160-001	General Physics	Zimmer	M-R	1730-1845	03	14	42
			DEPAR	TMENT TOTALS		142	382

1999 FALL SEMESTER SCHEDULE OF CLASSES

COURSE	COURSE NAME	INSTRUCTOR	DAY	TIME	CREDIT HOURS	NO. ENR.	TOTAL HOURS
P151-002 P157-002 P650-001	General Physics Problems in General Physics Research	Ahluwalia Ahluwalia Ahluwalia	M W W ARR	1730-1845 1900-1950 ARR	03 01 v	26 04 01	78 04 03
P307-005 P307L-004 P307L-003 P551-003 P552-003 P699-003	Junior Laboratory Junior Laboratory Junior Laboratory Problems Problems Dissertation	Bassalleck Bassalleck Bassalleck Bassalleck Bassalleck Bassalleck	T T R ARR ARR ARR	1400-1450 1500-1800 1400-1700 ARR ARR ARR	03 00 00 v v	09 07 02 01 01 02	27 00 00 02 02 02 12
P650-037 P699-037 P650-006	Research Dissertation Research	Brueck Brueck Bryant	ARR ARR ARR	ARR ARR	v v	01 03	03 24 01
P699-006	Dissertation	Bryant	ARR	ARR	v	02	06
P151-001 P157-001 P161-001 P162-001 P168-001	General Physics Problems in General Physics General Physics Exploring Physics Problems in General Physics	Caffo Caffo Caffo Caffo Caffo	MWF W MWF F F	0900-0950 0800-0850 1100-1150 1400-1500 0800-0850	03 01 03 01 01	216 29 99 25 15	648 29 297 25 15
P521-001	Grad, Quantum Mechanics I	Cahill	TR	1730-1845	03	18	54
A101-001 A101-003	Introduction to Astronomy Introduction to Astronomy	Campbell Campbell	TR TR	0930-1045 1900-2015	03 03	303 45	909 135
P152-002	General Physics	Cardimona	s	0900-1130	03	34	102

1999 FALL SEMESTER SCHEDULE OF CLASSES (continued)

COURSE	COURSE NAME	INSTRUCTOR	DAY	TIME	CREDIT		TOTAL HOURS
P158-003	Problems in General Physics	Cardimona	s	1140-1230	01	02	02
P406-001	Electricity/Magnetism	Caves	TR	1100-1215	03	11	33
P451-013	Prob. for Phys. 406	Caves	R	1900-2100	V	08	08
P650-013	Research	Caves	ARR	ARR	٧	01	02 05
P699-013	Dissertation	Caves	ARR	ARR	V	01	
P102-001 P400-002	Introduction to Physics Seminar	Chandler Chandler	MW W	1600-1715 1200-1250	03 01	19 09	57 09
P500-372	Advanced Seminar (ITV)	Deutsch	F	1400-1515	v	15	18
P500-372	Advanced Seminar (ITV)	Deutsch	F.	1400-1515	٧	07	07
P566-001	Quantum Optics	Deutsch	TR	1730-1845	03	25	75
P650-005	Research	Deutsch	ARR	ARR	٧	01	03
P699-005	Dissertation	Deutsch	ARR	ARR	٧	02	11
P476L-001	Exper. Techniques of Optics	Diels	w	0800-1200	03	03	09
P476L-002	Exper. Techniques of Optics	Diels	R	1800-2200	03	06	18 03
P551-040	Problems	Diels	ARR	ARR	V	01 01	03
P599-040	Master's Thesis	Diels	ARR	ÁRR ARR	V V	03	15
P650-040	Research	Diels Diels	ARR ARR	ARR	V	06	28
P699-040	Dissertation						
P102-002	Introduction to Physics	Dimiduk	TR	1100-1215	03	131	393
P107-001	Prob. for Intro. to Physics	Dimiduk	Ţ	1230-1320	01 01	09 10	09 10
P107-002	Prob. for Intro. to Physics	Dimiduk	R	1000-1050	03	97	291
P152-001	General Physics	Dimiduk	MWF	1200-1250 1100-1150	03	26	26
P158-001	Problems in General Physics	Dimiduk Dimiduk	M F	1400-1450	01	12	12
P158-002	Problems in General Physics	Dimiduk					
P262-001	General Physics	Duncan	MWF	1300-1350	03	92	276
P267-001	Problems in General Physics	Duncan	M	1000-1050	01	34	34
P551-047	Problems	Duncan	ARR	ARR	٧	01	01 03
P650-047	Research	Duncan	ARR	ARR	v v	01 01	03
P699-047	Dissertation	Duncan	ARR	ARR			
P400-001	Seminar	Dunlap	M ARR	1200-1250 ARR	01 V	09 03	09 03
P451-007	Problems	Dunlap	MWF	1000-1050	03	19	57
P491-001 P699-007	Inter, Quantum Mech. I Dissertation	Dunlap Dunlap	ARR	ARR	v	01	05
		•					
A101L-005	Astronomy Lab	Duric	М	1400-1600	01	22 ⁻ 21	22 21
A101L-006	Astronomy Lab	Duric	M	1900-2100	01 01	20	20
A101L-007	Astronomy Lab	Duric	T T	1400-1600 1900-2100	01	17	17
A101L-008	Astronomy Lab	Duric Duric	ŵ	1400-1600	01	20	20
A101L-009 A101L-010	Astronomy Lab Astronomy Lab	Duric	w	1900-2100	01	21	21
A101L-010	Astronomy Lab	Duric	R	1400-1600	01	16	16
A101L-011	Astronomy Lab	Duric	R	1900-2100	01	18	18
A101L-013	Astronomy Lab	Duric	F	0900-1050	01	20	20
A101L-014	Astronomy Lab	Duric	W	0900-1050	01	16	16
A101L-015	Astronomy Lab	Duric	S	0900-1050	01	16	16
P599-041	Masters Thesis	Duric	ARR	ARR	٧	01	03
P699-041	Dissertation	Duric	ARR	ARR	V	02	15
P570-001	Theory of Relativity	Finley	мW	1730-1845	03	13	39
P599-055	Master's Thesis	Fukushima	ARR	ARR	v	01	03
P500-002	Advanced Seminar	Gell-Mann	TR	1230-1345	٧	12	21
P161-002	General Physics	Gold	мW	1700-1815	03	07	21

1999 FALL SEMESTER SCHEDULE OF CLASSES (continued)

COURSE	COURSE NAME	INSTRUCTOR	DAY	TIME	CREDIT HOURS		OTAL HOURS
P699-032	Dissertation	Gold	ARR	ARR	V	01	09
P327-001	Geophysics	Geissman	MWF	0900-0950	03	05	15
A421-001 P699-016	Concepts of Astrophysics Dissertation	Gregory Gregory	T R ARR	0930-1045 ARR	v 03	10 02	30 18
P464-001	Laser Physics I	Jungling	TR	1600-1715	03	05	15
A423-001	Radio Astronomy	Ledlow	MW	1230-1345	03	14	42
P551-044	Problems	Lester	ARR	ARR	V	01	03
P303-001 P451-054	Analytical Mechanics Prob. for Phys. 303	Matthews Matthews	MW F	1100-1215 1100-1150	03 01	23 19	69 19
P451-033	Problems	McGraw	ARR	ARR	ν	01	03
P552-033	Problems	McGraw	ARR	ARR	٧	02	06
P552-056	Problems	McGraw	MW	1100-1215	03	01	03
P699-033	Dissertation	McGraw	ARR	ARR	V	01	09
P503-001	Classical Mechanics I	McIver	TR	1100-1215	03	17	51
P699-024	Dissertation	McIver	ARR	ARR	V	03	15
P650-038	Research	Oslnski	ARR	ARR	v	01	04
P699-038	Dissertation	Osinski	ARR	ARR	v	02	15
P102L-004	Physics Laboratory	Panitz	М	1400-1600	01	19	19
P102L-005	Physics Laboratory	Panitz	W	1000-1200	01	02	02
P102L-102	Physics Laboratory	Panitz	Ř	1400-1700	01	21	21
P151L-003	Gen. Physics Lab	Panitz	М	1400-1700	01 01	19 19	19 19
P151L-004	Gen. Physics Lab	Panitz	M	1400-1700 1400-1700	01	18	18
P151L-005	Gen. Physics Lab	Panitz Panitz	T T	1400-1700	01	14	14
P151L-006	Gen. Physics Lab Gen. Physics Lab	Panitz	Ť	1800-2100	01	13	13
P151L-007 P151L-008	Gen. Physics Lab	Panitz	w	1400-1700	01	21	21
P151L-009	Gen. Physics Lab	Panitz	R	1400-1700	01	20	20
P152L-003	Gen. Physics Lab	Panitz	М	1400-1700	01	18	18
P152L-004	Gen. Physics Lab	Panitz	T	1400-1700	01	08	08
P152L-005	Gen. Physics Lab	Panitz	R	1400-1700	01	17	17
P152L-006	Gen. Physics Lab	Panitz	S	1300-1600	01	11	11
P160L-004	Gen. Physics Lab	Panitz	W	1400-1700	01	19	19
P160L-005	Gen. Physics Lab	Panitz	R	1400-1700	01	16	16
P160L-006	Gen. Physics Lab	Panitz	F	1400-1700	01 01	15 12	15 12
P161L-003	Gen. Physics Lab	Panitz	M	1400-1700 1400-1700	01	19	19
P161L-004	Gen. Physics Lab	Panitz Panitz	T W	1400-1700	01	12	12
P161L-005	Gen. Physics Lab Gen. Physics Lab	Panitz Panitz	w	1400-1700	01	17	17
P262L-002 P262L-004	Gen, Physics Lab	Panitz	T	1800-2100	01	05	05
P699-030	Dissertation	Panitz	ARR	ARR	v	01	09
A101-420	Introduction to Astronomy	Pannuti	TR	1730-2015	03	20	60
P466-001	Meth/Theo of Physics I	Prasad	TR	0930-1045	03	21	63
P650-036	Research	Prasad	ARR	ARR	V	01	01
P699-036	Dissertation	Prasad	ARR	ARR	٧	03	21
A101-002	Introduction to Astronomy	Price	мW	1400-1515	03	164	492
P160-002	General Physics	Price	TR	1730-1845	03	11	33
P167-004	Prob. in Gen. Physics	Price	Т	1900-1950	01	03	03
A270-001	General Astronomy	Rand	TR	1100-1215	03	45	135

1999 FALL SEMESTER SCHEDULE OF CLASSES (continued)

COURSE	COURSE NAME	INSTRUCTOR	DAY	TIME	CREDIT HOURS	NO. ENR.	OTAL HOURS
A270L-002 A270L-003 P699-048	General Astronomy Lab General Astronomy Lab Dissertation	Rand Rand Rand	T R ARR	1900-2200 1900-2200 ARR	01 01 V	13 13 01	13 13 06
P452-023 P463-001 P552-023 P599023 P650-023 P699-023	Research Methods Advanced Optics I Problems Masters Thesis Research Dissertation	Rudolph Rudolph Rudolph Rudolph Rudolph Rudolph Rudolph	ARR T ARR ARR ARR ARR	ARR 1730-1845 ARR ARR ARR ARR	v 03 v v v	01 14 03 01 02 04	01 42 08 01 04 15
P301-001 P451-027 P452-027 P699-027	Therm. & Stat. Mech, Problems Research Methods Dissertation	Seidel Seidel Seidel Seidel	M W ARR ARR ARR	0830-0945 ARR ARR ARR	03 V V	13 01 02 01	39 01 04 09
P106-001 P106L-002 P106L-003 P551-018 P699-018	Light & Color Light & Color Lab Light & Color Lab Problems Dissertation	Sheik-Bahae Sheik-Bahae Sheik-Bahae Sheik-Bahae Sheik-Bahae	T R M T ARR ARR	1230-1345 1400-1600 1400-1600 ARR ARR	03 01 01 V V	20 04 05 01 01	60 04 05 02 06
P160-001 P160-003 P167-001 P167-003 P451-020	General Physics General Physics-Honors Prob. in Gen. Physics Prob. in Gen. PhysHonors Problems	Wolfe Wolfe Wolfe Wolfe Wolfe	MWF MWF M F ARR	1000-1050 1300-1350 1400-1450 1400-1450 ARR	03 03 01 01 V	206 24 42 13 01	618 72 42 13 03
A101-004	Introduction to Astronomy	Zeilik	T R	1400-1515 IMENT TOTALS	03	131 2883	393 6971

2000 SPRING SEMESTER SCHEDULE OF CLASSES

COURSE	COURSE NAME	INSTRUCTOR	DAY	TIME	CREDIT HOURS	NO. ENR.	OTAL HOURS
P152-002	General Physics	Ahluwalia	TR	1730-1845	03	21	63
P158-002	Problems in General Physics	Ahluwalia	T	1900-1950	01	04	04
A445-001	Intro. Cosmic Radiation	Ahluwalia	T R	1100-1215	03	05	15
P699-003	Dissertation	Bassalleck	ARR	ARR	v	02	12
P650-037	Research	Brueck	ARR	ARR	v	01	03
P699-037	Dissertation	Brueck	ARR	ARR	v	02	18
P650-006	Research	Bryant	ARR	ARR	v	01	03
P699-006	Dissertation	Bryant	ARR	ARR	v	01	03
P152-001	General Physics	Caffo	MWF	0900-0950	03	144	432
P158-001	Problems in General Physics	Caffo	M	1000-1050	01	08	08
P158-003	Problems in General Physics	Caffo	W	0800-0850	01	14	14
P262-001	General Physics	Caffo	MWF	1200-1250	03	80	240
P267-001	Problems in General Physics	Caffo	F	0800-0850	01	07	07
P522-001	Grad, Quantum Mech. II	Cahill	TR	1730-1845	03	08	24

2000 SPRING SEMESTER SCHEDULE OF CLASSES (continued)

COURSE	COURSE NAME	INSTRUCTOR	DAY	TIME	CREDIT		TOTAL HOURS
A101-001	Introduction to Astronomy	Campbell	TR	0930-1045	03	300	900
A109-001	T/in Astro: Mars	Campbell	ŤŔ	1600-1700	02	15	30
A455-010	Problems	Campbell	ARR	ARR	V	04	04
71,000,010	, , , , , , , , , , , , , , , , , , , ,						
P151-002	General Physics	Cardimona	S	0900-1130	03	51	153
P157-002	Problems in General Physics	Cardimona	S	1140-1230	01	04	04
				4000 4045	03	15	45
P405-001	Electricity-Magnetism	Caves	TR R	1230-1345 1900-2100	υ3 V	15	15
P451-053	Problems for Phys 405	Caves Caves	ARR	ARR	v	02	09
P699-013	Dissertation	Caves	MINIX	ANN	•	V	
P505-001	Stat. MechThermo.	Chandler	TR	0930-1045	03	11	33
1 000-001	Oldi, Media Tridino						
P511-001	Electrodynamics I	Deutsch	TR	1230-1345	03	16	48
P650-005	Research	Deutsch	ARR	ARR	٧	01	03
P699-005	Dissertation	Deutsch	ARR	ARR	٧	01	06
		Diele	мw	1230-1345	03	10	30
P302-001	Optics	Diels Diels	W	0800-1200	03	02	06
P477L-001	Exper. Techniques of Optics Exper. Techniques of Optics	Diels	R	1800-2200	03	07	21
P477L-002 P551-040	Problems	Diels	ARR	ARR	V	01	03
P552-040	Problems	Diels	ARR	ARR	v	01	03
P599-040	Master's Thesis	Diels	ARR	ARR	٧	01	01
P650-040	Research	Diels	ARR	ARR	٧	04	11
P699-040	Dissertation	Diels	ARR	ARR	٧	07	35
P108-001	Intro. Musical Acoustics	Dimiduk	TR	1230-1345	03	44	132 17
P108L-002	Musical Acoustics Lab	Dimiduk	R R	1400-1550 1730-1920	01 01	17 10	10
P108L-003	Musical Acoustics Lab	Dimiduk	ĸ	1730-1920	UI	10	10
P330-001	Intro, Modern Physics	Duncan	MW	0830-0945	03	29	87
P552-047	Problems	Duncan	ARR	ARR	٧	01	03
P699-047	Dissertation	Duncan	ARR	ARR	٧	01	06
		Bt		4030 4000	01	15	15
P400-001	Seminar	Dunlap	M W	1230-1320 1900-2000	01	04	04
P451-054	Prob. for P492	Duniap Duniap	MWF	1000-2000	03	09	27
P492-001	Inter. Quantum Mechanics II Research	Duniap	ARR	ARR	ν .	01	01
P650-007	Research	Durnap	AININ	Alli	•	٠,	••
A101L-005	Astronomy Lab	Duric	M	1400-1600	01	17	17
A101L-006	Astronomy Lab	Duric	M	1900-2100	01	17	17
A101L-007	Astronomy Lab	Duric	T	1400-1600	01	20	20
A101L-008	Astronomy Lab	Duric	T	1900-2100	01	13	13
A101L-009	Astronomy Lab	Duric	W	1400-1600	01	11	11
A101L-010	Astronomy Lab	Duric	w	1900-2100	01 01	15 18	15 18
A101L-011	Astronomy Lab	Duric	R R	1400-1600 1900-2100	01	07	07
A101L-012	Astronomy Lab	Duric Duric	F	1400-1600	01	18	18
A101L-013	Astronomy Lab	Duric	w	0900-1050	01	20	20
A101L-014 A101L-015	Astronomy Lab Astronomy Lab	Duric	s	0900-1050	01	13	13
P599041	Masters Thesis	Duric	ARR	ARR	٧	01	03
P699-041	Dissertation	Duric	ARR	ARR	٧	02	12
							4=
P161-002	General Physics	Fields	MW	1900-2015	03	15	45
P168-002	Prob. in Gen. Physics	Fields	W	1800-1850	01	05	05
P160-001	General Physics	Finley	MWF	1000-1050	03	93	279
P160-002	General Physics	Finley	MW	1730-1845	03	16	48
P167-001	Prob. in General Physics	Finley	w	1600-1650	01	14	14
P167-002	Prob. in General Physics	Finley	М	1900-1950	01	13	13
P599-012	Master's Thesis	Finley	ARR	ARR	٧	01	06

2000 SPRING SEMESTER SCHEDULE OF CLASSES (continued)

COURSE	COURSE NAME	INSTRUCTOR	DAY	TIME	CREDIT HOURS	NO. ENR.	TOTAL HOURS
P102-001 P699-032	Intro. to Physics Dissertation	Gold Gold	M W ARR	1530-1645 ARR	03 V	66 01	198 12
A422-001 P500-002 P699-016	Stars and Stellar Systems Advanced Seminar Dissertation	Gregory Gregory Gregory	T R W ARR	0930-1045 1230-1345 ARR	03 01 V	09 13 01	27 13 09
P699-025	Dissertation	Henning	ARR	ARR	٧	01	06
P105-001	Physics and Society	Hull	TR	1230-1345	03	26	78
P430-001/ P529-001	Intro, to Solid State/ Condensed Matter I	Kenkre	MWF	0900-0950	03	12	36
P650-034	Research	Kenkre	ARR	ARR	v	02	05
A101-004	Introduction to Astronomy	Ledlow	TR	1900-2015	03	53	159
P650-044	Research	Lester	ARR	ARR	V	01	03
P304-001	Analytical Mechanics	Matthews	MW	1100-1215	03	16	48
P451-032	Problems for 304	Matthews	F	1100-1150	01	13	13
P552-022	Problems	Matthews	ARR	ARR	V	02	05
D400 004	Contrain - Dhysica	McGraw	F	1400-1515	01	04	04
P162-001 A455-050	Exploring Physics Prob./Intro. Comp. Astro.	McGraw	мw	1730-1845	03	04	12
P650-033	Research	McGraw	ARR	ARR	v	04	10
P699-033	Dissertation	McGraw	ARR	ARR	v	01	09
	- · · ·	\$4-1.com	ARR	ARR	٧	01	01
P551-024 P699-024	Problems Dissertation	McIver McIver	ARR	ARR	v	05	30
P102L-002	Physics Laboratory	Odom	т	1300-1450	01	20	20
P102L-002	Physics Laboratory Physics Laboratory	Odom	w	1300-1450	01	20	20
P151L-003	Gen, Physics Lab	Odom	М	1400-1650	01	16	16
P151L-004	Gen. Physics Lab	Odom	T	1400-1650	01	17	17
P151L-006	Gen. Physics Lab	Odom	w	1400-1650	01	14	14
P151L-007	Gen. Physics Lab	Odom	R	1400-1650	01	10	10
P151L-008	Gen. Physics Lab	Odom	S	1300-1550	01	17	17
P152L-003	Gen, Physics Lab	Odom	M	1400-1650	01	20	20
P152L-004	Gen, Physics Lab	Odom	T	1400-1650	01	22	22
P152L-005	Gen. Physics Lab	Odom	R	1400-1650	01	20	20
P152L-006	Gen. Physics Lab	Odom	R	1900-2150	01	12	12
P160L-003	Gen. Physics Lab	Odom	М	1400-1650	01	14	14
P160L-004	Gen. Physics Lab	Odom	R	1400-1650	01	12	12
P160L-005	Gen. Physics Lab	Odom	W	1400-1650	01	07	07
P262L-002	Gen. Physics Lab	Odom	W	1400-1700	01	16	16
P262L-003	Gen. Physics Lab	Odom	T	1400-1700	01	80	80
P650-038	Research	Osinski	ARR	ARR	٧	01	04
P699-038	Dissertation	Osinski	ARR	ARR	V	02	15
P161L-005	Gen, Physics Lab	Panitz	м	1400-1700	01	16	16
P161L-006	Gen. Physics Lab	Panitz	w	1230-1530	01	04	04
P161L-007	Gen. Physics Lab	Panitz	w	1400-1700	01	16	16
P161L-008	Gen, Physics Lab	Panitz	R	1230-1530	01	17	17
P161L-009	Gen. Physics Lab	Panitz	R	1400-1700	01	16	16
P308-003	Junior Laboratory	Panitz	T	1400-1450	03	07	21
P308L-004	Lab for 308-003	Panitz	T	1500-1750	00	07	00
P467-001	Meth/Theor Phys II	Prasad	TR	1100-1215	03	08	24
P599-036	Master's Thesis	Prasad	ARR	ARR	V	01	06
P650-036	Research	Prasad	ARR	ARR	v	01	04
. 000.000							

2000 SPRING SEMESTER SCHEDULE OF CLASSES (continued)

COURSE	COURSE NAME	INSTRUCTOR	DAY	TIME	CREDIT HOURS	NO. ENR.	TOTAL HOURS
P699-036	Dissertation	Prasad	ARR	ARR	v	03	21
A101-003	Introduction to Astronomy	Price	TR	1400-1515	03	155	465
A271-001 A271L-002 A271L-003 P699-048	General Astronomy Gen. Astro. Lab II Gen. Astro. Lab II Dissertation	Rand Rand Rand Rand	TR T R ARR	1100-1215 1900-2200 1900-2200 ARR	03 01 01 V	40 12 09 01	120 12 09 06
P535-001	Plasma Physics II	Roderick	MW	1730-1845	03	01	03
P452-023 P552-023 P554-001 P599-023 P699-023	Research Methods Problems Advanced Optics II Master's Thesis Dissertation General Physics	Rudolph Rudolph Rudolph Rudolph Rudolph Seidel	ARR ARR M W ARR ARR	ARR ARR 1730-1845 ARR ARR 0730-0845	v v 03 v v	01 02 11 01 03	01 05 33 01 15
P157-001 P452-027 P699-043	Prob. in Gen. Physics Research Methods Dissertation	Seidel Seidel Seidel	M ARR ARR	0900-0950 ARR ARR	01 V V	19 01 01	19 03 09
P564-001 P650-018 P699-018	Laser Physics II Research Dissertation	Sheik-Bahae Sheik-Bahae Sheik-Bahae	T R ARR ARR	1730-1845 ARR ARR	03 V V	09 01 01	27 01 06
P161-001 P161-003 P168-001 P168-003 P452-020 P650-020	General Physics General Physics Honors Prob. in General Physics Prob. in Gen. PhysHonors Research Methods Research	Wolfe Wolfe Wolfe Wolfe Wolfe	MWF MWF M W ARR ARR	1100-1150 1300-1350 1400-1450 1400-1450 ARR ARR	03 03 01 01 V	146 22 26 07 01	438 66 26 07 01 06
A101-002 P500-001	Intro, to Astronomy Advanced Seminar	Zeilik Zeilik	M W M	1400-1515 1200-1315	03 01	124 03	372 03
			DEPART	MENT TOTALS		2493	6114

ANNUAL REPORT

of the

DEPARTMENT OF POLITICAL SCIENCE

July 1, 1999 through June 30, 2000 Neil J. Mitchell, Chair

Over the last year department of political science students have won awards and recognition for their work from other universities, including a fellowship to study at Harvard for the year, presented papers at the major disciplinary conferences, published in refereed journals, and accepted tenure track positions at major research universities. Department faculty have published articles in the top refereed journals in the discipline, appeared on public television's NOVA, and have received over \$600,000 in outside funding from state agencies, national laboratories, and the National Science Foundation.

I. SIGNIFICANT DEVELOPMENTS

A. UNDERGRADUATE PROGRAM

The department graduated 84 majors. The annual commencement ceremony was hosted in the Grand Ballroom of the Student Union Building. Over 420 students and parents attended. Mr. David Archuleta, a Regent for the University of New Mexico, was the commencement speaker.

The department awarded summa cum laude honors to two students. David Pacheco, also the department's commencement speaker, wrote a thesis titled "In Front of Our Own Eyes: A Public Interest View of Bureaucratic Corruption." Colin Hunter's senior thesis was titled "Judging Judicial Selection, Performance Evaluation, and Retention in New Mexico." Colin also attended the Rice Undergraduate Research Conference in January 2000, and took second prize for his paper.

B. GRADUATE PROGRAM

The department awarded two (2) MA degrees and eight (8) PhD degrees this year. The number of graduate students is 13. The department admitted three incoming graduate students for the 2000-2001 academic year. The department plans to develop, in conjunction with Sandia National Labs, a Policy Analysis/Security Policy concentration at the MA level.

The department and Sandia National Laboratories continued their program for students to work part-time at Sandia. Two graduate students are now working at Sandia's Cooperative Monitoring Center, an organization that uses advanced information, satellite and sensor technologies to help adversaries resolve their conflicts by effectively monitoring each side's compliance with agreements. One student is examining the application of these tools for resolving conflicts in South America, such as the recent border war between Peru and Ecuador. Another student is looking at the application of these technologies to help resolve civil wars as a component of international peacekeeping efforts.

Student Achievements

Publications

Erik Wibbels - "Party Systems and Electoral Volatility in Latin America: A Test of Economic, Institutional, and Structural Explanations," *American Political Science Review*, 93, 3 (September 1999): 575-590 (co-authored with Prof. Kenneth Roberts.)

Conference presentations

Randall Parish presented a paper co-written with Prof. Mark Peceny entitled "Kantian Liberalism and Democracy in Latin America," at the Western Political Science Association (WPSA) Annual Meeting in March. In November, he presented "Non-Hegemonic Stability: Brazil and Southern Cone Integration" at the Seminar on NAFTA and Mercosur Integration in Buenos Aires, Argentina.

Dylan Lindsay presented a paper entitled "Talking in Time: A Competing Risks Analysis of Civil War Duration and Outcome, 1945-1992" at the American Political Science Association (APSA) Annual Meeting in September. He also presented the sequel to this paper, "Talking in Time: A Competing Risks analysis of Civil War Duration and Outcome, 1820-1992" at the International Studies Association (ISA) Annual Meeting in March.

Nancy Carrillo presented a paper co-written with Prof. Lonna Atkeson entitled "Increasing External Efficacy: The Importance of Gender Diversity in State Governments" at the International Society of Political Psychology Annual Meeting in July. She also presented a poster titled "Cognitive Dissonance in a Primary Election" in at the Midwestern Political Science Association (MWPSA) Annual Meeting in April.

Awards, Fellowships, Prizes,

Randall Parish was a UNM "TA of the Year" for the 1999-2000 school year.

Dylan Lindsay received the Clifford Clogg Scholarship from the Summer Program In Quantitative Methods at the Inter-university Consortium for Political Science and Social Research in Ann Arbor, Michigan. Dylan also was selected to be a Predoctoral Fellow in the "Military Conflict as a Public Health Problem" Initiative at the Center for Basic Research in the Social sciences at Harvard University for the 2000-2001 academic year.

Mary Bellman received the Title VI Foreign Language and Area Studies fellowship for a second year from the Latin American Institute (LAI). She also received a Field Research Grants from the LAI for dissertation research in Central America.

Francois Gelineau, Jeffrey Drope, and Doug Hecock each received the Ph.D. Fellowship from the Latin American and Iberian Institute.

Placement Upon Graduation

Judith Palier, Ph.D., Fall 1999. Assistant Professor of political science at San Juan Community College in Farmington, NM.

Robert Wright, Ph.D., Fall 1999. Director of the Social Science Program at the Santa Fe Community College in Albuquerque. Served one year in a civilian instructor position at the United States Air Force Academy.

Diane Prindeville, Ph.D., Fall 1999. Assistant Professor at New Mexico State University Department of Government.

Moises Esquivel-Arce, Ph.D., Spring 2000. Assistant Professor at Louisiana State University, starting Fall 2000

Caroline Beer, Ph.D., Spring 2000. Assistant Professor at the University of Vermont, starting Fall 2000. Erik Wibbels, Ph.D., Spring 2000. Assistant Professor at the University of Washington, starting Fall 2000.

Sidney Cullipher (e-mailed)

Kristin Kenyon, Ph.D. candidate. Manager with InterSurvey, Inc., an internet polling company outside of San Francisco.

Jennifer Mathews-Lucas, MA, Spring 1999, works at the Tyson Organization, a political consulting firm in Ft. Worth. TX.

C. INSTITUTE FOR PUBLIC POLICY

Hank Jenkins-Smith and UNM research on public attitudes about global climate change was featured in a new NOVA and FRONTLINE program on the environmental debates about global warming. Focus groups conducted by the UNM Political Science Department's Institute for Public Policy explored public response to the debate, and illustrated some of the political difficulties facing proponents of policies to address global climate change. The program aired April 18 on KNME Channel 5.

D. SPEAKERS

The department continued its colloquium speaker series with talks given by the following faculty, graduate students, and visiting speakers:

September 13, 1999 - Mary Bellman, "Unionization in the Central American Maquilas: Lessons from Unlikely Victories."

September 20, 1999 - Nancy Carrillo, "Investigating Cognitive Dissonance in a Primary Election."

September 26, 1999 - Caroline Beer, "Democracy and Legislative Institutional Change in the Mexican States.**

September 27, 1999 - Erik Wibbels, "Federalism and the Politics of Macroeconomics Reform."

October 4, 1999 - Jennifer Mathews-Lucas

October 11, 1999 - Randall Parish, "Instituting Foreign Relations: Political Institutions and Foreign Policy in Latin America."

October 18, 1999 - Walter Dale Mason, UNM-Gallup, "Attacks on Tribal Sovereignity; The Politics and Ideology of Federalism."

October 25, 1999 - Barry Ames, University of Pittsburgh, "The Role of the Legislative Party in a 'Weak' Party System: The Case of Brazil."

November 1, 1999 - Dylan Lindsay, "Talking in Time: Third Party Intervention and Civil War Duration and Outcome."

November 8, 1999 - Moises Arce, "Political Consequences of Market Reform in Peru."

November 15, 1999 - Christina Schatzman

November 22, 1999 - William Stanley, "A Sacrifice for Peace? Public Security for Average Citizens Under Civil War Peace Settlements."

November 29, 1999 - Francois Gelineau, "Public Opinion and Policy-Making in the Southern Cone: Examples from Argentina and Uruguay."

February 14, 2000 - Max Cameron, University of British Columbia, "Threats to Democracy in Latin America,"

February 28, 2000 - François Gelineau

March 27, 2000 - Richard Waterman

April 10, 2000 - William Dixon, University of Arizona, "Major Powers and the Road to Multilateralism."

April 24, 2000 - Michael Alvarez, California Technical Institute

E. INTERNSHIPS

In addition to the Sandia opportunities, eleven undergraduate students were placed in internships with the New Mexico State Legislature working under the close supervision of Adjunct Professor Gilbert K. St. Clair. Both students and Legislature staff considered the internship a success. Legislative members of both parties commented favorably on the interns assigned to them.

1.55

F. SCHOLARSHIPS

Thirteen undergraduate scholarships were awarded this year.

II. SIGNIFICANT PLANS

A. RECRUITMENT

The department plans recruitment of one new faculty member in the area of international relations. The department will continue its efforts to increase the pool of applicants to the graduate program, including an innovative web page, and sending select faculty members to national recruiting events.

III. APPOINTMENTS TO FACULTY/STAFF

Joann Buehler was hired on as Administrative Assistant in March, 2000.

IV. SEPARATIONS FROM FACULTY/STAFF

Anne Burtnett left the department in December, 1999 for a position at Women Studies at UNM. Andrew Enterline left the department for a position at the University of North Texas in July, 2000.

V. PUBLICATIONS

During the period July 1, 1999 to June 30, 2000, department faculty published in the top three journals of the discipline - the American Political Science Review, the American Journal of Political Science and the Journal of Politics.

Lonna Atkeson - "Sure, I Voted for the Winner! Overreport of the Primary Vote for the Party Nominee in the American National Election Studies," *Political Behavior* 21(3): 197-215.
"From the Primaries to the General Election: Does a Divisive Nomination Race Affect a Candidates Fortunes in the Fall?" in *In Pursuit of the White House 2000*, edited by William G. Mayer, Chatham House.

Andrew Enterline – "Ripples from the Waves? A Systemic, Time-series Analysis of Democracy, Democratization, and Interstate War." with mark J. C. Crescenzi, *Journal of Peace Research* 36:75-94.

F. Chris Garcia – Book Review: The Cristal Experiment: A Chicano Struggle for Community Control by Armando Navarro, American Political Science Review, Vol. 93, No. 4 (December 1999), pp. 980-981.

<u>Gregory Gleason</u> - "Uzbekistan and Tajikistan: A Case Study for Conflict Potential," *The Soviet and Post-Soviet Review*, Vol. 24, No. 3 (1999): 205-28..

<u>Hank Jenkins-Smith</u> – "The Impact of the Expectations Gap on Presidential Performance: An Empirical Examination," *Journal of Politics*, November 1999, with Richard Waterman and Carol Silva.

"The Advocacy Coalition Framework: An Assessment," in *Theories of the Policy Process*, with P. Sabatier, Westview Press, 1999.

"Public Acceptance of Alternative Technologies," in Review and Evaluation of Alternative Technologies for Demilitarization of assembled Chemical Weapons, Committee on Review and Evaluation of Alternative Technologies for Demilitarization of Assembled Chemical Weapons. Washington, DC: National Academy Press

Neil Mitchell - "Antitrust Policy and Antimonopoly Politics in the United States," *Journal of Policy History*, 11 (1999) pp. 105-108.

Mark Peceny - Democracy at the Point of Bayonets, Penn State University Press.

"Forcing Them to be Free," Political Research Quarterly, Vol. 52, No. 3, pp. 549-582. September 1999.

Shane Phelan – "Bodies, Passions, and Citizenship," Critical Review of International Social and Political Philosophy 2/1 (1999):56-79. Simultaneous publication as Feminism, Identity, and Difference, ed. Susan Hekman (Ilford, UK: Frank Cass).

Karen Remmer - "Regime Sustainability in the Latin Caribbean, 1944-1994," Journal of the Developing Areas, 33:331-354.

Kenneth Roberts - "Party Systems and Electoral Volatility in Latin America: A Test of Economic, Institutional, and Structural Explanations," American Political Science Review, 93, 3 (September 1999): 575-590 (co-authored with Erik Wibbels).

<u>William Stanley</u> - "Building New Police Forces in Guatemala and El Salvador; Learning and Counter-Learning. *International Peacekeeping*, Fall 1999.

Joseph Stewart - Public Policy: An Evolutionary Approach, 2nd ed., with James P. Lester. West Publishing.

"Public School Quality, Private Schools, and Race," American Journal of Political Science, with Robert D. Wrinkle, October 1999, pp. 1248-1253.

<u>Richard Waterman</u> - "The Determinants of the Perceptions of Political Control for the Bureaucracy and the Venues of Influence," Journal of Public Administration Research and Theory, 527-569, October 1999.

"The Expectations Gap Thesis: Public Attitudes Toward an Incumbent President," Journal of Politics, November 1999.

VI. NOTEWORTHY OUTSIDE PROFESSIONAL ACTIVITIES OF FACULTY
Fred Harris and Kenneth Roberts collaborated with UNM Common Cause to sponsor a UNM Forum on
Campaign Finance Reform on January 26, 1999 in Dane Smith Hall.

Kenneth Roberts was invited to Venezuela by the Carter Center's Election Observation Delegation in May, 2000.

Edited or Served on Editorial Boards of Journals

F. Chris Garcia served on the editorial boards of Social Science Quarterly, Political Research Quarter, and the University Press of Virginia's book series on "Race, Ethnicity, and Politics."

Fred Harris served on the editorial board of the Civic Arts Review, published by the Arneson Institute of Politics, Ohio Wesleyan University.

Neil Mitchell served on the Editorial Board for International Studies Quarterly.

Shane Phelan served on the following editorial boards: Feminist International Journal of Politics, Women and Politics, and Frontiers: A Journal of Women Studies.

Karen Remmer served as Associate Editor for the Latin American Research Review. She served on the Editorial Boards of International Interactions, American Political Science Review, Journal of Politics, American Journal of Political Science, and Political Research Quarterly.

Christine Sierra served on the editorial board for PS: Political Science and Politics.

Joseph Stewart served on the Editorial Boards for: American Politics Quarterly, American Review of Politics, National Political Science Review, and Political Research Quarterly.

Served as officers or members of key committees in national or regional professional organizations F. Chris Garcia served as Consultant-Evaluator for the commission on Institutions of Higher Education, North Central Association of Colleges and Schools.

Fred Harris served as member and co-chair of the Board of Trustees for the Milton S. Eisenhower Foundation, Washington, D.C. He also served as the State Chair for New Mexico Common Cause and International Advisor for Americans for Indian Opportunity.

Hank Jenkins-Smith served on the National Academy of Sciences Committee for Review and Evaluation of Alternative Technologies for Demilitarization of Assembled Chemical Weapons. He was also a National Science Foundation grant reviewer.

Deborah McFarlane served as Co-chair of the Population, Family Planning, and Reproductive Health (PFPRH) section of the APSA, as well as Chair of the Awards Committee, and Co-chair of the History Committee of said section. for the Midwestern Political Science Association, she was a member of the Herbert Simon Award Committee.

Shane Phelan served as Chair of the APSA Committee on the Status of Gays and Lesbians in the Profession. She was also a member of the NWSA Plenary Committee.

Christine Sierra served as a consultant to The White House Project, a non-profit, non-partisan, national campaign to raise public awareness of women's leadership in American Politics. She was also a member of the selection committee to recommend vice-presidential candidates for the Ballot Box Initiative. She was a roundtable participant of "Leadership, Gender, and the Presidency" at the APSA annual meeting. She was co-president of the APSA with James Jennings, organizing the section on Race, Ethnicity, and Politics. Prof. Sierra currently serves on the Executive Council of the APSA for 2000-2002.

Joseph Stewart served as Chair of the Nominations Committee for the Southern Political Science Association. For the Southern Social Science Association, he is a member of the Editorial Policies Committee. For the Western Political Science Association, he is a member of the Executive Council. He also serves on the College Board for the Southwestern Regional Office of the Advanced Placement Advisory Council.

Represented their discipline or the university before legislative bodies

Lonna Atkeson made a presentation on campaign finance reform for the Campaign Finance and Reform Committee of the New Mexico Legislature on July 30, 1999.

Participated in outreach activities (guest lectures, classroom visits, demonstrations) in primary or secondary schools

Mark Peceny made a presentation to the 7th grade social studies classes at McKinley Middle School in October 1999 entitled "US Military Interventions."

Given on-campus tours, workshops, performances, or other activities for community members

Fred Harris, in collaboration with the Albuquerque Teachers Institute lead a four-week seminar titled
"Principles of US Government." Twelve public school teachers were enrolled in the course, held in June,
designed to give them ideas for political curriculum development.

Kenneth Roberts and Fred Harris, in collaboration with Re-Visioning New Mexico and UNM Common Cause, hosted a UNM Forum on Campaign Finance Reform on January 26, 2000, open to the public.

Kenneth Roberts made a presentation to the Jubilee 2000 International Debt Relief Campaign, Maryknoll Western Regional Conference in Albuquerque in September 1999. He also helped to organize a New Mexico Steering Committee for the Jubilee 2000 International Debt Relief Campaign.

VII. OUTSIDE-SPONSORED RESEARCH

Kenneth Roberts, National Science Foundation, \$60,136. Purpose: Research for upcoming book, "Party Systems, Economic Change, and Electoral Volatility in Latin America. January 1998 – December 1999.

Kerry Herron, Sandia National Laboratories, \$400,000. Title: Establish a Directed Research Program for the Cooperative Monitoring Center (CMC) at Sandia National Laboratories. July 22, 1999 – December 31, 2000.

Hank Jenkins-Smith, University of Rochester, \$45,833. Title: Informing Contingent Valuation Methods from Internet Surveys. May 1, 1999 – April 30, 2000.

Hank Jenkins-Smith, New Mexico Highway and Transportation Department, \$30,000. Title: New Mexico highway and Transportation Department Long-Range Planning Survey: Second Wave. January 18, 2000 – December 31, 2000.

Hank Jenkins-Smith, Middle Rio Grande Council on Governments, \$20,000. Title; Survey of the Middle Rio Grande Water Planning Region. February 17, 2000 – May 31, 2000.

Hank Jenkins-Smith, Argonne National Laboratory, \$10,000. Title: Technical Support Services for Risk-Related Material. February 1, 2000 – September 30, 2000.

Hank Jenkins-Smith, Hillard and Munoz, \$50,000. Title: Survey of Dallas/Ft. Worth Area Residents Evaluating Property Value Effects of Deep-Well Injection System. May 16, 2000 – July 31, 2000.

Hank Jenkins-Smith, New Mexico Department of Education, \$30,920. Title: Employment Status and Needs of New Mexicans with Disabilities. May 1, 2000 – September 30, 2001.

Hank Jenkins-Smith, New Mexico Health Policy Commission, \$20,000. Title: Develop Data Collection Tools for the Health Profession. May 1, 2000 – December 31, 2000.

Political Science

Michael J. Ballard, University of New Mexico Neil J. Mitchell, University of New Mexico

There is no rhadamanthine solution to the problem of comparing the research performance of departments, and there is no shortage of interest in the topic. Institutionally, a favorable ranking provides graduate and faculty recruitment benefits. Individually, rankings provide an outlet for the competitive spirit lurking behind good academic manners. Here, we provide a measure of political science department productivity that, while not capturing the whole of the story, has some advantages over other rankings.

The recent National Research Council's (NRC) rankings of research doctorate programs in the United States has generated some critical analyses by political scientists. The principal component of the NRC's rankings was department reputation, constructed from the perceptions of faculty evaluators in the spring of 1993 (National Research Council 1995). Analyses of the NRC rankings demonstrated that some of the more important factors accounting for the variation in reputation are department size and the overall reputation of the university (Katz and Eagles 1996; Jackman and Siverson 1996; Lowery and Silver 1996). In other words, there are extraneous influences on these reputation-based rankings that

Michael J. Ballard was a doctoral candidate in political science at the University of New Mexico. His research focuses on the efficiacy of market-based approaches to environmental regulation, and is currently pursuing this interest in the graduate program of the Department of City and Regional Planning at Cornell University.

Neil J. Mitchell is professor and chair of the department of political science at the University of New Mexico. His teaching and research are in the area of comparative politics and he is the author of The Conspicuous Corporation (University of Michigan Press, 1997). complicate their interpretation, at least as indicators of faculty quality and productivity.

The NRC study had data on number of publications, but, noting that these data do not control for journal quality, Miller, Tien, and Peebler (1996) focused on publications in the American Political Science Review, as well as on citations. While a welcome supplement to the reputational analyses, their focus on the discipline's preeminent journal itself represents an overcorrection for the problems with the NRC data. This ranking leaves out much high-quality research. As with any discipline, political science has a broad range of refereed journals, several of which can claim a visibility and authority comparable to the American Political Science Review. These journals are included in this analysis.

In this way we follow the lead of Welch and Hibbing (1983; see also McCormick and Bernick 1982), although with a somewhat different list of journals. Drawing on Garand's rankings (1990), political science journals that achieved a mean rating by a random sample of political scientists of 6 or above on a 0 = poor to 10 = outstandingscale, and a proportion familiar score of 0.5 or above, are included in the analysis. Thus, our analysis is based upon articles published in American Political Science Review, Journal of Politics, American Journal of Political Science, World Politics, Comparative Politics, British Journal of Political Science, Western Political Quarterly/Political Research Ouarterly, Polity, and Political Science Quarterly.1 Faculty publications in the form of articles, research notes, and controversies (APSR) are included for the period 1986-96, discounting for the number of coauthors. Thus, a department receives a 1 for each article.

research note or controversy authored by one of its faculty, .5 if coauthored (with someone from a different department), and so on.

Table 1 presents the department research performance rankings. Departments are ranked by a weighted total publication score over the average number of full-time faculty members over this period (WTFAC). Relatively small differences in the publication scores can lead to rank changes for the top fifty, but the best or most productive five departments do separate quite clearly from the rest.

Publications are weighted for the quality of the journal. For this quality weighting, we employ Garand's "journal impact" measure (1990). For faculty size, we averaged the data reported for each department in the American Political Science Association, Graduate Faculty and Programs in Political Science (1986, 1992, 1995). Per capitizing publications is necessary to control for the distortion of sheer faculty size on the measurement of faculty research performance.

How does this measure of research performance compare with the perceptions of research performance reported in the NRC study? While most of the top fifty publishing departments are in the NRC top 50, only one graduate program receives the same ranking by either measure, and there is no statistically significant relationship between the two measures.2 Examining column five (CHANGE), one can see the impact of the more objective measure. Some universities, including Cal Tech, Carnegie-Mellon, Texas A&M (the leading department by raw publication score), the University of New Mexico, Marquette, and West Virginia, were unranked by the NRC. For others that were included, like SUNY-Stony Brook, Iowa,

California, Riverside, North Texas, and located in universities with little or Louisiana State, the NRC rankcachet. The big losers, moving from ings are a lamentable understate-

TOTAL ACTION, SALO CALLINGUES OF

the subjective to the objective mea-792 ment of the research performance 292 of their political science faculties. sure, are generally larger departments in more well-known univer-These are exactly the type of departsities; that is departments whose ments that the earlier analyses of faculty are not driven to write the NRC rankings (Katz and Eagles shamelessly self-serving articles 1996; Jackman and Siverson 1996; in PS. Lowery and Silver 1996) suggest Research is disseminated in books would be undervalued by the in addition to journal articles, other

one could also make an argument for incorporating citations as an additional measure of research impact (see Miller, Tien, and Peebler 1996) But if rankings are unavoidable, then let them reflect actual rather than perceived research, depart-

mental achievements as distinct

faculty productivity rather than

from university prestige, and

departmental size.

louinais may accerve merasion, and

1. We focused on political science journals to reduce the likelihood of including the publications of non-political science faculty, while recognizing that journals from other disci-

plines (American Sociological Review) and interdisciplinary journals (Social Science Quarterly) achieve good ratings. It is likely that

there is some remaining measurement error because we relied on the affiliation and faculty status information listed in the journals.

The Journal of Conflict Resolution was not

included, since from 1989 to 1996 information

on authors' department affiliation and status

Katz, Richard S., and Munroe Eagles. 1996.

"Ranking Political Science Programs: A

View from the Lower Half." PS: Political Science and Politics 29(June): 149-54.

Buolective incusare. Iouthvery bindi

2. There is a significant relationship, .63 p < .01, between our measure and the Miller, Tien, and Peebler's (1996) number of APSR authors measure expressed as a ratio of the

potential number of authors (faculty size).

References

The state of the s

Notes

American Political Science Association. 1986. 1992. 1995. Graduate Faculty and Programs in Political Science. Washington, DC: American Political Science Association. Garand, James C. 1990. "An Alternative Interpretation of Recent Political Science Journal Evaluations." PS: Political Science and Politics 23(September): 448-51. Jackman, Robert W., and Randolph M. Siverson. 1996. "Rating the Rating: An Analysis of the National Research Council's Ap-

praisal of Political Science Ph.D. Programs."

PS: Political Science and Politics 29(June):

161-67. 1982. "Graduate Training and Productivity: A Look at Who Publishes." Journal of Politics 44(February): 212-27.

Lowery, Robert C., and Brian D. Silver. 1996. "A Rising Tide Lifts All Boats: Political Science Department Reputation and the Reputation of the University." PS: Political Science and Politics 29(June): McCormick, James M., and E. Lee Bernick.

National Research Council, 1995, Research Doctorate Programs in the United States: Continuity and Change. Washington, DC: National Academy Press. Welch, Susan, and John R. Hibbing. 1983. "What Do the New Ratings of Political Science Departments Measure?"

Miller, Arthur H., Charles Tien, and Andrew

A. Peebler. 1996, "Department Rankings:

An Alternative Approach." PS: Political

Science and Politics 29(December): 704-

PS: Political Science and Politics 16(September): 532-40.

Table 1

The Top 50 Political Science Departments

Rank	University	WŢFAC	NRC	CHANGE	TOTAL	FACSIZ	PUBFAC WTOT
1 / 4	- California Inst. of Tech 100	44.01	— :.	··· (—) ··	19.07	6.00	3.18 264.03
2	SUNY Stony Brook	41.47	34	(+32)	· 52.75	17,33 :	3.04 🐃 🌣 718.61
3 :	Rochester :	31.20	. 11 \	(+8)	49.23	21.66	2.27 675.69
4	lowa	29.92	25	(+21)	49.89	, 21.83	2.29 653.09
5 .	Houston	24.71	33	(+28)	58.24	30.50	1.91 753.70
6	Carnegie Mellon	21.77	— :	()- 25 .	9.15	6.00	1.53 130.62
7	Michigan State	21.45	27	(+20)	44.29	28.66 ::	1.55 614.80
8	Texas A&M	21.42 ·	:	(—)	65.00	40.00	1.63 856.68
9	Stanford	19.97	5	(-4)	39.74	26.33	1.51 525.79
10	Georgia	19.74	44.5	(+34.5)	45.16	29.00	1.56 572.41
11	Ohio State	19.28	17	(+6)	49.48	34.00	1.46 655.45
12	New Mexico	18.46		(—)	23.33	15.66	1.49 289,02
13	UC-Irvine	18.45	32	(+19)	~: 29.40	21.00	1.40 387.55
14	UC-Riverside	18.29	61	(+47)	21.66	14.33	1.51 262.11
15	Emory	17.78	36	(+21)	26.05	- 20.66	1.26 367.27
16	Rice	17.61	53	(+37)	20.08	14.00	1.43 246.54
17.	North Texas	17.20	84	(+67)	29.73	22.00	1.35 378.41
18	Florida State	17.03	38	(+20)	28.61	. 21.33	1.34 363.20
19	Minnesota	16.88	13	(-6)		27.33	1.29 . 461.26
20	Indiana	15.91	20	ò	37.65	30.50	1.23 485.35
21	UC-Davis	15.63	46	(+25)	29,48	24.00	1.23 375.07
22	Harvard	15.51	1	(-21)	58.90	48.66	1.21 754.72
23	North Carolina	15.17	18	(-5)	43.39	38.33	1.13 581.35
24	UC-Los Angeles	14.94	8	(-16)	49.50	45.00	1.10 672.21
25	UC-San Diego	14.80	9	(-16)	33.58	30.50	1.10 451.29
26	Kentucky	14.70	54	(+28)	23.19	20.33	1.14 298.88
27	Louisiana State	14.17	74	(+47)	21.83	19.66	278.67
28	Washington St. Louis	14.13	24	(-4)	21.44	20.50	1.05 289.65
29	Nebraska	13.85	63		20.80	18.50	1.12 256.27
30	Marquette	13.45	- 00	(+34) 5	16.50	17.00	.97 228.69
31	Arizona	13.44	35	(+4)	32.97	33.00	1.00 443.46
32	New Orleans	13.14	88	(+56)	16.33	16.00	1.00 4 443.40
33		12.80	3.5	(29.5)	48.14	51.66	
33 34	Michigan Yale	12.41	3.5 ·	(29.5) (30.5)	30.96	33.00	مراجع المجاورة
35							180 11
	Arizona State	12.39	43 16	(+8)	25.99	26.00	322.02 1.04 491.95
36	Columbia	12.30		(-20)		40.00	Market Committee of the
37	Wisconsin-Milwaukee	12.20	51.5	(+14.5)	24.57	24.50	1.00 298.96
38	Pittsburgh	12.13	31	(-7)	≥ 30.82	30.33	1.02 367.82
9	West Virginia	11.83		77070	18.16	, 18.33	
0	Duke	11.69	14 -	(−26) 🔩	26.31	30.00	.88 350.63
11	George Washington	11.58	47.5	(+6.5)	21.08	23.50 📜	.90 272.22
2	UC-Berkeley	11.31	2	(−40) ₹	33.89	39.66	.85 448.40
3	Colorado	11.17	39 :	(-4) '-*	28.14	32.00	357.41
4	Wisconsin-Madison	10.09	.10	(-34)	32.98	41.00	.80 413.51
15	Cornell	9.92	15	(−30)	23.47	29.66	294.17
16	New York University	9.41	[]56 ``` <u>`</u>	(+10)	18.47	25.00 TC	.74 235.29
17	Princeton	9.09	7 %	(-40)	37.30	48.33 el	439.14
18	Georgetown	8.65 🖽 🛶	∖ 37 🚈 🤼		··+ 25.40	34.50	1997.74 146 298.43
19 .	UC-Santa Barbara ".	8.56 🗡 +	41 🔭	ో 🛶 (-8) నిండ	₹ 14.08	21.00	.67 179.83
50	South Carolina	8.41	57 🞏	· · · · · · · · · · · · · · · · · · ·	~ 30.99	46.33 J	389.44

NRC = 1993 NRC rankings for political science departments

CHANGE = Number of places up or down, our rankings versus the NRC

WTFAC = WTOT/FACSIZE = Department score for publications per faculty member, controlling for journal quality TOTAL = Raw score for number of publications in top journals

FACSIZE = Average number of political science faculty, 1986–96

PUBFAC = TOTAL/FACSIZ = Publications per faculty member

WTOT = Publications weighted by Garand's (1990) journal impact score

ANNUAL REPORT

1999-2000

DEPARTMENT OF PSYCHOLOGY

Michael J. Dougher, Ph.D. Professor and Chair

TABLE OF CONTENTS

STATEMENT OF MISSION	2
I. DEPARTMENT INFORMATION AND ACHIEVEMENTS	4
A. Departmental Administration and Structure	4
B. Undergraduate Education	5
C. Graduate Education	8
D. Faculty	11
E. Department Clinic	16
F. Staff	16
G. Space	18
II. FUTURE PLANS AND COMMENT	18
APPENDICES:	
Appendix A - Committee Assignments	22
Appendix B - Department of Psychology Summary	23
Statistics and Extramural Grants	26
Appendix C - Department of Psychology Course Offerings	29
Appendix D - Part-Time Faculty Hired During AY 1999-2000	33
Appendix E - Senior Honors Theses	34
Appendix F - Doctoral Degrees Awarded and Master's Degrees Awarded	36
Appendix G – Graduate Students Rated Exemplary in Research Productivity	38
Appendix H - Graduate Students Accepted for AY 1998-2000	39
Appendix I – 1999 Annual Report for Doctoral Program	41
Appendix J - Psychology Faculty Interests	52
Appendix K - Persons Holding Professional Titles in Psychology 1995-1996	59
Appendix L - Department of Psychology Colloquia	62
Appendix M - Annual Report 1995-1996, Department of Psychology Clinic	68
Appendix N - Department of Psychology Support Staff	73

796

DEPARTMENT OF PSYCHOLOGY

STATEMENT OF MISSION

The Department of Psychology shares with other academic departments at the university its <u>raison de'etre</u>: the discovery and dissemination of knowledge. It shares with other science departments a commitment to empirical research. The distinguishing feature of this purpose for a psychology department is that the knowledge being sought concerns the individual organism, and most typically the behavior of the individual person.

The UNM Department of Psychology embraces a number of goals which serve to give the program a distinctive flavor. These are reflected in the mission of the department which is to:

- Create a supportive environment in which faculty and students associated with the department are encouraged to achieve their maximum potential as scholars.
- Promote a scientific approach to psychology, emphasizing both experimental and correlational methodologies as historic traditions.
- Encourage respect for and openness to a variety of theoretical, philosophical, and empirical approaches, with the view that the study of psychology is enriched by the interaction of multiple perspectives.
- Value active research programs within the department and in collaboration with colleagues outside the department.
- Maintain excellence in clinical and experimental psychology and foster the growth of neuroscience approaches to the study of learning, memory, and cognition.
- Encourage and support effective teaching both in communicating psychology to undergraduates as an area of major study and a critical part of a liberal arts education, and in training graduate students at a professional level.
- Train graduate students in the application of general experimental psychology in clinical and other professional settings.
- Ensure that graduate students in all areas are well trained in methodology and ethics appropriate for their effective functioning as researchers and professionals.
- Enable students to understand the development and operation of psychology in the context of diversity within the larger culture, and its application in the culture of the Southwest in particular.

- Be actively involved in service to the university, the community, the state, and the profession.
- Evaluate, in an ongoing fashion, our performance as a department with respect to our mission, and revise this Statement of Mission to accommodate to changing situations.

ANNUAL REPORT - AY 1999-2000

DEPARTMENT OF PSYCHOLOGY

Michael J. Dougher, Chair

I. Department Information and Achievements

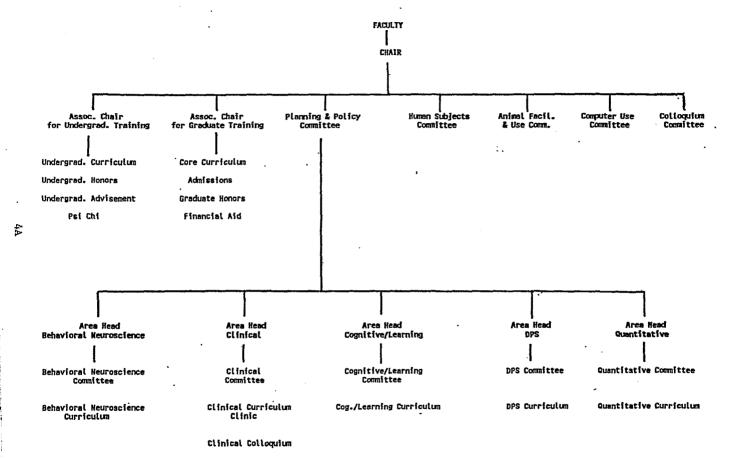
A. Departmental Administration and Structure

Michael Dougher served the second year of his second four-year term as Chair of the Department. The Department continued with the administrative structure adopted in 1995, which is depicted in the organizational chart on the following page.

With the exception of Harold Delaney, who was on sabbatical leave during the fall semester, the Department's major administrative committee, the Planning and Policy Committee remained the same as last year. Richard Harris served Associate Chair for Graduate Education and Area Head for the Developmental/Social/Personality and (in Harold Delaney's absence)

Quantitative areas; Gordon Hodge served as Associate Chair for Undergraduate Education, Mark McDaniel served as Area Head for the Cognitive/Learning area and Rob Sutherland served as Area Head for the Behavioral Neuroscience area.

As in past years, the governance and functioning of the Department relied heavily on a number of faculty members who served effectively on other departmental committees. A listing of the committee memberships for the 1999-2000 academic year is given in Appendix A. Particularly noteworthy was the very important and time-consuming work of the Graduate Admissions Committee (chaired by Mark McDaniel), the Faculty Search Committee (jointly chaired by Rob Sutherland and Mark McDaniel), and the Faculty Salary Committee (chaired by Mark McDaniel). The Admissions Committee was faced with the task of selecting the very best applicants from a pool of roughly 200. Outstanding graduate students are essential to any good



research department, and the Admissions Committee is to be commended for its work in recruiting an impressive class of new students. There is nothing a department does that is more important then hiring new faculty, and those who served on the Faculty Search Committee deserves many thanks for their hard work and congratulations on the excellent outcome of their efforts. Finally, the Faculty Salary Committee is given the unenviable task of ranking the performance of each member of the faculty in order to determine the allocation of salary increases. As they have done in the past, the committee did an excellent job and carried out their task with in a professional, sensitive, and respectful way.

The Department benefited again this year from the Quad-L Trust, which was endowed through the UNM Foundation by University Professor Emeritus Frank Logan. The Quad-L Library supported by this Trust is quite literally a world-class collection of literature concerned with the psychology of learning and is a tremendous resource to the Department. This year the Quad-L Trust supported a visit by Bruce Overmeir, Professor of Psychology at the University of Minnesota, who delivered the 12th annual Quad-L lecture. The title of Professor Overmeier's talk was "Expectations: From the Animal Laboratory to the Clinic." Rob Sutherland, who serves as faculty advisor to the Quad-L, coordinated the selection process for the Quad-L Lecture and arranged for Dr. Overmeier's visit.

B. Undergraduate Education

Stated simply, the undergraduate education productivity of the Department's faculty and staff is enormous and among the highest in the College. As of the spring semester, the Department had a total of 590 majors, which is 14.25% of the number (4140) of majors in the College of Arts & Sciences. The Department offers a wide variety of courses, ranging from introductory psychology to advanced courses in learning and memory, abnormal psychology,

evolutionary psychology, mathematical psychology, and cognitive neuroscience. Students are exposed not only to some of the best lecturers at the University but also to advanced laboratory courses in which they design experiments and have "hands-on" contact with human and non-human subjects.

The popularity of psychology courses has remained very high. Part 1 of Appendix B presents the Department's enrollment summary statistics for 1999-2000 as well as for the preceding four years. Actual enrollments per course and total student credit hours for the 1999-2000 fall, spring and summer semesters are presented in Appendix C. Total enrollment in our undergraduate courses was 7, 534 students, amounting to nearly 21,500 Student Credit Hours. While there was a decrease in the number of students enrolled in psychology courses relative to last year, that decrease occurred primarily in our introductory labs and upper division courses. This reduction was due to the Department's decision two years ago to eliminate the introductory labs and reduce the number of upper division courses we offer in order to bring that number more in line with our faculty FTE. The few introductory lab sections we did offer this year were to accommodate those students who entered the university under the old catalog and needed the introductory labs to fulfill graduation requirements. Lower enrollments in the upper division courses were also the result of the overall drop in university enrollments a few years ago. However, in line with increases in freshman enrollments the last two years, enrollments in introductory courses (2089) increased slightly over the previous year and were at a five-year high. As we intended when we revamped our undergraduate curriculum two years ago, enrollments in our advance labs increased substantially over the previous two years, and we expect that trend to continue. Despite the relatively large number of courses offered by the Department, we have been able to cut back significantly on the number of part-time and graduate student instructors in our undergraduate program over the past several years. Only seven individuals (not counting graduate students) were hired as part-time instructors during 1999-2000, and one of those, Dan Matthews is the Director of our Psychology Clinic. These instructors are listed in Appendix D. Most of these instructors have taught for us before and they were selected again because of their commitment to teaching and excellent classroom skills.

During the past year, non-regular faculty taught 28 of the 66 regular undergraduate courses (excluding labs and independent study) offered by the Department during the regular academic year (i.e., excluding summer). Graduate students taught twenty-two of those courses and six were taught by part-time instructors. Graduate students in our Department have a teaching requirement and many choose to satisfy that requirement by teaching their own course. To enhance the effectiveness of their teaching, all graduate student instructors are required to take a course in teaching before they are assigned their own course, and all graduate student instructors are assigned a faculty member to serve as a teaching mentor. Overall, the Department feels it is doing very well in achieving the combined objectives of training our graduate students to become good teachers, maximizing the number of undergraduate courses taught by regular faculty, and maintaining the teaching excellence that has been the hallmark of our Department.

The flagship for quality education in our Department remains our Psychology Honors

Program, which has been in existence for over 26 years. This program, which culminates in the
student completing a year-long research project, has been especially attractive to Psychology
majors who go on to pursue graduate work in Psychology. Appendix E lists our 1999-2000
honors students along with the titles of their research theses, the names of their faculty
supervisors, and the level of honors awarded to them by the department. Gordon Hodge
deserves special mention for his role as the instructor for the senior honors seminar. He did an

absolutely outstanding job of helping the students prepare their research projects for presentation to an assembly of faculty, students, and parents. By all accounts, these were some of the finest presentations in memory.

For the 11th consecutive year, the Department hosted a spring commencement ceremony for its graduating students. The commencement address, delivered by Professor Harold Delaney, was entitled "The University and the American Dream." This continued the tradition of having a senior faculty member in the Department deliver the commencement address. Previous addresses have been delivered by Frank Logan, Bill Gordon, Sam Roll, John Gluck, Henry Ellis, Bill Miller, Kristina Ciesielski, Mark McDaniel, Dennis Feeney, Richard Harris, and Robert Sutherland. Department Administrator, Candace Blashak, organized the ceremony and she and her staff handled all of the arrangements. Counting the faculty, the graduates, their families and friends, almost a thousand people attended the ceremony. Needless to the say this is a huge and costly (over \$4000) undertaking for the Department, but judging by the very positive comments from both the graduates and faculty, it is well worth the expense and effort.

C. Graduate Education

During the past academic year, the Department awarded five Ph.D. degrees. The names of the degree recipients along with the titles of their dissertations and the names of their faculty advisors can be found in Appendix F. This brings the total of Ph.D. degrees awarded by the Department to 270. In addition, the Department awarded 9 Master of Science degrees this year. These degree recipients along with the titles of their theses and faculty advisors are also listed in Appendix F.

The graduate program remained relatively unchanged from the previous five years. The faculty used the criteria and guidelines that were revised last year to evaluate each student's

Accessor in the contract of the contract of

research productivity and degree progress. This exercise proved very useful in that each of the major areas gained a clear picture of their students' progress and were able to give specific feedback to each student. Based on this evaluation process, it is clear that our graduate students continue to be very active in both research and teaching, and the performance of some merited special recognition. Seth Friedman received the Benjamin Haught Award in recognition of outstanding research by a graduate student and Rich Ogle and John Dencoff won awards for outstanding teaching associate and teaching assistant, respectively. In addition, a number of students received department commendation for exemplary research productivity. The names of these students are listed in Appendix G.

Fortunately, the Department was able again this year to financially support all graduate students who requested aid and were in good standing. In part, this was due to the availability of research assistantships made possible by extramural funding obtained by the faculty as well the availability of research and clinical positions outside the Department. However, most of the students who receive aid in our Department work as teaching assistants (TAs). This presents a problem because the ratio of the number of courses needing TAs to the number of TAs we are able to fund is too high and creates an excessive workload for our TAs. The Department simply does not receive adequate TA/GA funding to cover its needs. We are in clear need of at least three more TA positions. In addition to an insufficient number of TA lines, our TA stipends are too low relative to our peer institutions. This places us at a real disadvantage in trying to compete with other institutions for the best graduate students.

After a substantial decrease last year, the number of graduate students enrolled in the Department this year declined by just one (from 93 to 92). The previous years' decreases was the result of a decision made by the clinical faculty a few years ago to reduce the number of

admissions to the clinical program. They also reflect the Department's efforts to facilitate our students' progress toward their degrees and to provide them with clear guidelines and expectations regarding their degree progress. The positive result is that we have a more reasonable faculty to graduate student ratio, a more balanced graduate-training load across faculty, and a better balance between clinical and experimental graduate students.

Although still relatively large, the number of applications to the graduate program dropped from 157 last year to 138 this year. More concerning, this is the fifth year in a row that the number of applications has decreased. By far, the biggest drop has been in the number of applications to the clinical program. This decline is part of a national trend. Almost all Ph.D.-granting clinical psychology programs are reporting decreases in applications, some as high as 40%. The major reason offered for these decreases is the increasing role played by managed care in mental and behavioral health settings. This has resulted in a substantially reduced demand for doctoral level clinical psychologists to provide direct clinical services, especially psychotherapy. In response, psychology departments are seeing fewer applications from students whose primary interests are in delivering clinical services and providing psychotherapy. There has not, however, been a corresponding decrease in the number of applications from students whose primary interests are in clinical research. In addition, while the number of applications to clinical programs is down nationally, the qualifications of these applicants, as measured by GRE scores and GPA, have not declined and, in fact, remain quite high.

In the face of declining numbers of applications, the Admissions Committee under the leadership of Mark McDaniel redoubled its efforts to attract the very best applicants to our graduate program. Their efforts paid off in that we were able to admit 14 very good students to our program this year. These students and their advisors are listed in Appendix H.

Despite the decline in the number of applications to our graduate program, the

Department continues to receive nearly one-fourth of all the applications to departments in the

College and to have an acceptance rate that is markedly below the College average. Admission
to our doctoral program is still highly competitive, and this allows us to select students who are
highly qualified and share the research interests of our faculty.

As mentioned in the '97-98 Annual Report, the Clinical Program was awarded a full seven years accreditation by the American Psychological Association APA). A yearly report on the Clinical Program is required by APA to maintain our accreditation, and that report, prepared by John Gluck, is attached as Appendix I. As this report indicates, the clinical program continues to do well and validates APA's decision to grant it seven years accreditation. Thanks to John Gluck for his hard work in preparing this report.

D. Faculty

At the beginning of the academic year, the Department had 24 voting faculty members (22 FTE), including Bill Gordon, who is currently serving as President of the University, and Bill Miller, who is supported by a senior Research Scientist Award from NIAAA. As mentioned previously, the Department hired Claudia Tesche as a professor in the behavioral neuroscience area. Dr. Tesche received her Ph.D. in physics from the University of California, Berkeley in 1979, and has been working at the Brain Research Unit at Helsinki University since 1992. This is the first faculty member hired by the Department with a doctoral degree in a field other than psychology, but Dr. Tesche's expertise and international reputation as a behavioral neuroscientist makes her an outstanding addition to our faculty.

It was already mentioned that Dr. Tesche's hire was made possible through the Department's collaboration with the National Foundation for Functional Brain Imaging. This

was the first time the Department entered into a joint-hiring arrangement with an extradepartmental entity, and there were some concerns about this how process would work. In the end, the process worked extremely well and sets an excellent precedent for future collaborative endeavors. The Department thanks both Ed Flynn and Chris Wood from the National Foundation for Functional Brain Imaging for their cooperation, support, and professionalism during the hiring process.

The Department and College also entered into a novel arrangement this year with Holly Waldron. Dr. Waldron has been very successful in obtaining extra-mural funding for her research investigating alternative treatments for adolescent substance abuse. In order to accommodate this research, Dr. Waldron founded the Center for Family and Adolescent Research (CFAR). This year, Dean Fischer granted CFAR College Center status and allowed Dr. Waldron to be relieved of her classroom teaching responsibilities in order to administer CFAR. In return, Dr. Waldron paid her salary from her grants and released her university salary back to the College in order to hire a visiting professor to cover her teaching load. This arrangement was mutually beneficial to all the concerned parties and was made possible by Dean Fischer's flexibility and willingness to explore creative alternatives to meet the needs of the College, Department, and individual faculty.

Earlier this year, Richard Harris announced that he would retire at the end of this year. Dick joined the Department in 1968 and has served the Department, the University, and the profession very well in a number of capacities over his career. He will be missed by all of us, and we wish him well in his retirement.

<u>ب</u> ا ج

Five members of our faculty were on sabbatical leave this year. Harold Delaney was on leave during the fall semester, and Lynette Cofer, Dennis Feeney, Eligio Padilla, and Jane Smith were on leave during the spring semester.

Part 1 of Appendix B shows that the Department's faculty FTE has remained constant over the past three years despite our continuing need to hire more faculty. Although we were able to hire Sarah Erickson last year to replace Judy Arroyo (who left at the end of '96-97) and Claudia Tesche this year to replace Peder Johnson (who retired at the end of '96-'97), Jack Blanchard's resignation last year still leaves us down two FTE from 1996-1997. Add in Dick Harris' resignation, and next year the Department will be down three FTE from 1996-1997. Given the high student demand for our courses, the faculty's already heavy teaching load, and the need to maintain excellence in research and scholarly productivity, it is imperative that we hire three full-time regular faculty as soon as possible. We not only need to replace Jack Blanchard and Dick Harris, we need to add to our Developmental and Social areas. Both areas attract large numbers of students to their classes, and any psychology department simply must have adequate representation in these core areas if it is to remain viable. The lack of faculty representation in developmental psychology will become particularly acute after next year because this year Kathy Stansbury, a developmental psychologist, was denied tenure.

The research activities of the faculty are summarized in Part 2 of Appendix B. It is particularly noteworthy that our extramural support has increased in each of the last five years and this year was at an all time high of \$2,611,183. This was the fourth straight year that our extramural funding exceeded \$2 million dollars and these years were preceded by seven straight years with funding levels just below \$2 million dollars. This is certainly an outstanding accomplishment. No detailed commentary regarding faculty research will be presented here

inasmuch as these data have been provided in each faculty member's Annual Biographical Supplement. In addition, a list of the faculty and their research interests is presented in Appendix K. It should be pointed out, however, that our faculty continue to excel in their research and to be productive in terms of publishing and presenting their work at professional meetings. In addition, a large number of our faculty have achieved national and even international prominence and have assumed leadership roles in their respective fields.

This year, the University gave special recognition to the achievements of two members of our faculty. Steve Gangestad was named a Regents Professor, and Bill Miller was named a Distinguished Professor, the highest recognition of faculty excellence given by the University. Both of these awards were well deserved and the Department congratulates both Dr. Gangestad and Dr. Miller for their special achievements. The Department is also pleased to note that Dr. Miller is the third member of the Psychology Department to have been named Distinguished Professor. He joins Robert Grice and Henry Ellis in having received this prestigious honor.

By whatever metric one might wish to apply, the faculty of the Department of
Psychology is very good. However, a persistent threat to the quality of our faculty is salary
inequity. The salaries of some of our faculty are as much as 20% below national and regional
norms. The situation was hardly improved this year by salary increases that averaged only 3.2%.
The problem of salary inequity at UNM has existed for many years, and it will take several
successive years of substantial salary increases before our faculty is compensated at a level
comparable to our peers. While this problem is fully acknowledged by the central
administration, and while the Dean has made several recent efforts to enhance the salary of our
faculty, much more needs to be done. There should be no doubt that the highest priority for
the Department is to see faculty salaries increased to the level of regional norms

immediately and to the level of national norms in the near future. This is the only way to preserve the excellence of our Department.

Professional Appointments. In addition to the part-time faculty who served the Department this year, there were a number of other individuals within UNM and the professional community of Albuquerque who made major contributions to our teaching, training and research missions. Foremost among these are our three visiting faculty members: Nancy Handmaker, Theresa Moyers, and Miguel Villanueva. Drs. Handmaker and Moyers were hired to cover Bill Miller's teaching load while he fulfills the obligations of his senior Research Scientist Award, and Dr. Villanueva was hired to cover Holly Waldron's teaching load while she serves as Director of CFAR.

This year the Department awarded research faculty status to six individuals: Janet Brody, P. W. Kodituwakku, Robert Meyers, Natasha Slesnick, Scott Tonigan, and Carolina Yahne. Research faculty status is granted to individuals who have excellent research records, provide research opportunities for our students, and hold extra-mural funding. This past year the Department decided to more actively encourage applications for research faculty positions because it a) extends the range of research opportunities for our students, b) makes the faculty more aware of psychology related research outside of the Department, c) fosters collaborative research, d) provides the advantages of faculty status and university affiliation to researchers outside the University, and e) provides financial resources to the Department that are used to facilitate research by regular faculty and graduate students. The Department is very pleased to include these individuals on our list of research faculty and we fully intend to add to this list in the future.

In addition to our visiting and research faculty, a number of individuals were awarded professional titles based on their service to the department. The 1990-2000 list of visiting faculty, research faculty, and professional appointments is included as Appendix L. The department is grateful to these individuals for their willingness to contribute their time and knowledge to the education and training of our students.

A number of psychologists from other universities and the private sector further enriched our educational programs by presenting research colloquia to our faculty and students. Appendix M presents a record of this colloquium series. Special thanks go to the Colloquium Committee, Mark McDaniel, Rob Sutherland, and Akaysha Tang for their efforts in arranging an outstanding colloquium series.

E. Department Clinic

A separate Annual Report of the Department of Psychology Clinic is presented in Appendix L. Once again this year the Clinic met its primary goals of providing quality training to our Clinical graduate students and affordable, high quality psychological services to the community. The report shows that the Clinic provided many hours of therapy and intakes, and involved approximately 30 graduate students in the provision of those services. This was the second year of operation of the ADHD assessment program under the very able direction of Dan Matthews and Melissa Behrens-Blake. Finally, for the eighth consecutive year, the Clinic was able to operate within its allocated budget. This is a tribute to the able and caring leadership of Dan Matthews and the effective support of his Administrative Assistant, Wanda Sharts.

F. Staff

The Department of Psychology continues to benefit from an extremely competent support staff. This year there were some changes in the titles and responsibilities of several members of

our office staff that resulted from the transfer of Dee Ann Quintana and her staff from the Department to CASAA. In particular, Stan Bennett was promoted from Accounting Tech to Supervisor, Administrative Support, and Louis Carrillo will soon be promoted from Administrative Assistant I to Administrative Assistant II. In addition, Pat Sharp was promoted to Research Engineer I. Beth Isbell joined the Department as our new Academic Advisor and is performing outstandingly in that role. In order to better inform those who may not be familiar with the important duties of the fourteen staff in our department, Appendix M presents a brief job description of each member of the administrative, instructional, research, and clinical support staff. It should be mentioned that this staff is not rigidly bound by these formal descriptions and willingly shares responsibilities in an effort to best serve the needs of the Department.

The core administrative support staff (Candace Blashak, Stan Bennett, Beth Isbell, Nancy Chavez, and Louis Carrillo) skillfully handle the basic functions essential to the day-to-day operations of the Department. These people get the Department's administrative work done competently and efficiently. Stan Bennett faced some real challenges in taking on the increased responsibilities associated with his new position, but he has mastered the job and the transition occurred without disruption. As already mentioned, the success of the Psychology Clinic is due in large measure to the administrative skills of Dan Matthews, who completed his twelfth year as Clinic Staff Director this spring. Dan continues to be effectively assisted in his duties by Wanda Sharts, the Administrative Assistant. Our research support staff again includes Gilbert Borunda, Senior Lab Animal Technician; Dr. Linda Contos, Veterinarian, Ector Estrada, Animal Research Coordinator, DeLaine King, Supervisor, Lab Animal Husbandry, and Patrick Sharp, Research Engineer. The outstanding experience, skills and efforts of these individuals are invaluable and

facilitate a wide range of research activities in our department. The Department is very grateful to them.

G. Space

As has been highlighted in the Department's Annual Report for the past eleven years, our department is not well accommodated by its current space allocation. We need a new building. Currently, we have insufficient staff space in order to function optimally and are unable even to house all of our faculty in faculty offices. Furthermore, during the past few years we have had to continue to convert graduate student offices into faculty research space. Even with this, we do not have sufficient, suitable research space in the building to accommodate the high level of faculty research activity that has been attained in recent years. Although our need for additional faculty is well documented and while our extramural funding and research output is rising dramatically, the size of our current building places severe limitations on our ability to grow and to reach our full potential as a department. The Department's request for a new building is now acknowledged on the University's Capital Projects list. However, there is little indication that funds will become available to initiate this project in the foreseeable future.

The Department continues to need financial support in order to initiate a furniture replacement program that would replace 50% of its classroom and laboratory furnishings per year over the next five years. The majority of our current furnishings came with the original building more than 20 years ago. It has become increasingly worn and much of it is in disrepair.

II. Future Plans and Comments

The collaborative effort between the Department and the National Foundation was important not just because we were able to add an outstanding faculty member to our

Department, but because it establishes a new path of growth for the Department. The University's recent financial stagnation and resulting restrictions placed upon the College and Department have had very tangible, debilitating effect on the hopes, enthusiasm, and expectations of our faculty. Some wondered whether we would ever be able to realize the goals and objectives that just a few years ago seemed so clearly attainable. This hire suggests that we may yet attain those goals, but it also clearly indicates that if we are to do so we must explore new and creative ways to keep the Department moving forward. To be successful, these explorations will require a good deal of creativity, flexibility and cooperation between the College and the Department, between the Department and other university departments, and, most importantly, within our own Department. Very difficult decisions need to be made regarding how best to allocate our limited resources, and these will require open, frank, and collegial discussions. But our faculty has already shown both a willingness and an ability to that. Recently, the opportunity arose to pursue another joint-hiring arrangement with the National Foundation. To satisfy the needs of both the Department and the Foundation, it was decided that the position should be at the senior level and the person hired should be conducting research in the area of experimental psychopathology. Interim Dean Fritz Allen enthusiastically endorsed the idea and, because the arrangement with the Foundation allows the College to postpone for two years its salary obligations for this position, he approved our request to be able to search for two more faculty members in addition to this one. Thus, next year we will be searching to fill three faculty positions: one in clinical at the senior level, and one each in the developmental and social areas at the junior level. In order for us to have come to that decision, many of our faculty members had to put aside their short-term, individual interests in favor of the long-term more general interests of the Department. In addition, we had to have a Dean who was creative and

flexible enough to find new ways to help the Department grow. Fortunately for the Department, we had both.

I very much appreciate the commitment of all of the faculty and staff who were willing to devote their time and talent this past year on behalf of the Department. There are always those who go way beyond the call of duty and deserve special thanks. These include: Harold Delaney, Steve Gangestad, John Gluck, Dick Harris, Gordon Hodge, Mark McDaniel, and Rob Sutherland. John Gluck will be stepping down as the Director of Clinical Training and will be replaced next year by Ron Yeo. John did a great job as DCT and his efforts are well appreciated. Gordon Hodge will be going on sabbatical leave next year and stepping down as Associate Chair for Undergraduate Training. He will be replaced in that role by Harold Delaney. Many thanks to Gordon for performing so well in that difficult role. Thanks to all of those who served on critical departmental committees, especially the Admissions Committee, the Salary Committee, and the Faculty Search Committee. Many thanks also to all the staff who do their jobs so well so consistently. This is an experienced group who, though largely unacknowledged, defily handles the myriad details of the day to day operation of the Department as well as the acute demands of the occasional crisis.

Unfortunately, the University lost yet another first-rate administrator when Michael Fischer left to take the job of Provost at Trinity University. He was an outstanding Dean and, even in these times of financial difficulty, he always found ways to support the Department. The Department will miss him as Dean, and I will miss him as a friend. While Michael Fischer's departure is certainly a loss to the Department, we are fortunate to have Fritz Allen as his replacement. Dean Allen has been an extraordinarily quick study and has already shown the

vision and leadership qualities of a seasoned veteran. The Department looks forward to working with Dean Allen in the coming year.

Finally, I would like to thank all of my friends and colleagues in the Department whose energy, counsel, knowledge, and support make the Department a better place to be.

. .

APPENDIX A

COMMITTEE ASSIGNMENTS AY 1999-2000

Ad-hoc Committee on

Teaching Evaluation: Sutherland, Gangestad, Hodge, Smith

Admissions: McDaniel, Ciesielski, Gangestad, Goldsmith, Roll, Yeo

Animal Facilities and Use: Contos, Feeney, Gluck, Sutherland, Tang

Awards: Hodge, Gluck, Harris, Yeo

Behavioral Neuroscience: Sutherland, Ciesielski, Gangestad, Egly, Feeney, Hodge,

Stansbury, Tang, Yeo

Clinical: Gluck, Ciesielski, Dougher, Erickson, Miller, Padilla, Roll, Smith,

Waldron

Cognitive/Learning: McDaniel, Amrhein, Delaney, Dougher, Egly, Goldsmith,

Sutherland, Tang

Colloquiua: McDaniel, Sutherland, Tang

Computer Use: Goldsmith, Amrhein, Delaney, Harris

Developmental

and Social: Harris, Amrhein, Ciesielski, Cofer, Erickson, Gangestad, Gluck,

Roll, Stansbury

Faculty Search Committee: McDaniel, Sutherland, Ed Flynn, Fernando Valenquela

Faculty Raise Committee: McDaniel, Amrhein, Gangestad, Sutherland

Honors: <u>Delaney</u>, Amrhein, Hodge

Human Subjects: Egly, Erickson, Stansbury, Tang

Policy and Planning: Dougher, Delaney, Gluck, Harris, Hodge, McDaniel, Sutherland

Quantitative: <u>Delaney</u>, Amrhein, Gangestad, Goldsmith, Harris

Psychology Club: Hodge

APPENDIX B

-Part 1DEPARTMENT OF PSYCHOLOGY SUMMARY STATISTICS

	AY	AY	AY	AY	ΑY
	1995-96	1996-97	1997-98	1998-99	1999-2000
Faculty Information					
Voting Faculty (total)	25	25	24	24	24
Professors	12	12	10	13	12
Associate Professors	8	8	7	7	6
Assistant Professors	4	5	5	5	5
Budgeted FTE Faculty	19.94	19.94	22	22	22
Visiting Faculty	1	3	1	1	3
Undergraduate Education					
Introductory Psychology	1,891	1,661	1,560	2,018	2,089
Introductory Labs	662	522	520	521	144
Advanced Psychology	6,102	7,655	5,247	5,537	2,761
Advanced Labs	226	164	59	33	146
Total Enrollment	9,885	9,902	7,386	8,109	7,534
Number of Majors				625	590
Graduating Majors	249	161	235	266	182
Number of Faculty Involved	23	24	24	24	24

APPENDIX B, Part 1 (continued)

Graduate Education

Graduate Students	105	117	127	93	101
Graduate Enrollment	645	609	653	622	549
Graduate Assistants	31	35	33	37	39
Research Assistants	23	16	20	22	38
Fellows and Trainees	10	7	6	6	6
Master's Degrees	12	6	8	7	10
Doctoral Degrees	10	9	11	1	5
Applications Received Behavioral Neuroscience Clinical Cognitive/Learning DPS Quantitative/Methodology	263	221	190	157 14 113 9 19 2	133 13 91 8 20 1
Offered Admission Behavioral Neuroscience Clinical Cognitive/Learning DPS Quantitative/Methodology	,28	25	20	20 2 9 5 3 1	26 6 14 3 2
Accepted Admission Behavioral Neuroscience Clinical Cognitive/Learning DPS Quantitative/Methodology	12	13	11	10 2 3 3 2 0	14 2 7 1 2
Number of Faculty Involved	23	24	24	24	23

APPENDIX B, PART 1 (continued)

Research Activities

Books and Articles	64	78	82	78	74		
Lectures and Reports	23	38	65	67	83		
*Extramural Support	1,959,407	2,377,254	2,348,557	2,529,038	2,611,183		
General Information							
FTE Staff	12.2	5 11.2	5 11.2	5 12.2	5 12.25		
Department Budget	1,014,000	1,786,000	1,799,004	1,935,562	1,956,300		

^{*}Extramural funds budgeted for expenditure during a single AY.

. . .

APPENDIX B

- Part 2 -

DEPARTMENT OF PSYCHOLOGY CURRENT OUTSIDE-SPONSORED RESEARCH AMOUNTS FUNDED FOR THE CURRENT GRANT YEAR 1999 - 2000

Jack Blanchard - Principal Investigator

Anhedonia & Emotion in Schizophrenia, NIMH; \$46,336; 5/1/98-4/30/99

Kristina Ciesielski - Principal Investigator

Neuroimaging and Neurobehavioral Development Models of Functional Brain Subsystems Subserving Memory and Attention in Children; \$57,290; 9/2/99-8/31/00

Lynette Cofer - Principal Investigator

Morningness-Eveningness, Alcohol Use and Development, NIAAA; \$144,265; 3/1/00-2/28/01

Dennis Feeney - Principal Investigator

Effect Bone Morphogenic Protein OP-1 on Recovery After Sensimotor Cortex Injury in Rats, Creative Biomolecules; \$81,377; 3/1/99-6/30/00

Tim Goldsmith - Principal Investigator

Training and Assessing Aircrew Skills: Methods to Achieve Reliable and Valid Performance Data, FAA; \$137,000; 5/2/00-5/1/01

Analysis and Training of Cognitive Skills in a Line-Oriented Flight Training Program, FAA; \$165,736; 10/1/98-9/30/99

Mark McDaniel - Principal Investigator

Cognitive Analysis of Coding Schemes for Speech Protheses, NIDCD; \$130,999; 5/1/00-4/30/01

William Miller - Principal Investigator

Modeling & Modifying Motivation for Change, NIDA; \$221,066; 7/1//98-6/30/99 (Co-PI, Paul Amrhein)

Behavioral/Pharmacologic Treatment of Alcoholism, NIAAA; \$237,257; 9/1/98-8/31/99

NIH Research Scientist Award, NIAAA; \$92,202; 8/1/98-7/31/99

APPENDIX B, Part 2 (continued)

William Miller - Principal Investigator (cont.)

Programatic Treatment Innovation Research, NIAAA; \$90,242; 8/1/98-7/31/99

Alcohol & Drug Abuse Prevention and Treatment Evaluation, NIAAA, Predoctoral National Research Service Award (NRSA); \$106,674; 7/1/98-6/30/99

Strategies for Matching Clients to Treatments, NIAAA, No Cost Extension; 9/1/96-8/31/98

Unilateral Family Intervention for Drug Problems, NIDA; \$264,294; 9/1/98-8/31/99

Clinical Trial of Interventions with Significant Others, NIAAA, \$88,739; 2/1/98-1/31/99

Natasha Slesnick - Family Therapy Outcome for Runaway Adolescents, NIAAA; \$160,694; 9/28/98-8/31/99

Treatment Outcome for Runaway Adolescents, NIDA; \$96,634; 9/1/98-7/31/99

Kathy Stansbury - Principal Investigator

Developmental Mechanisms in Emotion Regulation, NIMH; \$106,837; 3/10/00-2/28/01

Robert Sutherland - Principal Investigator

ARND: Cortical Plasticity & Learning, NIAAA; \$189,808; 2/1/00-1/31/01

A Combined EEG/MEG/MRI/SPECT Imaging Study of Pathological Gamblers; \$76,360; 5/1/00-7/31/01

A Combined EEG/MEG/MRI/SPECT Imaging Study of Pathological Gamblers, NCRG; \$76,360; 5/1/98-11/1/99

Holly B. Waldron - Principal Investigator

Drug Abuse Treatments for Adolescents, NIDA; No Cost Extension; 7/1/99-6/30/00

Efficacy of Treatments for Adolescent Problem Drinking, NIAAA; \$401,512; 9/28/98-8/31/99

Engaging Resistant Adolescent Substance Abusers in Treatment, NIDA; \$277,559; 1/20/99-12/31/99

Drug Use & HIV Risk: Treatment of Hispanic and Anglo Youth, NIDA; \$487,647; 7/1/00-6/30/05

APPENDIX B, Part 2 (continued)

Michael Wilcox - Principal Investigator

Analog Implementation of High Resolution Retinal Information Processing, Office of Naval Research; \$140,000 - 4/16/98-7/14/99

APPENDIX C

DEPARTMENT OF PSYCHOLOGY COURSE OFFERINGS AY 1999-2000

SUMMER 1	1999	" OF	(DOTAY	
COURSE	TITLE	# OF SECTS	TOTAL ENROLLMENT	SCH
105	General Psychology	2	91	273
200	Statistical Principles	1	58	174
220	Developmental Psychology	1	64	192
240	Brain and Behavior	1	44	132
260	Learning and Memory	1	52	156
265	Cognitive Psychology	1	39	117
271	Social Psychology	1	44	132
302	Psychology Research Techniques	1	42	126
332	Abnormal Behavior	1	71	213
400	History of Psychology	1	50	150
499	Undergraduate Problems	39	30	90
551	Graduate Problems	36	4	12
599	Masters Thesis	29	5	15
699	Dissertations	28	6	36
		Total	600	1,818
FALL 1999		# 0F	TOTAL	

PALL 1999				
COURSE	TITLE	# 0F SECTS	TOTAL ENROLLMENT	SCH
105	General Psychology	5	1,061	3,183
106L	General Psychology Lab	5	82	246
200	Statistical Principles	4	206	618
220	Developmental Psychology	3	320	960
240	Brain and Behavior	3	137	411
260	Learning & Memory	2	121	363
265	Cognitive Psychology	2	130	390
271	Social Psychology	2	182	546
302	Psychological Research Tech.	1	53	159
325	Psychology of Infancy	1	53	159
331	Psychology of Personality	2	193	579
332	Abnormal Behavior	2	164	492
347	Drug & Beh: Psychopharm.	1	62	186
362L	Human Learning and Memory Lab	I	11	33

FALL 1	999(co	ontinue	:d)
--------	--------	---------	-----

FALL 1999	(continuea)			
COURSE	TITLE	# 0F SECTS	TOTAL ENROLLMENT	SCH
367	Psychology of Language	1	19	57
378	Social Interaction	1	59	177
391	Junior Honors Seminar	1	12	36
400	History of Psychology	1	63	189
411	Cross Cultural Psychology	1	46	138
434	Behavior Therapies	1	19	72
439	Child Psychopathology	1	41	123
450	Spec. Topics: Cog. Neuroscience	1	2	6
450	Spec. Topics: Evolution Social Psych	. 1	8	24
450	Spec. Topics: Child & Adoles. Media	1	5	15
491	Sr. Honors Seminar	1	12	36
499	Undergraduate Problems	40	88	264
501	Advanced Statistics	1	10	30
503L	Advanced Statistics Lab	1	10	10
505	Research Seminar	1	9	9
533	Psy. Eval:Cog/Neuropsych.	1	11	33
535	Psychological Evaluation:	1	5	15
540	Personality Functions	1	*	15
540	Biol. Bases Behavior	1	5 15	45
547	Drugs & Beh. Psychopharm.	1 38		78
551 565	Graduate Problems		26	/8 6
565	Seminar: Thought & Language	1	2 7	
568	Cognitive Processes	1		21 12
578 500	Social Interaction	1	4	60
599	Masters Thesis	28	20	12
600L	Practicum	3 1	12 6	18
601	Multiple Measures	13	28	16 84
631L	Prac. Psych. Adults I		28 1	3
635	Child Assess. Practicum	1	14	28
641	Seminar in Physiological Psych.	1		28 12
650	Spec. Topics: Cognitive Neuroscience		4	
650	Spec. Topics: Child & Adol. Media	1	4	12 27
650	Spec. Topics: Neur. Base Cojn.	1	9 7	
650	Spec. Topics: Sem. Teaching Psych.	1		21 54
650	Spec. Topics: Evol. Social Psych	1	18	
699	Dissertations	28	47	282
		Total	3,422	10,349

SPRING 2000

SPRING 200	JU	" OT	mom + r	
COURSE	TITLE	# OF SECTS	TOTAL ENROLLMENT	SCH
105	General Psychology	5	938	2,814
106L	General Psychology Lab	4	71	213
200	Statistical Principles	3	138	414
220	Developmental Psychology	3	260	780
231	Psych. Human Sexuality	1	220	660
240	Brain and Behavior	2	189	567
260	Psychology of Learning & Memory	2	178	534
265	Cognitive Psychology	1	65	195
271	Social Psychology	2	159	477
300	Intermediate Statistics	2	9	27
301L	Quantitative Psychology Lab	1	3	3
302	Psychological Research Techniques	1	55	165
322L	Developmental Psychology Lab	1	14	28
331	Psychology of Personality	1	198	594
332	Abnormal Behavior	2	355	1,065
341L	Behavioral Neuro Lab	1	16	32
344	Human Neuropsychology	1	45	135
361	Human Learning & Memory	1	78	234
365	Applied Exper. Psychology`	1	13	39
392	Junior Honors Seminar	1	10	30
430	Alcoholism	1	119	357
436	Family Psychology	1	84	252
450	Spec. Topics: PTSD	1	16	48
450	Spec. Topics: Primate Behavior	1	3	9
450	Spec. Topics: Health Psychology	1	8	24
450	Spec. Topics: Attention/Perception	1	4	12
450	Spec. Topics: Bases of Emot. Devel		11	33
450	Spec. Topics: Alcohol/Pregnancy	1	5	15
468L	Sci. Intel. System Lab	1	2	4
469L	Exper. Psycholing.	1	1	3
492	Senior Honors Seminar	1	12	36
499	Undergraduate Problems	28	107	321
502	Design & Analysis of Experiments	1	8	24
504L	Design & Analysis Expt. Lab	1	8	8
505	Research Seminar	1	8	8
530	Alcoholism	1	4	12
536	Family Psychology	1	1	3
536L	Practicum Psych. Evaluation	1	5	15
551	Graduate Problems	27	22	66
560	Human Learning & Memory	1	2	6
569	Seminar. Psychology - Creativity	1	4	12
599	Masters Thesis	26	20	120

SPRING 20	00(continued)			
COURSE	TITLE	# OF SECTS	TOTAL ENROLLMENT	SCH
600L	Practicum	3	3	14
630	Seminar Psychoanal, Psychology	1	7	21
631L	Practicum in Psychotherapy with Adults I	1	1	3
632L	Practicum in Psychotherapy with			
	Adults II	11	32	96
633	System of Psychotherapy	1	11	33
641	Seminar in Physiol. Psych.	1	11	22
648	Bio Bases Psychopathology	1	6	18
650	Spec. Topics: PTSD	1	1	3
650	Spec. Topics: Attention/Perception	1	6	18
650	Spec. Topics: Primate Behavior	1	4	12
650	Spec. Topics: Health Psychology	1	5	15
650	Spec. Topics: Analysis of Data	1	6	12
650	Spec. Topics: Bases of Emot. Devel	op. 1	12	36
650	Spec. Topics: Clinical Ethics	1	13	39
650	Spec. Topics: Alcohol/Pregnancy	1	4	12
699	Dissertations	24	54	648
		Total	3,374	11,396

APPENDIX D

PART-TIME FACULTY HIRED DURING AY 1999-2000

NAME	COURSE NUMBER	TITLE
SUMMER 1999		
Janice Hoesing, Ph.D.	Psychology 240.330	Brain and Behavior
FALL 1999		
Elena Bettoli-Vaughan, Ph.D. Bruno Bornet, Ph.D. Michael Hillard, Ph.D.	Psychology 220.001 Psychology 271.002 Psychology 400.001	Developmental Psychology Social Psychology History of Psychology
SPRING 2000		
Elena Bettoli-Vaughan, Ph.D. Janice Hoesing, Ph.D. Lorna Joachim, Ph.D. Daniel Matthews, Ph.D.	Psychology 436.001 Psychology 240.002 Psychology 450.003 Psychology 536L.003	Family Psychology Brain and Behavior Special Topics in Psychology Practicum in Psychological Evaluation

APPENDIX E

SENIOR HONOR THESES AY 1999-2000

DEPARTMENT OF PSYCHOLOGY

STUDENT	THESIS TITLE	FACULTY SPONSOR
Jennifer Hettema	Differential Roles of Spirituality In Varying Alcohol Treatment Approaches: A Retrospective Analysis of Project MATCH	Harold Delaney, Ph.D. Scott Tonigan, Ph.D.
Nova Morrisette	Decision Making about Physician Assisted Suicide	John Gluck, Ph.D.
Jill P. Anderson	Conformity and the Internet: An Investigation of the Asch Effect	Gordon Hodge, Ph.D.
Teresa Ines Cesena	The Correlation Between Strain Differences in Latent Inhibition And Hippocampal GAP-43 Levels	Robert Sutherland, Ph.D. Nora I. Perrone-Bizzozero, Ph.D.
Isabel Villarreal	The Effects of Blocking on Bilingual Processing: Evidence For Strategic Selection of Stimulus Processing Procedures	Paul Amrhein, Ph.D.
Jenine M. Ziemann	Protocol Analysis and the Experimental Identification of Variables Affecting Performance o Relational Tasks	Michael Dougher, Ph.D.
Karen L. Clifford	Effects of Expert Testimony in Reducing Rape Myth Bias	Steve Gangestad, Ph.D.
Timothy D. Verstynen	Expression and Modulation of a Population Level Paw Bias in The Rat	Akaysha Tang, Ph.D.
Rebecca Ping	Media Influence on Attitudes Toward Victim Blaming and Rape	Steve Gangestad, Ph.D.
Alisha R. Thompson	Morningness-Eveningness Among Navajos	Lynette F. Cofer, Ph.D.

Heather Pierson

Memory Bias Effects of the

Trained and Untrained

Acquisition of Fear Elicitation

Victor X. Luevano

Variations in Facial

Attractiveness as a Function of Position in the Menstual Cycle

Michael Dougher, Ph.D.

Steve Gangestad, Ph.D.

APPENDIX F

DOCTORAL DEGREES AWARDED AY 1999-2000

DEPARTMENT OF PSYCHOLOGY

NAME	TITLE OF DISSERTATION	ADVISOR
Robert Astur	The Role of the Human Hippocampus in a Virtual Morris Water Task	Rob Sutherland, Ph.D.
William C. Noonan	Group Motivational Enhancement of Outpatient Alcohol Treatment	William Miller, Ph.D.
Francisco Sanchez	A Values-Based Intervention for Alcohol Abuse	William Miller, Ph.D.
Delores Stroud	Re-examination of Child Sexual Abuse Cases: Can We Learn More From Increases in Reporting?	Steve Gangestad, Ph.D.
Marina Amaya- Williams	The Spanish Verbal Learning Test: A Learning and Memory Test for the Spanish Speaking Population	Eligio Padilla, Ph.D.

MASTER'S DEGREES AWARDED AY 1999-2000

DEPARTMENT OF PSYCHOLOGY

NAME	TITLE OF THESIS	ADVISOR
Georgianna Achilles	Standards of Parental Informed Consent For Mental Health Treatment of Adolescent. An Exploration of Detrimental Consequence	
Tim Apodaca	Risk Factor Change Comparing Family Therapy and Group Therapy to Treat Adolescent Substance Abusers	Holly Waldron, Ph.D.
Alfredo Aragon	Deception in Psychological Research: College Students' Perspectives	John Gluck, Ph.D.
Kevin Bennett	Individual Differences in Jealousy	Steve Gangestad, Ph.D.

NAME	TITLE OF THESIS	ADVISOR
Heidi Erickson- Pritchard	Models and Modalities: Diffusion of Ideas in Alcohol and Drug Abuse Treatment	William Miller, Ph.D.
Sharon Flicker	Pathways Between Marital Adjustment and Adolescent Adjustment	Holly Waldron, Ph.D.
David Hochstein	The Acquisition of Icon-Referent and Location-Referent Information in an AAC Device	Mark McDaniel, Ph.D.
Amanda Price	The Role of Saccadic Eye Movements in Spatial Sequence Learning	Rob Egly, Ph.D.
Andrea Sherwood	Neurocognitive and Symptom Correlates of Social Functioning in Schizophrenia	Ron Yeo, Ph.D.
Christopher Woodruff	Effects of Object on the Distribution of Attention	Rob Egly, Ph.D.

APPENDIX G

GRADUATE STUDENTS RATED EXEMPLARY IN RESEARCH PRODUCTIVITY AY 1999-2000

Behavioral Neuroscience

Carrie Cole Jennifer Jones Sandra Moses Laura Rowland Lisa Thomson

Ying Wu

Cognitive Neuroscience

Joel Bish Derek Hamilton Tim Martin

Clinical

Nicole Gendler
Patty Juarez
Marianne Lanoue
Melissa Meade
Erica Miller
Rick Perkins
Dan Squires
Scott Walters
Paula Wilbourne

Cognitive/Learning

Amanda Price David Trumpower Chad Woodruff

DPS

Chris Edgar David Haley

APPENDIX H

GRADUATE STUDENTS ACCEPTED FOR AY 1999-2000

NAME	ADVISOR	AREA
Jordan Bell New Mexico	John Gluck, Ph.D.	Clinical
Ana Bisono New York	Holly Waldron, Ph.D.	Clinical
Ira Driscoll New Mexico	Rob Sutherland, Ph.D.	Behavioral Neuroscience
Courtney Dornburg New Mexico	Mark McDaniel, Ph.D.	Cognitive
Brandi Fink Washington	Michael Dougher, Ph.D.	Clinical
Christine Garver Texas	Steve Gangestad, Ph.D.	DPS/Evolutionary
Jennifer Hettema New Mexico	Bill Miller, Ph.D.	Clinical
Lisa Hetter New Mexico	Sarah Erickson, Ph.D.	Clinical
Stacy Hendrickson New Mexico	Tim Goldsmith, Ph.D.	Cognitive
Margaret Hoskinson Texas	Dennis Feeney, Ph.D.	Behavorial Neuroscience
Eric Jackson North Carolina	Rob Sutherland, Ph.D.	Behavioral Neuroscience
Jaime Milford Georgia	Jane Smith, Ph.D.	Clinical
Melody Pearson-Bish New Mexico	Holly Waldron, Ph.D. and Bill Miller, Ph.D.	Clinical

Glenn Scheyd Texas

Steve Gangestad, Ph.D.

DPS/Evolutionary

836

AMERICAN PSYCHOLOGICAL ASSOCIATION COMMITTEE ON ACCREDITATION

2000 Annual Report for Doctoral Program

Date	Submitte	ed
Colle	ge/Univ	ersity/School_University of New Mexico
Depa	rtment o	r Division Psychology
Name	of Regi	onal Accrediting Body North Central
Curre	nt Regio	nal Accreditation Status Accredited
Direc	tor of Tr	aining/Program Director John P. Gluck
		05-277-3420 E-mail_jgluck@unm.edu
Fax	505	-277-1394
Signa	ture of l	Director of Training/Program Director
		on Completing this Form John P. Gluck
Q1	1.) CI 2. Co 3. So 4. Co	ounseling
Q 2	Indica	te the orientation of your current working and/or training environment (choose only one).
	<u>x.</u>	Research-oriented Ph.D. program (the majority of program graduates engaged in more research activities than practice activities in their initial jobs).
		Equal-emphasis Ph.D. program (the majority of program graduates engaged in equal proportions of research and practice activities in their initial jobs).
•		Practice-oriented Ph.D. program (the majority of program graduates engaged in more practice activities than research activities in their initial jobs).
		Practice-oriented Psy.D. program (the majority of program graduates engages in more practice activities than research activities in their initial jobs).

Q3	1998-99 academic year (September 1-August 31):	
	TYPE OF DEGREE	NUMBER OF DEGREES AWARDED
	1. Ph.D.	
	2. Psy.D.	0
	3. Ed.D.	0
Q4	What was the average number of years to comp	lete the program for students who graduated in
	•	6
٠	Ę	•
Q5	For the 1999-2000 academic year:	
	1. Number who applied to program	_111
	2. Number who were offered admission	3
•	3. Number offered admission who enrolled in p	orogram 3
Q6	. Total number of students enrolled in the progra	n for 1990_2888
Ųυ	10th manifest of students emotion in the program	57.

Q7 To date in 1999-2000, how many of your students:

1.	applic	ed for internships for 2000-01	8
2.	were	placed in an internship for 2000-01	8
	(2a)	Of those placed, how many were placed with an accredited program?	8
	(2b)	Of those placed, how many were placed with a non-accredited program?	0
•	(2c)	How many received full-time funded internships?	8
	(2d)	How many received full-time unfunded internships? 章	0
	(2e)	How many received part-time funded internships?	0
•	(2f)	How many received part-time unfunded internships?	0
3.	have n	ot been accepted by an internship for 2000-	01

PLEASE PROVIDE INFORMATION AS DESCRIBED IN TABLES 1-7:

Table T	Student Demographic Information
Table 2	Student Professional Activities
Table 3	Faculty Demographic Information
Table 4	Faculty Professional Activities
Table 5	Students Admitted to the Doctoral Program
Table 6	Students Who Dropped Out of the Program
Table 7	Students Graduated from the Program

Table 1 Student Demographic Information

Please complete the entire table. Zero values should be coded with a "0". Use a dash or "n/a" to indicate missing or non-relevant data,

Please identify the number of students enrolled in the program during 1999-2000 (including those on internship) by academic year of entry, who are:

		Academic Year of Entry							
		1999- 2000	1998- 99	1997- 98	1996- · 97	1995- 96	1994- 95	1993- 94 & earlier	Row Total
African American/Black	M								
	F	1							1
Caucasian	M	1	2	2	7	4	4	6	26
	F	1*	2	3	3	6	5	14	42
Hispanic/Latino	M			1		1	1	1	4
•	F				1			2	3
Asjan/Pacific Islander	M							1	1
	F			1					1
American Indian/Alaska Native	M								
	F								
Multi-ethnic ² (individuals identifying with more than 1	M								
of the above categories)	F								
Total Number Currently	M	1	2	3	7	5	_ 5	8	40
Enrolled for Each Year of Entry	F	2	2	. 4	4	6	5	16	47

Total Number Subject to	M	0_	0	0	0	1	0	0	1
Americans with Disabilities Act	F	. 0_	0	0	0	0	0	0	0
Foreign Nationals	M	0	_0	0	0	1	0	0_	1
(individuals who are not U.S. Citizens or who are not Resident Aliens)	F	0_	0	0_	0	0	0	0_	0

¹Academic Year (September !—August 31).

²For those individuals who are categorized as multi-ethnic, be sure to only include them in this category and not in other ethnicity categories.

Table 2 Student Professional Activities

Please complete the entire table. Zero values should be coded with a "0". Use a dash or "n/a" to indicate missing or non-relevant data.

Please identify the number of students enrolled in the program during 1999-2000 (including those on internship) by academic year of entry, who are:

	Academic Year of Entry							
	1999- 2000	1998- 99	1997- . 98	1996- 97	1995- 96	1994- 95	1993- 94 & earlier	Row Total
Members of professional/research societies (including student affiliates)	1	0	1	1	2	2	5	12
Authors/co-authors of papers or workshops at professional meetings ²	2	2	2	3	3	4	4	20
Authors/co-authors of articles in professional and/or scientific journals ²	2	. 1	1	3	3	. 4	3	17
Involved in grant-supported research (e.g. RA's)	1	1	2	3	1	1	4	11
Involved in teaching (on ongoing basis; e.g. TA's)	1	0	1	0	3	4	1	10
Involved part-time in delivery of professional services on or off campus (including extemship & practicum placements, excluding internship)	0	0	0	0	0	1	0	1

¹Academic Year (September 1—August 31).

Work published (or in press)/presented during 1999-2000 academic year only. Books may be included.

Table 3 Faculty Demographic Information

Please complete the entire table. Zero values should be coded with a "0". Use a dash or "n/a" to indicate missing or non-relevant data.

For the 1999-2000 academic year, please identify the number of faculty who are:

·		Core Program Faculty ¹	Other Program Faculty ²	Other Contributors ³	Row Total
African American/Black	M	0	. 0	00	0
	F	0	0	0	. 0
Caucasian	M	4	. 0	4	8
Caucasian	F	4	1	2	7
Hispanic/Latino	M ,	2	1	1	4
IIIspanie Matino	F	0	0	0	0
Asian/Pacific Islander	M	0	0	0	0
ASIGNA GELIA ASIANGO	F	0	· 0	0	0
American Indian/Alaska Native	M	.0	0	0 .	0
Filler I tell and and and and a tell of	F	0	0	0	0
Multi-ethnic ⁴	M	0	0	0	0
(individuals identifying with more than 1 of the above categories)	F	0	0	. 0	0
Total Number of Faculty	M	6	1	6	13
Total Indinoct of Enciry	F	4	0	1	.2

Total Number Subject to Americans	M	0	0	0	0
with Disabilities Act	F.	0	0	0	0 ·
Foreign Nationals	M	0	0	0	0
(individuals who are not U.S. Citizens or who are not Resident Aliens)	F	1	0	0	1

¹Faculty who are committed for approximately 50% or more of their time to the program.

²Faculty other than those identified as the program's "core" faculty, but who have responsibilities within the program for teaching, advising, etc. This would include other faculty within the department and university that teach program courses.

Individuals that have a role in the program but to a more limited extent. This would include people who present seminars, provide practicum supervision, and teach as adjunct faculty.

For those individuals who are categorized as multi-ethnic, be sure to only include them in this category and not in other ethnicity categories.

Table 4
Faculty Professional Activities

Please complete the entire table. Zero values should be coded with a "0". Use a dash or "n/a" to indicate missing or non-relevant data.

For the 1999-2000 academic year, please identify the number of faculty who are:

	Core Program Faculty ¹	Other Program Faculty ²	Other Contributors ³
Members of Professional/Research Societies	10(100%)	2(100%)	5(83%)
Authors/co-authors of papers at professional meetings ⁴	10(100%)	2(100%)	. 2(30%)
Authors/co-authors of articles in professional and/or scientific journals ⁴	9 (90%)	1(50%)	2(30%)
Recipients of grants or contracts	2(20%)	1 (50%)	. 0
Involved in undergraduate teaching	8(80%)	2(100%)	2(30%)
Involved in masters teaching	10(100%)	1(50%)	2(30%)
Involved in doctoral teaching	10(100%)	1 (50%)	2(30%)
Involved in research supervision	10(100%)	1 (50%)	6(100%)
Involved in professional service supervision (including practicum)	10(100%)	2 (100%)	6(100%)
Engaged in delivery of professional services	3 (30%)	0	6 (100%)

Faculty who are committed for approximately 50% or more of their time to the program.

²Faculty other than those identified as the program's "core" faculty, but who have responsibilities within the program for teaching, advising, etc. This would include other faculty within the department and university that teach program courses.

Individuals that have a role in the program but to a more limited extent. This would include people who present seminars, provide practicum supervision, and teach as adjunct faculty.

Work published (in press)/presented during 1999-2000 academic year only (September 1-August 31). Books may be included.

Table 5
Students Admitted to the Doctoral Program

Please provide the following information for ALL students admitted to the program for academic year 1999-2000. DO NOT PROVIDE STUDENT NAME; instead, please number students by year of admission (i.e., 99.001, 99.002, 99.003, etc.).

Identification	Undergraduate Institution	Year of Undergraduate stitution Undergraduate GPA		. Other Admissions Data				Graduate Semester- Hour Equivalent	Part- or Full-time
Number	•	Degree	(4 pt. Scale)	GRE Verbal	GRE Quant	GRE Analytic	. GRE Advanced Psych Test	Credits Transferred (if applicable)	Status
99-006	UNM .	1999	3562	710	560	570			
99-008	Emory University	1998	3.301	570	650	580	600	ļ.	
99-010	UNM	1995	3.68	630	760 -#	660	· 690		
				·					
			•						!
					<u> </u>	<u> </u>			
			•	<u> </u>					
•									

Table 6

Students Who Dropped Out of the Program

Please provide the following information for ALL students who dropped out of the program during academic year 1998-99. DO NOT PROVIDE STUDENT NAME; instead, please number students by year of admission (i.e., 89.001, 92.001, 92.002, etc.).

Identification Number	Date Left Program	. Reason for Leaving
98.001	6/2000	Family move
	·	
	<u> </u>	
	`	
		- A)
······································	<u> </u>	

Table 7

Students Graduated from the Program

Please provide the following information for ALL students who graduated from the program during the 1998-99 academic year. If you do not have information on a particular graduate, please place "unknown" in the appropriate space. DO NOT PROVIDE STUDENT NAME; instead, please number students by year of entry (i.e., 89.001, 89.002, 89.003, etc.). If employment is in a postdoctoral residency, leave "employment setting" blank and indicate corresponding code under "postdoctoral setting." Please use the codes provided in the appendix following this table for internship setting (column 1), postdoctoral/employment setting (column 2), and postdoctoral/employment activity (column 3). Feel free to duplicate this page to list all students who graduated from the program.

Identification Number	Internship Setting Code	Postdoctoral Setting Code(s) ^t	Postdoctoral Title/Activity Code(s) ¹	Employment Setting Code	Employment Title/Activity Code(s) ¹
94.001	3	3	2, 3, 4, 5, 6		
				**	
·					
	•				
			•		
	·				
	•				<u> </u>

¹If applicable, please provide multiple codes.

Appendix Codes for Internship Setting, Employment Setting, and Activity

Column 1—Internship Setting Codes	Column 2—Employment/Postdoctoral Setting Codes	Column 3—Activity Codes
1. Community Mental Health Center	1. Community Mental Health Center	1. Administration
2. Health Maintenance Organization	2. Health Maintenance Organization	2. Assessment
3. Medical Center	3. Medical Center	3. Consultation
4. Military Medical Center	4. Military Medical Center	4. Psychotherapy
5. Private General Hospital	5. Private General Hospital	5. Research
6. General Hospital	6. General Hospital	6. Supervision
7. Veterans Affairs Medical Center	7. Veterans Affairs Medical Center	7. Teaching
8. Private Psychiatric Hospital	8. Private Psychiatric Hospital	33. Other (e.g., community-based intervention)—please specify
9. State/County Hospital	9. State/County Hospital	•
10. Correctional Facility	10. Correctional Facility	
11. School District/System	11. School District/System	
12. University Counseling Center	12. University Counseling Center	
13. Medical School	13. Academic Teaching Position	
14. Consortium	13a. doctoral program	
33. Other (e.g., consulting)—please specify	13b. masters program -	
	13c. 4-year college	
	13d. community/2 yr. College	· · · · · · · · · · · · · · · · · · ·
	13e. adjunct professor	
	14. Independent Practice ·	
	15. Academic Non-Teaching Position	
·	16. Medical School	
	33. Other (e.g., consulting)—please specify	
	44. Student	
·	99. Not Currently Employed	

APPENDIX J

THE FACULTY DEPARTMENT OF PSYCHOLOGY UNIVERSITY OF NEW MEXICO AY 1999 - 2000

AMRHEIN, PAUL C.

Associate Professor. Ph.D. University of Wisconsin-Madison, 1987. Cognitive psychology: psycholinguistics; picture-word processing; aging, cognition and motor control. Current language research concerns the representation and function of pragmatic, semantic and syntactic information in discourse. Ongoing picture-word processing research concerns the development of 'hybrid' models that account for cognitive processes involved in episodic and semantic memory-production tasks (i.e., drawing, writing, speaking) in monolinguals and bilinguals. Current aging research concerns age- and dementia-based changes in cognitive processes that pertain to the preparation and execution of movements, and picture-word processing.

CIESIELSKI, KRISTINA T.

Associate Professor. Ph.D. Polish Science Academy (Nencki Institute of Experimental Biology), 1978.

Cognitive and clinical neuropsychology; brain event-related potentials; MRI and brain morphometry; development of normal and disordered human brain. Experimental approach is based on information-processing models and neuropsychological models of cognition, and integrates neurobehavioral, electrophysiological, neuroimaging and modeling techniques. A major goal is to describe the normal and pathological development of the frontal-cerebellar subsystem in humans with a particular focus on changes in mechanisms of selective inhibition.

COFER, LYNETTE FRIEDRICH

Professor. Ph.D. Cornell University, 1965.

Developmental psychology, human circadian rhythmicity as a mediator of personality development and cognitive performance, social development and gender differences, mediation of television effects, analyses of theoretical and empirical approaches to applied developmental research and family public policy. Current research includes analyses of Swedish longitudinal data base and new data collection in Sweden on individual differences in circadian rhythmicity and personality development and school performance.

DELANEY, HAROLD D.

Professor and Associate Chair for Undergraduate Education. Ph.D. University of North Carolina, 1975.

Methodology, quantitative. Current research is in statistical methods, particularly those that are useful in investigations involving individual difference variables. Issues in experimental design and philosophy of science are also of interest. Interests in substantive areas include the psychology of religion, and individual differences in values and in cognition.

DOUGHER, MICHAEL J.

Professor and Department Chair. Ph.D. University of Illinois at Chicago, 1980. Experimental and clinical behavior analysis. Primary research focuses on the experimental analysis of complex human behavior including stimulus equivalence and rule-governed behavior. Other interests include contextualistic methods of psychotherapy and psychotherapy research, and integrative psychotherapies.

EGLY, ROBERT

Assistant Professor. Ph.D. Arizona State University, 1990.

Cognitive neuroscience. My research focus is on understanding the cognitive processes and neural systems of visual attention and perception. A major component of my research program is the use of neurological patients (e.g., stroke, tumor, trauma) to identify the brain structures that control attending and perceiving in normal cognition, and to examine how various neuropathologies affect attending and perceiving.

ERICKSON, SARAH

Assistant Professor. Ph.D. Stanford University, 1994.

Clinical child psychology. Primary research interests are located within pediatric psychology and focus on children's adaptation to chronic illness; development and evaluation of clinical interventions for children and adolescents with families; adolescent coping; adolescent coping as it pertains to health outcomes; and eating disorder development and prevention interventions. Other interests include AIDS caregiving and bereavement; validity issues related to self-report methods; development and evaluation of adolescent substance abuse interventions; and childhood obesity prevention and intervention.

FEENEY, DENNIS M.

Professor (and Professor of Physiology). Ph.D. University of California, Los Angeles, 1968.

Behavioral neuroscience, brain injury, recovery of function and epilepsy. In my laboratory we are conducting interdisciplinary studies of experimental brain injury in animals using a variety of methods, including electrophysiology, liquid chromatography, pharmacology, histological and behavioral measurements. Our goal is to understand and enhance behavioral recovery after brain damage in humans, and determine what commonly prescribed drugs may slow behavioral recovery.

GANGESTAD, STEVEN W.

Professor. Ph.D. University of Minnesota, 1986.

Evolutionary psychology; social/personality psychology. General interests concern the ways in which humans' current psychological design is a product of evolutionary selection. Current research generally concerns this issue in regard to phenomena that occur within close relationships such as sexual relationships, friendships, and familial relationships. Other research concerns the developmental expressions of adaptations. Additional interests include individual differences, behavior genetics, psychometric theory, and philosophy of science.

GOLDSMITH, TIMOTHY E.

Assistant Professor and Associate Chair for Graduate Education. Ph.D. New Mexico State University, 1984.

Applied cognitive psychology, human factors, and statistics. My present research is focused on developing and validating methods for assessing and representing knowledge and skill. Under a grant from the FAA, I am currently attempting to improve the training and assessment of commercial airline pilots. Other research interests of mine include: psychological scaling, similarity, computer modeling, and human decision making.

GLUCK, JOHN P.

Professor. Ph.D. University of Wisconsin, 1971.

Clinical psychology, general experimental psychology. Interests include value changes during psychotherapy and the effects of early experience on development. In addition, I am very interested in the general area of bioethics, particularly professional clinical conduct and the ethics of human and animal research.

HANDMAKER, NANCY

Visiting Assistant Professor. Ph.D. University of New Mexico, 1993. Clinical psychology: specializing in addictions treatment, dual disorders, brief interventions as consultation/liaison in primary health care settings, alcohol and drug treatment in primary health care, cognitive-behavioral therapy. Research interests include treatment approaches for mentally ill substance abusers, brief interventions in primary health care, the efficacy of preventive interventions in prenatal health care of alcohol-related neurodevelopmental disorders, theimpact of prenatal alcohol exposure on the developing brain and associated functional deficits.

HARRIS, RICHARD

Professor. Ph.D. Stanford University, 1968.

Experimental social psychology, game theory, equity theory. Primarily interested in relatively formal (mathematical and computer simulation) models of social psychological phenomena, with emphasis so far on post-decision dissonance reduction, experimental games, and equity theory. A secondary interest is in the development of multivariate statistical techniques.

HODGE, GORDON K.

Presidential Teaching Fellow, Associate Professor, and Associate Chair for Undergraduate Education. Ph.D. University of California, Los Angeles, 1977. Psychopharmacology, behavioral neuroscience, and teaching technologies. Current research is directed toward developing multimedia technologies for teaching in general and for the teaching of psychology in particular. This includes development and authoring of CD-ROM disks for use by both faculty in the classroom and students studying independently, as well as publishing on the World Wide Web.

MC DANIEL, MARK A.

Professor. Ph.D. University of Colorado, 1980.

Cognitive. Major research interests center on how encoding and retrieval processes influence learning and memory. Current projects are focused on 1) text processing and memory; 2) recall processes; 3) investigating prospective memory processes in younger and older adults and neuropsychological underpinnings; 4) understanding how people learn functional relations between stimulus and response variables; and 5) investigating causal concept learning in multivariate environments.

MILLER, WILLIAM R.

Regents Professor (and Professor of Psychiatry) and UNM Center on Alcoholism, Substance Abuse, and Addictions. Ph.D. University of Oregon, 1976. Treatment, prevention, and assessment of addictive behaviors; program evaluation research; cognitive-behavior therapies; motivation and self-regulation; psychology and spirituality.

PADILLA, ELIGIO R.

Associate Professor (and Associate Professor of Psychiatry). Ph.D. University of Washington, 1974.

Clinical, cross-cultural and community. Current work focuses on higher educational policy and practice and the validity of traditional instruments for the assessment of intelligence among minority populations.

ROLL, SAMUEL

Professor (and Professor of Psychiatry). Ph.D., ABPP, ABFP. Pennsylvania State University, 1968.

Clinical psychology, developmental psychology, forensic psychology. Using a psychoanalytic framework as a base, I am exploring cultural influences on the development of personality and cognition. This involves work in the area of dreams, early memories, cognitive assessment, personality assessment and psychotherapy. My research involves Anglo, Chicano, American Indian and South American subjects.

SMITH, JANE E.

Associate Professor. Ph.D. State University of New York at Binghamton, 1985. Clinical psychology. Research interests: psychophysiological assessment, assessment and treatment of eating disorders (bulimia, obesity and anorexia), alcoholic homeless individuals, dual diagnosis (substance abuse and chronic mental illness) and implosive (flooding) therapy.

STANSBURY, KATHY

Assistant Professor. Ph.D. University of California, Los Angeles, 1990. Developmental psychology and behavioral neuroscience; emotional and neurohormonal development. My work focuses on developmental competencies, and individual differences in social, emotional, and neurohormonal domains in preschool age children. More specifically, how do children learn to regulate their emotional states and what impact does this process have on later developing skills? In creating and testing a model of these developmental processes, I have made use of several different paradigms, such as children's entry into new peer and social situations, and commonly occurring frustration situations, and studied a variety of systems that may be contributing to this development, including caregiver relationships, temperamental differences, psychophysiological factors (primarily hypothalamic-pituitary-adrenocortical hormones), behavioral-risk contexts, and differences in linguistic skills. I am also interested in prenatal influences on brain development and later behavior, depression and neurohormones in mothers and children, and developmental psychoneuroimmunology, as well as in basic theoretical questions in the area of emotion in humans.

SUTHERLAND, ROBERT J.

Professor of Psychology and Neuroscience. Ph.D. Dalhousie University, 1980. Cognitive and behavioral neuroscience, neuropsychology, learning and memory. Primarily interested in exploring the anatomical and functional organization of memory and related cognitive processes. The research includes combinations of behavioral analyses, electrophysiological recording, neurotoxins, and neuropharmacological techniques. Other goals are to understand in detail the function of the hippocampal formation, the nature of amnesic symptoms in Alzheimer's disease, Korsakoff's syndrome, epilepsy, cerebral trauma, and other disorders. We also explore factors related to cognitive recovery after brain damage.

TANG, AKAYSHA C.

Assistant Professor. Ph.D. Harvard University, 1995.

Cognitive neuroscience, behavioral neuroscience, computational neuroscience. My research focuses on the role of neuromodulation in cognitive functions, specifically, learning and memory, and neural coding. A combination of behavioral, eletrophysiological, and computational methods is used to study the effect of neuromodulators/neurotransmitters, such as Ach and GABA, at the cellular, network, and behavioral levels. Examples of specific research questions on learning and memory include: how are learning and memory affected in rats treated with the GABAb agonist baclofen (behavioral study)? How are synaptic transmission and neuronal excitability affected by the same treatment (brain slice electrophysiology)? How can the cellular effects be related to the effects on learning and memory (computational models)?

VILLANUEVA, MIGUEL

Visiting Research Assistant Professor. Ph.D. Pacific Graduate School of Psychology, 1997. Captain, U. S. Army Medical Service Corps.

Clinical Psychology: Traumatic stress reactions and program development in minority and rural communities. Ongoing research activities include both civilian and military-related tracks. Currently developing a theoretical understanding of PTSD in Native American veterans and the impact of traumatic stress related disorders (PTSD, substance use) on Native families, as well as developing clinical interventions which integrate traditional medicine with western, manualized treatment protocols. Research on military related issues include domestic violence, combat stress reaction, and officer and enlisted personnel retention issues.

WALDRON, HOLLY B.

Associate Professor. Ph.D. University of Utah, 1987.

Clinical psychology. Research interests focus on family interaction theories of psychopathology, family therapy process and outcome, and developing and evaluating effective assessment and treatment strategies for adolescent substance abuse and related behavior problems. Current research projects include evaluating cognitive-behavioral and family-based interventions for disturbed adolescents and examining family communication behaviors and cross-cultural variations in families of disturbed and nondisturbed adolescents.

YEO, RONALD A.

Professor and Director of Clinical Training. Ph.D. University of Texas, Austin, 1983.

Clinical and experimental neuropsychology. Research interests include individual differences in brain organization, neuroimaging, cerebral lateralization, genetic and environmental factors influencing brain development, and the neuropsychological bases of neurodevelopmental disorders.

APPENDIX K

PERSONS HOLDING PROFESSIONAL TITLES IN PSYCHOLOGY 1999 - 2000

Name and Address	Phone	Professional Title
Janet Brody, Ph.D. Center for Adolescent and Family Research 2350 Alamo SE, Bldg. 2 Albuquerque, NM 87106	842-8932	Research Assistant Professor
Phillip W. Day, D.V. M. Director, Animal Resource Facility University of New Mexico School of Medicine Basic Medical Science Building, G32 Albuquerque, NM 87131	277-3936	Assistant Professor (PT)
Charles H. Elliott 403 Dartmouth SE Albuquerque, NM 87106	843-2190	Clinical Associate
William E. Foote, Ph.D. 4308 Carlisle NE, Suite 208 Albuquerque, NM 87107-4849	255-9494	Clinical Assistant Professor
Nancy Handmaker, Ph.D. Department of Psychology University of New Mexico Albuquerque, NM 87131	277-8947	Visiting Assistant Professor
Mary Harris, Ph.D. Education Foundations University of New Mexico Albuquerque, NM 87131	277-2925	Professor (Secondary appointment)
Reid Hester, Ph.D. 4300 San Mateo NE Albuquerque, NM 87110	884-3002	Clinical Associate
Frances Koenig, Ph.D. 121 Wellesley SE Albuquerque, NM 87106	242-0439	Clinical Associate

APPENDIX K (continued)

Name and Address	Phone	Professional Title
P. W. Kodituwakku, Ph.D. CASAA 2350 Alamo SE Albuquerque, NM 87106	768-0144	Research Assistant Faculty
Marcia Landau, Ph.D. 300 San Mateo Blvd. NE, Suite 805 Albuquerque, NM 87108	266-8488	Clinical Associate
Milton Lasoski, Ph.D. 1817 Morningside Drive NE Albuquerque, NM 87110	266-3070	Clinical Associate
George Luger, Ph.D. Department of Computer Science University of New Mexico Albuquerque, NM 87111	277-3204	Professor (Secondary appointment)
Charlene McIver, Ph.D. 4600-A Montgomery NE, 102 Albuquerque, NM 87109	265-8800	Clinical Associate
Robert Meyers Center for Adolescent and Family Research Center for Alcohol and Substance Abuse 2350 Alamo SE Albuquerque, NM 87106	842-8932	Research Associate
John Moulton, Ph.D. 924 Girard NE Albuquerque, NM 87106	255-0274 Pro	Research Associate ofessor
Theresa Moyers, Ph.D. Department of Psychology University of New Mexico Albuquerque, NM 87131	768-0268	Visiting Assistant Professor
John Owen, Ph.D. 4001 Indian School Road NE Albuquerque, NM 87110	260-7553	Clínical Associate

APPENDIX K (continued)

Name and Address	Phone	Professional Title
Natasha Slesnick, Ph.D. Center on Alcohol and Substance Abuse 2350 Alamo SE Albuquerque, NM 87106	768-0146	Research Assistant Professor
Edward W. Snyder, Ph.D. Psychology Service Veterans Administration Medical Center 2100 Ridgecrest Drive SE Albuquerque, NM 87108	265-1711 ext. 2270	Clinical Associate
Scott Tonigan, Ph.D. CASAA 2350 Alamo SE Albuquerque, NM 87106	768-0266	Research Assistant Professor
Miguel Villanueva, Ph.D. Department of Psychology University of New Mexico Albuquerque, NM 87131	277-4927	Visiting Assistant Professor
Albert V. Vogel, M.D. Department of Psychiatry University of New Mexico School of Medicine 2400 Tucker NE Albuquerque, NM 87131	277-4763	Associate Professor (Secondary appointment)
Carolina Yahne, Ph.D. CASAA 2350 Alamo SE Albuquerque, NM 87106	768-0158	Research Assistant Professor

APPENDIX L

DEPARTMENT OF PSYCHOLOGY COLLOQUIA AY 1999-2000

Colloquium Presented By

Richard Harris, Ph.D. Professor of Psychology University of New Mexico Albuquerque, New Mexico

Steve Gangestad, Ph.D. Professor of Psychology University of New Mexico Albuquerque, New Mexico

Mark McDaniel, Ph.D. Professor of Psychology University of New Mexico Albuquerque, New Mexico

Amanda Price Jackie Griego Department of Psychology University of New Mexico Albuquerque, New Mexico

Michael Thomas, M.S. Department of Psychology University of New Mexico Albuquerque. New Mexico

George Lugar, Ph.D. Professor of Computer Science University of New Mexico Albuquerque, New Mexico

Plyadasa Kodituwakku, Ph.D. Professor of Psychiatry Center for Alcohol and Substance Abuse Addictions Albuquerque, New Mexico

Colloquium Title

"Graduate-student research involvement: A 98-99 retrospective" September 10, 1999

[&]quot;Fluctuating asymmetry and mating attractiveness in a rural Dominican village" September 17, 1999

[&]quot;Holding intentions before execution: When age matters"
September 24, 1999

[&]quot;Implicit Learning: Two Perspectives"
October 1, 1999

[&]quot;Prenatal alcohol exposure and adult hippocampal function" October 8, 1999

[&]quot;Interdisciplinary research in Cognitive Science at UNM" and "Artificial Intelligence: Diagnostic skills of human experts" October 22, 1999

[&]quot;Is there a unique cognitive profile associated with Fetal Alcohol Syndrome?" October 29, 1999

Kathy Stansbury, Ph.D.
Assistant Professor of Psychology
University of New Mexico
Albuquerque, New Mexico

Tony Biglan, Ph.D. Professor of Psychology Oregon Research Institute Portland, Oregon

Ron Yeo, Ph.D.
Professor of Psychology
Bill Horan
Department of Psychology
University of New Mexico
Albuquerque, New Mexico

Akaysha C. Tang, Ph.D. Assistant Professor of Psychology University of New Mexico Albuquerque, New Mexico

Mark McDaniel, Ph.D. Professor of Psychology University of New Mexico Albuquerque, New Mexico

Scott Makeig, Ph.D.
Computational Neurobiology Laboratory
Salk Institute
Department of Neurosciences
University of California
San Diego, California

C. Stephen Evans, Ph.D.
Professor of Philosophy
Dean of Research and Scholarship
Calvin College
Grand Rapids, Michigan

"How stress and hormones could help you find your mom" November 5, 1999

"Preventing youth behavioral problems" November 11, 1999

"Neurodevelopmental perspectives on individual differences in intelligence" "Diagnostic differences in the temporal stability of social anhedonia: A longitudinal study of Schizophrenia and Major Depressive Disorder" November 12, 1999

"Enhancing cognitive development through early life experience (How to make rats smart?) November 19, 1999

"While you were partying, I was figuring out the word frequency effect"
December 3, 1999

"Blind source separation and functional electromagnetic brain imaging"
December 13, 1999

"Faith commitments and scientific psychology" January 28, 2000

J. Bruce Overmier, Ph.D. Professor of Psychology University of Minnesota Minneapolis, Minnesota

Melissa Guynn, M.A. Department of Psychology University of New Mexico Albuquerque, New Mexico

Rob Sutherland, Ph.D. Professor of Psychology University of New Mexico Albuquerque, New Mexico

Michael A. Zarate, Ph.D. Professor of Psychology University of Texas at El Paso El Paso, Texas

Joan Bybee, Ph.D.
Professor and Chair of Linguistics
University of New Mexico
Albuquerque, New Mexico

Claudia Tesche, Ph.D.
Department of Psychology
Helsinki University of Technology
Helsinki, Finland

Brett Clementz, Ph.D. Department of Psychology University of California at San Diego San Diego, California

David Pogge, Ph.D.
Department of Psychology
Albert Einstein College of Medicine
Four Winds Hospital
Bronx, New York

The Thirteenth Annual Quad-L Lecture
"Expectations: From the animal laboratory to the clinic"
January 28, 2000

"Association and other theoretical underpinnings of prospective memory" February 4, 2000

"A medley of hippocampus, learning, and memory" February 11, 2000

"A neurological approach to person perception" February 18, 2000

"Generative vs. functional theories in linguistics: The great past tense debate and other Linguistic wars" March 3, 2000

"Using MEG to study cognition in normal human subjects" March 9, 2000

"EEG and MEG studies of auditory evoked response suppression in schizophrenia" March 23, 2000

"An actuarial analysis of Rorschach variables in adolescent psychiatric patients" March 24, 2000

Janice Hoesing, Ph.D.
David Haley
Department of Psychology
University of New Mexico
Albuquerque, New Mexico

Kristina T. Ciesielski, Ph.D. Associate Professor of Psychology University of New Mexico Albuquerque, New Mexico

Derek Hamilton Department of Psychology University of New Mexico Albuquerque, New Mexico

Jane E. Smith, Ph.D.
Associate Professor of Psychology
University of New Mexico
Albuquerque, New Mexico

Jackie Griego
Department of Psychology
University of New Mexico
Albuquerque, New Mexico

Steven Maier, Ph.D.
Department of Psychology
University of Colorado
Boulder, Colorado

Tracy Simpson, Ph.D. Department of Psychology University of Washington Seattle, Washington

Scott Walters, M. A. Department of Psychology University of New Mexico Albuquerque, New Mexico "Does the mind have a sex?
"The example of spatial navigation"
March 31, 2000

"Inhibitory brain subsystems in children" April 7, 2000

"Spatial learning and memory systems in human and non-human animals"
April 13, 2000

"Body image treatment for compulsive and non-compulsive exercisers"

April 14, 2000

"Hardcore inductive/deductive theoretical cognitive psychology"
April 21, 2000

"Immune system regulation of the brain: Implications for understanding sickness, stress, and depressed mood" April 28, 2000

Benjamin Haught Memorial Lecture
"Functional roles of alcohol use among
women: Some not so surprising surprises"
April 28, 2000

Sigma Xi Research Lecture
"Alcohol on campus: What (if anything)
have we learned about prevention?"
May 4, 2000

John Cronly-Dillon, Ph.D. Professor of Visual Neurobiology University Manchester, UMIST Manchester, England

Susan Brownmiller, Ph.D.
Journalist and author
New York City, NY

"Hearing visual images: A study in cross-modality transfer" May 5, 2000

"The women's revolution and the campaign against rape" May 7, 2000

COLLOQUIA COSPONSORED BY CASAA AY 1999-2000

Colloquium Presented By

Richard M. Ryan, Ph.D. Professor of Psychology and Psychiatry University of Rochester Rochester, New York

Angelica K. Thevos, Ph.D., MSW
Department of Psychiatry and Behavioral Sciences
Medical University of South Carolina
Charleston, South Carolina

Alison Snow Jones, Ph.D. Center for Injury Research and Policy Johns Hopkins School of Public Health Baltimore, Maryland

Linda C. Sobell, Ph.D. Center for Psychology Studies Nova Southeastern University Fort Lauderdale, Florida

Kathleen M. Carroll, Ph.D. Substance Abuse Treatment Unit Yale University School of Medicine New Haven, Connecticut

Colloquium Title

"The role of autonomy in motivation and behavior change: A self-determination theory perspective" August 30, 1999

"Using motivational interviewing to encourage safe water behaviors in developing countries" October 11, 1999

"Is outcome affected by treatment duration? Evidence from the treatment of batterers" February 7, 2000

"The evolution of studies of natural recovery from substance abuse" February 28, 2000

"Psychotherapy and Pharmacotherapy for cocaine dependence: Do our treatments do what we think they do?"
April 17, 2000

Appendix L (continued)

Andrew Christensen, Ph.D. Department of Psychology University of California at Los Angeles Los Angeles, California "Gender, power, and marital conflict" May 1, 2000

%C

APPENDIX M

ANNUAL REPORT

DEPARTMENT OF PSYCHOLOGY CLINIC

AY 1999-2000

The Department of Psychology Clinic continues to be a valuable and challenging part of the Psychology Department's educational environment. On the one hand, it is a fully functioning outpatient mental health clinic, providing quality therapeutic and assessment services to the Albuquerque community. At the same time, it is a training facility where graduate students in clinical psychology receive practical experience in this area. The challenge is to keep both missions functioning at a high level of excellence; neither training nor services can be seen as secondary if the Clinic is to fulfill its function.

The nature of the challenge may be seen in the fact that the combined services provided at the Clinic would provide a reasonable workload for two or three full-time clinicians. Here, however, those services are provided by 28 student-clinicians at various stages of training and performing different functions. All of them must follow ethical and professional standards of practice of psychology. The reason this is possible is the academic preparation and clinical supervision provided by the Department's faculty, especially the clinical faculty. Each student-clinician, carrying a caseload of two or more cases, receives at least one hour of face-to-face supervision per week individually or in small groups. Because of bright and responsible graduate students, competent educational preparation, and dedicated faculty the Clinic is a place where its twofold mission can be carried out without contradiction.

SERVICES

Individual adult therapy remains the primary service of the Clinic, with a patient/client population that is varied in terms of age, ethnicity, employment status, education and presenting problems. Generally the severity of referral issues is from mild to moderate. There is a frequent misperception that we serve primarily a University population; in fact, our referrals come from other agencies and practitioners, the Court, and self-referrals providing a cross-section of the community. Because of a sliding fee scale (\$10 to \$60 per hour), we do have a selection factor toward low-income individuals, but even this is not universal. The Clinic has had increased involvement in family, child and couples therapy over the years along with our individual work.

The closing of outpatient therapy services by the New Mexico Hospital Mental Health Center in 1990 produced an apparently permanent waiting list of referrals, changing our intake procedures and, to some extent, affecting our services. This presents a challenge to our existing commitment to long-term therapy as a valuable service and training modality. Student-clinicians are encouraged to provide time-limited therapy after developing experience in an open-ended timeframe in preparation for their future work on internship and thereafter.

At the same time, we continue to see the value of long-term treatment where this is appropriate, both in terms of proper treatment and for excellence of training. Clinical faculty provide supervision options in behavioral, cognitive -behavioral, existential, psychodynamic, family systems, and humanistic approaches with neuroscience, cross-cultural and developmental influences. The tension among therapy models, rationales and methods to which students are exposed reflects an educational value of the department. Experiencing and reflecting on these diverse aspects of therapy and assessment will, we believe, prepare students for the difficult challenges now facing the profession of clinical psychology whether in academic or treatment settings. Quite properly, for our research-based discipline, issues of empirical support and measurement of outcomes are of ongoing concern at the Clinic.

This year ends the second full year of operation of our ADHD assessment program. As ADHD has been classified as a disability under the Americans with Disabilities Act and with more concern about this diagnosis, schools, businesses and individuals are turning to psychologists for better assessment. Clinic personnel Melissa Behrens-Blake, M.S., Angela Caswell-Kilman, and Dan Matthews, Ph.D. have collaborated with Sigifredo Saenz, M.S.W. of the UNM Counseling Assistance and Referral Service to develop and carry out a program which draws from previous experience at UNM with an adult population and on current research and theory. Our assessment team this year has also included Michael Villanueva, Ph.D., a visiting professor, and Stephen Poland, Ph.D. whose achievement as a school psychologist has been recognized by the American Board of Professional Psychology. This project is now funding one graduate assistantship at the Clinic, and we hope that it may provide paid work for others as it develops.

Dr. John Gluck has completed his assignment as Associate Chair for Clinical Training (Director of Clinical Training) as the fall semester begins. Dr. Gluck initiated twice monthly Clinic Rounds as a way for students to share their cases, questions and clinical issues and also to introduce psychologists from the community to present case material and enhance student education. These have been well received by student-clinicians, and will continue as part of the Clinic's program. Dr. Gluck's efforts and interests in (among other things) the areas of general clinical training, support for students including during the internship application process and in particular his influence in the areas of clinical and research ethics have greatly benefited the students and the program. We welcome and look forward to Dr. Ron Yeo's influence and efforts in the role of DCT. In particular, as neuroscience informs and enriches our understanding of all aspects of behavior, we anticipate a continued and increasing integration of this knowledge and understanding to clinical applications.

PERSONNEL

The staff of the Clinic includes Dan Matthews, Director (since fall 1988); Wanda Sharts, Office Manager (who moved from the Department in June 1991); Angela Caswell-Kilman, Graduate Assistant for the ADHD program; Melissa Behrens-Blake, our educational diagnostician; and Gloria Lucero, office staff on work-study.

1 .

Gloria Lucero joined our staff this year. She is studying sociology and criminology and hopes to go to graduate school in counseling. Her interests fit with some of her experiences at the Clinic and her presence on our staff has been mutually beneficial. She is a reliable and consciencious worker with a good ability to deal with our clients and Clinic business.

Angela Caswell-Killman is beginning her second year in our graduate assistant position on the ADHD assessment team. She performed the work at a high level of excellence and added her interest and knowledge in development and neuroscience to enrich our evaluations. We have ended up testing more children than we had expected, and Ms. Caswell-Killman's background and interest in children have suited her well for this work. She is notably a person to whom you should not ask a question if you don't want an answer--when issues arise in our team meetings she is likely to have abstracts and articles on our desks the next day or the following meeting. We enjoy learning with her and from her.

The 1997 addition to our staff of Melissa Behrens-Blake has proved mutually beneficial. Ms. Blake is an educational diagnostician specializing in the assessment of adult learning disabilities and the educational portion of ADD/ADHD evaluations. She What began as an administrative arrangement to share space has become a valued working relationship with compatible aims. Ms. Behrens-Blake has knowledge and skills that complement and enhance the services and training we have traditionally provided. She has a strong interest in the neurological bases of the conditions she assesses and has provided consultation for our students and with our clients. The community's need for an ADHD assessment program (see above) was brought to our attention by Ms. Blake, and she has been one of three prime movers in its development.

Wanda Sharts reorganization of the Clinic continues to provide a steady foundation for our work here. She has provided not only an increase in the efficient operation of the Clinic, but also a calm and quieting presence that facilitates all our efforts in a sometimes stressful work environment. Her duties are numerous and varied, and she carries out each with productively and graciously.

I (Dan Matthews) am close to completing my twelfth year as Clinic Director. I remain active in New Mexico Psychological Association, serving this year as legislative co-chair and working with the Task Force on the Professional Psychologist Act and the Diversity and Social Responsibilities Council. Those roles have kept me involved with the changing status of psychology under movement to managed health care and with legislative and regulatory issues affecting our profession. My knowledge of the academic and pratice environments our students will be moving into is enhance by this involvement and I am able to influence the practice environment in New Mexico. I continue to enjoy the Case Formulation practicum for first year students, Pre-Clinical Practicum for second year students, and group as well as individual supervision of student-clinicians. I also taught the Practicum in Psychological Assessment for the second time, which was a challenge and enriching experience. My own clinical work is entirely through the Clinic, where I provide therapy, assessment and consultation services. I am working closely with the ADHD team and refreshing my knowledge of theory, research and assessment in that area.

This is the time each year that we experience the loss of our "senior staff" - those who graduate or go on internship. This year, a large group have terminated or transferred their Clinic work and left for internship: Rex Jung, Bill Horan, Erica Miller, Rich Ogle, Lorraine Torres, Kamilla Venner, Denise Walker, Vern Westphal. Their work in the Clinic, their support for other students and the regular contacts in conversation and supervision are already sorely missed. UNM students continue to do very well in obtaining their chosen sites for internship placements in spite of a dwindling availability of such placements.

Finally, the quality of our services depends critically on the efforts of our clinical faculty and adjunct faculty who supervise therapy and assessment cases and support the knowledge, professional development and personal growth of the student therapists. These individuals deserve special thanks (they are listed elsewhere in this report, and need not be individually named here).

PHYSICAL SETTING

Located at 1716 Las Lomas NE in a converted residence, the present building has offices for our three full-time staff, five therapy rooms, a waiting area and a student work space. Three therapy rooms are equipped for videotaping and live supervision is possible through remote video. A large converted garage is available for future use as classroom/ research/group-therapy space, and has received some use for research and training. Clinic funds allowed the purchase of new furniture throughout the building and the remodeling of the building for our use, though minimal, made it into livable and workable space. Like our previous location, the homelike setting presents an inviting and comfortable environment for our clients and our work.

The building is also a work-in-progress. It lacks the observation room of our previous building and videotape equipment is currently awkwardly placed within two of the rooms rather than in remote locations. One therapy room is quite small (necessitated by the remodeling of the building) and would be improved with a borrowed light window and translucent glass door. We have only recently been given a firm commitment by the University that we will stay in this location, and remodeling is depending on need and finances.

RESEARCH

Almost continuously over the past seven years, students and faculty are using the Clinic facilities for their research. This year, Rich Ogle ran about 80 research participants for his dissertation at the Clinic, primarily because of his need for place where research participants can be comfortable for sometimes extended periods of time. Colleen Colbert, a doctoral student in education and David Weer of our department are working on a learning disabilities study with the data collected by Melissa Behrens-Blake in her educational diagnostic work. We anticipate similar data collection and summary for our own purposes and possible publication to begin for the ADHD project this coming year. We welcome two undergraduate students from Dr. Jane Smith's Clinical Research class to these projects and look forward to their assistance and involvement in the Clinic research efforts.

AGORA

As this is written, arrangements are being finalized for Agora, a student-run crisis service, to move into our infrequently used converted garage. They will be administratively under the Clinic, but have their own program and administrative structure. We look forward to interacting with the staff and volunteers of Agora, sharing space with them, and finding ways in which we may support and enhance their efforts.

SUMMARY

The Department of Psychology Clinic continues to be a pleasant and supportive environment for providing psychological services to the Albuquerque community. Each year, some of our services remain the same and we take on new projects while completing others. The Clinic is a congenial setting to develop the experience and skill of being a therapist and psychological evaluator. Through the efforts of faculty, student-clinicians, supervisors and staff, an atmosphere is maintained that is supportive of this sometimes stressful work. It is a good place to work, learn and grow--for student-clinicians, faculty and staff.

Prepared by

Dan Matthews, Ph.D. Clinic Director and his assistant Wanda Sharts ١.

APPENDIX N

SUPPORT STAFF DEPARTMENT OF PSYCHOLOGY AY 1999 - 2000

ADMINISTRATIVE SUPPORT STAFF

Department Administrator: Candace Blashak

Assists the Department Chair; administers all personnel and budgetary decisions necessary to execute University policies and procedures set by the Department Chair and faculty; oversees all budgetary activities in the Department; hiring and supervision of all staff; assists in hiring students, and technical personnel; coordinates with various University administrators on a variety of complex matters, including faculty contracts, student financial aid, staff compensation, and other matters; drafts policies, procedures, correspondence for the Chair; takes minutes at faculty meetings. Office management, preparation of a variety of administrative and instructional documents, faculty recruitment, tenure and promotion files, coordination of the department convocation activities, departmental receptions, and other special events. Bookholder and Paymaster.

Supervisor, Administrative Support: Stan Bennett

Maintains records of fiscal and budgetary controls, ledgers, and other transactions for the Department. Processes routine financial documents and accounting transactions. Reconciles accounting records and analyzes routing accounting data. Serves as department bookholder. Assists in the development and coordinates the maintenance of area budgets. Processes part-time and full-time faculty contracts, GA and TA contracts. Building key coordinator. Responsible for the monthly tagging of department inventory and maintains inventory control.

. . .

Appendix N (continued)

Academic Advisor: Beth Isbell

Serves as department's graduate admissions coordinator; primary liaison with public and prospective graduate and undergraduate students; responsible for administering student degree checks, counsels and advises graduate and undergraduate students in Psychology program regarding policies, requirements, academic standing, and related matters; maintains all graduate student files and records; coordinates comprehensive examinations and thesis and dissertation defenses; interfaces with Graduate Studies Office in policy areas; coordinates with Scheduling Office, Continuing Education Office, regarding department class schedules; assists top administration with hiring part-time faculty; is official liaison between department and visiting faculty; coordinates with Graduate Studies Office, College of Arts and Sciences, Curriculum Change Committee, and Office of Scheduling regarding revisions for University catalogs; prepares reports for outside agencies such as the American Psychological Association as requested. Performs other duties as requested by the department chair or department administrator.

Editorial Tech: Nancy Chavez

Edits and word processes complex manuscripts and grant proposals; provides word processing for department faculty prepares department annual report; writes and edits department quarterly newsletter; prepares information for "Faculty Publications and Creative Works"; serves as department representative for the United Way drive; is a bookholder with back-up duties for department administrator, academic advisor, and administrative assistant and is a paymaster.

Administrative Assistant: Louis Carrillo

Represents the department as first point of public contact; directs telephone calls and foot traffic as appropriate; has responsibility for maintaining supplies inventory, security of classroom equipment inventory, and maintenance of office copier; backup for Academic Advisor, back-up for Editorial Assistant for typing of syllabi, exams and correspondence; maintains department classroom schedule, and supervises two student employees, first contact for building keys.

RESEARCH SUPPORT STAFF

Research Engineer: Patrick Sharp

Supports faculty, staff and graduate students with computer needs; responsible for electronic design, fabrication, troubleshooting, installation, computer upgrades, consulting, repair, and preventive maintenance for a vast assortment of electronic equipment; fabricates wood and metal products using a variety of equipment; responsible for annual department equipment inventory; advises Chair and department faculty regarding purchase, installation and maintenance of electronic equipment.

Appendix N (continued)

Supervisor Animal Husbandry: Ector Estrada

Supervises the daily operations of the Psychology Department's animal colony, including animal husbandry and environmental control; functional supervisory responsibility for the other Animal Technician IV and two student employees; works with department's veterinarian in treatment of laboratory animals and in monitoring compliance with the Animal Welfare Act; works under general supervision of Department Chair, Veterinarian, and Chair of Animal Care and Use Committee.

Senior Laboratory Animal Technician: Gilbert Borunda

Under limited supervision, maintains and breeds laboratory animals and functions as a section leader of student assistants; primarily responsible for daily care and preparation for surgery of laboratory animals; assists department veterinarian in all animal treatment; back-up for senior Laboratory Animal Technician IV.

Animal Research Coordinator: DeLaine King

Coordinates and supports all operational facets of a laboratory animal research facility, ensuring optimum usage of facilities and equipment, in compliance with all federal and state regulations pertaining to the conduct of animal research. Carries out specified research/experimental protocol and procedures as appropriate, and trains, guides, and oversees the activities of students engaged in animal research.

Veterinarian: Linda Contos, DVM

Provides preventive, acute and on-call medical treatment to a variety of departmental laboratory animals; provides professional management of animal research facility and monitors compliance with the Animal Welfare Act; provides relevant instruction to faculty, graduate and undergraduate students concerning care and treatment of laboratory animals; reports to Department Chair and Chair of Animal Use and Care Committee.

PSYCHOLOGY CLINIC SUPPORT STAFF

Clinic Director: Daniel Matthews, Ph.D.

Has overall administrative and fiscal responsibility for the Clinic and executes Clinic policies as set by the Department faculty; reports to the Department Chair through the Associate Chair for Clinical Training. Duties include triage of referrals to the Clinic, supervision of doctoral students, report writing, community relations and some direct clinical services, including assessment.

Administrative Assistant: Wanda Sharts

Works under general supervision and in support of Psychology Clinic Director, Psychology Department Chair, and Department Administrator. Assists in the formulation of Clinic policies and procedures; performs a wide variety of duties in the areas of budget, personnel, payroll, and related matters, and performs administrative work at the paraprofessional level; supervises student employee.

Certified Educational Diagnostician: Melissa Behrens-Blake

Participates in research projects conducted through the Department of Psychology as related to general disorders of neurological processing (including but not limited to dyslexia, learning disabilities, traumatic brain injury, schizophrenia and stroke/aphasia). Responsibilities include conducting extensive educational diagnostic evaluations as directly related to the specific requirements of the research project. Also serves as certified educational diagnostician in the department's Psychology Clinic with diagnostic evaluations to be integrated into the client's overall treatment program.

872

1,1

Department of Sociology

July 1, 1999 - June 30, 2000

Richard Coughlin, Chair

I am pleased to submit this report covering the fourth and final year of my second term as department chair. The 1999/00 academic year witnessed several important developments with respect to our faculty and students.

A. Significant Achievements

Among the achievements and accomplishments of the Sociology Department in 1999/00, there are several of which we are especially proud.

The Sociology Convocation was held in the Student Union Ballroom on Saturday, May 13th at 3:30 p.m. A total of 67 undergraduates received Bachelor of Arts degrees from the Department of Sociology with the following substantive breakdown: 30 Sociology majors; 37 Criminology majors. An estimated 850 persons were in attendance including family and friends. This year, the Department heard presentations from three Sociology graduating seniors, Robert Borbely, Brendan McDonald, and Tiffany Nelson. Jodi Chapman was awarded the McGee award for an essay by a Sociology student. The Department also awarded honors to two Sociology Honors students; Jodi Chapman (summa cum laude) and H. Jill Davis (cum laude). In addition, the Department recognized the accomplishments of graduating seniors with grade point averages above 3.50: Tamara Bertell, Robert Borbely, Jodi Chapman, Bridget Conlon, Emily Finnan, Heidi Greco, Laurie Lister, Sara Mongomery, Tiffany Nelson, Victor Rivera, and Karen Thalhammer. Emily Finnan was featured on the UNM homepage for June 26, 2000 as being selected to serve in Americorps in San Diego. She was a Clauve Outstanding Senior and served as an Alumni Trailblazer. Master of Arts degrees were awarded to Deanna Archuletta-Loeser, Jerry Daday, Sylvanna Falcón, Gwen Hunnicutt, Denise Hunter-Gilbert, Juanita Spitler, Lora Stone, and Gloria Vaguera. A Ph.D. degree was awarded to Andrea Hoplight Tapia.

Dr. Felipe Gonzales was featured in the Winter 1999 edition of UNM's "Inside Arts & Sciences" newsletter. The article on Dr. Gonzales discussed his participation in special initiative designed to promote the professional development middle and high school teachers in New Mexico titled "Albuquerque Teachers' Institute." He led a seminar on the "Political Culture of New Mexico." In order to prepare for the seminar, Dr. Gonzales attended two national conferences at Yale University.

Research professor and former faculty member Gary LaFree was featured in the October 27, 1999 UNM News Minute #9, named one of six U.S. criminologists invited to address governors from Italian cities on rising crime rates in Italy.

Professor Beverly Burris co-presented a colloquium with Dean Michael Fischer titled, "The Privatization of the Public University and the Decline of the Professoriat" on April 19th, 2000 as part of the Cultural Studies Colloquia Series.

Dr. Phil May was profiled in the UNM Campus News on August 2, 1999. The article discussed Dr. May's nine-year tenure as Director of the Center for Alcoholism Substance Abuse and Addictions (CASAA).

Professor George Huaco was profiled in the UNM Campus News on April 24, 2000. The article discussed Dr. Huaco's views on inheritance laws, family size limits, and his new book titled, "Marx and Sociobiology."

The Department of Sociology held its annual faculty retreat on September 24, 1999. The retreat focused on planning for the next three to five years.

B. List of Faculty Publications, Research, Committee Participation

Dodd H. Bogart

Committee Participation

Member, Undergraduate Committee

Research and Creative Work

Presented paper titled "Grade Bias in Student Evaluation of Instruction: A Critical Review" at the Southwestern Social Science Association in Galveston, Texas, March 15-18, 2000.

Presented paper titled "Interpersonal Latent Structure" at the Western Social Science Association in San Diego, California, April 26-29, 2000.

Lisa Broidy

Publications

Broidy, Lisa M. 1999. "Childhood Developmental Factors Associated with Violence." Pp. 402-403 in *Encyclopedia of Violence in the United States*, edited by R. Gottesman. New York: Charles Scribner and Sons.

A. C

Committee Participation

Member, Executive Committee
Member, Graduate Committee
Member, Recruitment Committee (Criminology)

Beverly H. Burris

Publications

Burris, Beverly H. 1999. "Braverman, Taylorism, and Technology." Pp. 37-51 in *Rethinking the Labor Process*, edited by Mark Wardell, Thomas L. Steiger and Peter Meiksins. New York: SUNY Press.

Research and Creative Work

"The Changing Nature of Academic Work," invited paper at NSF-sponsored workshop "Public Research Universities in the 21th Century," Nov. 11-13, 1999, University of Arizona.

Committee Participation

Member, Executive Committee
Member, Recruitment Committee
Chair, University Committee to select Women's Studies Director.

Richard M. Coughlin

Publications

Coughlin, Richard M. 1999. "The Spreading of Communitarianism." *The Responsive Community* 9(3):91-92.

----. 1999. "Whose Morality? Which Community? What Interests? Socio-Economic and Communitarian Perspectives." Pp. 157-80 in *Essays in Socio-Economics*, edited by Amitai Etzioni. New York: Springer.

Coughlin, Richard M., Charles Lockhart, and Jean Giles-Sims. 1999. "Family Structure and Children's Needs: The Test Case of Moral Development." *Journal of Divorce and Remarriage* 29(3/4):39-53.

Research and Creative Work

Work in progress: Revision of paper on attitudes toward the welfare state in Sweden in the 1990s

In press: Revised and expanded article on "Convergence Theories," in Encyclopedia of Sociology.

Committee Participation

Chair, Executive Committee Member, Recruitment Committee

Robert A. Fiala

Research and Creative Work

Forthcoming: "Postindustrial Society." Encyclopedia of Sociology. MacMillan. Approximately 12 pages.

Submitted (with Susan Tiano) "Maquila Employment and Fertility in Mexicali Mexico: A Study of Productive and Reproductive Relations." Currently under revision.

Reanalyzed expanded data set using cross-national data on employment and higher education. Preliminary results presented at professional meeting.

Committee Participation

Chair, Curriculum Committee

Felipe Gonzales

Publications

Gonzales, Phillip. 1999. "Protest and Affirmative Action in the 1980s: The Case of the University of New Mexico." Pp. 108-130 in *Chicano Politics and Society in the Late Twentieth Century*, edited by David Montejano. Austin: University of Texas Press.

Research and Creative Work

- A. Research grant. "Poisia del Pueblo: the Popular Political Poetry of Hispanos in New Mexico, 1888-1935." Recovering the U.S. Hispanic Literary Heritage, University of Houston, \$3000. Mar. 1999-Nov. 1999.
- B. Book contract awarded. Forced Sacrifice as Ethnic Protest: The Hispanos of New Mexico and the Racial Attitude Confrontation of 1933. Peter Lang Publishing, Inc.

- C. Showcase of regional culture at the 2000 Smithsonian Folk Life Festival in Washington D.C. The showcase was fund by a \$110,000 grant from the New Mexico State Legislature.
- D. Article accepted for publication. "La Junta de Indignación: Hispano Repertoire of Collective Protest in New Mexico, 1884-1933." The Western Historical Ovarterly.
- E. Book proposal submitted. Collected Essays on Hispanic Identity and Politics in New Mexico, to the University of New Mexico Press.
- F. Article submitted. "Bronson cutting and the Hispanos of New Mexico." Aztlán.

Committee Participation

Member, Executive Committee Chair, Recruitment Committee

Jane C. Hood

Publications

Hood, Jane C. 1999. "Review of *Handbook of Applied Social Research Methods* by Leonard Bickman and Debra J. Rog (1998)" *Journal of Anthropological Research* Spring:167-168.

Research and Creative Work

Review of Gender Vertigo by Barbara Risman (Yale University Press, 1998) in Gender & Society, 14 (February, 2000) 213-214.

In press: Review of Marriage in *Men's Lives* by Steven Nock (New York University Press, 1998) for *Contemporary Sociology* to be published in 2000.

In press: articles on "case study analysis" and "cult of domesticity" for Encyclopedia of Feminist Thought edited by Lorraine Code to be published by Routledge.

Work in progress: Final revision of Perspectives on Gender (an anthology for Wadsworth); two articles and a monograph on sampling for ethnographic studies, one article on the history of the male provider role.

Committee Participation

Chair, Undergraduate Committee

George Huaco

Publications

Huaco, George. 1999. Marx and Sociobiology. Lanham, MD: University Press of America.

Committee Participation

Member, Curriculum Committee Member, Graduate Committee Coordinator, Reading Room/Library

Miguel E. Korzeniewicz

Research and Creative Work

Preparation of a written manuscript and multimedia materials on Nike Corporation.

Raymond V. Liedka

John M. Roberts, Jr. and Raymond V. Liedka. 1999. "On Summary Measure of Binarized Dominance Data." Social Networks 21:23-35.

Research and Creative Work

Guggenheim Foundation. \$27,197 "Cross-National Study of Prisons and Crime Control."

Committee Participation

Member, Undergraduate Committee Chair, Research and Computer Use Committee

Phillip A. May

<u>Publications</u>

Berman, Matthew, Teresa Hull, and Philip A. May. 2000. "Alcohol Control and Injury Death in Alaska Native Communities: Wet, Damp, and Dry Under Alaska's Local Option Law." *Journal of Studies on Alcohol* 61(2):311-319.

Lectures, Presentations, and Conferences

July 7th - Fetal Alcohol Syndrome" presentations, Pine Ridge, South Dakota.

August 9th NIMH Review, Washington, D.C.

August 18th - 20 "Epidemiology of Drinking among Plains Indians," the Flathead

Reservation, Montana.

August 23rd - 27th "Epidemiology of Drinking among Plains Indians," Sisseton-Wahpeton

Sioux Reservation, South Dakota; "Epidemiology of Drinking among Plains Indians." Turtle Mountain Chippewa Reservation, North Dakota.

September 3rd "Drinking among American Indians," lecture, Catawba College, Salisbury,

North Carolina.

September 8th - 10th Healthy Nations, Tulsa, Oklahoma.

October 5th - 6th "Epidemiology of Drinking among Plains Indians," Cheyenne River Sioux

Reservation, South Dakota.

October 28th "Maternal Risk Factors for Fetal Alcohol Syndrome," lecture, Catawba

College, Salisbury, North Carolina.

November 8th "Maternal Risk Factors for FAS among South African Women: A

multivariate analysis," poster, American Public Health Association meetings. Chicago. Illinois (with J. Phillip Gossage, Julie Croxford, Denis

Vilioen).

November 10th -13th With Phyllis Trujillo, planned and hosted the Annual National Colloquium

for the NIMH Career Opportunities in Research Program in Albuquerque

at the Sheraton, Old Town. Programs, faculty and students from universities around the country attended (over 200 participants).

December 13th - 14th Conference on "Youth Violence, Crime, and Substance Abuse among

American Indians," U.S. Department of Justice and the National Institute

of Justice, Washington, D.C.

December 17th Site Visit for FAS research, Howard University, Washington, D.C.

December 20th Navajo IRB Conference, Albuquerque, NM.

January 7th U.S. Department of Justice Meeting, Consultant to Janet Reno, Attorney

General of the U.S. on: American Indian Alcohol use and Abuse.

Washington, D.C.

January 11 - 20th FASER Staff Training, Albuquerque, NM

February 3rd UNM Department of Family & Community Medicine - MEP Training

February 22 nd - 24 th	American Indian Suicide Prevention Network Workshop - Albuquerque, NM
March 1 st March 2 nd - 3 rd March 6 th March 6 th - 7 th March 16 th - 17 th March 20 th - 24 th	Medical School FAS lecture, 1st year medical students, UNM Department of Justice Conference on Alcohol, "The Epidemiology of Drinking among Plains Indians," Seattle, Washington. NIMH Meeting, COR Planning Committee, Washington, D.C. NIAAA, FAS-DC Planning Meeting, Washington, D.C. Healthy Nations, Denver, CO. FASER Developmental Clinic, Sisseton, SD.
April 11 th - 13 th April 25 th - 28 th	Visit to Flathead Reservation to oversee research project. Department of Justice, Tribal Initiative Training for Drug Courts, San Diego, CA. Two presentations with J.P. Gossage, Ph.D., "Alcohol Use and Abuse among Plains Indians" and "FAS among American Indians."
May 18th - 19th	Suicide Network Conference, Presenter "History of Suicide Research among American Indians," Minneapolis, MN.
May 24 th - 25 th	Office of Juvenile Justice & Delinquency Advisory Group Meeting, Washington, D.C.
June 7th - 8th	Navajo Nation Regional Behavioral Health Summit, Presenter
June 19 th - 22 nd	College on Problems of Drug Dependence (CPDD), Presenter, San Juan, Puerto Rico. Two presentations, "Maternal Risk Factors Associated with the Prevalence of Alcohol in the Western Cape of South Africa" and "Alcohol Use and Abuse and Traditionality among Plains Indians."
June 26 th - 28 th	Research Society on Alcoholism (RSA), oral presentation "The Epidemiology of FAS and Maternal Risk Factors in the Western Cape Province of South Africa." Denver, CO.

Posters

An Epidemiological Analysis of a Second Wave of Data from Children with Fetal Alcohol Syndrome and Controls in the Western Cape, South Africa. P. May; J. Gossage; L. Brooke; J. Croxford; D. Viljoen.

The Maternal Risk Factors from a Second Wave of Data from Mothers of Children with Fetal Alcohol Syndrome in the Western Cape, South Africa. P. May; J. Gossage; L. Brooke; J. Croxford; D. Viljoen.

Spatial and Logical Memory in Children with Fetal Alcohol Syndrome. P. W. Kodituwakku, C.C. Adnams, A. Hay; A. Kitching; R. Adams, P.A. May, D. Viljoen.

Deficient Phonological Working Memory and Grammar Comprehension in Children with Fetal Alcohol Syndrome. C.C. Adnams; P.W. Kodituwakku; A. Hay; A. Kitching; P.A. May; D. Viljoen.

An Association Between Deficient Verbal Processing and Behavioral Problems in Children with Fetal Alcohol Syndrome. A. Hay; C.C. Adnams; P.W. Kodituwakku; L. Hendricks; C. Snell; P.A. May; D. Viljoen.

c) Grants Currently Funded

NIMH, \$864,582 "A Research Career Program for New Mexico Minorities," July, 1995 - June, 2000. FY 1999 = \$195,000.

University of New Mexico, \$120,000, "Supplement (from Associate Provost for Research and Arts and Sciences) to the New Mexico Access to Research Careers Program," July, 1995-June, 2000. FY 1999 = \$26,000.

NIAAA, \$102,382, "The Epidemiology of FAS in Wellington, South Africa, Phase II: Preparation for Further Studies in Biomarkers and Genetics. Grant Supplement. December, 1998 - December, 1999. FY 1999 = \$102,382.

NIAAA, \$5,849,184, "A Trial of FAS Prevention in American Indian Communities." October 1, 1998 - September 30, 2003. FY 1999 = \$1,151,353.

State of New Mexico, Department of Health, \$400,000. Fetal Alcohol Syndrome Prevention in New Mexico: Statewide Coordination. July 1, 1996 - June 30, 2000. FY 1999 = \$85,000.

NIAAA, \$1,125, 974. "FAS Epidemiology Research in Washington, D.C." October, 1999 - September, 2003. FY 1999 = \$375,000.

NIJ (National Institute of Justice), \$201,621. "A Pilot Study Regarding the Relationship of Crime and Substance Abuse." September 30, 1999 - March 31, 2001. FY 1999 = \$157,487.

NIAAA, \$2,400,000 (UNM share = \$913,846). "Alcohol Server Education as a FAS Prevention Model." September 1999 - September 2004. FY 1999 = \$116,814. (Joint award to the Oregon Research Institute, Jack Dresser, Ph.D., Co-Principal Investigator).

d) Committees/Professional Societies

Member, American Sociological Association, American Public Health Association, Population Reference Bureau, College on Problems of Drug Dependence, and Research Society on Alcoholism.

Member, Minority Scholarship Committee, American Sociological Association, 1996-1999.

Member, Minority/Diversity Representation Committee, College on Problems of Drug Dependence, 1996-1999.

Research Associate, American Indian and Alaska Native Mental Health Research Center, University of Colorado, Health Sciences Center.

Advisory Committee, Robert Wood Johnson Foundation, Healthy Nations Program, 1993-1999.

Grant proposal reviewer and session chairman. National Institute of Mental Health. August 9, 1999.

Gilbert W. Merkx

Publications

Merkx, Gilbert W. 1999. "Foreign Language and Area Studies through Title VI: Assessing Supply and Demand." Pp. 95-112 in *Language Policy and Pedagogy*, edited by Richard D. Lambert and Elana Shohamy. Amsterdam: John Benjamins.

Merkx, Gilbert W. 1999. "The Case for Latin American Studies." LAZOS/LACOS. 1(2):4-8.

Merkx, Gilbert W. 1999. "Editor's Foreword." Latin American Research Review. 34:(1):3-6.

Merkx, Gilbert W. 1999. "Editor's Foreword." Latin American Research Review. 34(3):3-6.

Research and Creative Work

Director, "National Resource Center and Fellowships for Latin American Language and Area Studies," funded by the Center for International Education, U.S. Department of Education. Amount, \$273,506. Project duration, August 1998-August 1999.

Director, "NAFTA and MERCOSUR, New Economies, New Institutions, New Identities, funded by the Hewlett Foundation. Amount, \$200,000. Duration, January 1998-June 2000.

Director, "Internet Delivery of Latin America News and Information," funded by the National Security Education Program. Amount, \$74,670. Duration, December 1988-January 2000.

Committee Participation

Director, Latin American Institute Chair, UNM Campus Planning Committee Member, UNM Committee on Governance Advisory Committee to the Associate Provost for Research Provost's Ad Hoc Committee on Library Issues Chair, Latin American Institute Grants and Awards Committee Latin American Institute Policy Committee

John M. Roberts, Jr.

Publications

John M. Roberts, Jr. 1999. "Testing the Chance Hypothesis in Paired Comparison or Dominance Data with Missing Observations." *Journal of Mathematical Sociology* 23:293-307.

John M. Roberts, Jr. and Raymond V. Liedka. 1999. "On Summary Measure of Binarized Dominance Data." Social Networks 21:23-35.

Committee Participation

Member, Research and Computer Use

Art St. George

Research and Creative Work

Research on high-performance computing and web-based education

Paul Steele

Publications

Steele, Paul D. 1999. Employee Assistance Programs: Then, Now and in the Future. U.S. Department of Health and Human Services, Center for Substance Abuse Prevention, Center for Workplace Managed Care.

Committee Participation

Member, Arts & Sciences Starkey Award Comittee
Member, Athletic Council
Member, Faculty Senate Curricula Committee
Member, Sociology Department Curriculum Committee
Member, Sociology Department Research and Computer Use Committee

Research and Creative Work

College of Arts and Sciences, Freshman Seminar
National Evaluation of Children's Advocacy Centers
Assessment of Early Family Intervention on Child Abuse, Neglect and Delinquency
Evaluation of therapeutic models for incarcerated juvenile delinquents
Research on the impact of social movements on the institution of work in the United States

Susan B. Tiano

Publications

Tiano, Susan and Carolina Ladino. 1999. "Dating, Mating, and Motherhood: Identity Construction among Mexican Maquila Workers." *Environment and Planning A* 31(2):305-325.

Research and Creative Work

Completed a two-year project under contract with the City of Albuquerque, resulting in a large data set on the nonprofit sector and a lengthy report titled, "Nonprofit Agencies and Social Support in the Albuquerque Community," which was submitted to Department of Family and Community Services, in November.

Spent 6 weeks (from September to mid-October) in Ekaterinberg, Russia, collecting data for a study of the strategies women use to cope with the effects of economic crisis.

Revised a chapter ("The Role of Women") in a 1994 book entitled *Understanding Contemproary Latin America*, edited by Richard Hillman. The updated volume is to appear in 2000.

Bert Useem

Publications

Goldstone, Jack A. and Bert Useem. 1999. "Prison Riots as Revolutions: An Extension of State-Centered Theories of Revolution." *American Journal of Sociology* 104:985-1029.

Piehl, Anne M., Bert Useem and John J. DiIulio, Jr. 1999. Right-Sizing Justice: A Cost-Benefit Analysis of Imprisonment in Three States. New York: Center for Civic Innovation at the Manhattan Institute.

Useem, Bert and Michael Reisig. 1999. "Collective Action in Prisons: Protests, Disturbances, and Riots." *Criminology* 37:735-759.

Research and Creative Work

Completed:

National Institute of Justice, U.S. Department of Justice. "Prisons and Crime Control." Bert Useem, Anne M. Piehl, and Raymond V. Liedka, \$21,55, 1998-1999. Start date: January 1, 1999, 9 months. Final report submitted.

In Progress:

National Science Foundation, Law and Social Science Program. "Prisons and Crime Control." Bert Useem, Anne M. Piehl, and Raymond V. Liedka, \$148,079. Start date: April 1999, 24 months

Nelson P. Valdés

Publications

Valdés, Nelson. 1999. The Cuban Political Succession; Historical Patters, Legal Context and Domestic Players. Albuquerque, New Mexico: Cuba Research & Analysis Group.

Committee Participation

Member, Research and Computer Use Committee Member, UNM Y2K Committee

Richard L. Wood

Publications

Wood, Richard L. 1999. "Religious Culture and Political Action." Sociological Theory 17(3):307-332.

----. 1999. "Review of Political Activists in America: The Identity Construction Model of Political Participation by Nathan Teske." American Journal of Sociology 104(1):1236-1237.

----. 1999. Followers of Jesus. (Translation from the Spanish of Sequidores de Jesús). Winona, MN: St. Mary's Press.

Research and Creative Work

NIJ, U.S.D.O.J. "Transitions: Creating a Culture of Community Policing." \$177,000. October 1998 to August 2000.

Committee Participation

Chair, Graduate Committee

C. Graduate Program

Awarded Doctoral Dissertations & Master Theses Sociology Department/Summer '99, Fall '99, Spring '00

Author	Title		
PhDs:			
Andrea Hoplight Tapia, Ph.D.	Subcultural Responses to Y2K		
MAs:			
Deanna Archuleta-Loeser, M.A.	Baby Bottles and Baby Boomers: Determinants of Breast Feeding, 1945-1965		
Jerry Daday, M.A.	From Technocracy to Teamwork: A Case Study of Corporate Culture and Organizational Structure at the SYS Corporation		
Sylvanna Falcón, M.A.	Cruzando La Frontera: Human Rights Violations at the U.SMexico Border		
Gwen Hunnicutt, M.A.	A Time Series Analysis of Cross-National Female Conviction Rates: A Test of the Economic Marginality Hypothesis		
Denise Hunter-Gilbert, M.A.	Intellectual Property: Who Owns It? A Case Study of IP Agreements and Ideology in a Corporate Setting		
Juanita Spitler, M.A.	A Discursive Production of the "Anorexic Woman"		
Lora Stone, M.A.	The Emergence of the Franciscans: A Sociological Analysis		
Gloria Vaquera	Low Graduate Degree Production Among Hispanics: An Issue of Social, Cultural, and/or Human Capital		

The graduate program in Sociology continued to make progress with 18 new admissions and 1 readmit for 1999/00. Out of those 18 admitted, 7 students joined the program with 3 being supported during their first semester on GA/TA assistantships. The Sociology Graduate Student Association (SGSA) remained active with Betsy Erbaugh and Andrea Hoplight Tapia serving as co-presidents.

The following graduate students presented papers at the Pacific Sociological Association in San Diego, California in April 2000: Betsy Erbaugh (Women's Community Organizing as Social Movement), Andrea Hoplight Tapia (Subcultural Millennial Responses to the Y2K Problem), Gwen Hunnicutt (A Time Series Analysis of Cross-National Female Conviction Rates: A Test of the Economic Marginality Hypothesis), Li Ting (Anomie and Domestic Violence in China), Karen McCue (Students' Attitudes Towards Restructuring), Wayne Pitts (Adult Community Corrections in New Mexico, 1990-1999: Obstacles to Effective Evaluation), Juanita Spitler (Transgressing the Individual-Society Dichotomy: Post-Structuralism and the Anorexia Nervosa), Lora Stone (The Emergence of the Franciscans in the 13th Century: A Sociological Analysis), Gloria Vaquera (Low Graduate Degree Production Among Hispanics: An Issure of Social, Cultural, and/or Human Captial), and Warren Wylupski (Joining the Club: The Social-Fitness of a Non-Competitive, Leisure Bicycle Club). This represents the largest contingent of UNM Sociology students ever to present at professional meetings.

The Sixth Annual Graduate Student Colloquium was held on March 31, 2000 at 9:30 a.m. in the Sociology Commons. The presenters were as follows: Deanna Archuleta-Loeser (Baby Bottles and Baby Boomers: Determinants of Breastfeeding, 1945-1965), Betsy Erbaugh (Women, Community Organizing and Identity Transformation), Sylvanna Falcón (Cruzando La Frontera: Human Rights Violations at the U.S.-Mexico Border), Gwen Hunnicutt (A Time Series Analysis of Cross-National Female Conviction Rates: A Test of the Economic Marginality Hypothesis), Denise Hunter-Gilbert (Intellectual Property: Who Owns It? A Case Study Analysis of IP Agreements and Ideology in a Corporate Setting), Lora Stone (The Emergence of the Franciscans in the 13th Century: A Sociological Analysis).

Rebecca Frerichs received an ASA Student Forum Travel Award. Debra Allnock continued a research position with the Department of Energy's Russian Technopark Project, an international and interdisciplinary project to study the preservation of high-tech and scientific professions in the former USSR. Debra will be moving to England to continue her dissertation study.

The graduate program in Sociology now includes a series of workshops on issues in teaching, sponsored by the Graduate Committee, and a brown bag lunch series of professional issues, sponsored by SGSA.

Lisa Donaldson, a current doctoral student, has been hired as interim dean at San Juan Community College.

The graduate program lost a current and a former graduate student during the past year. Doctoral student Leo Griego passed away April 5, 2000 at the age of 38. He had been serving as dean of humanities at San Juan Community College while finishing his dissertation. Leslie Shaheen, who left the doctoral program 2 years ago, died from injuries received in an automobile accident in February, 2000. She is survived by her daughter. Tiana.

D. Appointments

Dr. Richard Coughlin continued to serve as the Chair of Sociology.

Dr. Felipe Gonzales continued to serve as the Director of the Southwest Hispanic Research Institute.

Dr. Phillip May continued to serve as the Director of the Center for Alcoholism, Substance Abuse and Addictions.

Dr. Gil Merkx continued to serve as the Director of the Latin American Institute.

Dr. Bert Useem served as the Director of the Institute for Social Research (ISR).

Dr. Nelson Valdés continued to serve as the Director of the Latin American Data Base.

E. Leaves of Absence, Sabbaticals, Departures

Dr. Gary LaFree retired from the department in December of 1999. He joined the faculty in the Department of Criminology and Criminal Justice at the University of Maryland.

Dr. Miguel Korzeniewicz and Dr. Susan Tiano took sabbatical leave during the 1999-00 academic year.

F. Colloquia Series

Dr. David Livingstone, Professor of Sociology at the University of Toronto gave a colloquium titled, "Employment and Lifelong Learning in the Knowledge Society: The Growing Challenge of Underemployment" on Friday, November 5 at 2 pm in the Commons Room.

G. Report from ISR

The Institute for Social Research (ISR) is a unit of the Department of Sociology, College of Arts and Sciences. Founded in September 1987, ISR operates entirely on contracts and grants from funding sources outside the University. Grant funds are secured by two sorts of affiliates: faculty members in the Department and Ph.D. researchers with staff-appointments at ISR. Numerous graduate and undergraduate students work at ISR, gaining significant, first-hand experience in conducting research.

The ISR Director and the Executive Committee are responsible for the overall operation of the Institute. Bert Useem, a professor in the Sociology Department, served as ISR Director in 1999/2000. The members of the executive committee were:

Richard Boyle, Ph.D.
Susan Brumbaugh, Ph.D.
Pete DiVasto, Ph.D.
Paul Guerin, Ph.D.
Gary LaFree, Ph.D.
Raymond Liedka, Ph.D.
Shannon Morrison, Ph.D.
Amelia Rouse, Ph.D.
Paul Steele, Ph.D.
Richard Wood, Ph.D.

Currently, ISR has two administrative staff members. Judith Bernhard is responsible for helping prepare grant applications and overseeing the operation of the front office. Carolyn Souther is responsible for preparing monthly budget reports on the approximately thirty-five active ISR accounts. This staffing level represents a reduction compared to the previous year, and has achieved considerable cost savings.

During this past year, Gary LaFree and Peter DiVasto left ISR through formal retirement. Dr. DiVasto was the Institute's first director; Dr. LaFree was Dr. Useem's immediate predecessor. In addition, the former Research Coordinator, Robert Wilson, left ISR to pursue other business interests.

On any given day at ISR, there are numerous graduate and undergraduate students working on dozens of funded projects. Graduate students often take on significant project responsibilities, including data collection and analysis. A common occurrence is for an undergraduate student to work in the front office, assisting the overall operation of the Institute. She or he then gets picked up to work on projects. In recent years the ISR has achieved standardized pay scales for all student employees. These scales give automatic raises for academic achievement. ISR is a place where students learn and gain confidence in their abilities.

ISR Researchers and Groups

Some of ISR's research activities take place in designated centers; others involve PIs conducting individual projects.

Dr. Richard Boyle, Program Evaluation Research Center (PERC)

A Senior Research Scientist II, Dr. Boyle brings a background in Mathematical Sociology to his research on programs designed to help children living in low income or high risk families. Under Boyle's direction, PERC evaluated three programs directed by Dr. Andrew Hsi of the Pediatrics Department, UNM Health Sciences Center: Starting Early Starting Smart (SESS), Los Pasos, and Grandparents and Relatives Outreach (GRO). These are all four-year programs providing home visiting, case management, and clinical medical services for infants age 0-3. PERC also is conducting a study for the City of Albuquerque (Evaluation of Child Development Programs) that is tracking children who attended preschools in Albuquerque between 1990 and 1996. Finally, PERC evaluated the statewide operation of the Police Athletic League (PAL) programs.

Dr. Susan Brumbaugh

Dr. Brumbaugh, holding a 1995 Ph.D. from the University of California, Riverside, specializes in quantitative methodology and large-scale organizations. Last year, she worked on three projects. First, she was the research director for the Criminal and Juvenile Justice Coordinating Council, which serves as a criminal justice policy resource for the state of New Mexico. Second, Dr. Brumbaugh was the Co-Principal Investigator of a project funded by the National Institute of Justice. Using time series analysis, this project studied the factors affecting New Mexico's female prison population over a ten-year period. Third, Dr. Brumbaugh did analysis and writing on project on the interface between jails in prisons in New Mexico for ISR's Statistical Analysis Center.

Dr. Paul Guerin, Center for Applied Research and Analysis
The Center for Applied Research and Analysis (CARA), under the direction of Paul Guerin, currently had 12 major ongoing projects and six smaller ones. The 12 were:

- Arrestee Drug Abuse Monitoring Program (ADAM). This program informs policy makers, law enforcement agencies, treatment providers, and the general public regarding the relationship between drugs and crime. Additionally the program tracked the changing trends in drug use and criminal activity.
- Drugs and Alcohol and their Connections with Domestic Violence. This research assembled data regarding the link between domestic violence and substance abuse. The foci included: (a) whether acts of family violence committed while the offender is under the influence of illicit psychoactive substances? (b) which substances are most strongly associated with incidents of domestic violence? (c) are battering incidents more severe when drug or alcohol have been used the offender?

- Albuquerque Local Weed and Seed Project. This project conducted an independent assessment of the effectiveness of the Weed and Seed services provided in two Albuquerque neighborhoods.
- Public Housing Drug Elimination Program. This project assessed the effectiveness of the federally funded Public Housing Drug Elimination Program.
- Public Housing Drug Elimination Program Public Housing Resident Survey. This project conducted a survey of public housing residents following guidelines established by the federal Department of Housing and Urban Development.
- Residential Substance Abuse for State Prisoners Program. This National Institute of Justice-funded work examined prison-based therapeutic communities for drug offenders.
- Third Judicial District Court Adult Drug Court Evaluation. This project determined whether the goals of drug courts were being achieved. It also collected information regarding the type of client that can benefit most from the drug court program.
- Metropolitan Criminal Justice Coordinating Council (MCJCC) Research. This project created a flow chart of the criminal justice process in Bernalillo County; profiled inmates held in jail; conducted a feasibility study for an integrated criminal justice information system; and studied mental health issues of jail inmates, leading towards the goal of meeting the requirements of the federal court order
- Community Corrections Program, Probation and Parole Division Research. The goals of this research were to: (a) continue a risk/needs validation study; (b) complete a unit cost study; (c) monitor a work load system; (d) complete the analysis of a probation and parole office survey; (e) plan a performance based evaluation system; (f) analyze community corrections program client data.
- Second Judicial District Court Juvenile Drug Court Evaluation. This project conducted a process evaluation of the implementation of a drug court program and an outcomes assessment of the clients at discharge from the program.
- Second Judicial District Court Adult Drug Court Outcome Study. This two-year study examined the effectiveness of drug courts in reducing recidivism and illicit drug use, and in increasing measures of social stability, such as employment.
- Third Judicial District Court Juvenile Drug Court Outcome Study. This one-year study examined the effectiveness of drug this drug court along the same lines as immediately above.

Dr. Raymond Liedka

A member of the Sociology faculty, Dr. Liedka received grants from the National Science Foundation, the National Institute of Justice, and the Harry Frank Guggenheim Foundation to study the effects of prison on aggregate crime rates. Working with Dr. Bert Useem and Dr. Anne Piehl (Kennedy School of Government, Harvard University), he is currently writing a book titled "Prison and Crime Control," which promises to be the most comprehensive study to date of the impact of prison rates on aggregate crime rates.

Dr. Shannon Morrison

Dr. Morrison was the Principal Investigator for the New Mexico Police Athletic League (NMPAL) project, a recreation-oriented juvenile crime prevention program that relies heavily upon athletics and recreational activities to create and cement the bond between the police officers and youth in the community. In addition, Morrison was the Principal Investigator for the evaluation of the "Weed and Seed" site. The purpose of this program funded by the National Institute of Justice is to reduce crime in targeted neighborhoods and create partnerships within them. Dr. Morrison's evaluations focus on the success of criminal cases arising from program.

Dr. Amelia Rouse

In the past year Dr. Rouse has been involved in three projects. One is the evaluation of the effectiveness of the Project Estrella, a demonstration after-school program that provides disadvantaged students with help in their mathematics and science education. The measured outcomes are retention in school and non-involvement in the juvenile justice system. The evaluation is being supported by grants from the Office Juvenile Justice and Delinquency Prevention, U.S. Department of Justice.

In the Sandoval County Community Oriented Policing Efforts (SCCOPE II) project, Dr. Rouse collected data about public attitudes toward and knowledge of community policing. She (along with two collaborators) reported the study's findings at a series of meetings with the heads of local law enforcement agencies, a press conference and final report. In a third project, conducted for the state's Workers' Compensation Administration, Dr. Rouse gathered information from participants in their administrative court. After several months observing mediations and court hearings Dr. Rouse conducted focus groups with attorneys, claims adjusters, and pro se litigants.

Dr. Bert Useem

In addition to serving as Director of ISR, Dr. Useem is working with Dr. Liedka on the prison/crime project. He also completed a study, funded by the University's Research Allocation Committee, that examines prison riots in New Mexico and the New York City Department of Correction.

Dr. Richard Wood, APD/UNM Partnership,

Richard Wood heads the APD-UNM Partnership, a research collaboration funded by the National Institute of Justice. This research partnership conducted ethnographic research on the key organizational dynamics within the changing world of policing. It brought together researchers from ISR, sworn and civilian police professionals from all levels within APD and, through written reports and conference papers, police scholars and leaders in Washington, DC and around the country. The Research Partnership produced a written report on the state of community policing in Albuquerque, presented papers at several national conventions, produced a series of short papers on emerging issues within policing, and hosted an on-going series of focus groups to generate discussion and long-term change within the Albuquerque Police Department.

Drs. Paul Steele and Gary LaFree. The Statistical Analysis Center (SAC).

Located at ISR for the last 12 years, the New Mexico SAC is supported by a grant from the Federal Bureau of Justice Statistics, which funds similar centers throughout the United States. Recent changes in the Bureau of Justice Statistics funding criteria allow the SAC to propose specific research projects with appropriate budgets. This change has had the positive effect of allowing the New Mexico SAC to engage in specific research that is of interest to New Mexico criminal researchers and policy makers. Dr. Gary LaFree served as SAC Director in 1999/2000. It is planned that Dr. Paul Steele will become the next SAC director, pending funding agency approval. At present, the SAC is engaged in a study of driving while under the influence of (non-alcohol) drugs, and an assessment of the implementation of the EQUIP program, a cognitive change model for juvenile offenders.

PROJECT STAFF

With the expansion of the number of projects, ISR has had the opportunity to hire several full-time project staff.

Name	Degree	Project or Center
Robert Hyde	MA, UNM	CARA
Martha Fernandez	BA, UNM	SAC, CJJCC
Elena Letourneau	BA. World College West	PERC

GRADUATE STUDENTS AT ISR

A central goal of ISR is to enhance the educational experience of UNM graduate students, as well as to help support their studies through paid employment. Students working on ISR projects were:

Name	Degree Working Toward	Project PI
Brault, Paul	M,M.	Front Office
Carrier, Laurel	J.D.	Guerin
Damon, Nell	Ph.D.	Steele/Boyle
Derkas, Erika	Ph.D.	Guerin

- with	Ph.D.	Guerin/Steele
Denman, Kristine	· Pn.D.	
Frerichs, Rebecca	Ph.D.	Guerin
Hunnicutt, Gwen	Ph.D.	LaFree
Littlefield, David	M.A.	LaFree/Steele
Long, Tony	M.A.	Guerin/Boyle
Olson, Colin	M.A.	Boyle
Pitts, Kim	Ph.D.	Morrison
Pitts, Wayne	Ph.D.	Guerin
Rioux, Jennifer	Ph.D.	Guerin
Roberts, Aki	Ph.D.	LaFree/Useem
Spitler, Juanita	Ph.D.	Boyle/Guerin
Vaquera, Gloria	Ph.D.	Guerin
Woerle, Sandra	Ph.D.	Guerin

UNDERGRADUATE STUDENTS AT ISR

ISR is able to provide undergraduates research experience and employment. The following students worked at ISR.

Name	Project PI
Bennett, Richard Busich, Matt Coca, Lawrence Conlon, Bridget Cubbage, Jason Englebretson, Elizabeth Goertz, Miriya Griego, Valerie Gutierrez, Emmanuel Jauriqui, Manny Lightle, Melanie Lucero, Amanda Lucero, Cynthia Marquart, Felicitas Ruiz, James Smith, Jennifer Smith, Lindsey Straw, Melissa Tsosie, Christopher	Project PI Guerin Boyle/Guerin Front Office/LaFree Guerin Morrison Guerin/Boyle Guerin Steele Guerin Boyle Guerin Front Office Steele Guerin Front Office Guerin Boyle/Rouse Guerin Front Office/Guerin Guerin Guerin Guerin
Ulibarri, Billy Walters, Brandon	Guerin

PROJECTS AND RESEARCH

The ISR currently has 30 active contracts and grants, totaling about \$2.5 million. The following grants were active in the last fiscal year.

PI Richard Wood Gary LaFree and	Project Title Community Policing Female Prison Population	6	Amount \$177,124 51,548	F&A Rate 26% 26%
Susan Brumbaugh Gary LaFree Paul Guerin	World Homicide Rates Residential Substance	HFG	34,538	0%
Gary LaFree	Abuse Treatment Big City Crime Trends	NIJ CM	100,000 44,188	26% 47%
Bert Useem and Raymond Liedka	Prisons & Crime Control	NSF	148,079	47%
Paul Guerin	Public Housing Drug	CO.4	40 507	8%
Shannon Morrison	Elimination Program Weed & Seed Evaluation	COA JRSA	42,507 31,466	24%
Paul Guerin	Third Judicial Court Drug Court	AOC	12,301	20%
Paul Guerin	Community Corrections	NMCD	164,165	20%
Susan Brumbaugh	Criminal & Juvenile Justice Coordinating Council	CIICC	100,000	20%
Gary LaFree	DWI Offenders	BJS	50,000	26%
Paul Guerin	Arrestee Drug Abuse Monitoring	Abt Assoc (NIJ)	91,384	47%
Paul Steele Paul Guerin	Evaluation of EQUIP Evaluation of 3 rd Judicial	JRSA	15,000	26%
Bert Useem and	Juvenile Drug Court Cross-National Study of Prisons	AOC	28,892	20%
Ray Liedka Amelia Rouse	& Crime Control Worker's Compensation	HFG	28,187	0%
Paul Guerin	Focus Group Local DWI Grant Program	NMDOL	9,975	20%
	Statewide Evaluation	NMCYFD	75,000	20%
Paul Guerin	Weed & Seed	COA	15,000	8%
Shannon Morrison	Police Athletic League	NIJ	333,333	24%
Paul Guerin Amelia Rouse	Domestic Violence Project Estrella (A Demonstration		41,428	24%
	After School Program)	NIJ	250,000	24%

Paul Guerin	Evaluation of 3rd Judicial			
•	Adult Drug Court	AOC	37,500	24%
Paul Guerin	Process Evaluation of 2 nd Judicial	2 nd Judicial		
	District Juvenile Court	District Court	31,571	24%
Paul Guerin	Evaluation2nd Judicial District Court			
	Adult Drug Court	AOC	69,632	20%
Paul Guerin	8th Judicial District Drug			
	Court Database	AOC	6,596	20%
Richard Boyle	Evaluation of Child			
	Development Programs	COA	33,643	20%
Paul Guerin	Evaluation Bernalillo County			
	Metro Drug Court	BC	20,000	20%
Richard Boyle	Los Pasos	AIA	39,680	24%
Richard Boyle	Starting Early, Starting Smart	SAMHSA	140,383	24%

^{*} Funding Agency Abbreviations

AIA, Abandoned Infants Assistance

AOC, Administrative Office of the Courts, State of New Mexico

BC, Bernalillo County

BJS, Bureau of Justice Statistics

CJJCC, Criminal and Juvenile Justice Coordinating Council, State of New Mexico

CM, Carnegie Mellon

COA, City of Albuquerque

HFG, Harry Frank Guggenheim Foundation

JRSA, Justice Research Statistics Association

NIJ, National Institute of Justice, U.S Department of Justice

NMCD, New Mexico Corrections Department

NMDOL, New Mexico Department of Labor

NSF, National Science Foundation

SAMHSA, Substance Abuse Mental Health Services Administration

Department of Spanish and Portuguese

Chair: John M. Lipski

Department Administrator: Rosario Johnson

Annual Report July 1, 1999-June 30, 2000

I. TEACHING FACULTY AND STAFF

A. Tenured and Tenure Track Faculty

Spanish

Garland Bills Professor
Anthony Cárdenas Professor
John Lipski Professor
Tey Diana Robolledo Professor

Enrique Lamadrid Associate Professor Susan Rivera Associate Professor Adriana Estill Assistant Professor María Dolores Gonzales Assistant Professor Michael Kidd Assistant Professor Assistant Professor Kimberle López Miguel López Assistant Professor Judy Maloof Assistant Professor Nuria Sagarra Assistant Professor

Portuguese

Jon Tolman Professor

Margo Milleret Assistant Professor

B. Visiting Professors

Michael Pagel

Assistant Professor

Patricia Rosas Lopátegui

Assistant Professor

C. Lecturers

Andrés Armijo

José Bañuelos

Veronica Calvillo

Deanna Cornejo-Patterson

Susan Clark

Pilar Duran

Roxanne Hale

Raquel Martinez

Gina Morales

Luisa Pueyo

Guadalupe Rivera

Francisco Ronquillo

Mary Salinas-Jordan

D. Emeritus Professors

Rubén Cobos

Pelayo Fernández

Rosa Fernández

Angel González

Tamara Holzapfel

Albert Lopes

Raymond MacCurdy

Marshall Nason

Alfred Rodríguez

Sabine Ulibarri

E. Teaching Assistants

Ph.D.

Stephanie Becker

Beth Bernstein

Rosa Campos-Brito

Esther Brown

Patricia Cano

Patricia Catoira

Mayra Cortés-Torres

Gabriela Díaz-Gallegos

Myriam Eguía

Arturo Fernández-Gibert

Fernanda Ferreira

Kristina Galindo Knudsen

José Esteban Hernández

Sangsuk Kim

Marcos Romero

Xochitl Estrada Shuru

María Eugenia Trillo

Theodore Walker

M.A. Spanish

Melba Amador

Lucía M. Anglada

Marcel Browne

Lorena Cedeño-Zambrano

Christy Chapman

Miguel Angel Estrada

Teresa Fernández

Jaime Gelabert

Barbara Gonzales

Inga Klein

Elizabeth Matthews

Sherry Niccolai

Lisa O'Grady

Leticia Ortiz-Gamber

Benito Quintana

Olga Ríos

Marcos Romero

Jessie Rutherford

Elaine Shenk

Gretchen Snyder

Patrick Staib

Megan Thornton

Saúl Trejo

Veronica Vargas

Mark Waltermire

MA Portuguese

Gilson Borges

Vera Castro

F. Office Staff

Rosario Johnson

Department Administrator

Ivana Černá

Administrative Assistant III

Esther Marquez

Administrative Assistant II

Rosita Pickle

Administrative Assistant I

G. Temporary Staff

Lisa Saiz

Office Assistant

Gustavo Montoya

Office Assistant

H. Work Study Team

Greg Gonzales

Audry Tafoya

Francisco Sánchez

I. Degrees Awarded

Ph.D. in Romance Languages/Spanish

Summer 1999

Contreras, José Vitelio, Dissertation title: "Estudio y edición del *Tratado* en defenssa de virtuossas mugeres." Por Mosén de Valera.

Lárraga, Maribel, Dissertation title: "La mística de la feminidad en la obra de Juan Villagutierre Sotomayor: Historia de la conquista, pérdida y restauración del reyno y provincia de la Nueva Mexico en la América septentrional (1698)."

Tarp, Helen Cathleen, Dissertation title: "Aurelio et Isabelle: An Edition and Study of the 1556 Antwerp Spanish and English Translations of Juan de Flores's Grisel y Mirabella."

Torres-Cacoullos, Rena C., Dissertation title: "Grammatization, synchronic variation, and language contact: a study of Spanish progressive -ndo constructions."

Watts, Keith Eugene, Dissertation title: "English Maintenance in Costa Rica? The Case of Bilingual Monteverde."

Fall 1999

Jenkins, Devin L., Dissertation title: "Hiatus Resolution in Northern New Mexican Spanish: Phonetics Aspects and Phonological Implications."

Silesky, Jean D., Dissertation title: "The Revolution Within the Revolution: A Comparative Study of Chicana, Nicaraguan, and Cuban Women Poets."

Master of Arts in Spanish

Miguel Angel Estrada

Bachelor of Art in Spanish Major

Sarah Langley

Lisa Nix

Stefanie Ortega

B.A., Second Major in Spanish

Janet Baca

Erin Hagenow

Linda Clemens

Georgina Lippiatt

Leah Collins

Roberta Lucero

Robert DoBell

Margaret Maier

Grace Gallegos

Brenda Pacheco

Monica Gurulé

B.S., Second Major in Spanish

Lisa Lavadie

Carlos Scarborough

Hans Hamburg

Christopher Wiggins

Spring 2000

Master of Arts in Spanish

Lucía M. Anglada

Barbara M. Gonzales

Christy Chapman

Linda M. Ryter

Jaime J. Gelabert

Elaine Shenk

Master of Arts in Portuguese

Vera Cecilia Castro

Bachelor of Art in Spanish Major

Anna Archuleta

Jessica Salazar

Laura Chávez

Harvey Shaeffer

Chikiyo Jackson

Sarah Thompson

Amavalise F. Jaramillo

Eleanor Werenko

Bryon Large

Brian Willemin

Juliana Mora

B.A., Second Major in Spanish

Carmela Olivas Arellano Tamara Davis
John Barona Ricky Enríquez
Carol Chávez Dominic García
Mia Chávez Michele Howard
Meagan Cockram Alissa Johnson
Yecenia Covarrubias Spencer Komadina

Amanda Kuebler Andrea Robeda

Tara Martin Christopher Rodríguez

Glen Martinez Alicia Romero

Miguel Martínez María Elena Salazar

Esmeralda Méndez Mary Tapia
Brian Morris Diana Temer
Charlie Ontiveros Diana Veguilla
Robert Padilla Christina Vigil

José María Perea Jocelyn Waterstradt

B.S., Second Major in Spanish.

Pablo Calderón Annie Marie Pahl
Sonia Persia Dickson Anna Nogar
Valerie Flores Sandra Pérez
Carlos Lamadrid Silvia Rodríguez
Lana Melendres Brian Williams

II. COURSES OFFERED

A. Summer 1999 Spanish

		Number of Sections	Credit hrs.
101	Elementary	3	186
102	Elementary	3	138
200	Intermediate Abroad	1	15
201	Intermediate	2	84
202	Intermediate	1	36
203	Spanish Conversation	2	30
275	Accelerated Beginning	1	108
276	Accelerated Intermediate	1	120
301	T/Caribbean Pop Culture	1	60
301	T/Cultura de NM	1	66
301	T/ Cultura de Mexico	1	30
301	T/Cont SP Cult / Politic	1	21
302	Dvlp Span Wrtg Skills	1	57
307	Intro Hispanic Literature	1	60
429	T/Pen Lit & Culture	1	21
479	Undergrad Problems	4	24
551	Graduate Problems	3	12
629	Sem/ XIX-C Penin Literat	1	18
	Dissertation	5	33

Portuguese

335 Braz Popular Culture	1	24
555 Dian Contain	•	
497 Undergrad problems	1	6
TO CHACIFIAG PLOCICIAL	~	_

B. Fall 1999

Spanish

	Elementary Spanish	31	2,367
	Elementary/Bilingual Only	3	222
	Elementary Spanish/KAFB	1	21
	Elementary Spanish	15	1,062
	Elementary/Bilingual Only	3	228
	Elemen Span Conversation	1	8
	Intermediate Spanish	12	843
201	Intermediate/Bilingual Only	3	231
	Intermediate Spanish	8	579
	Intermediate/Bilingual Only	3	198
275	Accelerated Beginning Span	1	120
276	Accelerated Intermediate Span	1	138
	T/Mexican Cult & Lit	2	168
301	T/Culture Renaiss Spain	1	78
301	T/Lat Am Cult Thru Art	2	168
301	T/La Nueva Canción	1	78
	T/Mex Thru Art: Film & Culture	1	81
301	T/US latino Culture	2	156
301	T/Lat Am Film	1	78
301	T/Cult Pop Mex y Front	1	75
302	Dvlp Span Writing Skills	5	303
	Intro Hispanic Literature	3	129
	Spanish Phonetics	1	69
	Advanced Grammar	2	150
375	SW Hispanic Folklore	1	84
411	Survey of Span Lit I	1	75
	Span Am Lit Survey I	1	63
	T/Lat Am Short Story	1	72
	T/Brazilian Theater	1	12
450	Spanish Mysticism	1	18
	T/Chicano Autobiog	1	30
	T/Chicano Culture	1	72
	Honors Essay	1	3
	Pro Sem Resch CR MTH	1	48
	Mod Movt Sp-Am Poet	1	18
	Research Methods-Teachers	1	39
	History of Span Language	ī	18
	Spanish Sintax	ī	33
	Afro- Hispanic Language	ī	36
	Graduate Problems	2	6
	T/Chicano Autobiog	1	24
	Sem/Med/Ren Span Hag	1	33
	Sem/Novela de la Tierrra	1	27
059	Delibratoreia de la Tiellia	7	21

639 Sem/Brazilian Theater 699 Dissertation Portuguese	1 5	12 118 8,391
275 Intens Beginning Portuguese 276 Intens Intermediate Portuguese 311 Adv Comp/Converst 415 Musica Pop Brasilera 457 Brazilian Lit Sur I 497 Undergrad Problems 511 Advanced Comp/Converst 515 Musica Pop Brasilera 521 Brazilian Theater 557 Brazilian Lit Sur I	2 1 1 1 1 1 1 1 1	186 60 39 27 3 6 21 3 12
C. Spring 2000		
Spanish		
101 Elementary Spanish	20	1497
101 Elementary/Heritage Language	3	195
101 Elementary/Contact	1	36
102 Elementary Spanish	19	1,047
102 Elementary/Heritage Language	4	252
104 Element Span Conversation	1	7
201 Intermediate Spanish	12	678
201 Intermediate/Heritage Language	3 10	174 603
202 Intermediate Spanish	3	201
202 Intermediate/Heritage Language 203 Spanish Conversation	3 1	201 51
275 Accelerated Beginning Span	1	78
275 Accelerated Beginning Span 276 Accelerated Intermediate Span	1	120
301 T/Cine/Lit del Caribe	2	141
301 T/NM History/Culture	1	75
301 T/Mexican Short Story	2	153
301 T/Mexico Icons on Stage	1	72
301 T/Introd Lat Am Film	1	81
301 T/Acting in Spanish	1	54
301 T/Mex Thru Art: Film & Culture	1	78
301 T/Women in Lat Am Film	1	72
302 T/Dvlp Span Writing Skills	3	267

		_	210
	Intro Hispanic Literature	3	213
	Spanish Phonetics	1	66
352	Advanced Grammar	2	147
353	Spanish as World Lan	1	150
370	Survey Chicano Lit	1	69
371	Spanish of the SW	1	81
412	Survey Span Lit II	1	69
423	Cervantes-Quijote	1	66
432	Span Am Lit Survey II	1	66
439	T/Lat Am Culture/Trip	1	69
439	T/Gender / Race La Lit	1	57
479	T/Lat Am Women Writers	1	27
497	Undergrad Problems	1	6
	Honors Essay	1	3
	Spanish Comedia	1	30
	Sem/Southern Cone Na	1	39
540	Lat Am Dialectology	1	48
	Introd Scnd Lang Acq	1	36
	Graduate Problems	1	3
579	T/Recov us Hispanic Lit	1	36
	Lat Am Vanguard Poet	1	27
	Sem/Lat Am Women Writers	1	39
	Sem/19 C Lat Am Novel	1	24
-	Dissertation	5	111
099	Dissertation	J	7,414
			1,717
Portuguese			
_	Intens Beginning Portuguese	1	162
	Intens Intermediate Portuguese	1	60
	Adv Comp and Con II	ī	36
	Undergrad Problems	1	3
	Adv Comp and Con II	1	12
**-	Graduate Problems	1	2
•	Sem/Cont Braz Narrative	1 1	21
	Sem/19 C Lat Am Novel Master Thesis	1	6 6
	Lat Am Vanguard Poets	1	3
051		-	311

III. DEPARTMENT HIGHLIGHTS

The academic year 1999-2000 was another year of growth, transition, and innovation for the Department of Spanish and Portuguese. During the year, two visiting professors taught in the department: Michael Pagel (Linguistics) and Patricia Rosas-Lopátegui (Latin America Literature). The department made successful offers to two assistant professors that will be joining us in the Fall: Rena Torres Cacoullos (Historical Linguistics) and Kathryn McKnight (Latin American Colonial Literature).

In Spring 2000, Professor Enrique Lamadrid was promoted to Full Professor, and Professor Kimberle López received tenure and promotion to Associate Professor. At the same time Professor John Lipski finished his term as department chair, and announced his resignation from UNM to head the Department of Spanish, Italian and Portuguese at Pennsylvania State University. Professor Anthony Cárdenas will succeed Professor Lipski as department chair. The department hopes to fill the Spanish Linguistics line held by Professor Lipski during the next academic year.

On February 17-18, 2000 the department hosted the 9th Annual Conference on Ibero-American Culture and Society, with the topic "A Spanish odyssey: one thousand years of Iberian Literature and Culture." The conference was organized by the Spanish Literature faculty (especially Professor Michael Kidd and Susan Rivera), and attracted over 60 papers by scholars from around the country. Professor Edward Friedman, who is a distinguished Spanish Golden Age scholar from Indiana University, delivered the keynote address.

On March 31 and April 1, 2000 the department co-hosted the Página Roja Chicano/Chicana detective fiction symposium at the Zimmermann Library, organized by Professor Tey Diana Rebolledo. Several department students and faculty members participated in that event.

In December of 1999 Professor Enrique Lamadrid brought the Pastorelas de Belen Cultural Group to our university for an evening performance in the UNM Chapel. This event brought together community and UNM members.

In Spring 2000 Professor Enrique Lamadrid led an honors group on a highly successful course-related field trip to Cuba, the first UNM student group to visit Cuba under the newly authorized travel license issued to UNM.

Department enrollment continued to climb dramatically. The UNM core curriculum was implemented in Fall 1999, resulting in a huge increase in Lower-division Spanish enrollment, funded by contingency monies provided by the Office of the Provost and Evening and Weekend Degree Programs. The Spanish as a Heritage Language/Spanish for Bilingual track (offering special sections of Spanish 101 through 202) experienced more then 50% growth over the previous academic year, due largely to the efforts of Professor María Dolores Gonzales, in her first year as full-time coordinator of this key program.

A. Visiting Professors

The Department of Spanish and Portuguese was joined by two Visiting Assistant Professors in the of Fall: Professor Patricia Rosas Lopátegui, who received her Ph.D. from the University of New Mexico, and Professor Michael Pagel, ABD from the University of New Mexico.

B. Resignation

Professor John Lipski resigned as per June 30, 2000.

C. Staff Changes

Ivana Černá, Administrative Assistant III resigned on April 30, 2000, after seventeen years at the department.

D. Awards

1. Professors

Tey Diana Rebolledo, received Regent's Professor for 3 years.

2. Graduate Students

Paul Goldberg, received a Latin American Institute Title VI for the 1999-2000 academic year.

IV. DEPARTMENTAL ACTIVITIES

A. Lectures and Conferences Sponsored by the Department of Spanish and Portuguese

Los Pastores, The New Mexican Shepherds Play with La Gran Pastorela de Belen, on December 2, 1999, at 7:00 pm. Professor Enrique Lamadrid organized and directed the event.

Professor Andrés Enrique, University of Southern California, Los Angeles, candidate Spanish historical linguistics position presented "The Evolution of Object Agreement in Spanish: a Typological Perspective," January 27, 2000, at 2:30 pm in the Ortega Hall Reading Room.

Professor Rena Torres Cacoullos, University of Florida, candidate Spanish historical linguistics position presented "From lexical to grammatical to social meaning: Spanish ESTAR/ANDAR-plus-gerund variation," January 31, 2000, at 2:45 pm in the Ortega Hall Reading Room.

Professor Virginia Bouvier, University of Maryland, candidate Latin American colonial literature position presented "Maps and Myths: Charting an Empire in Spanish California," February 3, 2000, at 2:30 pm in the Ortega Hall Reading Room.

Professor Sarah E. Owens, University of Arizona, candidate Latin American colonial literature position presented "Subversive Obedience: Confessional Letters of Eighteenth-Century Mexican Colonial Nuns," February 8, 2000, at 1:30 pm in the Ortega Hall Reading Room.

Professor Kathryn McKnight, Ph.D. Stanford University, candidate Latin American colonial literature position presented "Tall Tales of the Devil and Paradise: A Mexican Slave's Inversion of a Catholic Slave-Society Narrative," February 10, 2000, at 2:30 pm in the Ortega Hall Reading Room.

Professor Milleret, presented Three One Act Plays in Spanish, The Dickey Theatre, "Estudio en blanco y negro" by Virgilio Piñera (Cuba); "UnaMariposa blanca" by Gabriela Roepke (Chile); "El censo" by Emilio Carballido (Mexico), May 7, 2000, at 2:00 pm, in room 108 of the Humanities building.

Annual Conference: On February 17-18, 2000, the Department of Spanish and Portuguese hosted its 9th Annual Conference on Ibero-American Culture and Society: "A Spanish Odyssey: one thousand years of Iberian Literature and Culture," organized by the Peninsular faculty. The conference attracted over 60 papers by scholars from throughout the country. The event allowed departmental graduate students to present papers, chair sessions, meet with scholars, and aid in abstract selection and conference organization.

B. Invited Talks

John Lipski, participant at the American Association Teachers Spanish Conference, July 31, through August 3, 1999, Denver, Colorado.

- To Chair a panel and present: "Epenthesis vs. Elision In Afro-Hispanic language: A
 constraint-based approach to Creole phonology," at the 1999 annual meeting, July 31
 through August 3 1999, Denver, Colorado.
- To deliver a lecture at Penn State University, November 20-24, 1999, Pennsylvania.
- To evaluate Language programs in Spain. A portion of the New York-Spain-New York trip will be paid for by the Spanish Chamber of Commerce. March 11-18, 2000, New York.
- To evaluate computer assisted language instruction at the University of Illinois, May 14-16, 2000, Champaign, Illinois.

- To deliver the lecture: "Sailing the seven seas: cross-currents of Afro-Romance language contact." Penn State University, November 23, 1999, Pennsylvania.
- To deliver the lecture: Partial Spanish: "From Lingua Franca to Gringo Lingo,"
 30th Linguistic Symposium on Romance Language (LSRL), University of Florida,
 February 25, 2000, Gainesville, Florida.

Miguel López, "La narrativa de Carlos Fuentes," invited lecture from the Mexican Consulate in Albuquerque.

Susan D. Rivera, "La metapoesía en la obra de Angel González." Semana del Autor, October 1999, Buenos Aires, Argentina.

- "La poesía española del exilio: arma de Guerra o canción de amor." La Cultura del exilio Republicano Español de 1939, Madrid-Alcalá de Henares-Toledo, Spain, November 1999, Spain.

C. Papers Read by Faculty

Garland Bills with Neddy A. Vigil, to present the paper: "Anglicisms in New Mexican Spanish," at The Linguistic Association of the Southwest 29th Annual Meeting, October 1-3 1999, San Antonio, Texas.

 To present paper: "Anglisismos en el español de Nuevo México. XII Congreso Internacional de la Asociación de Lingüística y Filología de la America Latina, August 9-14, 1999, Santiago, Chile.

Anthony Cárdenas, to present paper: "Bargaining with Beelzebub: From Theophilus to Celestina," at the 81st Meeting of the American Association of Teachers of Spanish and Portuguese, July 29 through August 3, 1999, Denver Colorado.

 To present the paper: "Of Signatures, Stockings, Oil and Love: Marginalized Text in Alfonsine Science," at Texas Medieval Association Conference, September 10-11, 1999, Canyon, Texas. To attend the ADFL meeting for Chairs this Summer, May 31 through June 4, 2000,
 Phoenix, Arizona.

María Dolores Gonzales, to attend: The National Conference on Heritage Languages in America, October 14-16, 1999, Long Beach, California.

Michael Kidd, to read: "The Thief of Memory: Oedipal Conflict and Medieval Epistemology in *La vida es sueño*," at the Spanish Golden Age Theater Symposium, March 9-11, 2000, El Paso, Texas.

Enrique Lamadrid, to chair the opening plenary session of the annual meeting of the American Folklore Society, October 21-24, 1999, Memphis, Tennessee.

Participation in the Research Seminar on Cuban Art, Culture and Society,
 October 8-18, 1999, Havana. American and Iberian Institute, UNM.

Kimberle López, to present: "Dystopia and Genocide in the Conquest of Mexico: Herminio Martínez's Diario maldito de Nuño de Guzman," at the 1999, Hispanic Literature and Film at the End of Millennium. Second FIU-UM Conference on Iberian/Iberian-American Literature, October 28-30, 1999, Florida International University (U. Park Campus).

- To read: Colonial Desire in Homero Aridjis's "Memorias del Nuevo Mundo," at the Latin American Studies Association meeting, March 15-19, 2000, Miami, Florida.

Miguel López, conducted research at the Archivo General de la Nación on Mexican indigenists writers. Also he presented a paper at the Jornadas de Cultura Metropolitana, July 6 – 21, 1999, Mexico.

 To present: "Utopía y marginalidad en la Crónica de las destrucciones de Olivier Debroise," at the 1999, Hispanic Literature and Film at the End of the Millenium.
 Second FIU-UM Conference on Iberian/Iberian-American Literature,
 October 28-30, 1999, Florida International University.

- To read: "Tiempos Hibridos: Los lugares del margen en la narrativa mexicana a fin de siglo," at the Latin American Studies Association meeting. March 15-19, 2000, Miami, Florida.
- To read: "la vision de los vencidos en Carmen Bullosa y Olivier Debroise: heteroglosia e intertextualidad a fin de milenio," at the VI Mexican Literature Conference, UTEP, March 2-3, 2000, El Paso, Texas.

Judy Maloof, to present paper: at the Letras Femeninas Conference in Querétaro, Mexico, September 22-26, 1999.

- To present: "La pasión por el baile y la creación de espacios femeninos: en Danzón de ría Novaro," at El Congreso de la Asociación de la Literatura Hispánica Femenina, Sept. 23-25, 1999, Ouerétaro, Mexico.
- To read: "La Búsqueda de un lugar utópico en Uxaslala: Memorial del Futuro de gioconda Belli," at the Latin American Studies Association meeting, March 15-19, 2000, Miami, Florida.

Margo Milleret, to present paper: "Good Girls and Bad Girls in Leilah Assuçāō's Adoravel Desgraçada," at the 81st meeting of the American Association of Teachers of Spanish and Portuguese, July 29 through August 3, 1999, Denver, Colorado.

 To read: "Madre no hay una sola in Two Argentinean Plays," and to consult with editor on a book of essays about Brazilian culture, at the Latin American Theater Conference, March 29 through April 2, 2000, Lawrence, Kansas.

Nuria Sagarra, to read paper: "Working Memory and Second Language Acquisition: State of the Arts and New Data." Also, was Colloquium organizer and participant at the Second Language Research Forum Conference, September 23-26, 1999, University of Minnesota, Minneapolis.

Tey Diana Rebolledo, to present paper: "Latino Literature in the Millenium", New World Studies Panel, at the American Studies Association, October 26-31, 1999, Montreal, Canada.

Susan D. Rivera, to read: "La poesía Española del Exilio: arma de Guerra o canción de amor," at The Congreso Internacional sobre la cultura del Exilio Republicano Español de 1939; sesenta años después, November 19-28, 1999, Madrid, España.

Patricia Rosas Lopátegui, to present paper at the Theater of Latin America. A Festival and Symposium, March 29 through April 1, 2000, University of Kansas.

To read: "El sexismo a través del alter ego en El rostro de Elena Garro," at the
 Latin American Theater Conference, March 29 – April 2, 2000, Lawrence, Kansas.

Jon M. Tolman, attend and participate in a conference at Pontifical University in Rio de Janeiro.

- Meet with other Latin American Studies Center directors in DC at the invitation of the Brazilian ambassador to discuss Brazilian studies in the United States.
- Read paper on "Sexo e sexualidade na obra de Rubem Fonseca," at the Rocky Mountain Modern Language Association meeting, October 1999; in Santa Fe, New Mexico.

D. Papers Read by Graduate Students

Beth Bernstein, presented: "El hábito rechazado de la monja picaresca," at the 81st Annual Meeting of the American Association of Teachers of Spanish and Portuguese, July 30 through August 3, 1999, at the Marriot DTC Hotel, Denver, Colorado; 2) "In Search of the Virtuous Woman," at the 53rd Annual Convention of The Rocky Mountain Modern Language Association, October 14-19, 1999, Santa Fe, New Mexico; 3) "On Shaky Ground: The Merging of Dream and Reality in the Works of Shakespeare and Calderón," at the 8th Annual Graduate Conference on Romance Studies at Boston College, March 17-18, 2000, Chestnut Hill, Massachusetts.

Gilson Borges, "O Choro Vive." Panel: The Dislocation of Culture: New Approaches to Popular Culture and Literature in Mexico and Brazil. Rocky Mountain Council for Latin American Studies 48th Annual Conference, January 12-15, 2000, at the El Dorado Hotel, Santa Fe. New Mexico.

Esther Brown, "Reflexive Pronoun Use in the Spanish of Bilingual Living in Contact Situation." Paper read at XVIII Congreso del Español en los EE.UU, April 6-8, 2000, University of California at Davis.

Patricia Catoira, "Espejo de Paciencia: Reflejos de la patria criolla," presented at The 53rd Annual Convention of the Rocky Mountain Modern Language Association, October 14-19, 1999, Santa Fe, New Mexico; 2) "Cecilia Valdés: Language and Identity in a Abolitionist Novel" presented at The Rocky Mountain Council for Latin American Studies 48th Annual Conference, January 12-15, 2000, at the El Dorado Hotel, Santa Fe, New Mexico; 3) "Transculturización a la ajiaco: una receta para la modernidad," presented at The Fernando Ortiz Symposium, City University of New York, March 20-22, 2000, New York.

Fernanda Ferreira, "Aspiration and Deletion of / s/ in northeastern Brazilian

Portuguese: Evidence of Creolization or Parallel Processing Effects?" V Congreso

Nacional de Lingüística, AMLA, October 12-14, 1999, Universidad Autónoma de Nuevo
León, Monterrey.

Paul L. Goldberg, "Diego Viga y la literatura judeo-andina contemporánea," presented at the 10th Conference of the Asociación de Ecuatorianistas, July 23, 2000, Quito, Ecuador; 2) "La representación de la inmigración en la narrativa judeo-andina contemporánea" presented at Cuartas Jornadas de la Literatura Latinoamerica, (JALLA99) Cuzco, Peru, August 10, 1999.

José Esteban Hernández, "Syntactic Duplication and Simplification in the Spanish Spoken in Houston," Linguistic Association of the Southwest, 29th Annual Meeting October 1-3, 1999, San Antonio, Texas; 2) "La retención clítica y la duplicación acusativa nominal del Español mexico-americano en Houston, Texas," V Congreso Nacional de Lingüistica, AMLA, October 12-14, 1999, Universidad Autónoma de Nuevo León, Monterrey.

Mark Waltermire, "Gender Assignment to Lexical Switches in New Mexican Spanish," Linguistic Association of the Southwest, 29th Annual Meeting October 1-3, 1999, San Antonio, Texas.

E. Others Research Projects or Creative Works in Progress or Completed during period

Michael Kidd, "Starting at the sun: Hispanism and Invention of the Golden Age." Article-length manuscript in progress.

- "Cervantes and the Follies of Verisimilitude." Article-length manuscript in progress.

Enrique Lamadrid, "The Secular Folk Plays of New Mexico: Texts and Contexts," for Pasó por aquí series, UNM Press.

John Lipski, the special collections in the University of Puerto Rico, Río Piedras, libraries. Research on early Afro-Hispanic language in Puerto Rico.

Kimberle López, The Anxiety of Identification: Colonial Desire in the New Latin

American Novel of the Conquest, book manuscript completed; under consideration at

University Press; 2) "Eros and Colonization: Homosocial Colonial Desire in the

Gendered Rhetoric of Conquest in Heminio Martínez's diario maldito de Nuño Guzmán,"

under consideration at Chasqui.

Miguel López, "Deseo y degeneración en la novella etnográfica: el mestizaje frustrado en La cruz del maya y La selva encantada," submitted to Revista de Crítica Literaria Latinoamericana; 2) "Transculturación y resistencia a fin de milenio en Crónica de las destrucciones de Oliver Debroise," submitted to Chasqui; 3) "La reescritura de la historia en Crónica de las destrucciones de Oiver Debriose," submitted to Jornadas; 4) "Degeneración y deseo colonial en The Rag Doll Plagues," submitted to Confluencia; 5) "Historia y subalternidad en Oficio de tinieblas de Rosario Castellanos" (Article in progress); 6) "La novela indigenista: un acercamiento crítico al final del milenio" (Article in progress); 7) Subalternity and the Mexican Novell (Book in progress); 8) "Re-writing the Conquest, Rewriting the Self in Obsidian Sky by Guy García" (Article in progress).

Margo Milleret, continuing work on book "Latin American Women in/on Stages."

Susan D. Rivera, "Subversión del canon modernista: La musa [Post] moderna de Valle-Inclán." Revista Hispánica Moderna, Hispanic Institute, Columbia University;

2) Introduction and selection for an anthology of poetry Claudio Rodríguez; 3) "La trilogía urbana de Manuel Durán."

F. Activities in Learned and Professional Societies

John Lipski, Associate of *Hispania*, Journal of American Association of Teachers of Spanish and Portuguese (AATSP) for Theoretical Linguistics; 2) Presented the paper "Epenthesis vs. Elision In Afro-Hispanic language," at the annual meeting of the AATSP.

Kimberle López, "Dystopia and Genocide in the Conquest of Mexico: Hermínio Martínez's *Diario maldito de Nuño de Guzmán*," read at the Second Biennial Conference on Iberian/Iberian-American Literatures, sponsored by Florida International University, October 28-30 1999, Miami, Florida.

Miguel López, "Historias subalternas y utopia en *Crónica de las destrucciones* de Oliver Debroise," at VI Jornadas Metropolitanas de Cultura, at Universidad Autónoma Metropolitana, Plantel Atzcapoptzalco-Casa Lamm-Michigan State, University of Mexico City.

Jon M. Tolman, Executive Director of the Brazilian Studies Association; manager of the association office at UNM; 2) Manager of BRASA Listserve, BRASANet and the BRASA Web site; 3) Conference at the Pontificia Universidade Católica do Rio de Janeiro: Read paper on Brazilian Studies in the United States, October 1999.

G. Other Professional Activities (exhibits, off campus talks, etc.)

Adriana Estill, Associate Editor, <u>VOCES: A Journal of Chicana / Latina Studies</u>.

Manuscript review, University of New Mexico Press.

- Reviewed journal article in Arizona Journal of Hispanic Cultural Studies.

Michael Kidd, assistant in translating lyric sheet of the music CD Sephardic Journey: Spain and the Spanish Jews, by the Washington, DC, Group La Rondinella.

Enrique Lamadrid, "Dialogue Across difference: Folklore and Social Justice," American Folklore Society Plenary Panel, with Worth Long and Jack Tche, October 1999, Memphis, Tennessee.

- "Capitán Rafael Chacón: A Nineteenth Century New Mexican," Chautauqua Character, New Mexico Endowment for the Humanities Speaker Bureau Lectures Series.

John Lipski, served on the committee for revision of teacher licensure competencies in modern, classical, and native language, New Mexico Department of Education; 2) Editor in Chief, Hispanic Linguistic; 3) Reviewed several book-length manuscripts, series editor of series in Spanish Linguistics, Georgetown University Press; 4) Reviewed manuscripts for: Southwest Journal of Linguistics, Hispania, Studies in Second Language Acquisition,

Journal of Pidgin and Creole Language, Language, Diachronica, Language Variation and Change; 5) Reviewed University of Chicago Spanish Dictionary and Chicago Manual of Style for revised editions; 6) Reviewed abstracts for 29th and 30th Linguistic Symposium on Romance Language.

Jon M. Tolman, reviewer for four articles in the Latin American Research Review, Brazilian Foreign Ministry.

H. Non-teaching University, College, and Department Service

Adriana Estill, Activities Committee Chair, Fall 1999; 2) Undergraduate Committee, Fall 1999; 3) On board of Southwest Hispanic Research Institute; 4) On board of Feminist Research Institute, Fall 1999.

Michael Kidd, LAII Allocations and Awards Committee; 2) Spanish & Portuguese Merit and Salary Committee; 3) Co-Director, Ninth Annual conference on Ibero-American Culture and Society: A Spanish Odyssey; 4) S&P Search Committee, Colonial Literature; 5) S&P Advisor Committee; 6) S&P Undergraduate Studies Committee.

Margo Milleret, Chair, Advisory Committee (Dept); 2) Undergraduate Advisor-Portuguese; 3) Organizer & Director – Brazil Summer Study.

Enrique Lamadrid, Advisor, UNM Press Committee, S&P Dept. Honors; 2) Regional & Folk Arts Steering Committee. Southwest Hispanic Research Institute. Faculty Associate.

John Lipski, Chair, Iberian Committee of the Latin American and Iberian Institute;

2) Member, Latin American and Iberian Institute Grants and Scholarships Committee;

3) Met with the President of the Republic of Andorrra to discuss possible student exchanges.

Kimberle López, Spanish and Portuguese Graduate Committee, 1999-2000; 2) Spanish and Portuguese Search Committee for Spanish American Colonialist, 1999-2000; 3) Arts and Sciences Research Semester Award Selection Committee, 1999-2000; 4) Chair, Latin American and Iberian Institute Publications Committee, 1999-20000; 5) University New Faculty Committee, 1999-2000; 6) Dissertation Reader for Jean P. Silesky, Spanish and Portuguese, Fall 1999; 7) MA Examination Committee for Antoniette Vinel, LAII, Fall 1999; 8) Conducted Workshop on Graduate School, Spanish and Portuguese, September 1999.

Miguel López, Latin American and Iberian Institute Activities Committee, 1999-2000; 2) Spanish and Portuguese Activities Committee, 1999-2000; 3) Conducted MLA Mock Interviews, Spanish and Portuguese, November 1999; 4) Organized and chaired session for RMCLAS, Santa Fe; 5) Mentor, Research Opportunity Program, Summer 1999; 6) MA Examination Committee for Antoniette Vinel, LAII, Fall 1999.

Susan D. Rivera, Arts and Sciences Junior Tenure and Promotion Committee;
2) Co-coordinator of the Ninth Annual Conference on Ibero-American Culture and
Society: A Spanish Odyssey: One Thousand Years of Iberian Literature and Culture; 3)
Graduate Studies Committee; 4) Advisory Committee; 5) Search Committee, Lower
Division Spanish Coordinator and Applied Linguistics; 6) European Studies Committee;
7) Community Service Committee; 8) Women Studies Associate.

Jon M. Tolman, served as Associate Director for Luso-Brazilian Studies, Latin American and Iberian Institute; 2) Served on Grants and Awards Committee, LAII; 3) Served on Arts & Sciences Interdisciplinary Committee on Latin American Studies; 4) Served on S&P Salary Committee; 5) Served on Spanish & Portuguese Graduate Committee and Advisory Committee.

L. Grants and Contracts, Extramural and Otherwise

Enrique Lamadrid

Agency: RAC Grant Dates: August 1999

Funding: \$3,000

John Lipski

Agency: Title VI Grant

Dates: July 1999 Funding: \$3,000

Susan D. Rivera

Agency: Teaching Allocations

Dates: July 1999 Funding: \$2,500

Jon M. Tolman

Agency: LAII

Dates: Fall 1999

Funding: \$30,000

Agency: LAII

Dates: Fall 1999

Funding: \$4,000

J. Diversity

The last academic year the department maintained its pursuit of diversity, making efforts to attract women and minority groups. This past year, the department issued contracts to forty-six teaching assistants, twenty-five were Hispanics, and one was Asian. Women accounted for thirty percent of the total, of which fifteen were Hispanic and one was Asian. A total of twelve lecturers taught on a part-time basis, eight of them were woman of Hispanic origin. The work study team was composed of three students, two were of Hispanic origin, and one was a woman.

Annual Report Department of Speech and Hearing Sciences July 1, 1999 – June 30, 2000

Submitted by
Amy B. Wohlert
Professor and Chair, Department of Speech and Hearing Sciences

1. Program Improvements

Associate dean Ken Frandsen completed his second year as interim chair of the department and a national search was conducted for a new department chair. Janet Patterson achieved tenure and promotion to associate professor in spring, 2000.

The department's third annual report for accreditation renewal was accepted by the American Speech-Language-Hearing Association.

Our cooperation with Albuquerque Public Schools continued. APS supplied four clinical supervisors, salary support for secretarial staff, supply and equipment funds, and paid internships including tuition support for 4 students, in a contractual arrangement totaling over \$90,000 for the year.

The distance education program continued to make our undergraduate major available to students in northern New Mexico. Televised satellite sections of SHS 302 and 350 (fall, 1999), 303 and 320 (spring, 2000), and 321 and 430 (summer, 2000) were offered at sites in Taos, Espanola, Gallup, Santa Fe, Los Alamos, and Los Lunas. As of fall, 1999, 27 undergraduate students were taking courses through this program.

Faculty, particularly Finn and Ballachanda, developed websites for courses. A new undergraduate audiology course was added to the curriculum: SHS 320 <u>Hearing Science</u> covers the anatomy and physiology of the hearing system. New graduate courses, SHS 533, <u>Assessing Language in Children</u> and SHS 534, <u>Intervention: Child Language Disorders</u> were developed by Patterson and Rodriguez and undergraduate offerings in child language disorders were revamped.

The 9th annual Academic Exchange between UNM/SHS and Comunidad Crecer Rehabilitation Center in Mexico City took place Aug. 4 – 11, 1999. Three graduate students and one clinical supervisor from our department, plus three rehabilitation specialists from the community, participated.

Clinic: In response to requests from departments such as Mathematics and Statistics and Nursing and Pharmacy, the clinical staff developed an Accent Modification program for non-native speakers of English. A new clinical program for children with Autism Spectrum Disorder was initiated. The Speech-Language Pathology Clinical Policy Manual was thoroughly revised. The cooperative arrangement with UNM Health Sciences Center's Audiology Clinic was discontinued. Although the

department no longer supplies staff for that clinic, space and equipment for student practicum and research endeavors were retained at the Health Sciences Center.

The department's social activities included a picnic in September, a holiday party and a graduation reception in December, and a graduation reception in May.

2. Student Achievements

In fall, 1999, 102 undergraduate students were listed as majoring in Speech and Hearing Sciences and 83 students were enrolled in the graduate program. From summer, 1999 through spring, 2000, 29 students received bachelor's degrees and 36 students received master's degrees. Of the 36 master's graduates, 28 gave us information concerning their employment. Thirteen of the students who reported their employment were working for Albuquerque Public Schools and seven others were working elsewhere in the state.

Graduate students organized and presented the 9th Annual Southwest Conference on Communicative Disorders, a major regional conference that attracted approximately 400 attendees on March 9 and 10, 2000. The conference committee was chaired by student Mistie Brown.

A selection of students' honors include:

Scholarships

OGS: Tina Harte

Josephine Chen: Tina Harte

Ronald E. McNair: Ivonne Flores-Medieros

Richard B. Hood: Eileen Ogas

Interdisciplinary Health Care for Rural Areas Training Program

Sharon Christensen Molly Cheves Paula Zimmer

LEND (Leadership Education in Neurodevelopmental Disabilities Program)

Maria Gillen Jean Linardakis Teresa Phillips

Cum Laude and/or Golden Key B.A. graduates

Michelle Bourguet Renee Compher Stephanie Guerra Rebecca Ortega Stephanie Telge

3. Faculty Achievements

a.) Publications

Ballachanda, B.B. & Moushegian, G. (2000). Frequency following response: Effect of interaural time and level differences. <u>Journal of the American Academy of Audiology</u>, 11, 1-11.

McPherson, D. M., Ballachanda, B. B. (2000). Middle and Late Auditory Evoked Potentials. Chapter in Roeser, Valante, & Hosford-Dunn, <u>Diagnostic Audiology</u>. Thieme, NY.

Finn, P. (1999). A review of "A primer of stuttering therapy" by H. Schwartz. <u>Journal of Fluency Disorders</u>, 24, 239-246.

Finn, P. (1999). Childhood stuttering: To treat or not to treat. <u>Advances in Speech Language Pathology</u>, 1, 139-141.

Patterson, J.L. (1999). What bilingual toddlers hear and say: Language input and word combinations. <u>Communication Disorders Quarterly</u>, 21, 32-38.

Patterson, J.L. (2000). Observed and reported expressive vocabulary and word combinations in bilingual toddlers. <u>Journal of Speech, Language, and</u> Hearing Research, 43, 121-128.

b.) Presentations

Ballachanda:

Workshop on ear canal examination and cerumen management. Lake Tahoe, NV, July, 1999.

Theoretical aspects of ear canal acoustics. Phonak Conference, Zurich, Switzerland, January, 2000.

Finn:

Computer aided diagnostics and assessment systems for fluency disorders. American Speech-Language-Hearing Association Convention, San Francisco, CA, November, 1999.

Counting syllables or words: Implications for speech rate determination. American Speech-Language-Hearing Association Convention, San Francisco, CA, November, 1999.

Rodriguez:

Refelections from former compact scholars: My first year as an assistant professor. Sixth Annual Institute on Teaching and Mentoring, Compact for Faculty Diversity, New Orleans, LA.

c.) Theses

Ballachanda: Julie Christensen, Tinnitus Evaluation

Finn: Holly Allen, Defining the Parameters of Recovery from Stuttering

d.) Grants

Ballachanda, Patterson, Rodriguez: A&S Research Equipment Grant, \$9400.

Rodriguez: Teaching Allocation Proposal, "Assessing Language in Children," \$2495.

Frandsen: APS-UNM Collaborative Program in Speech-Language Pathology, 1999-2000, \$93,317.

e.) Honors, Awards

Rodriguez: SHS Teacher of the Year Award

4. Faculty Professional, Community, and University Service

a.) Journal service

Ballachanda:

Reviewer, <u>Journal of American Academy of Audiology</u>, <u>American Journal of Audiology</u>, <u>Ear and Hearing</u>.

Chair, Tutorial on Auditory Evoked Potentials: American Speech Language Hearing Association.

Finn:

Editorial consultant, <u>American Journal of Speech-Language Pathology</u>
Reviewer, <u>Journal of Speech, Language, and Hearing Research</u>, <u>Journal of Fluency Disorders</u>

Patterson:

Editorial consultant, <u>American Journal of Speech-Language Pathology</u>, <u>Language</u>, <u>Speech</u>, and <u>Hearing Services in the Schools</u>

b.) Selected professional service

Ballachanda: President of the Asian-Indian Caucus, American Speech-Language Hearing Association; Vice-president for Convention 2000, New Mexico Speech-Language-Hearing Association; Chair, Committee on Diversity and International Exchange (CODIE), American Academy of Audiology.

Rodriguez: Vice-president, New Mexico Speech-Language-Hearing Association

c.) Site visits

Ballachanda: NCA review of audiology program at Arizona Health Sciences Center, Phoenix, AZ.

d.) Selected community and university service

Blaker: Faculty facilitator for the UNM Health Sciences <u>Interdisciplinary Health</u> Care for Rural Areas Training Program

Cullivan: UNM Staff and Faculty Benefits Committee

Lough: Board member for the Brian Injury Association of New Mexico, the Albuquerque Speech, Language, and Hearing Center, and the Southwest NeuroRehabilitation Institute. Governor appointed member of the New Mexico Brain Injury Advisory Council.

Rodriguez: Bilingual speech and language assessments for the Grants-Cibola County Schools.

e.) Mentorships

Ballachanda: McNair Scholar, Research Opportunity Program

Patterson: Regent's Scholar

Rodriguez: McNair Scholar, Research Opportunity Program

5. Faculty/Staff Appointments and Separations

Charlotte Lough was appointed as clinic director (Visiting Lecturer II), beginning August 16, 1999. Carol Varela-Haager, Administrative Assistant I, resigned in June. 2000.

6. Future Plans

With a new chair in place, the department expects to use the coming year to develop long range plans for both the undergraduate and graduate programs. This process will be aided by a graduate unit review of the department scheduled for fall, 2001. A search will be conducted for an audiology faculty member. Patrick Finn, associate professor of speech-language pathology, has resigned effective at the end of the 1999-2000 academic year so we anticipate eventually filling that position. With new faculty in place, the department expects to improve its research presence and continue its highly successful programs of professional preparation in audiology and speech language pathology.



The University of New Mexico

Women Studies Program Mesa Vista Hall 2132 Albuquerque, NM 87131-1586 (505) 277-3854 Fax (505) 277-0267

September 8, 2000

Interim Dean Fritz Allen College of Arts and Sciences University of New Mexico Albuquerque, NM 87131

Dear Dean Allen,

Shane Phelan, director of Women Studies completed a narrative program report before she left the position in May of 2000. I began as acting director with the summer session of 2000. Since that time several other program accomplishments were reported to me or have occurred. Hence, I added an addendum to her report.

Sincerely yours,
Cheryl D. Learn Ph.D., RN 'Energy D- Klaum
Acting Director
Women Studies

Submitted by Shane Phelan

Significant Developments:

Curriculum revision was the major project of the year. Following our faculty retreat last year a curriculum committee (Louise Lamphere (Anthropology), Minrose Gwin (English), Diana Robin (Foreign Languages and Literatures), Rosa Campos (Spanish and Portuguese) and Rinita Mazumdar (Philosophy and Women Studies)) reviewed the core courses, met with instructors, and made recommendations for curriculum change (attached). During the spring the Executive Committee (Shane Phelan, Dorothy Chansky (Theater and Dance), Holly Barnett (Art and Art History), Vonda Long (Counselor Education), Anne Skinner-Jones (Women Studies), and Cheryl Learn (Nursing)) formulated standard guidelines for content and skills acquisition in WS 200, WS 324, and WS 492. We also initiated an extensive network of formalized AOA classes to replace the ad hoc cross-listing of prior years. We believe that this will help students to plan their majors and minors by making the courses listed together in the catalog, and also reducing the administrative burdens of locating and cross-listing classes.

We remained without tenure-track lines this year. Dean Fischer agreed to initiate joint appointments, but we did not go forward because of my leave. This is nonetheless the most crucial issue facing Women Studies. We desperately need continuity in teaching, advising, and governance, and I urge the College to immediately initiate a program for several joint appointments for existing faculty. The documentary history on this is available in the College and in Women Studies

We offered 22 courses through our funding, and listed another 15 as TW courses from other departments (almost double the number of TW courses offered in 1998-99). Our total enrollment for the fall and spring semesters was 425. We offered two courses in the summer 2000 session (due to staffing difficulties) with 41 students. Although this is on a par with last year, it is deceptive. Levels of student interest, measured by enrollments during the first two weeks, were up sharply (287 in the spring semester). I suspect that drops were partly due to instructor shifts as a result of graduate student schedules.

Staff:

The search for a new administrative assistant took up most of the summer and fall. An initial hire was disastrous, and a second round of searches had to be conducted. We relied on temporary help until December 20, when Anne Burtnett joined the program.

We were unable to rehire Jill Heine as advisor, and returned to the earlier system of using graduate assistants. Although they did an adequate job, it became clear that this is a less desirable situation. They do not know the campus as a regular advisor can and they change over each year, necessitating retraining each year. This is an important issue for future consideration.

Catherine Ramirez was hired by English through a spousal hire, but no joint appointment

resulted. We are thus still without regular faculty.

Publications and Professional Activities:

Because our faculty largely consists of part-time instructors, we cannot report many publications. A better indication would be publications of all those who teach our students through our courses and TW courses, but such a record is unavailable. We nonetheless had an active year.

Shane Phelan published "Queer Political Theory: Another Liberalism?" in the <u>American Political Science Review</u> (June 2000). She presented papers at the American Political Science Association, the Western Political Science Association, the American Philosophical Association (Pacific Division). She was a plenary speaker at the Hellenic Association for American Studies meeting in Athens, and gave lectures at the University of Alberta and conference on Female-to-Male Transgender Issues. She led a faculty seminar on integrating lesbian and gay studies into the curriculum at the University of Wyoming. She served as Chair of the APSA Committee on the Status of Lesbians and Gays in the Profession.

Our graduate assistants and graduate student instructors actively participated in their disciplines. Rosa Campos presented a paper at a conference on "Newness in Intercultural Practices" at the University of Antwerp, Belgium. Debbie Boehm presented papers at the conferences of the Latin American Studies Association and the American Anthropological Association. Yuriko Furuhata won a summer 2000 fellowship at the Smithsonian Institution. Cymene Howe, a graduate student instructor, won a 2000 Fulbright for field work in Latin America. Monica Torres, also a graduate student instructor, won a fellowship for teaching and research at Carleton College.

Addendum to Women Studies Annual Report September 15, 2000

Submitted by Cheryl D. Learn Acting Director Women Studies

1. Program Improvements

• Efforts to strengthen teaching

A pedagogy group was initiated in the spring of 2000 to discuss pedagogical strategies suitable for Women Studies classes. The textbook utilized was Mayberry, M. & Rose, E. C. (1999). Meeting the Challenge: Feminist Pedagogies in Action. New York: Routledge Press. The group met four times to discuss the readings and related issues.

Efforts to improve student recruitment and retention

Website was updated with information on the Women Studies Program, requirements for the major, classes, and the new acting director.

2. Student Achievements

• Placement Upon Graduation

First major graduate Adriana Nieto was accepted for graduate study at the UNM LAI program. She also returned as a GA in the Women Studies Program.

Summer Little accepted a position at the Women's Resource Center at UNM as editor of their newsletter, <u>Women Talk</u> after graduation in December 1999 and began graduate study at Columbia University in Social Work in fall, 2000.

3. Faculty & Staff Achievements

Publications

Learn, C.D. (2000). What makes research holistic? Part II. Beginnings, 20(1), p. 7 Learn, C.D. & Higgins, P. (1999). Harmonizing Herbs. <u>AWHONN Lifelines 3 (2)</u>, p. 39-43. 39-42.

Higgins, P. G. and learn. C. D. Health practices of adult Hispanic women. <u>Journal of Advanced Nursing 29 (2)</u>, 1105-1112.

Prizes, Awards, Fellowships

Director Shane Phelan received an award from the UNM Women's Resource Program at the International Women's Day Celebration in honor of her contributions as director of Women Studies.

Anne Burtnett, the administrative Assistant, was selected to participate in Leadership Albuquerque 2000-2001 and received a staff development award from the College of A& S.

Acting Director Cheryl Learn received the mentor award from Gamma Sigma Chapter of Sigma Theta Tau International, the nursing honor society. This is the highest award at the chapter level.

• Scholarly or Disciplinary Societies

Acting Director, Cheryl Learn completed a 3-year term as international recording secretary of the International Society for Human Caring. Cheryl Learn also was received as a Virginia Henderson Fellow in Sigma Theta Tau International in November 1999.

4. Faculty, Professional and University Service

Editorial Boards

Cheryl Learn was a member of the editorial boards of the <u>Journal of Qualitative Health</u> Research and Journal of Holistic Nursing.

• Departmental, College, or University Committees

Acting Director Cheryl Learn was the alternate delegate to the Faculty Senate Graduate Committee representing the UNM College of Nursing academic year, 1999-2000. Cheryl Learn also served as the vice-chair of the College of Nursing Curriculum Committee, assuming the chair in June of 2000. Cheryl Learn also became a member of the Women Studies Executive Committee in February 2000.

5. Data

- Undergraduate majors: As of August 31, 2000, the A & S advisement office reported 7 declared majors, 9 declared second majors, and 19 minors in Women Studies. Since there are no full time faculty at this time, the ratio is not significant.
- Credit Hours Generated in 1999-2000 is estimated at 1440.
- Underenrolled classes-2 in 1999-2000

6. Faculty /Staff Appointments and Separations

- Cheryl Learn was selected via an internal UNM search and appointed to the position of acting director of Women Studies by Dean Michael Fischer and assumed the position in June of 2000.
- Shane Phelan is on indeterminate leave of absence starting May 15, 2000.

UNM-VALENCIA CAMPUS ANNUAL REPORT

For the Period

JULY 1, 1999 – JUNE 30, 2000

Alice V. Letteney Campus Executive Director

CONTENTS

	INTRODUCTION	1
I.	INSTRUCTION	5
II.	STUDENT SERVICES	15
III.	BUSINESS OPERATIONS	23
IV.	PROGRAM DEVELOPMENT	26

INTRODUCTION

Dr. Alice V. Letteney, Campus Executive Director

Highlights of the University of New Mexico-Valencia Campus

1. Significant Developments

The college was awarded a 5-year, \$2.1 million Hispanic serving Institutions Title V Grant to promote student success, create a management information system, and create a development office (details of Title V Grant progress follow this section of the report).

The new 32,000 square foot Student/Community Center was opened on April 28, 2000. The first event held in the new multipurpose room was a dragon play put on by the children of the gifted/talented/McCune programs at the college. An open house for the Small Business Development offices, the Valencia County Workforce Center Offices, and the Community Education Officers were held that day, as well as tours of the new campus bookstore and the renovated cafeteria. The new center also hosted the college's graduation ceremonies in May.

2. Program Developments

The college's Wellness/Fitness Center was completed during the summer of 2000, as the Associate of Science in Health and Fitness Education was approved.

Creation of an Associate of Applied Science in Electronic Engineering which includes Semiconductor Manufacturing Technology, Industrial Electronics, and Communication Electronics Programs.

Major revision of all Information Technology Programs, including Web Master, Systems Engineer, and Computer Programmer.

Updating of all Office and Business Technology programs.

Alignment of all degree and certificate programs with Main Campus programs, including the UNM Core Curriculum.

Medical Coding and Billing and Heavy Equipment Training were offered by the college in collaboration with the Department of Labor.

3. Honors and Awards

Two Valencia Campus students completed HACU summer internships in the summer of 1999, one with USDA, and one with NASA.

4. Community Outreach

Approximately 14,560 citizens visited the campus.

- a. The Small Business Development Center hosted the first Valencia County Economic Development Conference, co-sponsored by the Belen, Los Lunas, and Hispano Chambers of Commerce, which attracted 170 participants from the region and featured NM Secretary of Economic Development, John Garcia.
- b. The UNM-Valencia Campus Development Board elected Gail Wall as its President and exceeded its \$40,000 fundraising goal. A "Giving Tree" was installed in the new Student/Community Center Lobby donated by the Lardner family of New Mexico Travertine.
- c. A Minority Outreach Committee was appointed by the UNM-Valencia Campus Advisory Board in the Spring of 2000 and as a result of the committee's recommendations a minority recruiter position was created and filled during the summer of 2000.

- d. UNM-Valencia Campus and the Valencia County Chapter of AAUW co-sponsored the second annual "Sister to Sister Conference" in January, attended by 100 girls from grades 6-9. Featured speakers were Deanna Sauceda, KREQ, and Jackie Ingles, NM Deputy Secretary of Labor.
- UNM-Valencia Campus and the Belen Pilot Club co-sponsored the third annual Women's Conference for Secretaries and Professional Women which was used as a training session for several SU PARTE Welfare Reform Clients.
- f. The Math Department hosted its third annual CETP conference for college, K-12, and pre-service educators.
- g. The "New Mexico American Mathematical Association for Two Year Colleges" annual conference was hosted by the Math Department in April.
- h. The New Mexico Historical Society's annual conference was hosted by the college in April.

5. Campus Executive Director's Office

Major activities of the Campus Executive Director, Dr. Alice Letteney

UNM-Valencia Campus Advisory Board Award "For Outstanding Service and Dedication to this Institution," April 28, 2000.

New Mexico Association of Community Colleges, President Elect.

American Association of Community Colleges, Workforce Development Commission.

Executive Committee, American Association of University Women, Valencia County Branch,

President, Los Lunas Chamber of Commerce.

Community Council, Ranchers Banks.

ACI Education and Workforce Committee

Chair, Belen Rotary Scholarship Committee.

Valencia County Hospital Committee.

United Way Valencia County Advisory Board.

Los Lunas Rotary Club, "Workforce Investment Act," October 1999.

Belen Rotary Club, "Economic Development in Valencia County," June 2000.

New Hires

Chad Perry, Public Information Officer, March, 27, 2000. Sonia Allen .5 Admin. Assistant II, January 4, 2000.

Separations

Rigo Chavez, Public Information Officer, October 22, 1999.

Title V Grant Gearld Willis, Title V Coordinator

Current status of the University of New Mexico-Valencia Campus Title V Grant Developing Hispanic Serving Institutions Program, administered by the University of New Mexico-Valencia Campus under the guidance of the U.S. Department of Education.

A. Significant Developments

1. Activity I - Student Success

Activity I continues to progress nicely ahead of schedule and well within budget.

- a. The Counselor/Social Worker position has been filled by Kim Jeffries, as of July 24, 2000, following the resignation of Joanna Cummings. Ms. Jeffries will be able to put this task in order quickly with the guidance of Ray Rondeau. The groundwork for student contacts and the atrisk student problem-solving program has been implemented and will continue on schedule.
- b. All components of the Freshman Seminar/Student Success web site will be in place by the end of July 2000. The Student Success web site for students whose placement scores placed them in the college level English and Mathematics, is the last component to come into place.
- c. A very well organized and impressive New Student Orientation program is in place. This PowerPoint presentation, coupled with useful narrative by Student Services representatives, is being well received by new students.
- d. The new student mentoring program is in its initial stages.
- e. Technology and retention training for the first five faculty members has been completed. The second group of training, for an additional five faculty members will begin in these areas at the beginning of the Fall semester 2000.
- f. Construction of two developmental studies presentation classrooms was completed in May 2000. The developmental lab will be complete by mid-August 2000. These facilities will be ready for student/faculty use before the Fall semester begins, a full ten months ahead of schedule.
- g. The initial installment of multi-media presentation equipment will be in place for the developmental classrooms and lab before the beginning of the Fall semester, ahead of schedule. Additional multi-media equipment required for these areas will be ordered in August 2000, to be installed soon after the beginning of Fall semester, seven months ahead of schedule. The position of Developmental Lab Coordinator has been filled, with an anticipated early September 2000 start date. This will be one month ahead of the scheduled start date.
- h. The position of Developmental Lab Technician has been advertised, interviews are in progress and hiring is expected to take place by the second week in August 2000, nine months ahead of schedule.

2. Activity II - Institutional Stability Through Information Management

Activity II deals with gathering of information, which is often difficult to quantify with tangible results. Progress is slow, but continues at a steady pace. Activity II remains behind schedule in some areas due to the sheer enormity of the task.

 a. Critical contacts with main campus have been established to determine the status of current reporting requirements and accessibility of critical databases.

- A list of major reporting needs for the Valencia Campus is being compiled. A comprehensive synopsis of the status of these reports will be complete upon completion of the reporting needs list.
- Coding for the automated degree audit system, PROGRESS, is ahead of schedule. The faculty will have an introduction to the system in August 2000.

3. Activity III - Institutional Advancement

Major areas within Activity III are either on schedule or ahead of schedule. The Development Office is established and running very effectively under the guidance of Lois Hansen, Manager, Donor Relations, who is well known and respected within the community.

- A full time administrative assistant has been hired to work in Activity III, Institutional Advancement.
- b. Mailing lists and the donor database are established and are up-dated on a regular, ongoing basis.
- c. Development Board Policies for donations are established and mirror those of the Main Campus.
- The Campus/Community impact study is being formulated and will be completed by the end of August 2000.

4. Project Management and Evaluation

- The first Title V Grant Performance Report was completed on time and submitted to the U.S. Department of Education on April 28, 2000.
- b. Meetings of faculty and staff to discuss the status of issues related to Title V were conducted in June and July 2000. Monthly meetings are planned.
- c. University of New Mexico Valencia Campus has received the Grant Award Notification from the U.S. Department of Education announcing the award of the full amount of \$425,000 for year two of the project.
- d. A Title V web page has been posted to the University of New Mexico Valencia web site. This page is designed to provide information about Title V activities and is updated on a regular basis. This page can be viewed at http://www.unm.edu/~vctitlev. This report will be published to the web site. Minutes of the Title V monthly meetings will be published to the web site as time permits.

I. INSTRUCTION Submitted by Dr. Reinaldo Garcia, Dean of Instruction

A. Significant Developments

1. Overall

- a. Continued implementation of outcomes assessment program.
- b. Continued assessment of programs of study and effectiveness of course scheduling.
- c. Completion of 2000 2002 Catalogue.

2. Credit Programs

a. Curriculum Development

i. Approval of Associate of Science in Health and Fitness Education.

- Creation of Associate of Applied Science in Electronic Engineering Technology (includes Semiconductor Manufacturing Technology program as well as Industrial Electronics and Communication Electronics).
- Major revision of Associate of Applied Science in Information Technology (formerly Microcomputer Systems Support), with specialty areas and certificate programs in Internet Web Master, Systems Engineer, and Computer Programmer).
- Revision to Associate of Applied Science in Business Management (Banking, Real Estate, and Computer Accounting were dropped).
- Major revision to Associate of Applied Science in Office and Business Technology, including new Medical Office and Legal Specialists specialty areas and certificates.
- All other associates and certificates were revised to align with Main Campus programs and the UNM Core Curriculum.

b. Labs and Equipment

- i. Replacement of PCs for CAD lab, which is in a new lab able to accommodate more students.
- Creation of presentation rooms (two rooms in the new Student-Community Center, which
 contain projectors and other high-tech audio-visual equipment for integrating technology into
 instruction), (Title V equipped).

c. Scheduling

- Continued implementation of use of rating matrix to hire adjunct faculty.
- ii. Progress towards automated scheduling and data reporting system.

d. Out-of-District Instruction

(administered by Community Education) in Socorro, Moriarty, Estancia and Magdalena and Central NM Correctional Facility .

- Socorro Fall 1999: CIS 120T: 23; ENGL 100T: 23; MATH 120: 22; MATH 010T: 10; POL SC 200: 12. Spring, 2000: CIS 120T: 21; MATH 100T: 19; ENGL 100T: 19; MATH 120: 18: PSYCH 250: 18
- ii. Magdalena Spring 2000: CIS 120T: 9; SPAN 101: 15
- iii. Mountainair Spring 2000: CIS 120T: 14
- iv. Estancia Fall 1999: CIS 120T: 9; HIST 260: 6. Spring 2000: SOC 101: 9
- v. Moriarty Fall 1999: CIS 120T: 14; CIS 120T: 10. Spring, 2000: CIS 120T: 19; CIS 120T: 19; EDUC 293T: 10; SPAN 102: 10
- vi. Total Out-Of-District Instruction: 329 (Fall 1999: 129; Spring 2000: 200)
- vii. NM Department of Corrections (Enrollment in this program is restricted to students incarcerated by the NM Dept. of Corrections. Enrollment at the beginning of the semester in the Fall academic courses was around 20 students per class. As few as 3 per class completed due to mandatory transfers of inmates. In the Spring CIS 101T was offered. Three sections made with 16 students per section. All students completed the short-term courses.): SOC 212; CIS 101T (1-credit hr.); PSYCH 105 (3 sections); C&J 221.

3. Non-Credit Programs

a. Adult Basic Education

The program served 996 students over the year July 1, 1999-June 30, 2000.

- Open House in the fall: students spoke publicly about their experiences in and out of the program at the Open House where approximately 100 people attended.
- ii. GED Graduation in the spring: Graduation ceremonies were held in our new auditorium where 64 of our 166 Graduates "walked the line." Awards for scholarships, Student of the Year, the Boleslo Lovato Citizenship Award and Employee of the Year were presented as well as special recognition for a seventy-eight year-old man who completed his GED this year. Our local newspaper, the <u>Valencia County News-Bulletin</u>, published an article on him and two other articles about graduation.
- iii. Our staff made various public presentations this year to inform community leaders about our services. We presented to approximately 25 people at the Belen Rotary, approximately 20 people at the Los Lunas Rotary, and approximately 50 people at the Moriarty Chamber of Commerce. We also made presentations to teachers and staff at elementary schools, approximately 50 at Valencia Elementary and 35 at Tome Elementary. In conjunction with the campus, we also gave an informative presentation to 260 employees at the Avonite plant in Belen.
- iv. This year we developed a ten-point recruitment plan that will be used each semester to inform the community about our services. We will rotate some of the activities in an effort to spread the word to different populations. Activities include printing flyers with our class offerings and distributing them in the community, staffing information booths at Walmart and at the County Fair and advertising in the UNM-Valencia Campus and Community Education schedules of classes.
- v. We continue to expand services in terms of both geographical location and types of classes offered. ESL, GED, GED in Spanish and citizenship classes were held at nine different sites, including two brand new community centers in Meadowlake and El Cerro Mission. The Valencia County Literacy Council assisted with child development at three of these sites to promote family literacy. We also worked with the Department of Labor and Su Parte to provide computer-based instruction to welfare recipients.
- vi. We also worked on changing our means of assessing students to meet the requirements for the National Reporting System (NRS). Currently, we use materials developed by our faculty through a mini-grant awarded by Project 353 in 1997. They are based on the idea of using alternative means to assess competencies. However, we are now required to use standardized testing for both pre and post-testing. We are exploring ways to meet the requirements without changing instruction.

b. Student Enrichment Center

- i. Tutorial Services
 - Alternating biweekly sessions on various topics were offered on Fridays to SEC and ABE tutors or a small group enrolled in EDUC 293: Peer Teaching and Learning.
 - b) Subject Specific Training included Math and English faculty members, as well as short presentations from the staff and several veteran tutors.
 - c) More basic education, developmental studies, and college-level assistance in Spanish.
 - d) New tutoring services in CAD and C++ programming.

c. Library

- i. The number of titles cataloged was up 44% over last year to 1575.
- ii. The number of full text articles accessed online was up 132% to 10,261 articles

- ii. The number of full text articles accessed online was up 132% to 10.261 articles
- iii. As a result of the large increase in full-text articles being accessed, some statistics were lower:
 - a) Interlibrary Loan was down by 52%. Requests for articles have been steadily dropping ever since we gained access to FirstSearch's two full-text databases a few years ago. In 1996-97, the second year that we had access to First Search and the first year that the statistics are available, 58% of all of our ILL requests were for periodical articles. This past year, during which we added three additional full-text databases, interlibrary loan requests for articles dropped to just 13% of the total.
 - b) <u>Circulation dropped by 14%</u> as students realized they could get more current information on certain research topics via the online databases rather than by using books.
 - c) Registration of library users dropped by 20% as both student and community users realized that they didn't have to register in order to use the computers.
- During the summer and early fall of 1999, the Library converted its patron files, circulation system, cataloging system, and online catalog to Innovative Interfaces, the system used by Main Campus (LIBROS).
- v. The Library became a full OCLC user, which has meant that we now have access to the full interlibrary loan and cataloging databases. Our students are receiving their ILL's much quicker now.
- vi. 21 new Gateway computers were installed in the Library in August 1999.
- vii. In January 2000, the Library was relieved of its campus audio-visual equipment duties after 14 years!
- viii. Four additional full-text databases were brought online this year ProQuest, Newsbank, Wilson Biographies, and the Gale Academic Health Center. Due to increased requests for low-literacy and Spanish language books, a new section to bring together those books was created. It is called the ESL collection.

d. Community Education

A total of 6,117 individuals participated in programs offered through Community Education Services, including credit, non-credit and cultural enrichment, during the 1999-2000 Academic Year. This was a 52% increase over 1998-99.

i. Non-Credit Programs

A total of 2,634 students enrolled in non-credit Community Education programs for 1999-2000. All programs showed an increase with the exception of the Community Education Non-Credit classes, which decreased by about 4.5%, All other programs reflected healthy increases. Details are as follows:

Fall '99

Spring '00

Total

Summer '99

*Community Education	402	187	302	891
**Contract Training	12	36	16	64
***MIBC	18		21	39
Education to Go	2	4	7	13
***Computer Maintenance Tech	11			11
Waste Station Transfer Training		45		45
Sub-Total for Non-Credit Courses	S:			1,063
*includes personal enrichment, pe	rsonal developm	ent, computer	training and progr	ams for
youth.	-	· •	- , -	
**Contracts: Belen Police Dept.,	DVR, Solo Cup,	ProFab		
***funded by NM Dept. of Labor	•			
Community Training Center	150	523	611	1,284
(American Heart Association app	roved curriculum	for CPR Basi	c Life Support)	
Gifted/High Potential Program:				
Same students Fall/Spring; Los Li	unas & Isleta:			165

McCune Charitable Foundation Accelerated-Enrichment Program:

Same students Fall/Spring; Los Lunas, Belen & Isleta: 107

Total Enrollment/Non-Credit: 2.619

ii. Cultural Enrichment Series

- O Summer Flora Tour, June 1999: 68
- O Fall '99, Hispanic Heritage Night, Sept 18: 100; Featuring Flamenco Dance by "La Poli"; and Ritual to Nuevo Cancion by Dr. Cipriano Vigil (NM Endowment)Historic Lodgings of NM, Nov. 16: 50; Lecture by Sandra Lyn (NM Endowment)
- John L. Hatcher: Mountain Man, Oct. 14 and 15; Lecture by Bart Barbour (NM Endowment Chattaqua)
- UNM—Valencia Campus Chorus, Dec. 4: 500; With the Symphony Orchestra of Albuquerque and Albuquerque Boy Choir
- O Walt Whitman, Dec. 7: 68; by Bruce Noll (NM Endowment Chattaqua) Spring '00
- O In Honor of a Man and His Dream, Jan. 15: 300; A Salute to Martin Luther King
- Frederick Douglass—The Lion, Feb. 17: 84; By Don Perkins (NM Endowment Chattaoua)
- O 17th Annual Valley Cultural Festival and Student-Community Center Ribbon-Cutting Ceremonies, Friday, April 28: 200; Featuring: Valley Visions Literary Magazine Awards; Music from the Andes to the Rockies by Tradicion; Celtic Music Concert by Sherilyn Weldon; Magic F/X by Joseph Green; Schuplatter (Bavarian Dance; by Mike & Janice Hacker); Faculty Art Exhibit; Tome Elementary School Writing Expo
- Saturday, April 29—9th Annual Family Fun Fest, Sponsored by the Village of Los Lunas, Children, Youth & Families; Valencia Campus Student Senate, Faculty, and Community Education Services at Daniel Fernandez Park in Los Lunas: 1,000+
- Total Cultural Enrichment Series 1999-2000; 2,385

iii. Distance Education

Electronic Distance Education (EDEN)

- Upper Division & Graduate Courses received via satellite broadcast from UNM—Main Campus, Fall '99: 6; Spring '00: 9
- O Teleconference/C-band Satellite Receptions:
- O NM Dept. of Health/Family Nutrition Bureau: 30;
- O English Literacy & Civics Education: 5;
- Total Distance Education: 50

4. Faculty Assembly:

a. Officers for 1999 - 2000:

- a. President: Greg Candela
- ii. Vice President: Dubra Karnes-Padilla
- iii. Secretary: Cindy Chavez
- iv. A & S: Lerov Baca
- v. B & T: Alex Sanchez

b. Standing Committee Chairs for 1999 - 2000:

- i. Tenure and Promotion: Miriam Chavez
- ii. Faculty Professional Development: Miriam Chavez
- iii. Faculty Program Development: Julie Depree/Pam Perez
- iv. Curriculum: Cindy Chavez

- vi. Adjunct Faculty: Dubra Padilla/Ray Moore
- vii. Outcomes Assessment: John Crawford/Michelle LeBeau

c. Accomplishments for 1999 - 2000:

- i. Building of a Faculty Assembly Homepage and Interactive Website (Vicinities).
- ii. Strengthening the connections between FEC and Assembly Committees.
- Enhancing Curriculum, including co-sponsorship and planning of the "Curriculum Conference 2000 Conference," holding forums concerning the reduction in our course offerings and integrating our core curriculum into all of our degrees, etc.
- Reviewing of Faculty Assembly Handbook Committee procedures and the subsequent disbanding of this committee and transfer of its duties to the FEC.
- v. Full support of our Dean's drive to hire more full-time faculty.
- vi. Coordinated the faculty evaluation of the Executive Director
- vii. Represented faculty on the Instructional Council, Advisory Board, Minority Recruiting Committee
- viii. Strengthened communication and cooperation among the faculty, staff, and student associations
- ix. Ended the year with a budget surplus, which was forwarded to FY 2000-2001 and which has finally allowed us to purchase a filing cabinet to store Faculty Assembly Records
- x. Continued publication of the Faculty Assembly Newsletter, now in its tenth year.
- xi. Assisted the Cultural Enrichment Committee and Community Education in producing and Presenting the Annual Valley Cultural Festival

B. Significant Plans and Recommendations

1. Overall

- a. Complete Strategic plan for 2001 2004.
- b. Update Faculty Procedural Handbook and publish it to the world-wide web.
- c. Create training programs for workforce development including welfare reform.
- Enhance and expand business, industry and other agency partnerships to insure currency of vocational programs.
- Improve communications with main campus departments and other receiving institutions to insure
 effective student transfer.
- f. Enhance and expand business and industry training programs.
- g. Improve campus-wide data collection and information management.
- h. Integrate technology into the classroom through faculty training, presentation rooms, and inclusion of A/V equipment into other classrooms.
- i. Implement new developmental studies laboratory.
- i. Continue to improve internal communications/teamwork/collegiality:
 - a) Share information to improve effective communications through informal and formal networks and by publishing important documents, such as the Campus Catalogue, the Faculty Procedural Handbook, and proceedings of the Instructional Council and Strategic Planning to the web.
 - b) Provide workshops, seminars, such as ongoing Covey training, to improve teamwork and encourage collegiality campus-wide.
 - c) Support Staff Association efforts directed at improving communication and morale.
 - d) Provide easily accessible information/training on setting up email and web pages, including faculty training for viewing course enrollments.

2. Credit Programs

- a. Create an advisory board for Criminal Justice.
- b. Assess effectiveness of all credit programs.

3. Non-Credit Programs

a. Adult Basic Education

- ii. It is planed to continue our work on assessment with the assistance of two coordinators, one for GED and one for ESL. Setting realistic student goals and helping them meet those goals will play a major role in this process. Our level of accountability to funding agencies and students will increase. In addition, a new data entry person will be hired to record and report our findings.
- iii. Program expansion remains a primary goal. We have a strong desire to do contract training with local businesses and correctional facilities. Other agencies in Valencia and Torrence County are requesting services.
- iv. Another goal is to increase the amount and the quality of technology in instruction. Instructors are being trained and encouraged to use more technology, especially computers, in their classrooms. Video units, overhead projectors, laptops, printers and a computer projector are available for all sites.

c. Student Enrichment Center

The Center will be reorganized, in part with Title V funds, as follows:

- A new coordinator will be hired to supervise tutorial services, equal access, and a new developmental studies lab.
- The SEC computer lab will be relocated to a new location. Construction is funded with Title V funds.
- iii. The "former" SEC lab will be converted to serve as a lab for developmental studies students. Remodeling and computers will be funded through Title V funds.
- iv. Offices formerly used by Tech Prep and SEC will be reconverted to serve as a developmental studies classroom. Remodeling and computers will be funded through Title V funds.
- v. A new Instructional Assistant will be hired to assist students in the developmental studies lab as well as to assist with maintenance of computer systems in the lab and classroom.

d. Library

- Renovate the room that has been used for aerobics so that it can be used as a Library Instruction classroom.
- Pursue moving Judy Marquez from a grade 6 Library Technician to a grade 7 Library Information Specialist I.
- Pursue joining the National Networks of Libraries of Medicine so that our Library might be eligible for grants related to consumer health acquisitions.
- Using the funds made available by ABE, increase the low literacy and Spanish language books in the Library, now located in the new ESL section.
- Continue to send staff members to relevant and cost-effective professional conferences and workshops.
- Complete the revisions to the Library's policy and procedures manual sections impacted by the changeover to LIBROS.
- vii. Implement the Library's new computer use policies and continue to monitor printing costs.

e. Community Education

Although the number of individuals participating in Community Education programs has increased dramatically, the non-credit classes, i.e., personal enrichment, personal development, computer training and programs for youth, have decreased once again (4.5%).

- The Department will concentrate efforts on program development to include non-credit community education, contract training, cultural enrichment series and out-of-district instruction. Our goal is to develop new programs, which should increase enrollment translating into increased revenue.
- Workforce Development is the most exciting new trend in continuing education today. The
 Department will work closely with the Dept. of Labor and with Business & Technology to
 create and implement workforce training programs.
- iii. The Community Training Center (CTC) has been part of Community Education for about 3 years. Ginny Kay Massara was the Coordinator until June 2000 when she moved to Colorado, Sheran Dodd, is the new on-call Coordinator working approximately 10 hours per week. Sheran is an EMT from Belen, she knows the area well, and has many new ideas to develop and offer CPR programs to the community, including contract training to business & industry, governmental entities, schools, etc. In addition, she will develop a First Aid program that we will implement.

C. Appointments to Faculty and Staff

- 1. Full-Time Faculty -No new faculty appointments for 1999 2000.
- 2. Staff Josie Sanchez, .50 Administrative Assistant I, Academic Support.

D. Separations from Faculty and Staff

- 1. Faculty None
- Staff None

E. Tenure and Promotion Decisions

- 1. Advancement to Professor None
- Achievement of Tenure and advancement to Assistant Professor, Celestyn Brozek, Ph.D., Associate Professor of Chemistry.
- 3. Advancement to Code 4
 - a. Julie DePree, Ph.D., Assistant Professor of Mathematics.
 - b. Toni Black, M.A., Assistant Professor of Computer Information Systems.

F. Publications, Papers, and Notable Achievements

- 1. Reinaldo A. Z. Garcia, Associate Professor of Computer Information Systems and Dean of Instruction:
 - a. Elected as Vice President of Rio Rancho Schools' Board of Directors.
 - b. Attended HACU Conference, November, 1999, Miami, Florida.
- 2. Kris Warmoth, Librarian:
 - New Mexico Library Association (Secretary of the Association, Chair of NMLA Conference Program Committee, and member of NMLA Public Relations Committee).
 - b. New Mexico Academic and Research Librarians (Advisory Board member).
 - c. New Mexico Consortium of Academic Libraries (member).
- 3. Kris White, Information Librarian:
 - a. New Mexico Consortium of Academic Libraries (ILL subcommittee).
 - b. New Mexico Library Association,

٧. : .

- c. Mountain Plains Library Association, Northwest Archivists Association.
- 4. David Coker, Lecturer in Fine Arts and Chair of the Fine Arts Department:
 - Donated sculpture for the <u>Valencia County News-Bulletin</u> Silent Auction to help raise money for the UNM-Valencia Campus Excellence Fund.
 - Faculty Exhibit, Art Department Foyer Gallery, Valley Cultural Festival, UNM-Valencia Campus, Tome, New Mexico.
- 5. Daniel Davis, Adjunct Lecturer in Fine Arts (Music):
 - a. Produced the music for UNM Main Campus' production of The Christmas Carol.
 - Produced incidental music for KNME 'Colores,' Vision and Spirit, featuring artist Raymond Johnson.
- 6. Frank Melcori, Adjunct Lecturer in Fine Arts (Theatre):
 - a. Director of the Italian American Home Theatre, which produced a play by Pirandello, 'The Man with the Flower in His Mouth,' (eight weekend performances) Albuquerque, New Mexico.
- Donald Woodman, Adjunct Lecturer in Fine Arts (Photography):
 - a. Biannual New Mexico 2000 Exhibit, Museum of Fine Arts, Santa Fe, New Mexico.
 - b. Collaboration with Judy Chicago, Sixth Exhibit of the Holocaust Project, National Traveling Exhibition, Lehigh University Art Gallery, Bethlehem, Pennsylvania.
 - c. Attended International Conference, Representation in the Holocaust, Sponsored by the Berman Center for Jewish Studies, Lehigh University, Bethlehem, Pennsylvania.
 - d. Photography Fest 2000, buried exhibition, Lawndale Art Center, Houston, Texas,
 - c. Coordinated and produced photos for, <u>Judy Chicago an American Vision</u> by Edward Lucie-Smith, (published April, 2000).
 - f. Group Invitational Show, Jewish Artists on the Edge, Marian Art Center, College of Santa Fe, Santa Fe, New Mexico.
- 8. Pamela Etre-Pérez:
 - Served on the Workforce Investment Act Regional Board as a representative for Adult Basic Education as well as serving on the State ABE Advisory Committee, the NM State RFP Committee, and Sen. Heather Wilson's Council on Literacy.
 - Attended all ABE directors meetings held during the year and participated in ABE Day at the State Legislature.
 - c. Held the position of board president for the Valencia County Literacy Council.
 - d. Spoke on literacy to the United Way and the Belen Rotary Club.
 - e. Presented to Belen High School and Moriarty Chamber of Commerce and coordinated taping of a literacy piece for KOAT TV.
 - f. Maintained membership in four professional organizations, NMAEA, TESOL, AESA, MPAEA and attended two conferences, the NMAEA annual conference and American Educational Research Association in New Orleans.
 - g. Presented at two Nuestras Voces conferences for ESL students and a BLAST retreat for student leaders.
 - Traveled to Puerto Rico during the summer to increase her Spanish language proficiency and cultural awareness.
- 9. Tina Shiplet:
 - a. Is the representative for the Central Region on the NMAEA board and chaired the scholarship and award committee for this board.
 - b. Attended the NMAEA annual conference where she presented with a panel on the topic of student leadership in the classroom.
 - c. Attended NMCHE's conference on assessment and retention.
 - d. In the interest of promoting student leadership, she assisted with the BLAST Leadership Institute and wrote an article for BLAST's magazine, <u>Echoes.</u>
 - e. Regularly attended ABE directors meetings and participated in ABE Day at the state legislature.
- Miriam Chávez:
 - Awarded "Teacher of the Year" for the Arts & Sciences Division.
- 11. Toni Black:
 - Awarded "Teacher of the Year" for the Business & Technology Division.

12. Richard Melzer:

- Published "Governor Miguel OTERO'S War: Statehood and New Mexican Loyalty in the Spanish-American War." <u>Colonial Latin American Historical Review</u>, vol. 8 (Winter 1999): 79-103
- Breakdown: How the Secret of the Atomic Bomb was Stolen During World War II. Santa Fe; Sunstone Press, 2000.
- Coming of Age in the Great Depression: The Civilian Conservation Corps Experience in New Mexico, 1933-42. Las Cruces: Yucca Press, 2000.

Michele Diel Co-Organizer NM CETP Conference held at UNM Valencia Campus October 1999

- Equal Opportunity Committee Chair for American Mathematical Association of Two-year Colleges, Directed publication of EOMC Newsletter.
- d. Attended annual AMATYC Conference in Pittsburgh Pennsylvania November 1999. Conducted EOMC meetings, served as presider over the conference presentation.
- e. Attended Developmental Studies Conference through Title V Grant in Denver, Colorado, October 1999
- f. Served on Review Committee reading proposals for 2000 AMATYC Conference.
- g. Program Chair for New Mexico Mathematical Association of Two-year Colleges held at UNM Valencia Campus May 2000. Attended conference.
- h. UNM Valencia Campus representative to UNM Undergraduate Mathematics Committee.

 Transitional Math Team Sub-Committee member.
- UNM Valencia Campus Mathematics and Statistics Department Chair Teacher of Teachers Chair for NMMATYC
- j. As a member of the New Mexico Network for Women in Science and Engineering, helped to plan the Expanding Your Horizons conference, which encourages girls in grades six through 12 to pursue careers using mathematics and science.
- k. Member of UNM Teaching Enhancement Committee

14. Julie DePree

- a. Co-Organizer NM CETP Conference held at UNM Valencia Campus October 1999.
 b. Attended, presented and presided at the 1999 AMATYC Conference in Pittsburgh, Pennsylvania.
- Attended and Presented at the 2000 Joint Mathematics Meetings Conference in Washington, DC. In January 2000.
- d. Received Mathematical Association of America Teaching Award.
- NMMATYC 2000 Conference Chair for conference held at UNM Valencia Campus May 2000.
 Attended conference.
- f. Worked at National Science Foundation in Washington, DC as Grant Proposal Reader in July 2000.
- g. Awarded the Eisenhower Grant to work collaboratively with TVI to enhance Teacher Prep courses.
- Attended New Mexico Spring Forum of Eisenhower SW Consortium for Improvement of Math and Science Teachers in March 2000.
- i. Attended Southwest Section meeting of the MAA March 2000
- i. Accompanied class to Tome to attend the World's Largest Math Event
- k. Valencia Campus rep to Faculty Senate at UNM
- Member of Admissions and Registration Committee at UNM

15. Mary Robinson

- a. Served as Presider Chair for American Mathematical Association of Two-year Colleges
- Attended American Mathematical Association of Two-year Colleges Annual Conference in Pittsburgh, Pennsylvania, November 1999.
- c. Organizer for Panel Discussion at the 1999 AMATYC Conference
- d. Served on Review Committee reading proposals for 2000 AMATYC Conference.
- c. Co-Organizer Contributed Paper Session and Co-Organizer of Panel Discussion for Joint Mathematics Meetings Conference in Washington DC, January 2000.
- f. Served on Two-ear College Committee for Mathematical Association of America
- g. Served on Conference Committee for NMMATYC 2000 Conference held at UNM Valencia Campus in May 2000. Attended conference.

- h. Performed with musical group Tradición in Valencia Campus and Valencia County functions.
- Built, managed and maintained UNM Valencia Campus, and NMMATYC listservs, and webpages.
- i. Designed and published online proposal forms for AMATYC and NMMATYC conferences.
- 16. Robert Bristol

April 2000 - received a grant from partners in Education to travel to Russia and presented at a conference at Volgograd Pedagogical University. Also visited and taught at several gimnazia.

- 17. John Crawford
 - Conducted panel discussion "The Alternative Press in the Midwest," Associated Writing Programs, Kansas City, April 2000.
- 18. Michele Le Beau
 - a. Member, Board of Directors for NM Higher Education Assessment Association.
 - b. Attended Preparing Future Faculty (PFF) Conference, Albuquerque, NM, April 2000.
 - c. Facilitated and attended NMComp Conference, Albuquerque, NM April 2000.
 - d. Conference organizer for NMComp Conference, Abuquerque, NM, April 2000.
 - e. Participated in UNM's Communication and Journalism Department PFF grant, March 2000.
 - f. Presentation to NMHEAC Conference on Assessment and Student Retention, Albuquerque, NM, February 2000 ("Assessing Writing for English 100 and 102 Skills and Critical Thinking").
 - g. Attended NMHEAC Conference on Assessment and Student Retention, Albuquerque, NM, February 2000.

. . .

II. STUDENT SERVICES

Presented by Donna Romero, Associate Director for Student Services

A. Significant Developments

Overall, the Department has focused on Student Retention and Advisement efforts, aided by the hiring of a full-time retention counselor, a full-time PROGRESS (Electronic advising) coordinator, and funds to assist in various aspects of retention through Title V funding.

1. Admissions/Registrar's

- a. In an effort to enhance awareness about the Valencia Campus, Admissions/Registrar's Office staff has been actively involved in informational workshops conducted at area high schools.
- b. Off site registration was a great success in 1999/2000, with courses offered at Moriarty, Mountainair, Magdalena, Socorro, and Estancia and some 399 students enrolled. Courses at the Los Lunas Schools and the Central New Mexico Correctional Facility were also offered.

2. Advisement Services

- a. Retention efforts have been implemented to specifically target new students for 99/00. As students registered, a follow-up 15-minute appointment was scheduled for the first two weeks of class in order to ensure that scheduling, Financial Aid, bookstore accounts, etc. were in place. Students were then scheduled to see advisors at the 6-week point to again check their progress. Continued checks (early alert and attendance referrals) were also in place to maintain contact with students throughout the semester.
- b. Regular advisement training/meetings were held throughout the academic year to keep the department updated. Issues specific to retention, attendance, degree programs, transfer students and scholarship requirements were addressed. Department Chairs and other campus representatives from various departments attended the meetings to share specific program/departmental information and review any changes.
- c. Advisors gave Study Skills presentations to various ACAD courses. They also participated in offcampus presentations at Los Lunas and Belen schools. Throughout the academic year, the advisors worked with the Dean of Instruction on curriculum as it related to the recent implementation of the UNM Core Curriculum.
- d. A pilot peer advisement program was initiated during the Summer 2000 semester. Peer advisors are generally workstudy students who have completed over 30 credits who have at least a 2.5 g.p.a. They provide new students with information on admissions, placement testing, new student orientation etc. They discuss "student success tips" with the student based on a checklist. The student then sees the academic advisor for course selection and program requirements, following which, the peer advisor helps the student build their schedule. Thus far the program has been effective. As the semester continues, the program will be reviewed and improved based on feedback from students, peer advisors and academic advisors.
- e. "El Compañero" the former UNM-Valencia Student Handbook was replaced by the "Success Guide for New Students" handbook. The end result is a much more appealing handbook with updated and more relevant information. It will be provided to all enrolled students free of charge at orientation, workshops as well as upon request.

- the Student Services staff and four additional on-call advisors were hired to keep up with the demand.
- g. The Student Services' staff have been heavily involved in assisting the Dean of Instruction to proof the catalog for readability, clarity of the academic program information, and general information.

3. Career Services

- a. During the fiscal year 1999-00, Career Services continued to experience personnel challenges in the areas of Cooperative Education services and VA advising to the Campus. The position of Cooperative Education Coordinator (.5 FTE) was filled on August 16, 1999 and remained as such until that person resigned to accept a full time position as the UNM-Valencia Campus Donor Relations Manager effective March 27, 2000. The .5 FTE Cooperative Education Coordinator position was reduced to a grade 8 and combined with the .5 FTE Career Services Administrative Assistant position for the fiscal/academic year 2000-01. The VA advising responsibility reverted to the Academic Advising area of Student Services and was assumed by a Senior Academic Advisor effective April 7, 2000.
- b. Career Services made some 3,267 contacts via various activities and programs including Career Day (our sixteenth and largest yet); Career exploration with high school students from Belen, Los Lunas, Mountainair, and Estancia, and career exploration activities with students participating in this campus' Adult Basic Education and SU PARTE programs, Additional activities included presentations to high school seniors visiting the campus for two "walk-about" activities; job skills seminars for UNM-Valencia Campus students, and Career counseling for both campus students as well as members of the community. Career Services staff also presented to students during student orientation and made specific presentations to developmental skills classes. Career Services also conducted its annual "Young Scientist Day" by hosting 14 fifth grade "at-risk" students from Isleta Pueblo Elementary School. The students participated in hands-on activities in the biology and chemistry labs. The Career Counselor represented the campus at career fairs held by the Mountainair and Estancia High Schools. Contacts were realized from Valencia Campus students seeking Cooperative Education placement, part time jobs, and work-study positions. Additional contacts resulted from providing Academic Advising, Counseling, VA Advising, and JTPA advising, Career Services also presented this campus' third Career Informational Seminar on April 20 in which two employers presented information on resumes, interviewing and hiring practices to our students. Five faculty members representing all of our vocational and academic programs were also present to discuss employer concerns and they look for in new employees.
- c. Career Services assumed responsibility for supervision of the newly created Title V Counselor 1.0 FTE position on April 10, 2000. The Counselor is responsible for addressing the needs of first year "at-risk" students in order to increase retention of this population and help them to achieve the educational success they desire. During the April, May, June time frame the Counselor had 131 contacts with students. The Counselor resigned effective June 15 to take a position in Albuquerque. Career Services immediately initiated a new search and was able to hire a new Counselor to fill the position effective July 24, 2000.
- d. Career Services (career Counselor) conducted our first Alcohol Screening Day on April 6, 2000. Sixty-four people filled out screening forms and there was a very positive response from the students toward this activity.
- e. Cooperative Education placed 39 students (36 in paid positions) with 31 different employers including: DP Signal Systems, Sandia National Labs, Los Lunas Schools, the State of New Mexico, Ranchers Bank, Pueblo of Isleta, Avonite, Inc, as well as other schools and businesses in the area. Most exciting was the placement of two students with HACU summer internships in Lufkin, Texas with the USDA and Sioux Falls, SD with NASA. These students were placed in positions associated with their majors in Computer Science. We are proud that our students are

very capable of competing nationally for these positions. Career services will continue to emphasize this program during the coming year.

- f. The combined Spring, Summer and Fall 1999 graduate placement survey reveals that of the forty-eight percent of our vocational program graduates who responded, sixty-eight percent were continuing their education, while sixty-three percent reported working in jobs (full or part time) related to their training.
- g. Career Services will be participating in the Carl Perkins Grant during the new fiscal year in 'three activities:
 - i. providing job shadow or volunteer experience to new vocational program students in their chosen career field:
 - ii. providing employment skills assessments and guidance to vocational program students, and
 - conducting a vocational technical job fair and seminar. Career Services will also be providing Career Counseling to Vocational students.

4. Committees

a. Scholarship Committee

1.	Scholarships awarded:		
	a. Lottery	279	\$103,788
	b. Connection	55	\$ 20,460
	c. 3% New Mexico	70	\$ 33,026
	d. Leg. Endow.	9	\$ 3,736
	e. Bonifacio & Eloisa Tabet	5	\$ 750
	f. Student Government	32	\$ 13,200
	g. Tibo Chavez History	1	\$ 1,000
	h. Los Lunas Jr. Miss	1	\$ 816
	i. Foundation	9	\$ 4,000
	TOTAL	461	\$ 180,776
	i. Childcare awards	107	\$ 19,757

b. Student Affairs Committee:

Eliseo Montoya is the chair of the Student Affairs Committee. The following is a compilation
of the number of students who submitted appeals to the committee:

a. Appeals submitted: 194b. Appeals granted: 176c. Appeals denied: 18

All appeals were financial aid related.

5. Financial Aid

- a. The number of students awarded some type of financial aid for 1999-2000 hit an all time high of 1,116, compared to 825 the previous year, resulting in an increase of 35%.
- b. Students awarded financial aid:

May 1999: 825 May 2000: 1116 c. Workstudy allocations:

July 1999: 73 July 2000: 61

d. The Financial Aid Office has been involved with other departments in student services in offering new student orientation sessions. Off-site recruitment efforts will continue to be a part of the duties of the office. The office staff will continue to conduct excellent recruitment/retention services to students through workshops, orientation and off-site recruitment efforts.

6. GED

- a. Thirty-one test dates were scheduled for the 1999-2000 academic year. One hundred and forty-eight testers passed, while 77 failed. Twenty testers have yet to complete the battery.
- b. An advisement plan for GED Testing was implemented in September 1999. Academic advisors see all GED candidates and discuss Financial Aid, Career Services and academic programs with the candidates.

7. JTPA Program

- a. The JTPA program coordinator accepted a full time position as he Development Officer at UNM-Valencia Campus on March 25, 2000. The program continued through June 30, 2000 under the direction of Career Services and was terminated when JTPA was transferred to the new WIA (Workforce Investment Act). The WIA program became the responsibility of the Central Regional Board of New Mexico effective July 1, 2000.
- b. The following is a list of completed assessments, graduates, and total of all participants involved with the Job Training Partnership Act Program during the 99-00 fiscal year.
 - i. Completed Objective Assessments Totals
 - Department of Labor for Valencia, Torrance and northern Socorro Counties, as well as HRDI, TAA and Stay-in-School Programs 256

ii.	JTPA Classroom	Training (CRT)	Participants
-----	----------------	----------------	--------------

a)	Summer 1999	20
b)	Fall 1999	27
c)	Spring 2000	<u>20</u>
Total Participants		67

iii Graduates

III. Graduates			
	a)	Summer 1999	1
	b)	Fall 1999	4
	c)	Spring 2000	4
Tot	tal C	Graduates	09

c. The WIA (Workforce Investment Act) became effective July 1, 2000 and the New Mexico Department of Labor is currently processing all students who are transition into the WIA program. Seven students have decided to continue and are being certified for their classroom training through the WIA. The loss of grant funding has resulted in the termination of a .5 FTE JTPA Coordinator and a JTPA assistant (student employee .5 FTE) positions.

8. New Student Orientation

Last year's new student orientation program (NSO) was reviewed and modified based on evaluations from students and presenters. All new students, transfers and re-admits with less than 26 credit hours were again required to attend a NSO session. Students are subsequently required to return to the campus for an intensive advisement session prior to registration. Several on-call advisors were hired to accommodate the demand of walk-in as well as appointment students.

A total of 21 orientation sessions have been held this summer, (four sessions remain) and 289 of our entering students have participated. Student Services revised their power point presentation to include career assessment as part of the orientation session. The requirement that students attend orientation and advisement sessions prior to registration proved difficult to enforce toward the end of the summer. Also, unintentionally, the orientation sessions were much smaller this year, however, the smaller groups have provided a very inviting atmosphere for student comfort level. Many questions were asked and open dialogue was encouraged.

Feedback from students attending the orientation indicated good to excellent ratings in terms of information learned and provided. Student Services staff continues to revise the program throughout the summer, updating information and improving the quality of presentations.

9. Outreach and Recruitment

- a. Teams from Student Services gave presentations on career planning, financial aid, admissions, advisement, and registration to senior English classes at Socorro, Belen, and Los Lunas High Schools. Presentations included information about the Valencia campus, and included general educational information.
- b. Participation in holiday parades. The visibility of the campus in the holiday parades, in collaboration with Student Government, gave the campus a wonderful opportunity to inform the community about the campus.
- Senior Walkabouts were conducted in both semesters, as was and a Middle School/High School Counselor's Luncheon.

10. Placement

- a. During the 1999-2000 academic year, Student Services scheduled 50 COMPASS placement testing sessions for incoming and returning students. Test sessions were offered during the day, evenings and Saturdays in order to accommodate as many students as possible. 832 COMPASS placement assessment test were administered.
- b. Of those who tested in math, 69.8% tested into math 010, 24.5% tested into math 100, 3.8% tested into math 120, 0.7% tested into math 121/150, 1% tested into math 123, and 0.3% tested into math 180 (COMPASS).
- c. Of those who tested in reading, 23.8% were at ABE level, 28.5% tested into ACAD 100, 25.5% tested into ACAD 101 and 22.2% tested out of reading (COMPASS).
- c. In English, 13.7% were at the ABE level, 25.6% tested into English 010, 31.4% tested into English 101, and 29.3% scored high enough to enroll in English 101 (COMPASS).
- d. In April 2000, the Math Department added an additional assessment tool for use in conjunction with COMPASS in the hope of evaluating the accuracy of the COMPASS current cut-scores. To date, results indicate that a change in the scores is needed for improved accuracy.

958

11. ESL

- a. Student Services continues to provide academic advisement to ESL students. Advisement sessions are conducted in Spanish when necessary. The Financial Aid Office keeps a sufficient supply of FAFSA forms in Spanish. Many students take advantage of this Spanish version form.
- b. Student Services is staffed with bilingual administrators, advisors (both permanent and on-call), work-studies and administrative assistants. The staff has provided a very welcoming and inviting atmosphere for the ESL students.
- c. In Fall, 1999, 7 ESL students were nominated by Student Services for the Who's Who Award.
- d. In an attempt to create a learning community, 9 ESL students were placed into Sociology 101 with Marie Cleavenger. The students received the following grades: A, C, C, WP, B, A+, B, A+ and A. Marie Cleavenger was very receptive to the idea of learning communities and has encouraged Student Services to continue to refer ESL students to her. This was a challenging course for many of the students and as a group they did exceptionally well.
- e. Student Services participated in a faculty development session focusing on ESL issues. An ESL student was invited to speak at this session, and share her experiences at UNM-Valencia Campus. The discussion focused on ESL course placement and an overview of the current services offered to those students with limited English abilities.

12. VA

Twenty-six VA students who certified to receive educational benefits for the Summer, 1999 session, 43 certified for the Fall, 1999 session, and 49 for the Spring, 2000 session. Eight VA students were nominated by Student Services for the 'Who's Who' Award. UNM-Valencia Campus had two VA work-studies during the 1999-2000 academic year, each working approximately 20 hours/week.

B. Enrollment Data

Listed below are enrollment and graduation figures for the 1998-99 academic year:

	Summer 1999	Fall 1999	Spring 2000
Headcount	640	1648	1624
FTE	423	986	912

Enrollment at the Valencia Campus increased this past year. These figures represent an increase of 5.8% in headcount and an 8.2% increase in FTE from Fall, 1998 to Fall, 1999. Also represented from Spring, 1999 to Spring, 2000 is an increase of 2.59% in headcount and 1.79% in FTE.

	Summer 1999	Fall 1999	Spring 2000
Associate Degrees	4	29	50
Certificates	0	4	7

C. Student Senate

The Student Senate has been a very flexible and cooperative team this year. They continue to learn new policies and procedures with each project they coordinate. As in previous years, they provide pizza during Welcome Back days, sponsor a Halloween Carnival and help new student organizations in their formation and implementation. The Senate was involved in several activities including a blood drive, a yearbook, the Excellence in Teaching Award, participation in the Valencia County Fair Parade and local Electric Light parades and provide entertainment at the annual Valley Cultural Festival, sponsored by the Valencia Campus.

D. Significant Plans and Recommendations

- 1. On-going training for staff.
- Students can now apply for financial aid and access all financial aid awarding on the web. They can also access documents for file completion.
- 3. Student Services staff will continue to concentrate efforts on recruitment and retention of students.
- 4. Off-site workshops will continue to be a big part of recruitment efforts.
- 5. Continued efforts in the evaluation of Student Services programs using surveys and focus groups,

E. Appointments to Staff

- 1. Lois Hansen, Cooperative Education Specialist, JTPA Coordinator, VA Certification, August 1999.
- 2. Linda Humprey, Sr. Financial Aid Advisor, September 1999.
- 3. Terry Romero, DARS (Title V), January 2000.
- 4. Joanna Cummings, Counselor/Social Worker (Title V), April 2000.
- 5. Eliseo Montoya, Sr. Financial Aid Advisor, April 2000.
- 6. Lucy Sanchez was promoted to Manager, Enrollment Services, in March 2000.

F. Separations from Staff

- Linda Humphrey terminated February 4, 2000.
- Lynne Jacobsen terminated July 7, 2000.
- 3. Lois Hansen terminated March 2000.
- 4. Joanne Cummings terminated June 2000,

G. Outside Professional Activities

- 1. Donna Romero, Associate Director for Student Services:
 - New Mexico Student Persistence/Retention Summit Conference, Las Cruces, NM, February 2000.
 - e. 3rd Annual New Mexico Student Affairs Symposium, Albuquerque, NM, May 2000.
- 2. Joanne Silva, Sr. Academic Advisor:
 - a. NACADA National Conference, Denver, Co, October .
 - b. COMPASS NM Conference, UNM-Valencia Campus, Tome, NM, December 1999.
 - c. COMPASS Annual Regional Conference, San Antonio, TX, May 2000.
- 3. Frances Duran, Administrative Assistant III:
 - a. Administrative Assistant Conference, Albuquerque, NM, July 1999.
 - b. How To Be A Great Communicator Seminar, Albuquerque, NM, September 1999.
 - c. Franklin-Covey's Time Management Workshop, Albuquerque, NM, June 2000.
- 4. Lucy Sanchez, Registrar:
 - a. Council on Law in Higher Education, Colorado Springs, Co, July 1999.
 - Rocky Mountain Association of Collegiate Registrars and Admissions Officers, Denver, Co, July 1999
 - c. Beginners Encoders Workshop, Ohio, February 2000.
 - d. American Association of Collegiate Registrars and Admissions Officers Annual Meeting, New Orleans, LA, April 2000.
 - e. 3rd Annual New Mexico Student Affairs Symposium, Las Cruces, NM, May 2000.
 - f. New Mexico Association of Collegiate Registrars and Admissions Officers Conference, June 2000,
- 5. Joseph Burgess, Administrative Assistant II:
 - a. Completed Associates Degree in General Studies.
 - Pursuing Career Ladder towards Administrative Assistant III.

- 6. Terry Romero, Coordinator of Registrations (Title V):
 - a. Beginners Encoders Workshop, Ohio, February 2000.
- 7. Michele McGhee, Office Assistant:
 - a. Pursuing Career Ladder towards Administrative Assistant.
- 8. Raymond Rondeau, Counselor and Coordinator for Career Services
 - New Mexico Placement Council quarterly meetings, Southwest Indian Polytechnic Institute, Albuquerque, NM, October 1999; TVI, Albuquerque, NM, January 2000.
 - b. New Mexico Counseling Association Annual Conference, Albuquerque, NM, October 1999.
 - e. Stress and Disease Workshop, Albuquerque, NM, March 2000.
- 9. Lois Hansen, Cooperative Education Specialist, JTPA Coordinator:
 - a. Officer Pilot Club throughout Academic Year 1999/2000.
- 10. Nancy Moore, Administrative Assistant II:
 - a. Lessons in Leadership, Albuquerque, NM, January 2000.
- 11. Dixie Dennison
 - a. Completed Master's degree in Organization Learning and Instructional Technology, May 2000.
 - b. National Student Loans Database System Workshop, Albuquerque, NM, May 2000
- 12. Eliseo Montoya, Sr. Financial Aid Advisor:
 - a. Continuing pursuit of Master's degree in Counseling.
 - b. National Student Loans Database System Workshop, Albuquerque, NM, May 2000.

A. Significant Developments

1. Campus Issues

- a. Construction of the Student/Community Center was completed on May 25, 2000. The campus wide HVAC renovation is also essentially complete with only minimal testing and balancing remaining. The Bookstore, Small Business Development Center, Community Education, and the Department of Labor have all moved into the new facilities. The Multi-Purpose room has also been utilized, for our graduation ceremony, several other internal and external functions. The Wellness Center will be operational by the Fall 2000 semester and the Child Care Center is expected to be operational by year's end.
- b. Work on the Five-year Master Plan was completed on June 25, 2000. The planning company of Architectural Research was hired to assist with the process. The Master Plan has been submitted to the Commission of Higher Education.

2. Business Office

- a. To improve cash handling procedures, the Cashier's Office took over cash collection duties for Community Education in late Fall of 1999. Community Education has now moved to a new building with cash handling duties designed into the facility, and the Community Education staff have received additional training, including a list of procedures to follow. As a result, cash handling duties will be returned to the Community Education Department for the Fall 2000 semester.
- b. In an effort to improve customer service, the Business Office created a Web site that contains information on all Business and Finance departments as well as policies, forms and links to the Main Campus Business Office Policies and Procedures, (Big Red).

3. Budget

- Efforts continue for an open budget process involving the entire campus together with concerted efforts to link the budget to the strategic plan.
- The size of the campus budget continues to grow. The FY 99-00 budget increased by over 11% over FY 98-99.

4. Auxiliary Enterprises

- a. The changes implemented in the Bookstore continue to improve all aspects of Bookstore operations. The new structure was implemented for a number of reasons, including inventory control and management as well as to have store supervision backup. These changes resulted in a minimal inventory adjustment, better service, reduced costs to students, and increased revenue for the Bookstore.
- b. As a result of the new construction and renovation to the Student Center, the Cafeteria remained displaced to temporary facilities during the first quarter of the year. Food preparation was completed in a temperature-controlled bay at the Physical Plant. Food was then served from a converted office in the Student Center. Because the facilities were temporary, the menu was limited to sandwiches and pizza purchased from the Pizza Hut Corporation. The Cafeteria reoccupied the newly renovated kitchen area by the beginning of the Fall semester

5. Physical Plant

a. The Physical Plant staff was increased by 2.5 FTE as a result of the additional square footage added by the Student/Community Center Facility coming on-line.

B. Significant Plans and Recommendations for the New Fiscal Year

- Complete renovation of the Learning Resource Center. The renovation will add two developmental studies computer labs, and one library studies computer lab.
- Complete testing and balancing of the campus wide HVAC system. The new system includes a central cooling plant with thermal storage for increased efficiency and lower operating costs.
- Thoroughly train the Physical Plant staff in the maintenance of the new HVAC system. It is expected
 that our own maintenance department will do most of the maintenance of this new system and only
 require outside vendors for major repairs.
 Begin renewal and replacement work on the campus roofing systems.

C. Staff Changes

1. Additions to Staff

Walter Prahl Security Officer James McGee Security Officer Robert Maxwell User Support Analyst I Tod Singeltary User Support Analyst II Jon Bernard Systems Analyst II (Title V) Cynthia Martin Branch Human Resource Representative Elsa Aguirre Custodian Norma Casas Custodian Rebecca Luna Custodian Leticia Tellez Custodian Billie Gonzales Custodian Ralph Miramontes Custodian

2. Staff Departures

Kevin Hobbs
Rosanna Martinez
Robert Davis
Frank Parra
Carlos Montoya

Kevin Hobbs
Instructional Assistant
User Support Analyst I
Custodian
Security Officer
Security Officer

D. Human Resources Office

- a. Kathy Meech, Branch Human Resources Representative made a presentation to the Valencia Campus Advisory Board regarding minority recruitment on January 20, 2000, after a Minority Recruitment Committee had been formed to review hiring practices for Valencia Campus. It was determined that Valencia Campus was complying with all necessary Affirmative Action procedures and making honest effort to recruit underutilized groups. The Committee made suggestions for further possibly recruiting activities, several of which were incorporated.
- Kathy Meech resigned from her position as Branch/Division HR Representative effective March 21, 2000.
- c. Cynthia Martin was hired to replace Ms. Meech, effective May 24, 2000.

- d. In late June 2000 the Human Resources Department was moved to a larger space in the Learning Resource Center. This space provides excellent accommodation to the public and ensures a greater measure of confidentiality for those who are seeking assistance with employee relations issues.
- e. In response to the suggestions of the Minority Recruitment Committee of the Valencia Campus Advisory Board, a part-time recruiter will be hired September 1, 2000, to work under the Branch/Division HR Representative and to focus specifically upon attracting minority applicants.

IV. PROGRAM DEVELOPMENT Presented by Olga Gandara, Associate Director, Program Development

The Associate Director, Branch Program Development reports directly to the Executive Director of the branch campus and assists in the general administration of the branch campus in activities related to strategic planning, grant funding and special projects. The Associate Director is responsible for management oversight of the Small Business Development Center, the School-to-Work Program, Tech-Prep Program, the Welfare Reform Program entitled "SU PARTE" and the Welfare to Work Program.

A. Significant Developments

1. Special Projects

- a. The Executive Director, and Associate Director, Program Development assisted by the Associate Director, Student Services served as the principal writers for the Title V Developing Hispanic Institutions grant, which resulted in a five-year \$2.1 million award to UNM-Valencia Campus.
- b. UNM Valencia Campus, the "SU PARTE" (Welfare Reform) program, and the Belen Pilot Club cosponsored a half-day seminar program for Secretaries and Professional Women, in Valencia County. All presenters donated their services. Participation of "SU PARTE" clients was facilitated through financial support provided by the UNM-Valencia Campus Development Fund and the "SU PARTE" program.

2. Grants

- a. UNM-Valencia Campus received a Title V, five-year award totaling \$2.1 million from the U.S. Department of Education. The Campus will use the funds over the next five years to improve the retention of students, develop and implement a management information system, enhance instruction through the use of technology and establish a development office dedicated to increasing alternative funding sources needed to support the mission of the institution.
- b. SBDC received \$136,817 to operate during the 2000-2001 fiscal year.
- c. The Tech Prep award for the fiscal year 2000-2001 totaled \$138,898. This exceeded the 1999-2000 award by \$55,923.
- d. The School-to-Work program received fourth year funding of \$140,000. This is approximately \$50,000 above the anticipated projected award.
- e. The Welfare Reform "SU PARTE" agreement is extended through June 30, 2000. Total funding to operate this fiscal year is \$583,266.66.

3. Small Business Development Program (SBDC)

- a. The current SBDC Director is Roberta Scott who was hired in February 1999. Cindy Browning is the Business Advisor. The Administrative Assistant is Arlene Stump. Roberta and Arlene earned their SBDC certification in 1999. In February 2000, at the Governor's Mansion, Roberta and Arlene were presented with their NMSBDC five-year pins.
- During the fiscal year of 1999-2000, the UNM-Valencia Campus SBDC served 217 Clients making a total of 582 hours at an average of 2.7 hours.
- c. The SBDC held 13 workshops attended by 64 people.
- d. The Center helped seven clients obtain a total of \$327,000 of capital during the year.

- e. 23 businesses were opened, and a total of 76 new jobs were created.
- f. Of the clients served by UNM-Valencia Campus SBDC, 46 percent were women. 33 percent were men and 21 percent were teams of men and women.
- g. Hispanics composed 42 percent of the clients.
- h. The SBDC and its clients were featured 37 times in the local print media. This is 50 percent more than the exposure of the previous year. In addition to this, the Director published six articles in the Valencia County News-Bulletin. The articles all concerned small business.
- SBDC sponsored, along with UNM-Valencía Campus and several local businesses, an Economic Development Conference on June 7. The conference was composed of speakers and panel discussions and was attended by 170 people.
- j. A business community survey was conducted by SBDC. The survey contacted 300 small businesses in the Valencia, Socorro and Torrance Counties and asked them growth projection questions and opinions.
- The SBDC is a member of every Chamber of Commerce in the UNM-Valencia Campus service area.

4. School-to-Work Program

- a. The administrative assistant position providing support services for the School-to-Work /Tech Prep projects was dropped and a .5 FTE School-to-Work coordinator position was established. The individual selected to fill the coordinator's position was hired in February.
- Five hundred fifty nine students participated in Job Shadowing activities during the 199-2000 academic year.
- c. UNM-Valencia Campus sponsored a Business Technology Valley Expo on March 16,2000. Each of the partnership high schools had a display. Local businesses and government agencies presented displays to visiting students and parents.
- d. In June 2000 the Valencia Campus School-to-Work program, the Department of Labor, and teachers from Belen High School conducted a weeklong life-skills conference for 65 out of 110 JTPA students. The remaining 45 students participated in job training in June 1999. This joint effort enabled these students to have a summer job and gain valuable work experience as well as work-skill experience.

5. Tech-Prep Program

- a. The Tech Prep program began operating with a full-time Tech Prep Coordinator in February 2000.
- 135 high school students received college credit through concurrent enrollment. The high school seniors completed coursework and successfully passed the UNM-Valencia Campus final challenge exam.
- c. Ninety secondary public school teachers and counselors were provided with some level of training.
- A total of approximately \$68,000 was spent on equipment and supplies for the six public schools for use in the Computer Aided Drafting and Office Business Technology programs.
- e. UNM-Valencia Campus sponsored a Business Technology Valley Expo on March 16,2000. Each of the partnership high schools had a display designed and presented students.

- f. The Tech Prep Program was strengthened by offering concurrent enrollment opportunities for "career technical" courses taken by high school student at their respective school sites.
- g. 40 teachers, counselors and administrators participated in the Region IV Association for Career and Technical Education Conference in Albuquerque, April 13-16, 2000. The Tech Prep Program covered the registration fees.

6. SU PARTE Program

- a. The major change for the SU PARTE program during the fiscal year 1999-2000 occurred as UNM-Valencia Campus SU PARTE program was made operative through a subcontract with San Juan Community College, the Region II Contractor calling for Valencia Campus to oversee the NM Works programs in Cibola and Torrance Counties. Prior to this fiscal year UNM-Valencia Campus had enjoyed a direct contract with the NM Income Support Division.
- b. The 1999-2000 contract was signed effective July 29, 1999.
- Sites to operate the programs in Cibola and Torrance counties were secured on September 21, 1999.
- d. The Program Coordinator for NM Works SU PARTE was hired October 18, 1999.
- e. Partial staffing for both Cibola and Torrance counties were hired December 6,
- f. The SU PARTE best practices, nationally recognized by a study funded by the US DOL, were refined and continued in the 1999-2000 contract year. The GED class, Job Club, the Applied Works Skills Class and Computer Skills Training —designed to meet the needs of the welfare clients, were the best practices identified.
- g. SU PARTE co-sponsored the annual Valencia County Women's Conference "Seeds for Success" with UNM Valencia Career Center and Valencia County's Pilot Club. Nine SU PARTE clients attended.
- h. The Program Manager and two SU PARTE teachers presented a workshop on Strategies for Participant Support at the national Adult Learners Conference in Atlanta, Georgia.
- UNM-Valencia Campus, and NM Works, Torrance County sponsored a two day job fair in Torrance County.
- SU PARTE participated in the labor force analysis for the Valley Economic Development group in Torrance County.
- k. The Program Manager for SU PARTE applied for, and received funding from Clothes Helping Kids, Inc. \$4500 was provided for use in scholarship for children of SU PARTE clients to enroll their children in the summer school educational camps offered by UNM-Valencia Continuing Education Program. Sixteen children enrolled in the summer camps.
- Twelve Valencia County SU PARTE clients received their GED and attended the GED graduation.
 The Valencia-Campus SU PARTE staff attended the graduation together in recognition of the
 clients' accomplishments.
- Two SU PARTE Valencia GED graduated received 1-year full scholarships for college tuition and books.
- In May, UNM-Valencia Campus received a 3-month extension to operate the NM Works Program in Valencia County.
- San Juan Community College, Region II Contractor, requested oversight of the NM Works Cibola County program and UNM-Valencia Campus willingly relinquished oversight in February 2000.
- p. San Juan Community College assumed responsibility for the NM Works Torrance County program and the Torrance Welfare-to-Work program in June 2000.
- q. On August 1, 2000 the 3-month agreement to operate NM Works SU PARTE. Valencia County was extended, allowing UNM-Valencia Campus to operate the program through June 30, 2001.

B. Significant Plans and Recommendations for the Near Future

1. The Small Business Development Center

- a. The Center plans to continue its marketing efforts through attendance at Chamber of Commerce functions, community events, campus-sponsored events, Rotary Club and Kiwanis events as well as participation in appropriate seminars, conferences and work shops.
- b. The SBDC will host its second Economic Development Conference in 2001. It will be similar to the event in 2000 but with added topics.

2. School-to-Work Program

- a. During the coming grant year, the focus for School-to-Work will be on strengthening community partnerships and increasing parental involvement. The summer Community Mapping Institute was the first step towards establishing teams within each of the communities to design strategies to complete community mapping and strengthening partnerships between the business partners and the schools. Each participating school district will have a Parent Involvement Institute to develop increased parental involvement, and strengthen the partnerships between the schools and parents.
- b. The role of the Career Transition Specialists will be adjusted to increase the amount of time they spend on developing linkages within the communities. The School-to-Work initiative will also shift its focus to include more community-based activities. This is the fourth year of funding and with the decrease in federal/state funding, the School-to-Work activities will need to be absorbed by the communities and the schools.

3. Tech-Prep Program

a. The Tech Prep Program received funding to develop three new technology programs: Internet Webmaster, Systems Engineer (PC Repair) and Solutions Developer. These programs will be developed and implemented in six school districts. The Computer Aided Drafting and Office Business Technology will be improved.

4. SU PARTE Program

- a. UNM-Valencia Campus has been directed by the Region II contractor to expend the \$545,000 that was unexpended during the 1999-2000 contract year. This will allow the program to reinstate some of the training previously provided that had been eliminated due to funding constraints.
- b. UNM-Valencia Campus will be able to expand its staff to better address client needs.
- c. The SU PARTE program was relocated shortly after the end of the contract year. The Program is currently housed in the Learning Resource Center. This move has provided our case managers with individual offices, and affords privacy when interviewing clients.

C. Outside Professional Activities

1. The Small Business Development Center

- a. Manager wrote articles for local publication.
- b. Business Advisor participated in Career Days at Los Lunas High School.
- c. Manager and Administrative Assistant earned their SBDC certification in 1999.

 Manager and Business Advisor attended professional training conference in San Antonio, TX in May 2000.

2. The Tech-Prep Program

- The Program Coordinator served as New Mexico Association of Career and Technical Education, President during this fiscal year.
- The Program Coordinator attended the New Mexico Association of Career and Technical Education, Region IV Conference Coordinator, April 12-16, 2000

3. SU PARTE Program

 The Program Manager and 2 SU PARTE faculty attended the national Adult Learners Conference in Atlanta, Georgia.

Program Coordinator

Job Development Coord.

February 15, 2000

March 27, 2000

b. The Program Manager and 2 SU PARTE faculty participated in the national Adult Learners Conference in Atlanta, Georgia, presenting a session entitled 'Strategies for Participant Support".

D. Appointments to Faculty/Staff

1. School-to-Work

Darlyn Mabon

2.	SU PARTE		
	Ray Meek	Transportation	August 15, 1999
	Marquita Matsu	Admin. Assistant II	October 18, 1999
	Kevin Begley	Program Coordinator	October 25, 2000
	Cyndi Barden	Admin. Assistant II	November 15, 1999
	Karolyn Selleck	Case Manager	December 6, 1999
	Karen Romeo	Case Manager	December 6, 1999
	Eileen Torres	Job Development Coord,	December 6, 1999
	Mary Gray	Program Development	December 6, 2000
	Babara Elliott	Job Development Coord.	December 6, 2000
	Betty Miller	Program Coordinator	December 6, 2000
	Danielle Groeling	Case Manager	March 29, 2000

E. Separations, Faculty/Staff

Debbie Stiles

1. SU PARTE

Bob Hodges	Instructor	May 29, 1999
Jodi Weinberger	Instructor	July 30, 1999
Lois Hansen	Instructor	August 15, 1999
Gary Sanchez	Program Coordinator	September 2, 1999
Ralph Hart	Transportation	September 10, 1999
Annette Guerrera	Admin. Assistant II	October 6, 1999
Stephanie Ramirez	Admin. Assistant II	October 14, 1999
Stacie Scott	Case Manager	October 15, 1999
Shawn Huttleston	Case Manager	October 22, 1999
Lori Crawford	Instructor	October 30, 1999
Eileen Torres	Job Development Coord.	April 19, 2000

Karen Romero	Case Manager	May 11, 2000
Jill Oglesby	Instructor	May 19, 2000
Antoinette Prevetti	Instructor	May 19, 2000
Raul Ortega	Instructor	May 19, 2000
Betty Miller	Program Coordinator	May 31, 2000
Barbara Elliott	Job Development Coord.	May 31, 2000

F. Publications

- 1. The Small Business Development Center
 - SBDC Manager writes a newspaper column for the Valencia County News-Bulletin with small business topics.
 - b. The SBDC had themselves or their clients mentioned in the newspaper 37 times this year.

Computer and Information Resources and Technology Annual Report

July 1, 1999-June 30, 2000

Prepared by Staff and Management of CIRT

Computer and Information Resources and Technology (CIRT) is the computing backbone at the University of New Mexico. With an experienced staff and dynamic resource capabilities, CIRT provides computing and networking services to a diverse and extensive campus community.

972

2.0 EXECUTIVE SUMMARY

CIRT's major accomplishments for the 1999-2000 academic year fell in the following broad areas:

- · Ensuring that all major UNM systems were Y2K compliant.
- Upgrading UNM's Information Technology (IT) infrastructure to continue to meet the growing demand for IT services.
- Installing uninterruptible power supplies (UPS's) to protect UNM's mission critical IT
 assets
- Working with Business and Finance (B&F) to reengineer and streamline B&F business processes.
- · Enhancing other UNM administrative systems.

Y2K compliance was this academic year's major undertaking and was completed successfully (Section 4.4). This included modifying and testing all of UNM's mission-critical administrative systems, upgrading some of UNM's old and non-Y2K compliant data network hardware, and providing central support to UNM's various organizations to ensure that their systems were also Y2K compliant. This involved many people whose diligent work made the Y2K rollover smooth and uneventful for UNM.

The demand for CIRT services continues to increase and is detailed in the tables and graphs shown in Section 6.0. While the amount of e-mail seems to have stabilized at 160,000 messages/day, there have been substantial increases in other areas, including UNM web accesses, number of sessions, connect time, CPU hours, disk space and in the number of network connections, all of which have increased by amounts varying from 10-25%. What is notable about these increases is that they have been accomplished with a 3-4% reduction in staff, which indicates that CIRT is continuing a trend started over a decade ago of making effective use of technology to improve staff productivity.

The growth in services provided was enabled through needed upgrades to UNM's IT infrastructure. Some of the more notable upgrades included the following:

- Disk upgrades to several systems, including a 170GB disk storage upgrade to the central NFS server (Section 4.10).
- A CPU upgrade consisting of 32 nodes of an IBM SP2 system that was decomissioned by HPCERC (Section 4.10).
- · Deployment of a Gigabit campus backbone that supports multicasting (Section 4.13).
- Installation of an additional 2,033 network ports to bring the total of active UNM network ports to 19,246 (Section 4.13).
- PC, file and software upgrades to UNM's pods and classrooms. (Section 4.2).

Another aspect related to IT infrastructure has been the installation of uninterruptible power supplies in the CIRT building (Section 4.12) and in the major campus network hubs (Section 4.13). The objective is to protect these mission critical assets from power surges and outages and to ensure all major UNM services are available 24 hours/day 7 days/week. Since their installation, UNM's network and enterprise services

stayed up during major power outages, including power outages in the CIRT building. This helps reduce UNM's liability, especially as it-relates to patient care in the Health Sciences Center.

The EMIS project to reengineer and streamline UNM's business processes in the Business and Finance area has implemented new systems that allow departments to track applicants, hiring requisitions and purchase requests (Section 4.8). Also the Oracle suite of financial systems, including procurement and accounts payable, has been selected and acquired given that it best met the needs identified by the Business and Finance EMIS team (Section 4.8). It is hoped that the needed funding will be found to begin system implementation in calendar year 2001.

While some CIRT staff were working with Business and Finance staff to reengineer business processes, other staff worked on enhancements to other UNM administrative systems, including Financial Aid (Section 4.5), Admissions (Section 4.6) and other Financial Systems (Section 4.7).

Now that it appears that funding will be identified to initiate planning and implementation of the Oracle Purchasing and Accounts Payable systems (Section 4.8), a challenge will be UNM's ability to attract and retain skilled IT design and implementation staff needed for this project. The implication is that UNM will need to provide competitive salaries for the new hires, allow needed skills to be freely substituted for a degree (which may not be relevant given the specialized skills needed), and to allow market salaries for existing IT staff. Unless UNM's current Human Resource policies are changed to reflect the above, it will be difficult, if not impossible, to start the project without resorting to wholesale use of expensive consultants, and thus increasing the initial and recurring costs well beyond those that have been identified to date.



3. 0 CIRT ORGANIZATION

CIRT's organization consists of the executive office of the associate vice president and two directorates. One directorate consists of the Information Resource Center and Administrative Information Support. The other directorate is comprised of Distributed Systems Integration Group, Central Systems and Operations Support and the Communications Support Group. Cross-CIRT support is provided by the executive offices of the associate vice president. The following summarizes the activities of these groups.

3.1 Executive Offices of the Associate Vice President

- Associate Vice President
- Unit Administrator
- Contract Administrator
- Network Specialist
- Supporting Staff

The executive offices provide support common to all groups within CIRT, including contracting, materials management, and administrative support for the entire staff of CIRT. Planning is the shared responsibility of upper-level management in the executive offices and operational groups which include: Administrative Information Support (AIS), Information Resource Center (IRC), Central Systems and Operations Support (CSOS), Distributed Systems Integration Group (DSIG), and Communications Support Group (COMSUP).

3.2 Administrative Information Support (AIS)

AIS serves the administrative information needs of the University, primarily through the development and 24-hour maintenance of mission-critical central systems such as Registration, Financial Aid Management, Financial Reporting Systems, and others.

3.3 Information Resource Center (IRC)

The IRC provides the UNM community with the first level of support for CIRT-supported hardware and software. The CIRT Support Center, staff consultants, CIRT pods and classrooms, computer accounting, public relations, hardware maintenance, software distribution, security, tutorial materials, publications, and the CIRT library, are all included in the Information Resource Center.

3.4 Central Systems and Operations Support (CSOS)

CSOS provides operational support for all CIRT shared systems. This includes the monitoring and operation of all hardware systems, data entry, scanning services, mainframe operating system and telecommunications support (system programming), as well as database, technical, and administrative support. CSOS provides delivery service to administrative departments on campus, and monitors, records, and reports the status of

hardware problems. In addition, CSOS supports a staff that maintains outside contracts.

3.5 Distributed Systems Integration Group (DSIG)

DSIG supports a variety of systems running AIX and a number of other dialects of the UNIX operating system. DSIG works with academicians, researchers, and administrators throughout the UNM campus and associated organizations to support their computing system management needs. In addition, DSIG develops and supports mission-critical university-wide systems such as electronic mail, the World Wide Web server, and automatic generation of user accounts.

3.6 Communications Support (COMSUP)

COMSUP is responsible for designing, installing, and supporting the Campus Data Communications Network (CDCN), including campus access to the Internet and other national networks such as the very high speed Backbone Network Service (vBNS). The group works closely with various units to ensure that departmental network needs are met. In addition to the installation of the network, this group maintains the current network configurations to allow accessibility on a 24-hour, 7-day-a-week basis.

です。 ※でい 4.0 CÎRT ACHIEVEMENTS

4.1 CIRT Participation in the Acceptable Computer Use Policy (ACUP) Committee

- CIRT chairs the committee to update and develop policies for the University Business Policy Manual regarding computer use. This year the committee:
- Revised the Acceptable Computer Use Policy (ACUP) according to the Faculty Senate Computer
 Use Committee feedback and achieved Faculty Senate and Executive Cabinet approval. The policy
 has been in revision since 1996 and is in the final review phase with the general campus.
- Outlined the revision of the 2500 section of policies to replace outdated policies (many are more
 than 10 years old with obsolete equipment references) with fewer, broader, non-technology specific
 policies. The new section will include the new ACUP, minimal security guidelines and possibly one
 with specific user guidelines.
- Drafted and refined the minimal security guidelines policy. This was developed from CIRT's response to an external audit review.

4.2 Pod and Classroom Improvements

- As expected, the fervent usage of the new Dane Smith Hall (DSH) computer classroom facility by
 faculty, staff and students prompted pod management to upgrade the PCs in the two computer
 classrooms and adjoining pod area. In conjunction with this PC upgrade, the existing Dane Smith
 Hall PCs were relocated to the Communication and Journalism, Economics, CIRT and ASM computer pods and classrooms. Twelve UNM departments received the fifty-three older PCs removed
 from these computing facilities through the CIRT hardware redistribution program. The recipients
 were Risk Management, Human Resources, Special Education, Carrie Tingley, Athletics, Geography, Communication & Journalism, Center for Teachers Education, Fine Arts, College of Education,
 Tireman Library and the Tamarind Institute. The success of CIRT's hardware redistribution program
 enables these UNM Departments to upgrade their existing hardware and remain technologically
 current.
- In addition to the arrival of the Dane Smith Hall's new PC hardware, Lobo Lab Macs were replaced
 with new G3 computers. These new G3s will be relocated to the Engineering and Science Computer
 Pod next fiscal year in preparation for the closure of the Lobo Lab computing facility due to the
 Student Union Building (SUB) two-year remodeling project. The Language Learning Center located in
 Ortega Hall was the recipient of Lobo Lab's old Macs.
- Anticipating the closure of the Student Union Building (SUB) for remodeling, pod management took
 the initiative to move all the x-terminal workstations and the Math Department's PCs out of the
 Engineering and Science Computer Pod (ESCP) to make room for the relocation of the existing
 Lobo Lab hardware. The Math Department received the ESCP x-terminals.



- Other pod hardware improvements included a memory upgrade from 64MB to 128MB on the Macs at Dane Smith Hall and Johnson Center to support computer classroom instructional software requests; a new projector at the Communication and Journalism computer classroom; a new HP LaserJet printer installed at CIRT; and the PC scanner workstations in all pods were upgraded to 300MHz pentium machines.
- In July of this fiscal year, CIRT went out to bid on a new recycle toner cartridge contract to support
 the pods and computer classrooms. The award went to a local vendor, Laser Specialist Inc., which
 now supports the University. Laser Specialist's pricing is extremely competitive and their service has
 been excellent.
- As the demand for computing classrooms increases, pod management has fine-tuned the requests for installation of instructional software by setting up a standard policy for instructors to follow. This policy gives UNM departments the responsibility for purchasing instructional software, establishing legal software licensing and adhering to specific test and installation deadlines set by pod management. A variety of new software upgrades were implemented in the pods and computer classrooms for both the PC and Mac platforms. The new Mirada version was installed on all pod PCs. Altiris Vision, an interactive screen control software, was installed at ESC Pod and Dane Smith Hall at faculty request. Central File Service was installed on all pod PCs along with the Mulberry tutorial. PhotoShop was installed on the Communication and Journalism Computer Classroom PCs to meet instructional requests. Also, a variety of software was upgraded on the Mac platform including PhotoShop, MacMirada and MacroMedia Director.

4.3 Student Data Mart Pilot

- A student information data mart has been tested by 60 users in a pilot project to enable departments to do ad hoc reporting. Oracle tables were built from student information (admissions, registration, courses) which are updated nightly from the legacy IDMS system. Historical tables were built from student information for the past two years. The Extended University has used the data mart to identify students in web classes supported by Blackboard. Media Tech has used the data mart to identify students in Web CT courses. The production systems have facilitated:
 - · 495,000 Registration Transactions
 - 142,000 Transcripts
 - · 228,000 Grades

4.4 Y2K Accomplishments and Successful Transition

The Y2K rollover was uneventful here at the University of New Mexico. This was due to the efforts of
many people both inside and outside the university who worked hard to make the entry into the Year
2000 a smooth one. UNM's Y2K project has had substantial, lasting benefits. We now have
upgraded hardware and software, well-defined and thorough testing procedures, a number of infra-

structure improvements, and greatly enhanced preparedness for future emergencies. The greatest benefit of Y2K, however, may be the intangible benefit of our having demonstrated that the entire institution can pull together to solve a common problem. Y2K accomplishments and successful transitions are as follows:

- CIRT pods and computer classrooms services were not affected by the Y2K prophetics. Pod
 management's preparations to prevent Y2K disruptions were of great benefit when CIRT's facilities,
 as well as UNM in general, were faced with a barrage of power outages unrelated to Y2K. These
 power outages bombarding CIRT's computing facilities and the UNM Campus were caused by new
 campus construction, local tunnel flooding and regional wild fires.
- Staff worked out repeatable procedures for migrating an IDMS database for Year 2000 testing and refreshed the database numerous times.
- Staff modified an IDMS database procedure for Year 2000 which prevented the need for numerous database schema changes and hours and hours of programmer effort.
- The DBA team spent considerable resources preparing for Year 2000 which included new tool
 implementation, program modifications, and support for application development/maintenance staff.
- · Staff finished up Y2K equipment compliancy on IBM Hardware Systems.
- · ODE data entry software was upgraded to the newest version.
- To meet Y2K compliance the network was upgraded in 14 buildings. Over 40 switches were installed to migrate main campus departments from a shared network to a switched network environment. Wireless backbone connections for five buildings to connect to the campus network were installed, four of which were not accessible through the tunnel system.

Y2K - Internal Building Network Upgrades (equipment and wiring):

- · Student Services Building
- Novitski Hall
- 1717 Roma NE
- Research Park: NMERI
- Research Park: Parcel 2
- Research Park: Building 1
- KNME
- · Safety, Health and Occupational Agency
- Scholes Hall
- Student Health Center, basement
- University House
- 1801 Roma NE

- · Services Building
- University Network Command Center at the Police department

Y2K - Equipment Upgrade:

- Student Health Center
- · Research Park: Office and Light
- Nuclear Lab
- CIRT printing services
- Department of Mathematics' router
- · Physics and Astronomy's router
- WAN router for 700 Lomas
- Remote consoles for Unix systems' group access
- WAN AGS router
- Hodgin Hall
- Student Residence Center Commons Building

Y2K - Product Maintenance:

· CA-1, Dispatch, SnapShot, IXFP, Librarian, CA-90s

4.5 Financial Aid Automated Packaging

A new financial aid packaging process was implemented in June 2000. This automated process was designed by the financial aid officers to meet their special needs here at UNM, while reducing the amount of time it takes to get financial aid offers to our students. The new process eliminated several manually intensive tasks. This allows officers to spend more time with students.

> Financial Aid and Scholarship awards processed (over \$5 million awarded)

Bills sent in the past year

400,000+

49,554

4.6 Admissions Applications Web Link

The Admissions Application Web Link Version 3.0 was deployed in May 2000. The Admissions Office has reported that they are receiving fewer problem calls and the number of duplicate applications has decreased dramatically.

Admissions Statistics are as follows:

 Students admitted: 32.850

· Students admitted via Web Link: 4,151 12% of total

 New undergraduate transfer students: 2.516

As reported to the CHE:

Transfer credits evaluated from public NM funded institutions:

52.601

81% accepted

· Transfer credits evaluated from private NM institutions:

358

100% accepted

Scanning of transfer credit and automated uploading of transfer course work is happening for 24 institutions and 2 high schools.

4.7 Financial Systems Accomplishments:

- Expanded tax record to accommodate increasing salaries and tax amounts.
- · Migrated employees from Pres PPO and Pres Indemnity Health plans to CIGNA
- · PPO Health plan.
- · Added daily reporting files for FRS and Payroll Data.
- · Automated budget updates for new fiscal year.
- · Created monthly FRS/HRS reports for 250+ departments.
- · Posted 21,000 FRS batches and 2.4 million FRS transactions.
- Processed health, dental, vision insurance changes for 1500 employees.
- Processed 750 flexible spending account enrollments.
- Transferred 750 employees to University Hospital.
- · Processed 4250 staff salary increases.
- · Processed 257,000 checks/direct deposits.
- · Printed 20,250 W2's.

4.8 Electronic Management Information Systems (EMIS)

- Procurement: The Acquisition Design Team evaluated various vendor applications (both off-the-shelf
 and built-to-order) that would implement the proposed future state processes. After an evaluation
 which included numerous telephone conferences, literature research and site visits, the group
 proposed purchasing the Oracle Financial Application. The contract with Oracle was signed after
 several months of further research into Oracle's other administrative applications, i.e. Student
 Systems and Human Resources. Budget estimates were also prepared to estimate the total cost of
 implementation and ongoing maintenance.
- Applicant Tracking System: Throughout the summer and fall, the EMIS Project technical team
 was focused on the development and implementation of the new employment tracking system. This
 system is used by HR Employment to track applicants, hiring requisitions, referrals, and hires. The
 system was developed using Oracle developer tools—Designer, Developer, and Discoverer.



- Lookup Employment Requisition History: An online web based application was developed that allows department hiring officers to track the progress of their hiring requisitions once the Employment Office receives them. Hiring officers can search for their requisitions by number, department code, department name, job code, or job title. Information includes current status, recruitment type, number of applications to date, and HR contact with a direct e-mail link.
- · Lookup PR/PO Payment Tracking: The internal provider payments (FRS Sales Invoice transactions) were added to this web based application.

4.9 CIRT Support Center (formerly Help Desk)

To advance the increasingly strategic role the Help Desk is playing in computer support for UNM, the Help Desk concluded the year with a new name, "The Support Center," a redesigned facility and expanded services including evening and weekend hours. The Support Center has built on the Help Desk reputation for providing knowledgeable, fast and friendly technical consulting and worked to increase its value to CIRT and to the UNM community. The Support Center is committed to providing leadership in technical support for UNM.

Major Support Center Initiatives ('99-'00):

- · Renamed Help Desk to the Support Center.
- Remodeled Support Center separated walk-in clients from phone clients.
- · Added evening and weekend hours in response to client demand.
- Provided Problem/Asset/Change Management project leadership.
- Provided Knowledge Management project leadership.
- Assumed responsibility for system availability message posting.
- Assumed 1st level support for Web CT, E-UNM.
- · Assumed co-chair of UCU (University Computer Umbrella) Group.
- Assumed representation for IRC in CIRT's Change Management meetings.
- · Continued ongoing implementation of a single-point-of-contact, defining a phased consolidation of CIRT first level support activities.

•			Suppo	ort Center Activity	for 1999-2	000			
	Calls from off Campus M-F 8-5	Calls from on Campus M-F 8-5	Voicemali	Outgoing Calls made from SC to Cilents	Total Calls	Email Totals	Walk-ins*	Total Contacts	Support Center WEB Hit
	1714	1281	468	1237	4700	80	940	5720	4359
<u>Jul</u> Aug	2260	1487	361	1375	5483	109	1097	6689	6818
Sep	2020	1355	349	1169	4893	143	979	6015	4827
Oct	1630	1396	374	1244	4644	97	929	5670	4197
Vov	1425	1265	169	1095	3954	94	791	4839	4200
Jec	1161	972	113	825	3071	72	614	3757	3200
lan	1969	927	182	733	3811	136	762	4709	5600
eb	2649	1270	212	1059	5190	102	1038	6330	4500
lar	2222	1124	256	770	4372	99	874	5345	3100
\pr	1685	820	107	690	3302	62	660	4024	3148
lay	1880	929	119	764	3692	81	738	4511	3831
Sep Oct Nov Dec Jan Jan Var Var May Jun	2063	1040	112	885	4100	81	820	5001	3425
fotals	22678	13866	2822	11846	51212	1156	10242	62610	51205

Data estimated based on historical information and data available from comparable months.

4.10 Hardware and Infrastructure for Distributed Systems and Integrations Group

CIRT purchased additional disk space in several areas. Most significant was an addition of 170G usable disk storage to the Network Appliance central file server. This server provides multi-protocol (NFS and CIFS) access to storage anywhere on campus. Other storage changes included minor expansions to the administrative Oracle, alumni Oracle, and parking services Oracle storage systems. CIRT recently acquired an IBM SP2 with 32 nodes from High Performance Computing Education and Research Center (HPCERC). We will use 16 of these as AIX cpu login servers and the remainder as spare parts. These nodes will replace the 16 SP1 nodes currently in use and will function without a hardware maintenance agreement. Also purchased, was a replacement for UNM's primary domain name server. Finally, all significant systems in operations were moved from 10MB to 100MB ethernet. The central file server was upgraded to a gigabit ethernet link.

4.11 Software and Operating Systems

A new listserv software, L-Soft, was purchased and will be implemented prior to the fall semester 2000. This new software will provide a more manageable and scalable listserv service. CIRT also purchased the Lightweight Directly Access Protocol (LDAP) directory product from Netscape. We are currently migrating our computer account management system to this new product. There are several other future uses for LDAP as a master directory system and ultimately as an authentication system. The ADSM backup server has been migrated from the MVS system, freeing up needed cycles, to an AIX system and is in full production. The Dynamic Host Configuration Protocol, DHCP, has been introduced to UNM, and rollout to the entire campus occurred over the last year. DHCP allows users to automatically obtain an IP address for their system/PC without having to contact CIRT for a specific number. A Web program, developed by the IRC group, allows users to automatically convert their PC to use DHCP while recovering the old IP address for later use.

E-Mail and Web Statistics of Interest:

- The very stable UNM e-mail "cluster" consists of 8 PC systems running Slackware Linux OS; as part
 of the e-mail cluster we also use two file servers from Network Appliance. No changes have been made
 to this system over the last year.
- The following are two different web statistics: The first is based on home page accesses; this is the number of accesses to the initial UNM home page. The second is total accesses, which includes access counts for all pages in the UNM WWW domain. WWW accesses show an increase from the FY99 average of 65,000 home page accesses per week to an average of 85,000 accesses per week at FY00 year end. The most significant increases to web service activity have occurred over the last 3 months averaging 100,000 accesses per week. The total number of web pages accessed in the UNM WWW domain averages 820,000 pages per week. Electronic mail averaged approximately 160,000 messages per day (weekdays) during the semester for FY99.

IBM Systems Group Annual Report Items:

System 390 Product Upgrades:

- · Operating system OS/390
- · Security ACF2
- · Scheduling ESP
- · Session management TPX
- · Sort SyncSort
- · Data entry ODE
- Language programming aide Xpediter
- · Change management Version Merger
- Language programming aide Xpediter
- Change management Version Merger
- Tape utilities FATS/FATAR
- Job management JCLCheck
- · Statistical SAS

Products Removed:

· AbendAid, Strobe, SPSS/X, Mark IV

Open Systems:

- · Upgraded CIRT Novell server.
- · Installed and implemented Tivoli Service Desk.
- Converted AIX PSF/6000 print server solution for OS/390 host reports to a Windows-based print director solution by Solimar.

Integrated Systems:

- Implemented cooperative cross systems (AIX, NT and OS/390) communication for the automatic backup of Tivoli Service Desk Oracle databases.
- · Replaced local problem management paging application with Internet SMTP-based paging.
- Implemented distributed automated problem management between OS/390 Netview and NT Tivoli Service Desk using TCP/IP remote execution.

Significant accomplishments of the DBA Team:

- Completed 15 IDMS schema changes/area reorganizations. Proactive application of numerous IDMS patches insuring a stable production environment.
- · Upgraded all Oracle databases twice.
- · Applied numerous patches to Oracle Designer/Oracle Developer.
- · Upgraded Oracle Discoverer twice.
- Upgraded and moved the Oracle Application Server to a different machine.
- · Upgraded the Oracle Transparent Gateway.
- · Set up quality assurance for Oracle application migrations.
- · Hired a new DBA Team Member.
- · Participated in renegotiating the Oracle Site License Agreement for UNM.
- Administered the Oracle Site License for UNM which includes software and documentation inventory and check out, continuous Oracle software upgrade requests, continuous of small migrations of IDMS entities and Oracle objects to quality assurance and/or production.
- Upgraded backup and recovery software for Oracle twice.
- Entered into a service level agreement with Parking and Transportation Services to install and support a purchased Oracle Application. The application is running in production.
- Disconnected the 7171's IBM Controllers from service.
- · Disconnected the 3800 IBM Printer.
- · Disconnected a 3803 IBM tape drive and Controller.
- · Installed hardware for Winframe Project.
- Connected Xerox and Solimar Systems to 100MB service from 10MB.
- Converted all Administrative Network and Local Printing from PSF6000 to SPD/NT.
- · Produced overlays with the Highlight Printer to be scanned on the Optical scanner.
- Discovered the (single thread process) in the Solimar System and broke the Groups into more
 efficient gatherings.
- · Utilized Network Storage in our new printing configuration for the first time.
- Added new module in the Solimar setup to compensate for the new model of HP printers.
- · Attempted to convert to one Banner page on the Solimar System.
- · Converted OS/2 W/S to Win NT.

4.12 Multifunction UPS Units Installed

A major CIRT project in 1999 was the purchase and installation of Uninterruptible Power Supply (UPS) units in CIRT's Operations Center and all Fiber Zone hubs. The project included rewiring CIRT's computer room to meet electrical code requirements and upgrading the fire extinguishing system to bring it into compliance with current fire codes. The UPS units will isolate and protect critical computer and network equipment services in the event of electrical power surges or disruptions. This will reduce vulnerability of UNM mission

critical information technology.

The UPS Units will:

- · Help Prevent data loss
- · Reduce system maintenance
- · Extend computer system life
- · Reduce downtime to UNM and other State institutions
- · Prevent equipment loss, and
- · Enhance system reliability

4.13 Campus Data Communications Network (CDCN)

The Network Group had a very busy year. The implementation of a gigabit backbone was begun, with 12 buildings currently connected. To better manage the IP address pool, *Dynamic Host Control Protocol, (DHCP)* was implemented campus wide. Our detailed efforts are described in the following categories:

Internal Building Network Upgrades from a Shared Network to a Switched Network;

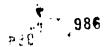
- · Parking Services
- UNM Bookstore
- Castetter Hall
- · Communications and Journalism
- · Mathematics and Statistics
- · Anderson School of Management
- · English Department
- ESC Pod
- · Physics and Astronomy

Internal Building Network Expansions:

- · Service Building (PPD)
- · CIRT Support Center
- Bratton Hall

Internal Building Networks Established:

- · UNM Press warehouse
- · DHCP implemented on the main campus
- · 1915 and 1923 Las Lomas Research Park department: Cryptodynamics
- Technology and Education Center planning for Valencia, Taos, Los Alamos and Gallup branch campuses



Backbone Connections Established:

- 1915 and 1923 Las Lomas
- · Technology and Education Center

Backbone Network Upgrades or Expansion:

Health Sciences Center building connections were upgraded from 10MB to 100Mbps for:

- · Family Practice Center
- · Health Sciences and Services Building
- · Medical Building 2
- Surge
- · Medical Buildings 5 and 6
- · Cancer Research Facility
- · Biomedical Research Facility (BRF)
- College of Nursing and Pharmacy WAN T1 Frame Relay connection to UNM for the HSC Gallup Diabetes Center

Other Backbone Network Upgrades Include:

- WAN T1 Frame Relay connection to UNM for the UNM/Bernalillo/Los AlamosTraining Center
- · Increased memory on the backbone routers
- · Sevilleta's WAN connection relocation
- · Fiber connections in support of Media Technology Services
- · Research Park: Grouplinx
- · Electrical upgrade campus project from a network perspective
- · Health Sciences Center Library
- Medical Building 2
- · Mechanical Engineering
- · WAN T1 point-to-point connection for Continuing Education Career Works
- Frame Relay connection between the Office of the Medical Investigator and Santa Fe TVI to a dedicated point-to-point connection to UNM BRF Campus backbone router at CIRT to the CDCN's gigabit backbone
- AHPCC
- ESC pod
- · Dane Smith Hall
- Mechanical Engineering (@ 100Mbps)
- · Technology and Education Center
- 1915 Las Lomas (@ 100Mbps)
- 1923 Las Lomas (@ 100Mbps)
- CIRT Services

* . 7.

- · CIRT (@ 100Mbps)
- HSC Library (@ 100Mbps)
- Medical Building 2 (@100Mbps)
- · Wireless backbone (LAN connections)

Lobo Energy Campus Monitoring Project, Phase I:

 This project makes it possible for the Lobo Energy department to monitor building power over the campus network backbone.

Equipment with a network interface was installed and attached to the CDCN in the following buildings:

- · Co-generation plant in the Campus Blvd parking structure
- · (New) Castetter Hall
- · (Old) Castetter Hall
- Fine Arts
- · Main campus switching station
- · Zimmerman Library
- · Popejoy Hall
- · North campus switching station
- · HSC chilled water plant
- · New Cancer Research Facility
- · UNMH Facilities Engineering
- · Basic Medical Services Building
- · Health Sciences Services Building

Wireless Backbone Connections Established:

- · Institute for Social Research at 2808 Central SE
- UNMH (Backbone hub)
- · UNM Stadium (Backbone hub)
- SAAP @ 120 Vasser SE
- · Emergency Medical Services at 2700 Yale SE

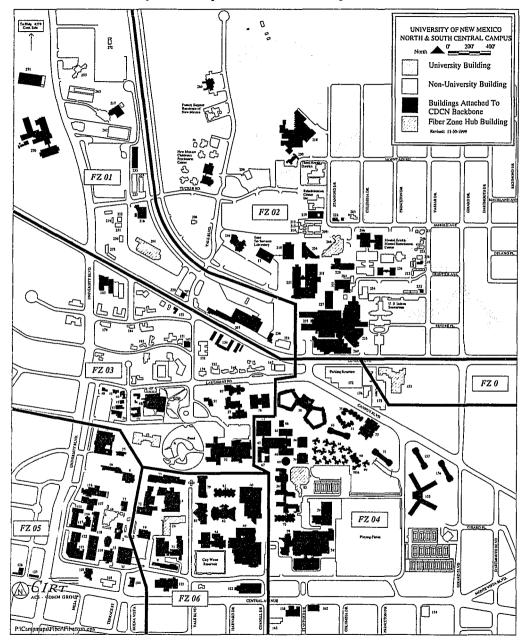
Dial-up Service:

The dial-up configuration was modified to decrease the connect time limits from two hour to one hour and four hours to two hours to increase service availability.

One-time Tasks:

- IBM's Tivoli Problem, Change, and Asset Management software was installed, with the Problem Management application "live" in February 2000.
- Installed a multicast connection for President Clinton's visit from the Albuquerque High Performance Computer Center to Shiprock.
- Uninterruptible Power Supplies (UPS) were installed for disaster recovery at the fiber zone hub level.
- · CIRT acquired 128 Class C address spaces.
- The Health Sciences Center network documentation down to the network plate level was begun.
- · The CIRT machine room equipment was moved to the new UPS system.
- The Communications Group Web site was adapted to the CIRT standard and expanded to include maps, diagrams, and network specifications.
- CDCN and ResNet Rules of Use were established and put on the web.
- · Participated in the hiring process for the Telecommunication Director.
- Eliminated bridging over the campus backbone to decrease unnecessary traffic and to limit a network broadcast domain.
- Upgraded from RIP 1 to RIP 2 to allow for variable length subnet masking, to prepare for final
 migration to OSPF and limited routing information updates to areas where required.
- Investigated optical Internet networking as an alternative to gigabit backbones. Results demonstrated that we should retain the gigabit backbone plan.
- Simplified Concord's NetHealth network management system so it can be more quickly and effectively utilized.
- Provided a vBNS performance report using Internet performance metrics.
- Provided network monitoring for the Chautaugua conference, which used multicasting as the mechanism for achieving the teleconference.
- Using network management software, assisted departments such as Continuing Education and Mechanical Engineering in determining their network capacity.
- Monitored the commodity Internet connection. Evaluated statistics for ISP upgrade proposal.
- · Resolved network equipment problems for Brain Imaging by using network management software.
- Analyzed the Network Management tool, Unicenter TNG, for its use to UNM and the scope of
 opportunities it offers to increase CIRT's services to UNM.
- Installed and configured Tivoli's Netview on a server and had it perform all the network management functions like discovering the network, analyzing the network and troubleshooting.
- Installed and configured MRTG (multi router traffic grapher), a network traffic measuring tool to quantify traffic evolving from different network boxes in order to extract any information regarding Napster.
- Installed RRD tools which is an extension of Napster, and which uses MRTG as a backend too, to create some frontend tools for traffic analysis.
- Worked on storage area management, studying its features and the technical issues.
- Purchased additional licenses for Concord's NetHealth to increase monitoring capabilities.

Campus Zone Map for North & Main Campus



#	ZONE	BLDG#	BUILDING NAME
1	00	153	CIRT
2	01	183	1716 Lomas UNM Press
3	01	203	Facility Planning
4	01	204	Services Building
5	01	207	Physics and Astronomy
6	01	216	Automotive
7	01	217	KNME TV Studio
8	01	224	North Campus Chilled Water Plant
9	01	233	SHEA
10	01	256	Telecommunications
11	01	258	Continuing Education
12	01	259	Continuing Education
13	01	262	Postal Service
14	01	265	KNME Annex
15	01	270	Carrie Tingley
_16	01	271	UNMH Business Center
17	01	273	Office of Contract Archeology
18	01	276	Landscaping
19	01	278	1209 Universtiy
20	01	leased	1714 Lomas Printing Plant
21	02	206	North Campus Golf Course
22	O2	209	Medical Buildings #4, #5, #6
23	O2	236	NM Children's Psychiatric Center
_24	O2	17	Office of the Medical Investigator
25	02	201	Med School Bldg 2
26	O2	210	Senior Health Center
27	02	211	Basic Medical Sciences
28	O2	212	Communicative Disorder
29	02	218	Bratton Hall (Law)
30	O2	226	Surge Building
31	O2	227	Cancer Research Center
32	02	228	Nursing & Pharmacy
33	O2	229	New Cancer Research Center
34	O2	230	NM Law Center
35	O2	232	Risk Management
36	02	234	Med Center Library



#	ZONE	BLDG#	BUILDING NAME
37	O2	235	UNM Hospital
38	O2	248	Family Practice
39	O2	249	Dental Program
40	O2	253	Biomedical Research
41	O2	260	Center for Non-Invasive Diagnosis
42	O2	266	Health Sciences and Services
43	O2	269	Ambulatory Care
44	O2	236A	CPH Administration
45	O2	leased	Wilderness Law Center
46	O2	leased	MHMRC
47	02	leased	1615 University
48	О3	10	Scholes Hall
49	O3	20	1801 Roma (Human Resources Annex)
50	O3	26	1717 Roma (Human Resources)
51	О3	27	Public Affairs
52	О3	29	1800 Las Lomas
53	О3	40	Visitor's Center
54	O3	41	1712 Las Lomas (old Parking)
55	O3	42	Equal Opportunity Programs
56	O3	44	Psychology Clinic
57	O3	48	Dane Smith Hall
58	O3	51	University House
59	O3	53	Zimmerman Library
60	03	57	Economics
61	О3	76	Anderson School of Management
62	O3	78	Social Science Building
63	О3	87	Parish Library / GSM
64	О3	150	1915 Las Lomas
65	O3	151	Naval Science
66	О3	154	Institute for Applied Research Services
67	О3	160	1923 Las Lomas
68	О3	165	Latin American Institute
69	О3	168	Bureau of Business and Economic Research
70	03_	171	SW Hispanic Research Institute
71	О3	182	Latin American Institute
72	О3	185	Institute for Public Policy

#	ZONE	BLDG#	BUILDING NAME
73	О3	20A	Payroll
74	04	56	Mesa Vista Hall
75	04	58	Hokona Hall
76	04	59	Johnson Gymnasium
77	04	61	Santa Clara Hall Dorm
78	04	63	Education Office
79	04	64	Center for Technology and Education
80	04	65	Education Administration
81	04	66	Family Studies
82	04	67	Education Classroom
83	04	68	Art Education
84	04	69	Kiva
85	04	70	Manzanita Center
86	04	71	Santa Ana Hall
87	04	73	Student Health Center
88	04	74	Laguna Hali
89	04	75	DeVargas Hall
90	04	77	La Posada Hall
91	04	85_	Student Services Center
92	04	88	Student Residence Center (12 bldgs)
93	04	89	Student Residence Center Commons
94	04	90	A-SRC Dorm
95	04	90	B-SRC Dorm
96	04	155	Coronado Hall
97	04	156	Onate Hall
98	04	157	Alvarado Hall
99	04	158	Architecture & Planning
100	04	162	SAAP Annex (2500 Central)
101	O5	2	ESC Pod
102	O5	. 8	Bandelier Hall (East)
103	O5	11	Anthropology/ Maxwell
104	O5	12	Anthropology Annex
105	O5	16	Bandelier Hall (West)
106	O5	34	Logan Hall
107	O5	35	Regener Hall
108	O5	46	EECE

#	ZONE	BLDG#	BUILDING NAME
109	O5	103	Hodgin Hall
110	O5	106	Civil Engineering Lab
111	O5	107	Engineering Annex
112	O5	111	Chem&Nuclear Engr Lab
113	O5	116	Ford Utilities
114	O5	117	Wagner Hall (Engr Lab)
115	O5	118	Tapy Hall
116	O5	119	Farris Engineering
117	O5	121	Nuclear Eng. Lab
118	O5	122	Mechanical Engineering
119	O5	125	Parking Services
120	O5	126	Galles Building
121	06	4	Carlisle Gym
122	O6	9	Marron Hall
123	06	19	Biology Annex
124	06	21	Castetter Hall
125	06	22	Clark Hail (Chemistry)
126	06	23	Mitchell Hall
127	06	24	Northrop Hall
128	06	60	New Mexico Union
129	06	62	Fine Arts
130	06	72	Popejoy Hall
131	06	79	Ortega Hall
132	06	81	Humanities Building
133	O6	82	Woodward Lecture Hall
134	O6	83	Empty (old Bookstore)
135	06	84	Fine Arts
136	06	102	New Bookstore
137	O6	115	Journalism
138	07	301	University Stadium
139	07	302	University Arena (The Pit)
140	07	307	Athletic Administration
141	07	308	Tow Diehm Athletic Facility
142	07	331	Crystal Growth Facility
143	07	332	Science and Technology Park: Park Center
144	07	333	Science and Technology Park: NMERI

#	ZONE	BLDG#	BUILDING NAME
145	07	334	Technology Commercialization Center (Dykewood)
146	07	337	Science & Technology Park: UNM/SNL Advanced Material Lab (Parcel 2)
147	07	338	Science & Technology Park: Optoelectronic Materials Ctr
148	07	339	Science & Technology Park: Office and Light
149	07	352	Science & Technology Park: Microelectronics Research

16:360

5.0 CIRT STAFF PROFESSIONAL DEVELOPMENT

CONFERENCES:

ODTUG 2000 Conference

Ft Lauderdale Fl

Maria de Jesus Malczynski, Randy Eldridge, Beth Lowery, Jeffrey O'Keefe. Theresa Sanzone-Wood

Field Service Solutions Conference

Dallas, TX

Anthony Waldron

CHECS Conference

Las Cruces, NM

Mark Harty, Linda Miller, Pam Mirabal, Sandra Carter-Mayes, John Sobolewski, David Mcquire, William Adkins,Eugene Bustos, Starlyn Brown, Vance Kittredge, John Alfaro

Tivoli Service Desk User's Conference

Dallas, TX

Ivan Boyd, Matthew Carter, Stephen Spence, Anthony Waldron

1999 ACM SIGUCCS Users Service Conference

Denver, CO

Randall Perkins, Barbara Riggs-Healy, Joseph Quintero, Matthew Carter, Stephen Spence

CAUCUS NET 1999 Annual Conference

Washington, DC

1999 EDUCAUSE Conference

Long Beach, CA

John Sobolewski, William Adkins

Internet 2 and Network 2000 Conference

Washington, DC

John Sobolewski

CUMREC Conference

Washington, DC

American Industrial Hygiene Conference

Orlando, FL

Christina Lopez

NASFAA Conference & Pre-Conference Workshop

Las Vegas, NV

Barbara Pfaff, Barbara Nolan, Lorraine Tafoya

Department of Education Third Party Servicers & Sofware Providers Conference

Washington, DC Barbara Nolan

WEBDEVSHARE '99 Conference

Bloomington, IN

Richard Valdez, Jan Diewald

1999 Electronic Conference for the Department of Education

San Antonio, TX

Barbara Nolan, Lorraine Tafoya, Raymond Baca

Direct Lending Conference

Washington, DC

Barbara Nolan

ESP User's Conference

Tucson, AZ

Alice Garcia

CA World Conference

New Orleans, LA

Bruce Fraser, Alex Estrada

SHARE Conference

Chicago, IL

Kathryn Ballard

AFCOM Fall Conference & IS Expo Trade Show

Las Vegas, NV

Veda Goslar, Sandra Jones

Oracle OpenWorld '99 Conference

Los Angeles, CA

366

Patricia Rathbone, Starlyn Brown

1999 Computers on Campus Conference

Columbia, SC Louis Sulla

Disaster Recovery Spring World 2000

Conference

San Diego, CA

Louis Sullo

AFCOM's Spring Conference & IS Expo Trade Show

Las Vegas, NV

Joe Montoya, John Alfaro

Gartner Group Conference

San Diego, CA

Ivan Boyd, Aaron Ezekiel

Computer Associates Senior Management Forum

New Orleans, LA

John Sobolewski, Louis Sullo

Computer Associates Executive Management Forum at CA World 2000

New Orleans, LA John Sobolewski

CLASSES/WORKSHOPS/SEMINARS:

Managing Technical Professionals

Washington, DC

Mark Harty

Contract Manager Software Training provided by International Computer

Negotiations

Orlando, FL

Martha Talbott

Seminars on Academic Computing

Snowmass, CO William Adkins

CITRIX 181: Winframe 1.8 Administration Training Class

Phoenix, AZ

Mary Hanson, David Moomey

Oracle "Discoverer for End Users and Administrators" Workshop

Houston, TX Barbara Pfaff

DARS Advanced Method Workshop XI

Las Vegas, NV

Meredith Swanson

Rocky Mountain User Group/Vegasoft Product

Englewood, CO

Sue Roujansky, Vicki Bellmeyer

IBM Education and Training

San Francisco, CA

Charles Phillips

Tivoli Storage Manager Implementation 3.7 Conference

Los Angeles, CA

DamionTerrrell, Charles Phillips

Networld & Interlop 2000 Convention

Las Vegas, NV

John Lutz

Tivoli Service Desk Migrations Workshop

Dallas, TX

.lim Iden

MEETINGS:

Westnet Meeting

Denver, CO Salt Lake City, UT

John Sobolewski

80₈₁,

MEETINGS: (continued)

NM State Committee on Information **Technology Recharge Systems**

Santa Fe. NM John Sobolewski, William Adkins, Louis Sullo

CHECS Summer Planning Meeting

Cloudcroft, NM

Pamela Mirabal, John Sobolewski, William Adkins

NORTEL Meeting

Dallas, TX

John Sobolewski, Louis Sullo, Louella Phillips

Governor's Commission on Information Technology

Santa Fe. NM

Louis Sullo

CHE Information Technology

Socorro, NM

William Adkins, Louis Sullo, John Sobolewski

CHE Meeting

Las Cruces, NM

Barbara Nolan, Barbara Pfaff

Oracle Student System Meeting with the University of Maryland

Washington, DC John Sobolewski

State Information Technology Commission Meeting:

Santa Fe. NM William Adkins

Legislative Finance Committee Hearing:

Santa Fe. NM

John Sobolewski

State Committee Meeting on IT Desktop Standards

Santa Fe. NM John Sobolewski

CHECS Spring Planning Meeting

Santa Fe, NM

John Sobolewski, William Adkins, Louis Sullo,

Pamela Mirabal

CHECSnet Planning Meeting & Vendor Presentation

Arizona St. AZ John Sobolewski

Statewide Desktop Standards Task Force Meeting

Santa Fe, NM John Sobolewski 4.5

5.1 Guide to Acronyms

ACM Association for Computing Machinery

CHECS Council for Higher Education Computing/Communications Services

NASFAA National Association for Student Financial Aide Administrators

OTDUG Oracle Too! Development Users Group

SIGUCCS Special Interest Group on University and College Computing

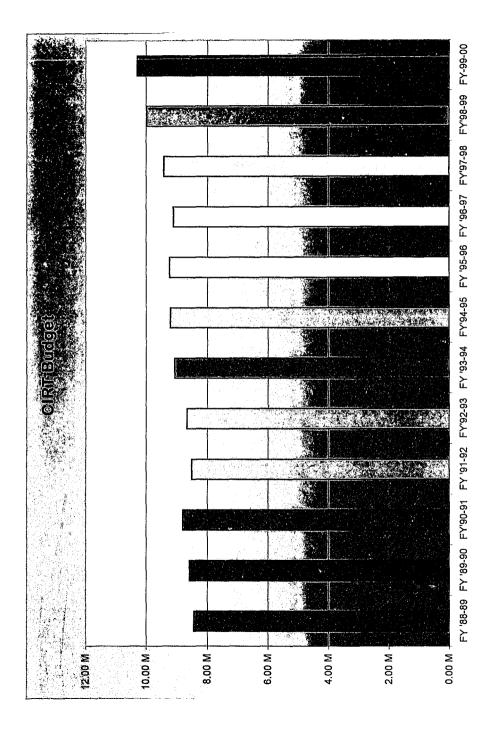
5.2 Contracts & Grants

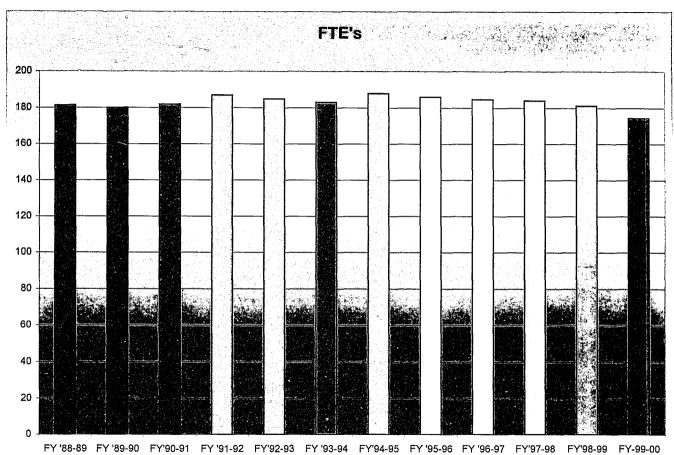
B. Tacker, J. Sobolewski Co-PI's National Science Foundation \$365,000 for 2 years "NMIMT High Speed Connection to the vBNS and Abilene Networks"

J. Sobolewski, A. St. George, D. Stuart Co-Pl's Commission on Higher Education (CHE) \$791.1K requested \$676K funded "IT Infrastructure to Support Distance Independent Education and Lifelong Learning" æ ¿ 1000

1988-1989 to 1998-1999 Fiscal Year Change

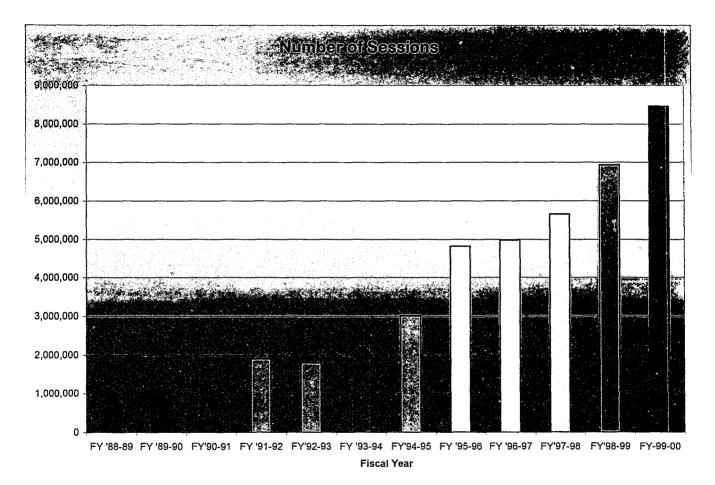
	FY '88-89	FY '89-90	FY'90-91	FY '91-92	FY'92-93	FY '93-94	FY'94-95	FY '95-96	FY '96-97	FY'97-98 I	FY'98-99	FY-99-00
Budget	8,43 M	8.57 M	8.79 M	8.50 M	8.66 M	9.05 M	9.20 M	9.22 M	9.10 M	9.41 M	9.98 M	10.30 M
Full-time FTE's	162.0	161.0	163.0	154.2	154.2	154.2	155,7	155,7	155,4	152.5	150.9	145.6
FTE's	181	180	182	187	185	183	188	186	185	184.09	181.17	174.4
# Accounts	3,933	6,625	10,072	13,120	17,425	32,955	40,326	58,509	58,201	67,544	71,907	73,322
# Sessions	567,754	1,068,697	1,644,448	1,900,647	1,800,123	2,201,300	3,013,235	4,818,319	4,978,951	5,650,893	6,934,902	8,456,901
Connect Time in F	335,924	727,740	1,170,498	1,173,567	1,779,979	2,610,629	2,610,629	2,290,415	3,190,297	3,831,168	4,701,695	5,923,112
Normalized CPU I	113,824	194,928	289,677	459,702	1,109,968	1,606,830	6,380,037	7,191,537	7,116,482	8,461,929	16,808,605	21,997,234
Disk Space (GB/E	48	46	48	58	72	80	118	212	350	456	645	879
Mail Message/Day	300	405	2,500	7,000	11,000	23,500	32,000	48,500	70,000	140,000	160,000	160,000
WWW Hits/Day	0	0	0	0	0	150	2,300	39,700	70,000	82,000	122,000	138,400
Network Connecti-	700	1,274	1,975	2,578	3,403	6,526	8,065	11,808	12,700	15000	17,213	19,246



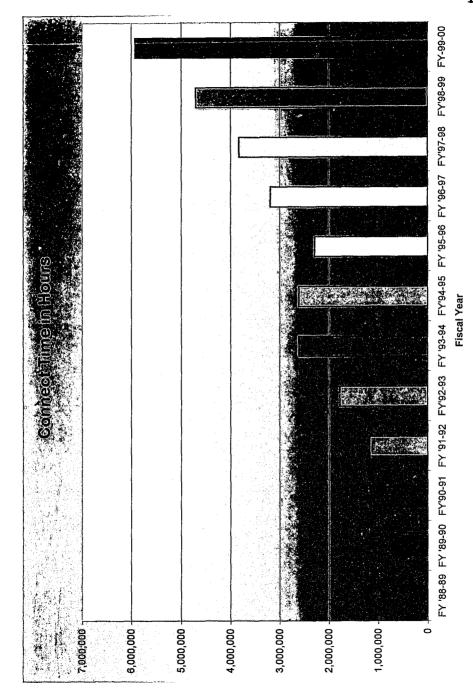


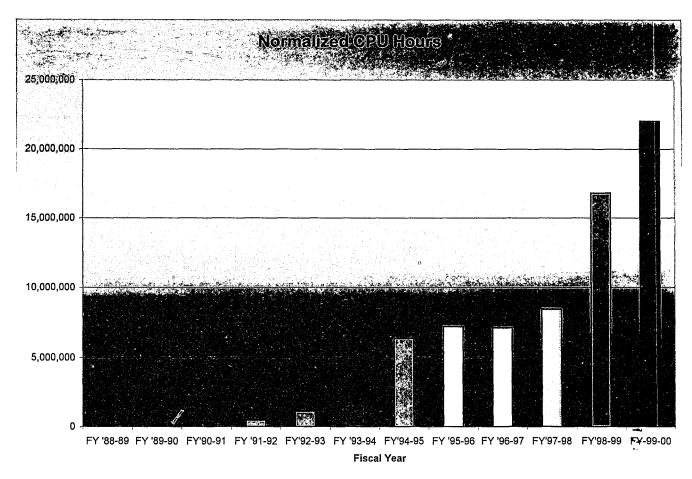
e. 12

\$2 1.008

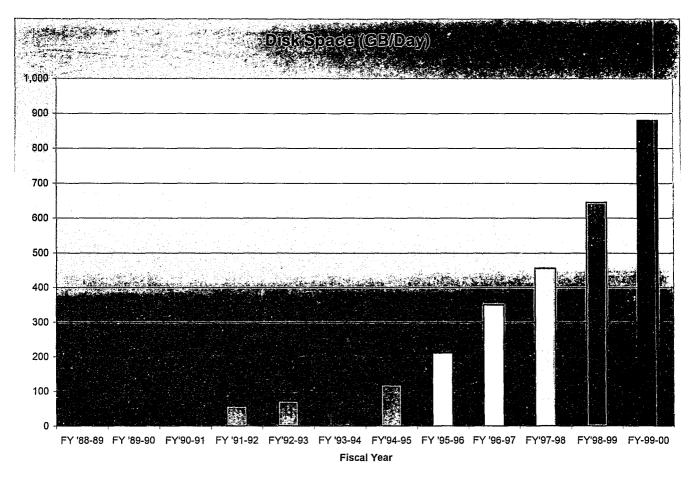


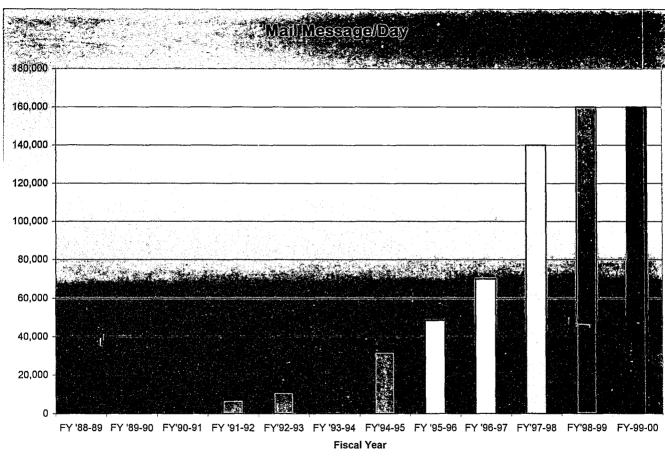
101.0 (101





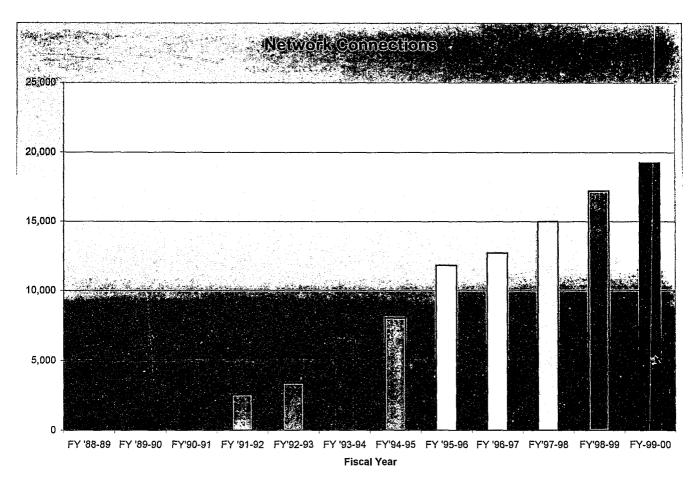
(

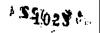




c † () }

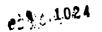
15 8 1 1020





6.0 Statistical Review of CIRT Provided Services

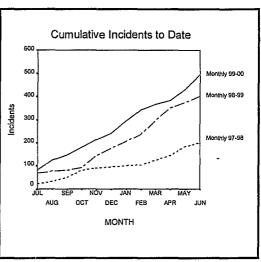
The following statistics summarize key services provided by CIRT. The following tables summarize the changes over the past 11 years and clearly illustrates the growth in computing services, despite no increases in staff and only token increases in total budget. As such, it provides a measure of the efficiency and effectiveness of CIRT.



6.1 1999-2000 Annual Report of Security Incidents

Summary:

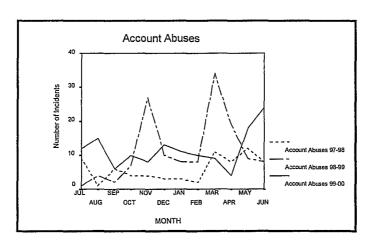
Security incidents were up over 20% at UNM in the 1999-2000 fiscal year over the previous fiscal year. While the number of break-ins remained relatively stable, Internet e-mail viruses, network vulnerability scanning and Denial of Service activity increased. Harassment case reports were up for faculty and staff from last year primarily due to security awareness training. The efforts of the UNM Y2K Team paid off by updating software and operating systems that previously were vulnerable to intruders and viruses. Shadowing the password file and installing network firewalls would have significantly decreased the number



of incidents by hiding the passwords, identifying and blocking unauthorized network activity. The following reports and graphs present the trends and incidents by category. The tables at the end show a finer breakdown of each category.

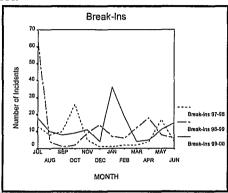
Account Abuse Problems:

This fiscal year we had approximately the same amount of account abuses as last year. Harassment is up from last year (102 to 145 cases) and by far remains the major problem in this category. Most of these are related to domestic issues. Commercial misuse has doubled from last year. These continue to be handled routinely by CIRT and the appropriate authorities.



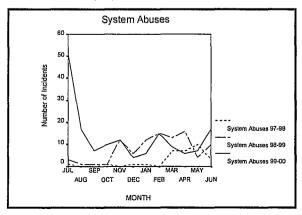
Break-ins to Personal Accounts and Systems:

Overall break-ins were approximately the same as last year with the majority of intruders attacking internal or external systems. The rest were break-ins into individual accounts. The majority of these individual break-ins were discovered prior to the intruders doing damage. This was accomplished by the use of automatic search tools developed by our System and UNIX support staff. Both system and individual account compromises were up in January 2000. This was not unexpected, as intruder groups had been planning disruptive efforts for Y2K. Both CIRT and UNIM departmental staff implemented patches and closed accounts without any major disruption to campus-wide services.



System Abuses:

This fiscal year we saw a dramatic increase in Denial-of-Service (DOS) activity from and to UNM. During summer 1999 intruders used Linux exploits to compromise departmental machines to launch DOS attacks. Overall the University experienced a doubling in attacks into and out of our networks and computing systems. Most of these attacks came through systems that had already been compromised. The intruders left backdoors, password sniffers, and DOS tools. The incidents that network and systems staff handled were primarily from intruders placing DOS software on multiple platforms to attack other sites.



Virus incidents:

Computer viruses have doubled this year at UNM. This corresponds with nation-wide trends. CIRT continued its efforts to provide easy to obtain current anti-viral signatures from the web. Our most effective tools were awareness and the implementation of an automatic "infected e-mail" virus detection-deletion program, which lessened the impact of these new e-mail viruses on our user community. Like everyone else during the spring of 2000, UNM experienced more infections with viruses such as the "LOVE BUG" virus/worm. UNM is fortunate in that these new viruses have not yet had a University wide impact.

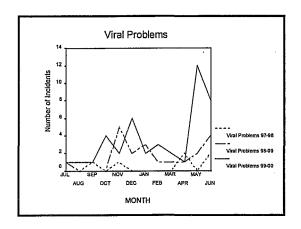


Table 1 1999-2000 Fiscal Year Total Security Incidents

	Staff/Faculty	Student	External	Unknown	Totals	
Account Abuses	29	60	25	27	141	
Break-in	8	69	2	71	150	
System Abuses	7	87	12	55	161	
Viral	16	1	3	23	43	
Totals	60	217	42	176	495	

Table 2 Account Abuse Fiscal Year 1999-2000

	Staff/Faculty	Student	External	Unknown	Totals	
Totals	60	217	42	176	495	
System Attacks	2	8	2	6	18	
Harassment	24	35	22	21	102	
Commercial Use	2	8	2	1	13	
False Reports	0	1	0	0	1	
No Harm	1	3	0	0	4	
Other	1	5	0	1	7	
Totals	30	60	26	29	145	

* *312 * ... 1.027

Table 3 Break-ins: System and Individual 1999-2000 Fiscal Year

	Faculty/Staff	Student	External	Unknown	Totals
System Attack	4	38	1	53	96
Other	3	31	1	17	52
Totals	7	69	2	70	14

Table 4 System Abuses 1999-2000 Fiscal Year

	Faculty/Staff	Student	External	Unknown	Totals
System Attack	1	86	6	22	115
System Vulnerability	2	0	4	5	1
Other	4	1	1	27	33
Totals	7	87	11	54	159

Table 5 Viral Problems 1998-1999 Fiscal Year

	Faculty/Staff	Student	External	Unknown	Totals
Major New Virus	2	0	2	1	5
Virus Hoax	9	0	1	3	13
Other	4	1	0	19	24
Totals	15	1	3	23	42

CLASS	DATE	AUDIENCE		NUMBER IN CLASS	CLASS LENGTH	CONTACT HOURS
CIRT 1 on 1	8/26/99 8/25/99	Gen Student Gen Student	Class Totals	10 10 20	1 1 2	10 10 20
CIRT Services	06/02/00 06/02/00 08/11/99 08/09/99 08/16/99 08/16/99 05/09/00 05/16/00 04/13/00 08/20/99 02/10/00 08/18/99 08/18/99 06/21/00 06/14/00 06/14/00 08/19/99 08/19/99	CEP CEP Gen Faculty Gen Faculty Gen Faculty Gen Student	Class Totals	20 19 1 8 100 35 20 20 20 100 40 40 100 51 53 20 20 20 20 20 40 40 40 40 40 40 40 40 40 40 40 40 40	1 1 0.5 1 1 1 2 2 1 3 2 2 1 1 1 1 1 1 1 1 2 2 1 1 1 1	20 19 0.5 8 100 35 40 40 20 300 80 80 100 51 53 20 20 20 20 40 40 40 40 40 40 40 40 40 40 40 40 40
Comp. Literacy	08/12/99 06/27/00 11/02/99 03/09/00	Gen Staff HR HR HR HR	Class Totals	6 5 6 8 25	3 3 3 3 12	18 15 18 24 75
Corporate Time	01/11/00 10/07/99 04/04/00 09/01/99 03/21/00 09/14/99 9/016/99 02/14/00 08/17/99 07/22/99 07/29/99 07/08/99 04/26/00 09/21/99 10/05/99 06/28/00 11/16/99 12/01/99 06/07/00	Gen Staff HR HR HR HR		7 10 4 8 9 10 7 7 10 10 10 10 9 10 9 10 10	2 2 1 1 2 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2	14 20 4 4 16 18 20 7 14 20 20 20 12 18 20 18 12 20 20

CLASS	DATE	AUDIENCE	· · · · · · · · · · · · · · · · · · ·	NUMBER IN CLASS	CLASS LENGTH	CONTACT HOURS
Corporate Time (continued)	04/06/00 01/26/00 02/17/00 09/28/99 10/21/99 07/28/99 08/05/99 03/29/00	HR HR HR HR HR HR HR	Class Totals	10 10 9 6 5 10 10 9	2 2 2 2 2 2 2 2 2 53	20 20 18 12 10 20 20 18 455
HTMLI	06/22/00 03/23/00 07/14/99 07/14/99 07/14/99	HR HR HR HR HR	Class Totals	5 4 25 24 25 10 93	3 3 3 3 3 4 19	15 12 75 72 75 40 289
HTML II	03/02/00 08/09/99 08/11/99 08/16/99 04/12/00 01/27/00 02/16/00 11/08/99 03/23/00 6/6/2000 06/22/00 10/04/99 11/08/99	Gen Faculty Gen Faculty Gen Faculty Gen Staff HR HR HR HR HR HR HR	Class Totals	5 3 3 16 10 10 8 11 6 4 7 5 10 10	2 2 2.5 3 3 3 3 3 3 3 3 3 3 3 3	10 6 7.5 48 30 30 24 33 18 12 21 15 30 20 304.5
Internet	08/10/99 11/17/99	Gen Staff Gen Student	Class Totals	2 7 9	1 2 3	2 14 16
Mirada	08/11/99 8/10/1999	Gen Faculty Gen Faculty	Class Totals	2 2 4	1 1 2	2 2 4
MS PowerPoint	11/10/99 02/29/00 10/27/99 05/18/00 03/22/00	Gen Student Gen Student Gen Student Gen Student Gen Student	Class Totals	7 10 12 50 8 87	2 2 2 2 2 2	14 20 24 100 16 174
MS Word	05/18/00 03/01/00 12/09/99 12/08/99 11/03/99 02/08/00	Gen Student Gen Student Gen Student Gen Student Gen Student Gen Student		30 8 7 5 11 7	2 2 2 2 2 2	60 16 14 10 22 14

n 1030

DATE AUDIENCE NUMBER CLASS CONTACT CLASS IN CLASS LENGTH HOURS 10/20/99 Gen Student 8 2 MS Word 16 Gen Student 7 2 02/15/00 14 (continued) Gen Student 6 2 02/22/00 12 12/08/99 Gen Student 3 2 6 HR 10 2 20 03/22/00 102 22 204 Class Totals 2 Mulberry 11/18/99 Gen Faculty 10 20 Gen Staff 2 20 03/30/00 10 2 01/11/00 Gen Staff 6 12 03/27/00 Gen Staff 7 1 7 Gen Staff 8 2 16 11/16/99 2 20 06/06/00 Gen Staff 10 2 03/07/00 Gen Staff 8 16 06/06/00 Gen Staff 8 2 16 09/13/99 Gen Staff 14 2 28 2 06/20/00 Gen Staff 60 120 2 03/14/00 Gen Staff 7 14 10 2 20 03/30/00 Gen Staff Gen Staff 20 40 07/19/99 Gen Staff 10 2 20 06/08/00 Gen Staff 20 2 40 07/12/99 20 20 Gen Staff 1 09/03/99 20 2 11/19/99 Gen Staff 40 12/03/99 Gen Staff 10 2 20 Gen Staff 8 2 16 04/27/00 Gen Student 25 1 25 08/30/99 2 20 History 10 04/04/00 ž 07/26/99 HR 13 26 2 26 12/02/99 HR 13 2 06/21/00 HR 10 20 HR 26 2 52 07/12/99 HR 28 2 56 08/25/99 2 20 HR 10 02/24/00 2 04/20/00 HR 5 10 HR 10 2 20 02/24/00 HR 5 2 10 04/20/00 2 08/30/99 HR 15 30 HR 9 2 18 01/25/00 2 10/07/99 HR 17 34 18 2 36 09/24/99 HR 2 HR 6 12 03/30/00 27 2 54 08/25/99 HR 2 46 10/22/99 HR 23 08/25/99 HR 30 2 60 50 25 2

CLASS	DATE	AUDIENCE		NUMBER IN CLASS	CLASS LENGTH	CONTACT HOURS
Mulberry (continued)	07/12/99 04/04/00 11/11/99 06/08/00 02/09/00 11/19/99 07/19/99	HR HR HR HR HR HR	Class Totals	30 9 14 9 19 35 747	2 2 2 2 2 2 2 2 2 93	60 18 28 18 18 38 70 1442
a ta agando sidas estadolos tamas			Grand Totals	2236	281	4109

7.0 NEW STAFF and SEPARATIONS

New Staff:

Damion Terrel Systems Analyst I August 6, 1999

Alex Estrada Systems Analyst III September 1, 1999

Jeff Gassaway Tech Support Analyst II September 20, 1999

Ray Baca Analyst Programmer III November 1, 1999

Randall Scott Analyst Programmer I December 1, 1999

Kingsavanh Bounkeua Systems Specialist December 15, 1999

Separations:

Bruce Warren Analyst Programmer I July 16, 1999

Don Brady Associate Director, IT July 30, 1999

Debby Grace Analyst Programmer II August 13, 1999

Ann Myers Tech Support Analyst I December 9, 1999

Mark Suazo Analyst Programmer I December 17, 1999

Anne Snider Database Coordinator June 23, 2000