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Annual Report of the University, 1988-1989, Volumes 1-5

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ANNUAL REPORTS
1988-89

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ANNUAL REPORT
OFFICE OF PLANNING AND POLICY STUDIES (P&PS)
Richard H. Cady, Director
July 1, 1988 through June 30, 1989

I. Significant Developments During Academic Year, 1988-89

A. Approximately one man-year of effort was devoted to analysis to detect possible gender or racial/ethnic bias in faculty personnel operations at the university. This effort was required to support responses by the Counsel's office to queries put by OFCCP.

B. Approval by the NMCHE of its statewide postsecondary education plan, "Planning for the Class of 2005," required review of the plan by President May. P&PS provided that review plus all of the written institutional testimony.

C. NMCHE developed a 16-page directive, "Institutional Planning Guidelines," which required extensive input to the Commission's Planning Committee. Commissioner Taylor and the NMCHE staff resisted most of the institutional recommendations. Of some significance was the addition by NMCHE of a set of statewide issues in New Mexico higher education drafted in P&PS.

D. P&PS provided data and some text for the decennial North Central Association accreditation review.

E. P&PS provided reports to President May on improving academic preparation for college by UNM new

freshmen, participation of minorities, and migration of new freshmen.

F. P&PS provided a report and detailed recommendations for the Vice President of Academic Affairs on inventory of UNM's degree programs.

G. Introduced the Vice President for Business and Finance to Bloom's productivity ratios and supported UNM's efforts to improve the funding formula.

H. Continued to provide text, data, analysis, displays, and policy recommendations regarding tuition rates.

I. R. Cady was relieved, at his request, of responsibility as UNM's Data Coordinator for NMCHE. Registrar W. Haid was assigned these vexing duties. Detailed advice had been provided to NMCHE.

J. P&PS continued the elaborate tracking reports on freshman cohorts at UNM since 1983.

K. Developed with R. Weaver and transmitted to President May the first set of quantitative enrollment management objectives for UNM.

L. P&PS was a principal author and designer of the report on higher education prepared for New Mexico First, a statewide citizens' advocacy group on public policy issues.

M. P&PS worked closely with Representative Pauline

Eisenstadt to draft and support legislation (H.B. 129) which would have provided pilot programs on student assessment.

N. P&PS personnel continued to provide staff support for these committees:

- 1) VP/AA's student assessment task force
- 2) Admissions and Records Committee
- 3) Adult Re-entry Committee
- 4) Faculty Senate Long Range Planning Committee
- 5) Tuition policy task force
- 6) Legislative Liaison Committee
- 7) Administrative Computing Committee

II. Significant Plans and Recommendations for the Near Future

A. Completion of data analyses for Legal Counsel's office on potential bias.

B. Perform inventory of all UNM units which may perform assessment of student learning outcomes. Assign Dr. Burris-Woodall to 80% service in the VP/AA's office.

C. Continue to work with NMCHE to improve and correct "Institutional Planning Guidelines." Coordinate and prepare UNM's response when it is due.

D. Provide President's testimony for new Legislative Higher Education Reform Committee; monitor committee.

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E. Advise and service Faculty Senate Long Range Planning Committee on the selection and application of a survey of faculty preferences and perceptions.

F. Relieve P&PS of responsibility for "Highlights about UNM." Transfer to Public Affairs.

G. Complete any residual tasks on the Arizona State University study of organization influences on minority student success. (UNM a subcontractor.)

H. Support the work of the UNM-2000 committee. This includes text, analysis, and data. Provide criteria for program cut-back and program review by Dr. Burris-Woodall.

I. Provide Vice President Mc Kinney with a draft of an "aspiration funding formula."

III. Appointments to Staff

Fae Korsmo, project assistant, half-time. (Position was restored for one year to work on OFCCP requirements.)

IV. Separations from Staff

Fae Korsmo, project assistant, half-time.

V. Papers

Miller, M. C., Woodall, W. G., & Burris-Woodall, P. A. (1989, May). Patient characteristics and expectations:

Further refinement of the MRRRI and its relationship to patient characteristics. Paper presented at the annual convention of the International Communication Association, San Francisco, CA.

Miller, M. D., Woodall, W. G., & Burris-Woodall, P. A. (1988, November). Health care provider-patient role relationships: The patient's perspective. Paper presented at the annual convention of the Speech Communication Association, New Orleans, LA.

VI. Outside Professional Activities of Staff

Richard Cady

- was appointed to the Albuquerque/Bernalillo County Goals Commission;
- developed and offered a new course, called "International War," Political Science 340;
- was appointed to the national publication advisory committee of the Society for College and University Planning (SCUP);
- hosted and organized the annual meeting of Southwestern and Rocky Mountain SCUP in Albuquerque.

Patricia Burris-Woodall

- co-organizer and teacher in a one-week multi-cultural day camp for children (pre-school to high school) in Albuquerque;

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- participant in one-on-one program at UNM; and
- attended AAHE 4th National Conference on Assessment in Higher Education.

Tom Field

- named associate editor of the Association for Institutional Research (AIR) Bitnet Newsletter September 6, 1988;

- attended the Rocky Mountain Association for Institutional Research conference in Aspen, CO. in September 1988; and

- attended the AIR Forum in Baltimore, MD. in April, May 1989 and did the following there:

- 1) Prior to the nominal beginning of the Forum on Sunday evening attended three pre-Forum workshops, including one all Saturday on "approaches to the assessment of institutional effectiveness--the what and the how," one Sunday morning on "the principles of successful student retention," and one Sunday afternoon on "assessing and increasing the effectiveness and impact of institutional research at your institution."

- 2) Attended SIG meetings for a) Urban Universities Institutional Researchers where he presented a brief paper on "The Necker Cube of Enhanced Admission Standards: Increased Performance, Reduced Access;" 2) Computer Users where he demonstrated the Interactive System

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for Advanced Academic Computing (ISAAC), 3) the Rocky Mountain Association for Institutional Research (RMAIR), commenting on the current highlights of the higher education situation in New Mexico and introduced as incoming coordinator for the RMAIR Newsletter, Panorama; and 4) Major Research Universities (MRU), reporting information about the University of New Mexico in the context of interests common to major research universities.

3) Invited contributor for two panel discussions, including a) "The Use of Electronic Mail as an Institutional Research Tool," b) "Common Institutional Research Problems and Solutions--or IR Can Be Trying," where the role of an institution's vice president for business was assumed in an illustrative skit.

4) The final presentation was a 90-minute demonstration of "Electronic Bulletin Boards and Their Use in Institutional Research."

VII. Outside Sponsored Research

Clean-up, review of final report on Arizona State University's minorities study of which UNM was a case study and a subcontractor.

REPORT OF ATHLETIC PROGRAM
AT THE
UNIVERSITY OF NEW MEXICO
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Statistics of Participation in Athletics

Athletic Department FY1988-89 vs FY1989-90 Budget Plan

FY1989-90 Athletic Department Budget Plan

Athletic Department Five-Year Plan

REPORT OF ATHLETIC PROGRAM
AT THE
UNIVERSITY OF NEW MEXICO

Reviewed herein is the past year's activities of the Athletic Program and the budget plans for the current year at the University of New Mexico. FY1989 was a good year in many ways for the Program, including selection of a permanent Athletic Director, improvement in the competitive quality of many of the sports teams, improved overall financial performance of the Athletic Department, significant improvement in the funding of the Program by the Legislature, and record-setting private support.

PARTICIPATION

Last year there were over 500 students participating in 22 men's and women's intercollegiate athletic programs at the University of New Mexico. Tab A summarizes the participation for each of the sports programs. Information includes number of participants, authorized NCAA scholarships for each program, and number of scholarship equivalents actually awarded last year by sport.

COMPETITIVE PERFORMANCE

Last year, several of the sports programs did very well in the competition within their respective conference and, in some cases, nationally.

WOMEN'S ATHLETIC PROGRAM

The women's athletic program at the university of New Mexico competes in the high Country Athletic Conference (HCAC) which includes Brigham Young University, Colorado State University, New Mexico State University, the University of Utah, Utah State University, and the University of Wyoming. During the 1988-89 year, UNM finished second only to BYU in the overall composite ranking of schools. The volleyball team won the conference title for the first time in history and received the NCAA automatic bid. Senior setter Karen Saavedra-Warnock became volleyball's first All American. Interim head coach Blase Czerniakowski was named HCAC Coach of the Year. Head coach Laurel Kessel competed on the United States Volleyball Team in the 1988 Olympic Games in Seoul, Korea. The Albuquerque Sports Hall of Fame honored Kessel as the Female Athlete of the Year; Coach Czerniakowski was honored as the Coach of the Year; and the Lobo volleyball team shared Team of the Year honors with the West Mesa girls' volleyball team.

The golf and track & field teams finished second in the HCAC. Three golfers and four track & field athletes were named to the All Conference teams. Golf and track & field each sent one athlete to the NCAA Championships.

Cross Country, softball and tennis turned in third place conference finishes. Three cross country athletes were named to the All Conference Team and Gwen Willink finished 36th in the NCAA Championship and was selected as an All American. Two tennis players were named to the HCAC All Conference Team. The softball team finished third in the conference and had three players named to the HCAC All

Conference Squad. Third baseman, Karla Ismay, was selected as a second team All American.

The skiing team, which is composed of both men and women athletes, finished third in the Region and fifth at the NCAA Championship. Six skiers were named as All Americans.

The gymnastics team finished fifth in the HCAC Championship and had three athletes qualify for the NCAA Regional competition. The swimming team placed sixth in the Conference Championship meet and one swimmer was named to the All Conference Team.

On the whole, the University of New Mexico women's athletic program was well represented at both the conference and national level. With the implementation of the tuition waivers, the program can be expected to do even better in the future.

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**HIGH COUNTRY ATHLETIC WOMEN'S CONFERENCE
1988-89 OVERALL STANDINGS**

1. Brigham Young University
2. University of New Mexico
3. University of Utah
4. Colorado State University
5. University of Wyoming
6. New Mexico State University
7. Utah State University

NCAA WOMEN'S COMPETITION

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Volleyball

NCAA First Round, lost to Kentucky, 3-2

Cross Country

Ind., Gwen Willink, 36th/135, 17:22

Skiing

Finished 5th

Golf

Ind., Michelle Wooding, 54th/102, 79-78-79-80=316

Track & Field

Darcy Ahner, heptathlon, 16th/18, 5,189

NCAA Regional Competition Gymnastics

**Inds., Lisa Pank, 20th, 37.55
Jeanne Parncik, 36.8
Illiana Carrillo, 36.5**

1988-89 HONORS

ALL AMERICA

Cross Country - Gwen Willink, 5k, 36th, 17:22, second team

Volleyball - Karen Saavedra-Warnock, setter, second team

Skiing - Henrik Lonnberg, men's giant slalom, 10th, second team

Ida Lundeberg, women's giant slalom, 9th, second team

Sindre Mekjan, men's 10K classical, 10th, second team

Maria Nilssen, women's giant slalom, 7th, second team, women's slalom, 7th

Maria Seppala, women's 5K classical, 9th, second team

Geir Simonsen, Nordic Skiing, Men's 15K, 10th place

Softball - Karla Ismay, third baseman, second team

ALL REGIONAL

Cross Country

Gwen Willink, 3rd, 5K

Cindy Herhahn, 5th, 5K

Ida-Lise Leyba, 10th, 5K

Volleyball

Nao Ikeda-Nagatoma

Marlo Pennington

Karen Saavedra-Warnock

Swimming

Elisabeth Ahlgren, 100 butterfly (1), 200 butterfly (2)

Golf**Wendy Werley****Susan Wineinger****Michelle Wooding****Tennis****Chris Hoffee, singles****Rachel Wilson/Chris Hoffee, doubles****Softball****Liz Bogdanovic, center field****Karla Ismay, third baseman****Beth Unterbrink, pitcher/outfield****Track & Field****Darcy Ahner, heptathlon (1), high jump (2), javelin (20)****Hweidi Anderson, heptathlon (2)****Annette DiLorenzo, triple jump (1)****Natanya Jones, 400m hurdles (1)****Honorable Mention****Volleyball****Lori Forrest****Maria Gurreri**

For the first time in 22 years, the Lobos captured three Western Athletic Conference titles (cross country, gymnastics, golf). Seven individual student-athletes were named All-America in their respective sport - the most since 1978. In the unofficial Western Athletic Conference composite rankings for 1988-89, New Mexico placed third - up a notch from last year - behind BYU and UTEP. However, seven of UNM's 11 WAC-affiliated sports finished in third place or higher.

Gymnastics led the honors parade. Senior Chad Fox became the first gymnast in NCAA gymnastics history to win four individual titles on the same apparatus - vault. Fox recorded a 9.625 to claim top honors. Teammate Paul O'Neill was not to be outdone earning his third consecutive rings title with a 9.95 score. O'Neill joined Nebraska's Jim Hartung as a three-time winner on the rings. Along the way, Rusty Mitchell's squad won its fourth straight WAC title and ninth overall.

Del Hessel's track teams had a fruitful campaign, too. The cross country team won its first conference crown in 20 years led by senior Bill Mangan. At nationals, UNM placed 20th with a youthful team comprised of two seniors, four sophomores and one freshman. In indoor track, Simon Arkell won the WAC pole vault (17-5) to capture seventh place at the NCAA Championships. However, it was outdoors where the Lobos strutted their stuff.

Three Lobos earned All-America status - the most since 1978 - as UNM placed 37th at the NCAA Outdoor Championships at BYU. Arkell placed sixth in the pole vault

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with a school-record leap of 17-10 1/4. Darren Crawford took sixth in the shot put with a toss of 60-3 and Mangan ran eighth in the 5,000 meters for UNM's seven points. In UNM's third place WAC finish, all three won their respective events and Mangan was named the outstanding performer of the meet winning both the 5,000 and 10,000 meters.

For the first time since 1965, the Lobos swept the individual and team honors at the WAC Golf Championships. Playing on their home course at UNM South, the Lobos claimed their first WAC title since 1979. Lobo Kent Jones captured the individual championship with a nine-under 207, the lowest 54-hole total by a UNM golfer in the WAC Championships. Derek Crawford, who was voted All-America by the Golf Coaches Association of America, placed third. Jones and Crawford were both named All-WAC, while head coach John Fields, who played on UNM's last winning team in 1979, was voted conference Coach of the Year. Jones and teammate Tord Nilsson also received the All-American Scholar Award from the GCAA.

The first All-America performer of the 1988-89 season came in wrestling. Junior TeDon Fleischman, wrestling at 150 pounds, placed eighth at the NCAA Wrestling Championships in Oklahoma City. Fleischman was 34-6-1 for the season and was also named Outstanding Wrestler in the WAC Championships by the leagues' coaches after taking the title at 150.

The Lobo basketball team, with five underclassmen among the top seven players, finished the season with a 22-11 record for their third straight 20-win season and fourth in six years. UNM was 11-5 and tied Texas-El Paso for second place in the league, the Lobos' best finish since the 1978 team won the conference crown. The

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Lobos led or shared the league lead until the final day of the regular season, when Colorado State won at BYU and the Lobos lost a one-point decision to Hawaii.

After dropping a semifinal encounter to UTEP at the WAC Tournament, New Mexico was passed over for the NCAA Tournament and accepted its sixth straight NIT bid. The Lobos went 2-1 in the NIT, losing a heartbreaking 66-65 decision to St. Louis in the quarterfinals.

First-year head coach Dave Bliss set a school record for wins by a rookie coach at UNM with the 22-11 record. His career mark improved to 241-174 after the 1988-89 season.

The Lobos established five WAC records and a dozen school marks in 1988-89. UNM set league standards for assists (677), assists in WAC games (324), season field goal percentage (54.5 which was also second best in the nation), WAC games field goal percentage (57.0) and individual free throw percentage (Rob Robbins, 92.6 percent).

Senior forward Charlie Thomas and sophomore center Luc Longley were named second team All-WAC while Robbins and junior guard Darrell McGee received honorable mention recognition. Freshman Willie Banks was runner-up in the voting for WAC Newcomer of the Year.

UNM also just missed setting a school record for average attendance with 17,201. However, that figure guaranteed the Lobos a top 10 national ranking for an NCAA-record 23rd consecutive year.

The football team got into the win column twice in 1988 and ended a 13-game overall losing streak and a nine-game home field skid. The Lobos ended their losing streak with a dramatic 36-34 win at New Mexico State when Rick Walsh booted his school record-tying fifth field goal with two seconds remaining in the contest. The other win was no less thrilling. Freshman quarterback Jeremy Leach hit senior Tony Jones on a 28-yard strike as time expired to hand UNM a 24-23 triumph over Colorado State. UNM finished 2-10 overall, 1-7 in the loop.

Senior tight end John Duff, sophomore defensive lineman John Bell and Walsh all earned second team All-WAC and Associated Press honorable mention All-America laurels. Junior running back Andre was voted honorable mention All-WAC while senior offensive guard Jeff Howes was first team Academic All-WAC. Walsh was also chosen to play in the East-West Shrine Game and he kicked a pair of field goals.

Leach was the top freshman quarterback in the nation, statistically. He passed for 1,986 yards. He was also the only true freshman to start the first game of the 1988 season among NCAA Division I schools.

After the 1988 season ended, head coach Mike Sheppard - who completed his second year - hired two new coaches. Denny Moller became the Lobos' defensive coordinator and secondary coach while Wayne Moses assumed duties with the wide receivers and tight ends.

The soccer team finished 5-13-1 overall and 1-2-1 in the Rocky Mountain Intercollegiate Soccer League. Junior captain Troy Besserra led the team in scoring with 12 points. Interim head coach Jim Wiesen was replaced by Klaus Weber.

Weber, who was UNM's interim head coach in 1986-87, became UNM's first full-time head coach in June.

The 1989 baseball season marked the end of head coach Vince Cappelli's career at New Mexico. A 1950 grad of UNM, Cappelli had a 13-year record of 384-350-7 and finished as the school's winningest baseball mentor. The Lobos had a tough time of it in '89. UNM was 10-37-1 overall and 6-20 in conference play. Senior second baseman Eric Torres, who led UNM in virtually every offensive category, was named first team Academic All-WAC and earned second team laurels for his play on the field. Rich Alday, former head coach at Pima Community College in Tucson, Ariz., was named Cappelli's successor.

Under first-year coach Tim Cass, the men's tennis team placed sixth in the WAC. The team sported a 8-19 overall record. Individually, senior Alan Dils took second place in the conference singles and qualified for the NCAA Championships. Teammate Jorge Ortega joined Dils on the All-WAC singles and doubles team.

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1988-89 WESTERN ATHLETIC CONFERENCE UNOFFICIAL COMPOSITE RANKINGS

	AFA	BYU	CSU	UH	UNM	SDSU	UTEP	UTAH	WYO
Football	T6	T3	T8	T3	T8	T6	2	5	1
C. Country	4	2	5	--	1	8	3	6	7
Ind. Track	5	2	7	--	6	3	1	4	8
Swimming	5	2	--	4	3	--	--	1	6
Wrestling	4	1	--	--	3	--	--	--	2
Basketball	T6	5	1	4	T2	9	T2	T6	T6
Gymnastics	3	2	--	--	1	--	--	--	--
Out. Track	8	1	7	--	3	4	2	6	5
Tennis	4	2	8	7	6	3	5	1	--
Golf	T8	4	T8	7	1	6	2	5	3
Baseball	5	2	8	1	7	3	--	6	4
<hr/>									
TOTAL PTS.	58	26	52	26	41	42	17	40	42
No/Sports	11	11	8	6	11	8	7	9	9
Average	5.27	2.36	6.50	4.33	3.73	5.25	2.43	4.44	4.67

FINAL ORDER (Sports) / Avg.	87-88	86-87	85-86	84-85	83-84	82-83	81-82	80-81
1. Brigham Young 11 / 2.36	1	1	1	1	1	1	1	1
2. Texas-El Paso 7 / 2.43	3	7	T4	3	3	2	3	3
3. NEW MEXICO 11 / 3.73	4	2	2	2	2	4	5	9
4. Hawaii 6 / 4.33	8	5	7	4	4	5	2	4
5. Utah 9 / 4.44	6	6	3	3	T7	6	6	2
6. Wyoming 9 / 4.67	2	3	6	7	6	8	8	6
7. San Diego State 8 / 5.25	5	4	T4	6	5	3	4	5
8. Air Force 11 / 5.27	7	8	8	8	T7	7	7	8
9. Colorado State 8 / 6.50	9	9	9	9	9	9	9	7

NEW MEXICO'S YEAR-BY-YEAR WAC TEAM TITLES (won or shared)

1962-63 -- Football, Golf
1963-64 -- Football, Basketball, Golf, Cross Country, Outdoor Track
1964-65 -- Football, Tennis, Golf, Outdoor Track
1965-66 -- Cross Country, Outdoor Track
1966-67 -- Golf, Tennis, Cross Country, Outdoor Track
1967-68 -- Basketball, Gymnastics
1968-69 -- Cross Country
1969-70 -- Gymnastics
1970-71 -- Gymnastics
1971-72 -- Gymnastics, Wrestling
1972-73 -- Gymnastics
1973-74 -- Basketball, Tennis
1974-75 -- none
1975-76 -- none
1976-77 -- none
1977-78 -- Basketball
1978-79 -- Tennis, Golf
1979-80 -- none
1980-81 -- none
1981-82 -- Tennis
1982-83 -- none
1983-84 -- none
1984-85 -- none
1985-86 -- Gymnastics, Swimming
1986-87 -- Gymnastics
1987-88 -- Gymnastics
1988-89 -- Cross Country, Gymnastics, Golf

UNIVERSITY OF NEW MEXICO ALL-AMERICA PERFORMERS (men's sports only)

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Baseball (5)

- 1977 - OF Aaron Cain
- 1980 - 3B Keith Hagman
- C Duffy Ryan
- 1985 - SS Jim Fregosi
- P Dean Duane

Basketball (2)

- 1967 - Mel Daniels
- 1978 - Michael Cooper

Cross Country (4)

- 1975 - Lionel Ortega
- 1979 - Kip Koskei
- 1981 - Ibrahim Hussein
- 1982 - Ibrahim Rivina

Football (6)

- 1954 - C Larry White
- 1962 - RB Bobby Santiago (UPI 3rd team)
- 1975 - PK Bob Berg (USFWA 1st team)
- 1976 - LB Robin Cole (AP 3rd team)
- 1982 - LB Johnny Jackson (AP 3rd team)
- 1987 - WR Terance Mathis (AP 3rd team)

Golf (27)

- | | |
|----------------------|-----------------------|
| 1961 - Jerry Truax | 1977 - Mitch Mooney |
| 1962 - Jerry Truax | 1978 - Mitch Mooney |
| 1964 - Guy Wimberly | 1979 - Mitch Mooney |
| 1965 - Joe McDermott | 1980 - Curt Byrum |
| 1966 - Ralph Coker | 1981 - Tom Armour III |
| 1967 - Mahlon Hoe | Mike Putnam |
| 1968 - Terry Dear | 1982 - Mike Putnam |
| Wes Wilkening | 1984 - Don Hurter |
| 1971 - Greg Harmon | 1986 - John Kienle |
| 1972 - Dave Newquist | 1989 - Derek Crawford |
| 1973 - Paul Simson | |
| Jack Sommers | |
| 1974 - Jack Rice | |
| 1975 - Brad Bryant | |
| 1976 - Ray Cragun | |
| Greg Goldsmith | |
| Brad Bryant | |

0024
Gymnastics (44)

- 1969 - 1. Bob Manna, high bar
5. Dave Carrier, rings
- 1970 - 2. Stormy Eaton, floor
2. Stormy Eaton, trampoline
3. Jon Aitken, high bar
- 1971 - 1. Stormy Eaton, floor
2. Jon Aitken, high bar
5. Jim Ivicsek, vault
6. Jim Ivicsek, parallel bars
- 1972 - 2. Mark Hopkins, vault
3. Dana Shelley, floor
3. Jon Aitken, high bar
5. Jim Ivicsek, all-around
5. Jim Ivicsek, parallel bars
- 1973 - 1. Jon Aitken, high bar
2. Jim Ivicsek, vault
4. Jim Ivicsek, parallel bars
6. Jim Ivicsek, all-around
- 1977 - 1. Chuck Walter, pommel horse
3. Steve Ortiz, high bar
- 1978 - 3. John Bernal, rings
5. John Bernal, parallel bars
- 1979 - 5. Steve Jennings, pommel horse
- 1980 - 3. Steve Jennings, pommel horse
- 1981 - 1. Steve Jennings, pommel horse
- 1982 - 1. Steve Jennings, pommel horse
- 1983 - 2. Matt Arnot, parallel bars
4. Matt Arnot, rings
- 1985 - 2. Tom Novak, pommel horse
3. Matt Arnot, high bar
6. Matt Arnot, all-around
- 1986 - 1. Chad Fox, vault
3. Chad Fox, floor
6. Tom Novak, pommel horse
6. Scott Burr, rings
- 1987 - 1. Chad Fox, vault
1. Chad Fox, floor
3. Tom Novak, pommel horse
T3. Scott Burr, rings
- 1988 - 1. Chad Fox, vault
1. Paul O'Neill, rings
2. Chad Fox, floor
- 1989 - 1. Chad Fox, vault
1. Paul O'Neill, rings

Indoor Track (18)

- 1967 - Clark Mitchell, 600
- 1971 - Reid Cole, 600
- 1976 - Charles Dramiga, 600 (champion)
- 1977 - Mike Solomon, 600 (champion)
- 1978 - Charles Dramiga, 440
- Charles Dramiga, 600
- Fatwell Kimaiyo, 60 HH
- Two-mile relay (Jay Quade, Mark Romero, Jeremiah Ongwae, Sammy Kipkurgat) (champion)
- 1979 - Jeremiah Ongwae, 880
- 1983 - Two-mile relay (Ibrahim Hussein, Richie Martinez, Roger Moore, Pete Serna) (champion)
- 1984 - Ibrahim Hussein, 1,000
Dwayne Rudd, long jump

Outdoor Track & Field (37)

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- 1958 - Buster Quist, javelin
- 1959 - Dick Howard, 400 IH
- 1963 - Adolph Plummer, 440
- 1964 - Larry Kennedy, discus (champion)
- 1965 - Clarence Robinson, long jump (champion)
Clarence Robinson, triple jump (champion)
- 1966 - Steve Caminiti, 110 HH
Ira Robinson, long jump
440 relay team (Rene Matison, Bernie Rivers, Jim Singer, Steve Caminiti)
- 1967 - Art Baxter, triple jump (champion)
Web Loudat, steeplechase
- 1971 - Chuck Steffes, triple jump
- 1972 - Two-mile relay (Reid Cole, Gary Easterly, Bob Dooley, Matt Henry)
- 1975 - Two-mile relay (John Allison, Jay Miller, Bob Phippen, Tom Snowden)
- 1976 - Charles Dramiga, 400
Mike Solomon, 400
- 1977 - Sam Kipkurgat, 800
- 1978 - Sam Kipkurgat, 800
Harrison Koroso, steeplechase
Fatwell Kinaiyo, 400 IH
- 1979 - Kip Koskei, 1,500
- 1982 - Marty Niebauer, decathlon
- 1984 - Dwayne Rudd, long jump
- 1985 - Gary Kinder, decathlon
- 1987 - Bill Mangan, 5,000
- 1989 - Simon Arkell, pole vault
Darren Crawford, shot put
Bill Mangan, 5,000

Swimming (33)

- 1965 - Tom Mellars, 100 butterfly
- 1970 - Robert Milne, 50 freestyle
Steve Craven, 100 butterfly
Steve Craven, 200 butterfly
- 1971 - Rick Klatt, 200 freestyle
Steve Craven, 100 freestyle
Steve Craven, 200 butterfly
- 1973 - Rick Klatt, 200 freestyle
Larry Farrar, 1,650 freestyle
Dave Johnson, 200 backstroke
400 freestyle relay (Doug Masey, Larry Farrar, Paul Harris, Rick Klatt)
- 1974 - Larry Farrar, 50 freestyle
Doug Massey, 100 freestyle
Larry Farrar, 1,650 freestyle
Dave Johnson, 200 backstroke
400 freestyle relay (Rick Klatt, Larry Farrar, Doug Massey, Shawn Wallwork)
800 freestyle relay (Doug Massey, Dave Johnson, Larry Farrar, Rick Klatt)
400 medley relay (Dave Johnson, Bob Frank, Randy Fuller, Doug Massey)
- 1984 - Duncan Cruickshank, 1,650 freestyle
- 1986 - Duncan Cruickshank, 1,650 freestyle
- 1987 - Duncan Cruickshank, 1,650 freestyle

Tennis (4)

- 1958 - Jack Kennedy
- 1968 - Van Hill
- 1976 - Tim Garcia
- 1984 - Tim Cass-Steve Bickham

Wrestling (4)

- 1972 - Dave Van Merren (177)
- 1982 - Brad Bitterman (167)
- 1988 - Greg Gascon (118)
- 1989 - TeDon Fleischman (150)

FY1989 FINANCIAL PERFORMANCE

One of the highest priorities of the Athletic program administration last year was to reestablish financial accountability. This goal was not easily accomplished. An operating deficit of \$186,215 from the previous year was carried forward and had to be covered. The Department was expected to continue to make a \$100,000 payment on retirement of the long-term debt accumulated over a number of prior years' operations. Also, it was soon discovered that budget plans prepared in the previous year for some of the sports programs were totally inadequate to even support the minimum travel and recruitment needs. Reallocations had to be made to address these deficiencies.

In spite of these obstacles, the Athletic Department ended the fiscal year with a \$73,432 surplus after meeting all of its deficit obligations. To accomplish this result, Departmental administration budgets were reduced significantly by eliminating positions and cutting support budgets. All sports program budgets were reduced 3%. These cost reducing measures plus some receipt of unanticipated revenues, primarily the result of internally operating the concessions in the Stadium and Arena, contributed to the positive results. Of greatest significance is the fact that the results were accomplished with the support and sacrifice of every coach and support service manager in the Department. Tab B compares the budget plans for last year with actual expenditures.

FY1990 BUDGET PLAN

The budget plan for the current year, FY1990, may be the best plan that the Department has seen in quite a number of years. (See Tab C for summary of FY1990 Athletic Department Budget Plan.) The overall increase of nearly 11% reflects significant improvement in the support of all of the sports programs, but with particular emphasis on more realistic budget plans for the nonrevenue sports programs that include team travel and recruitment funds. The objective of these investments is to reduce the need for individual sports' coaches to have to raise funds privately to minimally sustain their program. The effort now is for all coaches to join the Department administration and the UNM Lobo Club in raising funds that will benefit the overall Athletic program.

The Athletic Department was able to make this improvement in the funding support its sports program receive in large part because of the significant increase in State General Fund appropriations. This appropriation, which included partial offset of tuition and fee costs, increased \$394,000 (40%). Increased prices for basketball season tickets will also significantly contribute support to the increase in budget.

Although the additional revenues will allow for significant improvement in budgets for the several sports programs, there is considerable conservatism built into some of the revenue projections. Although demand for basketball season tickets appears to exceed the capacity of the Arena, the projected revenue does not assume a sellout for any game. Furthermore, there are no assumed revenues from any post-season basketball tournaments. Football revenue projections assume only a modest increase in attendance this fall. Projected revenues from radio/television and from

distribution of WAC revenues that result from conference member teams' participation in televised games, and post season bowls or tournaments have also been projected very conservatively for this year.

The budget plan also assumes no increase in operating support from private gifts and donations received primarily through the UNM Lobo Club. Although it has been announced that over \$1 million in pledges was received during the Spring campaign, the Athletic Department has elected to only budget \$400,000 from this source to support the general operating budgets of the Department and its sports programs. It is anticipated that much of the balance of the private support will be made available to address the many equipment and facility improvement needs of the Department on a one-time basis. The intent is to not grow the basic operating too fast and create demand for levels of funding that might not be able to be sustained in the future.

Tab C shows the changes in budget plans for each of the sports programs and an allocation of revenues to support those expenditure budgets. As indicated earlier, significant help was given to the nonrevenue producing sports programs that had very poor budget support in the past. The two revenue producing programs, men's football and basketball, also received more help for recruitment and for training table support, in the case of football.

In summary, the expenditures planned for the current year breakout in the following manner:

General Administrative Support:	\$1,977,067
(Departmental administration, marketing, media support, training room, etc.)	
Men's Sports Programs:	3,044,052
(Coaches salaries, team travel, recruitment, game expenses, etc.)	
Women's Sports Programs:	679,215
(Coaches salaries, team travel, recruitment, game expenses, etc.)	
Student Athlete Scholarships:	1,638,935
(Tuition and Fees, Room and Board, books, etc.)	
	<hr/>
Total Budget:	\$7,339,269

Two modifications of previous budget plans that are reflected in the current year plan should be noted. For the past several years, the University has committed \$200,000 from its Main Campus I & G appropriation to athletic tuition and fee

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waivers. The initial intent in the planning of the current year's Athletic Department budget was to continue that allocation one-more year, since the waiver cost was only partially funded for FY1990. In FY1991, it is anticipated that HB #377 will be applicable and the tuition and fee waivers costs will be fully funded. As a result of the concerns raised by students at UNM about the impact of the overall tuition and fee increase approved by the Board of Regents on access to the University, the \$200,000 initially budgeted for athletic waivers from I & G was reallocated to a special "safety net" financial aid fund that will be used to assist those students who demonstrate a particular problem with paying the tuition and fee increase. Thus, the commitment to athletics from I & G was eliminated for the current year. To partially offset this budget impact, the Department's obligation to pay \$100,000 on its long-term debt retirement was deferred one year. However, if funds are available at the end of the year, it may be desirable for the Department to make that payment.

A modest operating surplus of \$50,000 is projected for the end of the current fiscal year, which when added to the surplus carried forward from last year, should leave an operating fund balance of \$123,432. Because the overall funding of the Department is so heavily dependent upon revenues generated by two of its sports programs (nearly 64% of all funding support), the goal is to have a minimum of 5% of the operating budget in an operating reserve fund. Excesses above that goal would be used for one-time enhancements to the programs such as equipment and improved facilities.

LONG-RANGE PLANNING

Given the fact that a new, permanent Athletic Director has now been appointed, and that the Department does not face any immediate financial crisis, the Departmental administration has initiated a long-range planning effort. The process is to develop an overall policy statement about the direction and emphases of the Athletic Program. Tab D is a preliminary draft of that statement. The fundamental goals of the Athletic Program are to be financially accountable, academically responsible, and competitive in the conference.

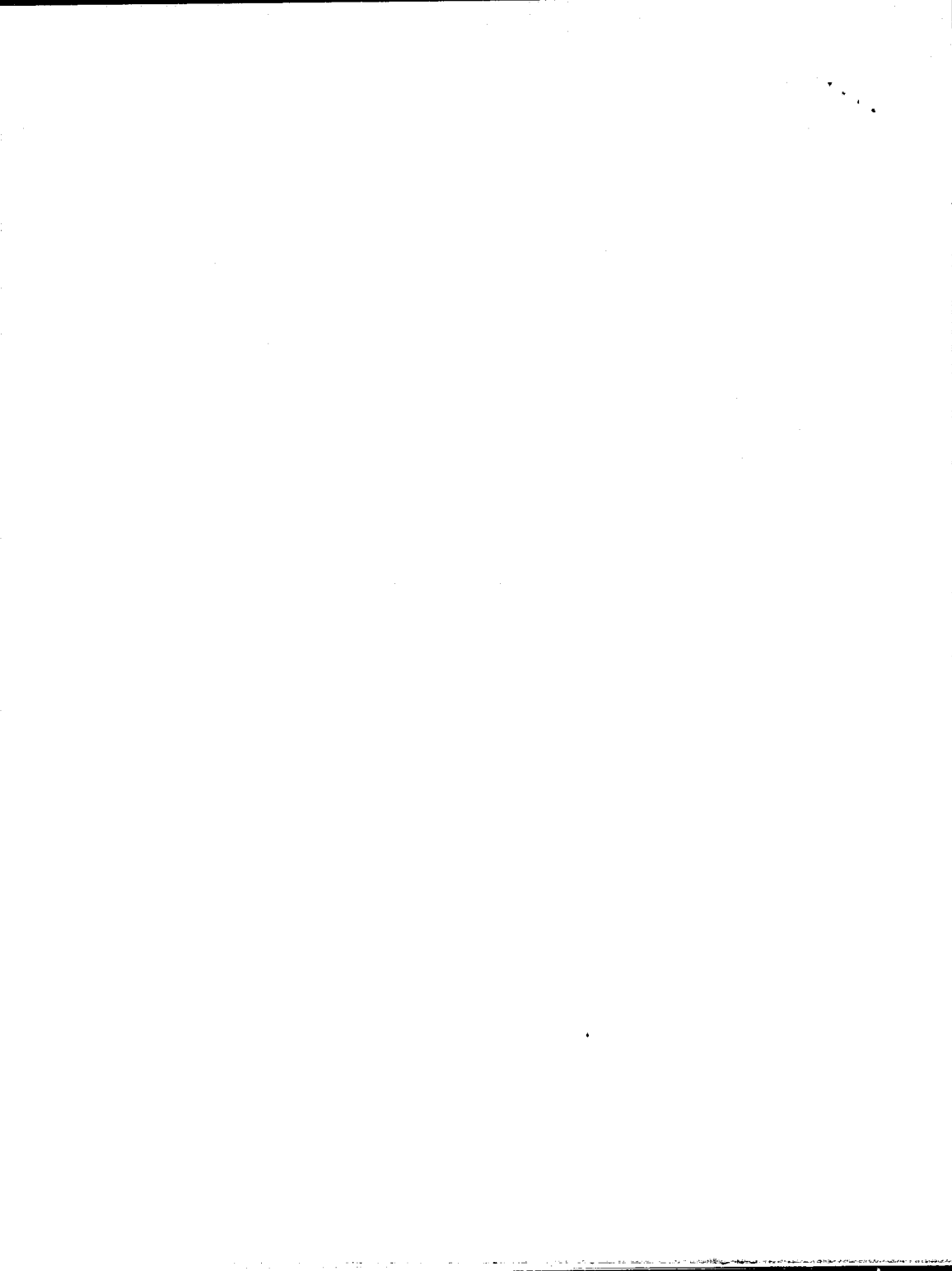
Each sports program coaching staff and each support service staff is being asked to review the current status of their particular program and to identify unmet needs within the context of the overall policy and goal statement. In addition to assuring that those sports programs retained in the Athletic Program are adequately supported, the administration recognizes that improvements in opportunities for female student participation must be addressed. It is anticipated that women's basketball will be added in the near future. Recruitment for a coaching staff will be initiated this year to start in the FY1991 fiscal year. First year of competition may be as early as the 1991-92 season on a limited basis.

The time scope for the Department's long-range planning effort is to project over the next five years. Once coaches and managers complete their needs analyses, the Department administration will attempt to fit those needs into alternative scenarios of potential funding. The Athletic Director has targeted December 1989 as the completion of the planning effort.

An important element of the planning effort will be a thorough assessment of the current sports facilities. The Arena was built over 20 years ago and needs some major repair and renovation. Support facilities for the football program needs major upgrading, particularly weight room and locker facilities. The Departmental office complex needs renovation and some expansion so that more of the Departmental staff may be accommodated. Other needs will be identified and prioritized.

CONCLUSION

The members of the Athletic Department are excited about the future of the Athletic Program at the University of New Mexico. The quality of the staff and their commitment to build collectively competitive sports programs that also reflect sound financial management and emphasize the academic opportunities and responsibilities of the student-athlete offers great potential for the Program.



STATISTICS OF PARTICIPATION IN ATHLETICS
 FYE JUNE 30, 1989

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	NUMBER OF PARTICIPANTS	ALLOWABLE NCAA EQUIVALENTS	SCHOLARSHIP OF EQUIVALENTS AWARDED	NUMBER OF IN-STATE SCHOLARSHIP ATHLETES	NUMBER OF OUT-OF-STATE SCHOLARSHIP ATHLETES	GRANTS-IN-AID FYE JUNE 30, 1990	GRANTS-IN-AID FYE JUNE 30, 1989	DIFFERENCE
Men's Sports:								
Basketball	15.00	15.00	11.00	2.00	9.00	120,000.00	118,500.00	1,500.00
Football	148.00	95.00	75.93	14.00	69.00	670,000.00	690,000.00	(20,000.00)
Baseball	49.00	13.00	9.99	13.00	7.00	57,000.00	53,580.00	3,420.00
Golf	13.00	5.00	3.69	3.00	6.00	40,000.00	36,000.00	4,000.00
Gymnastics	24.00	7.00	6.61	5.00	5.00	39,476.00	36,200.00	3,276.00
Soccer	52.00	11.00	2.28	5.00	3.00	16,370.00	9,000.00	7,370.00
Swimming	28.00	11.00	8.43	2.00	14.00	70,000.00	55,000.00	15,000.00
Tennis	27.00	5.00	2.56	4.00	3.00	35,000.00	33,000.00	2,000.00
Track	74.00	14.00	12.62	19.00	11.00	81,226.00	70,000.00	11,226.00
Wrestling	39.00	11.00	6.59	9.00	5.00	35,000.00	29,300.00	5,700.00
H Skiing	18.00	7.00	4.40	2.00	8.00			
TOTAL MEN'S SPORTS	487.00	194.00	144.10	78.00	140.00	1,164,072.00	1,130,580.00	33,492.00
Subtotal								
Women's Sports:								
Golf	10.00	6.00	4.68	3.00	5.00	42,240.00	29,000.00	13,240.00
Gymnastics	17.00	10.00	7.80	5.00	4.00	50,963.00	45,452.00	5,511.00
Swimming	10.00	14.00	1.47	1.00	2.00	0.00	10,544.00	(10,544.00)
Softball	20.00	11.00	9.59	5.00	8.00	72,810.00	62,662.00	10,148.00
Tennis	13.00	8.00	5.65	0.00	6.00	50,000.00	34,000.00	16,000.00
Track	48.00	16.00	13.53	21.00	3.00	78,757.00	53,500.00	25,257.00
Volleyball	18.00	12.00	9.29	2.00	9.00	69,593.00	66,096.00	3,497.00
H Skiing	17.00	7.00	5.25	3.00	9.00	110,500.00	90,000.00	20,500.00
Basketball								
TOTAL WOMEN'S SPORTS	153.00	84.00	57.26	40.00	46.00	474,863.00	391,254.00	83,609.00
TOTAL SPORTS	640.00	278.00	201.36	118.00	186.00	1,638,935.00	1,521,834.00	117,101.00

NOTES:

- (1) This column represents the number of individuals who took physicals for participation in a sport.
- (2) This column shows the number of scholarships allowed by the NCAA.
- (3) This column shows the number of NCAA equivalent scholarships that we awarded last fiscal year.
- (4) This column shows the number of individuals who are in-state residents with some scholarship support.
- (5) This column shows the number of individuals who are out-of-state residents who received some scholarship support last fiscal year.
- (6) This column shows the Grant-in-aid budget for this current fiscal year.
- (7) This column shows the Grant-in-aid budget for last fiscal year.
- (8) This column shows the difference in Grant-in-aid budget from last year to this year.

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ESTIMATED FULL TUITION COST BASED ON THIS FISCAL YEARS TUITION RATES.

	(1)	(2)	(3)	(4)	(5)
	ALLOWABLE NCAA EQUIVALENTS	ESTIMATED OUT-OF-STATE PARTICIPANTS (75%)	ESTIMATED IN-STATE PARTICIPANTS (25%)	CURRENT TUITION RATES FOR 2 SEMESTERS	COLUMN 2 OR 3 TIMES 4
<hr/>					
Men's Sports:					
Basketball	15.00	11		4,860.00	53,460.00
		0	4	1,372.00	5,488.00
Football	95.00	71	0	4,860.00	345,060.00
		0	24	1,372.00	32,928.00
Baseball	13.00	10	0	4,860.00	48,600.00
		0	3	1,372.00	4,116.00
Golf	5.00	4	0	4,860.00	19,440.00
		0	1	1,372.00	1,372.00
Gymnastics	7.00	5	0	4,860.00	24,300.00
		0	2	1,372.00	2,744.00
Soccer	11.00	8	0	4,860.00	38,880.00
		0	3	1,372.00	4,116.00
Swimming	11.00	8	0	4,860.00	38,880.00
		0	3	1,372.00	4,116.00
Tennis	5.00	4	0	4,860.00	19,440.00
		0	1	1,372.00	1,372.00
Track	14.00	10	0	4,860.00	48,600.00
		0	4	1,372.00	5,488.00
Wrestling	11.00	8	0	4,860.00	38,880.00
		0	3	1,372.00	4,116.00
H Skiing	7.00	5	0	4,860.00	24,300.00
			2	1,372.00	2,744.00
<hr/>					
TOTAL MEN'S SPORTS	194.00	144	50		768,440.00
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Women's Sports:					
Golf	6.00	4		4,860.00	19,440.00
			2	1,372.00	2,744.00
Gymnastics	10.00	8		4,860.00	38,880.00
			2	1,372.00	2,744.00
Swimming	14.00	11		4,860.00	53,460.00
			3	1,372.00	4,116.00
Softball	11.00	8		4,860.00	38,880.00
			3	1,372.00	4,116.00
Tennis	8.00	6		4,860.00	29,160.00
			2	1,372.00	2,744.00
Track	16.00	12		4,860.00	58,320.00
			4	1,372.00	5,488.00
Volleyball	12.00	9		4,860.00	43,740.00
			3	1,372.00	4,116.00
H Skiing	7.00	5		4,860.00	24,300.00
			2	1,372.00	2,744.00
<hr/>					
TOTAL WOMEN'S SPORTS	84.00	63.00	21.00		334,992.00
<hr/>					
TOTAL SPORTS	278.00	207.00	71.00		1,103,432.00
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NOTES:

- (1) THIS COLUMN SHOWS THE TOTAL SCHOLARSHIPS ALLOWED BY THE NCAA.
- (2) THIS COLUMN SHOWS AN ESTIMATED 75% OF TOTAL SCHOLARSHIPS TO BE OUT-OF-STATE.
- (3) THIS COLUMN SHOWS AN ESTIMATED 25% OF TOTAL SCHOLARSHIPS TO BE IN-STATE.
- (4) THIS COLUMN SHOWS THE TUITION RATES FOR THE ENTIRE YEAR.
- (5) THIS COLUMN IS TOTAL OF COLUMN (2) OR (3) TIMES COLUMN (4).

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ATHLETIC DEPARTMENT 1988-89 vs 1989-90 BUDGET PLAN

	1988-89	1988-89	1989-90	% INCREASE
	BUDGET PLAN	FINAL ACTUALS	BUDGET PLAN	OVER ACTUALS
REVENUES:				
State General Fund	985,000	985,000	1,379,000	40.0%
Student Fees	662,965	662,980	695,000	4.8%
Basketball:				
Ticket Sales	2,300,000	2,315,957	2,500,000	7.9%
Game Guarantees	25,000	25,000	25,000	0.0%
Radio/TV/WAC/NCAA	245,000	187,969	250,000	33.0%
Tournament Sponsorship	0	7,000	10,000	42.9%
Football:				
Ticket Sales	359,868	362,901	430,000	18.5%
Game Guarantees	430,000	430,000	600,000	39.5%
Radio/TV/WAC/NCAA	318,209	318,815	280,000	-12.2%
Advertising	85,173	115,309	111,500	-3.3%
Lobo Club Contribution	400,000	400,000	400,000	0.0%
Concessions	350,000	401,330	258,035	-35.7%
Program Sales	21,764	28,097	30,000	6.8%
Parking	136,253	153,824	140,000	-9.0%
Special Events	80,000	208,540	80,000	-61.6%
Work Study	5,000	3,864	5,000	29.4%
Misc. Income	91,136	135,121	36,500	-73.0%
Baseball	12,641	17,412	2,000	-88.5%
Golf	50,560	560	50,000	8828.6%
Gymnastics	6,000	5,490	6,000	9.3%
Soccer	4,000	4,397	4,000	-9.0%
Softball	0	13,893	1,500	-89.2%
Volleyball	5,400	14,715	6,000	-59.2%
Skiing	6,000	5,855	28,734	390.8%
Swimming	10,810	810	10,000	1134.6%
Tennis	200	200	0	-100.0%
W Golf	600	13,100	0	-100.0%
W Swimming	4,300	1,205	0	-100.0%
W Tennis	200	700	0	-100.0%
W Track	3,500	2,683	0	-100.0%
Wrestling	2,003	2,291	1,000	-56.4%
Total Revenues	6,601,582	6,825,018	7,339,269	7.5%

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ATHLETIC DEPARTMENT 1988-89 vs 1989-90 BUDGET PLAN

EXPENDITURES:	DOLLARS	DOLLARS	DOLLARS	% INCREASE OVER ACTUALS
Administration	311,408	308,621	344,332	11.6%
Women's Program Admin.	90,840	89,814	120,674	34.4%
Business Office	182,135	193,963	203,551	4.9%
Ticket Office	104,500	91,677	136,278	48.7%
Sports Information	181,443	178,573	182,985	2.5%
Women's Sports Inform.	51,883	51,054	60,150	17.8%
Medical/Training Room	269,874	261,586	289,885	10.8%
Weight Room	53,180	54,575	58,768	7.7%
Advancement/Promotions	47,950	47,187	73,931	56.7%
Academic Advising	142,604	137,389	169,671	23.5%
Equipment Room	87,179	85,057	93,928	10.4%
NCAA Participation	25,000	14,387	25,000	73.8%
Utilities	100,000	100,000	105,000	5.0%
Tuition Waivers	(200,000)	(203,100)	0	-100.0%
Debt Reduction	100,000	100,000	0	-100.0%
Workstudy	5,000	3,864	5,000	29.4%
Contingency and Special Events	10,000	107,216	57,914	-46.0%
Subtotal, Depart. Expenses	1,562,996	1,621,863	1,927,067	18.8%
Men's Sports:				

Basketball:				
Program	617,733	634,421	693,953	9.4%
Game Guarantees	190,300	190,300	180,000	-5.4%
Football:				
Program	1,664,641	1,663,622	1,819,288	9.4%
Game Guarantees	357,000	357,000	280,000	-21.6%
Baseball	125,748	134,151	133,300	-0.6%
Golf	88,003	104,580	102,800	-1.7%
Gymnastics	111,664	111,657	125,240	12.2%
Soccer	52,030	53,546	76,550	43.0%
Swimming	102,980	100,676	116,350	15.6%
Tennis	57,695	61,284	101,327	65.3%
Track	179,404	172,605	185,346	7.4%
Wrestling	70,077	75,755	77,970	2.9%
Basketball Game Expenses	159,700	198,823	205,000	3.1%
Football Game Expenses	108,706	103,839	111,000	6.9%
Subtotal, Men's Sports	3,885,681	3,962,259	4,208,124	6.2%

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ATHLETIC DEPARTMENT 1988-89 vs 1989-90 BUDGET PLAN

Women's Sports Programs:				

Golf	84,557	90,517	95,350	5.3%
Gymnastics	90,405	89,472	104,986	17.3%
Swimming	34,716	32,963	26,071	-20.9%
Tennis	81,061	88,907	115,470	29.9%
Track	150,668	149,291	186,786	25.1%
Volleyball	149,514	162,066	196,745	21.4%
Skiing	219,351	198,683	242,323	22.0%
Softball	156,418	169,350	186,347	10.0%
	-----	-----	-----	-----
Subtotal, Women's Sports	966,690	981,249	1,154,078	17.6%
	-----	-----	-----	-----
Total Expenditures	6,415,367	6,565,371	7,289,269	11.0%

OPERATING RESERVE:

BOY Balance	(186,215)	(186,215)	73,432
Net Operating Gain(Loss)	186,215	259,647	50,000
EOY Balance	0	73,432	123,432

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FUNDS ALLOCATED TO SUPPORT FY 1989-90 BUDGETS

FY 1989-90 BUDGET	FUNDS ALLOCATED TO SUPPORT FY 1989-90 BUDGETS					TOTAL FUNDS ALLOCATED	
	STATE APPROPRIATIONS	STUDENT FEES (2)	REVENUES(3)	REALLOCATION OF REVENUES(4)	LOBO CLUB(5)		
Departmental Services:							
Administration	344,332						
Women's Program Admin.	120,674						
Business Office	203,551						
Ticket Office	136,278						
Utilities	105,000						
Debt Reduction	0						
Contingency	57,914						
WorkStudy	5,000						
Women's Sports Information	60,150						
Men's Sports Information	182,985						
Promotions	73,931						
Academic Advising	169,671						
Equipment Room	93,928						
Training Room	289,885						
Weight Room	58,768						
NCAA Participation	25,000						
Operating Reserve	50,000						
Subtotal	1,977,067	371,480	187,220	361,035	1,057,332	0	1,977,067
Men's Sports:							
				0			
Basketball	693,953	54,363	65,715	3,010,000	(2,496,650)	60,525	693,953
Football	1,819,288	344,296	172,279	1,385,000	(240,963)	158,675	1,819,288
Baseball	133,300	47,114	12,623	2,000	59,937	11,626	133,300
Golf	102,800	18,121	9,735	50,000	15,978	8,966	102,800
Gymnastics	125,240	25,369	11,860	6,000	71,088	10,923	125,240
Soccer	76,550	39,866	7,249	4,000	18,759	6,677	76,550
Swimming	116,350	39,866	11,018	10,000	45,318	10,148	116,350
Tennis	101,327	18,121	9,595	0	64,773	8,838	101,327
Track	185,346	50,738	17,552	0	100,891	16,166	185,346
Wrestling	77,970	39,866	7,383	1,000	22,920	6,800	77,970
Subtotal	3,432,124	677,720	325,009	4,468,000	(2,337,948)	299,343	3,432,124
Women's Sports:							
			0	0			
Golf	95,350	21,745	9,029	0	56,259	8,316	95,350
Gymnastics	104,986	36,242	9,942	0	49,646	9,157	104,986
Swimming	26,071	50,738	2,469	0	(29,410)	2,274	26,071
Softball	186,347	39,866	17,646	1,500	111,082	16,253	186,347
Tennis	115,470	28,993	10,935	0	65,471	10,071	115,470
Track	186,786	57,987	17,688	0	94,820	16,291	186,786
Volleyball	196,745	43,490	18,631	6,000	111,464	17,160	196,745
Skifing	242,323	50,738	22,947	28,734	118,769	21,135	242,323
Basketball							
Subtotal	1,154,078	329,800	109,287	36,234	578,101	100,657	1,154,078

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FUNDS ALLOCATED TO SUPPORT FY 1989-90 BUDGETS

FY 1989-90 BUDGET	STATE APPROPRIATIONS	STUDENT FEES (2)	REVENUES(3)	REALLOCATION OF REVENUES(4)	LOBO CLUB(5)	TOTAL FUNDS ALLOCATED	
Game Expenses:							
Basketball	385,000		36,458	0	348,542	385,000	
Football	391,000		37,026	0	353,974	391,000	
	776,000	0	73,484	0	702,516	0	776,000
Totals:	7,339,269	1,379,000	695,000	4,865,269	(0)	400,000	7,339,269

NOTES:

1. Allocation of State Appropriated Funds based on:
 - a. Portion to Departmental Services based on % share of overall Expenditure Budget.
 - b. Portion to each Sports Program based on ratio of NCAA authorized scholarships for each sports program to the total authorized for all UNM sports programs.

2. Allocation of Student Fees based on:

- a. Same distribution basis as State Appropriated Funds.

3. Revenue Projections:

Administrative Revenues	
Parking Special Events	15,000
Mailing/Handling	15,000
Concessions	158,035
Miscellaneous Revenue	21,500
Sign Advertising Pit	50,000
Special Events	80,000
Ticket Advertising	10,000
Scoreboard Advertising	2,500
Workstudy	5,000
Schedule Card Advertising	4,000
Subtotal	361,035

Basketball Revenues	
Parking - Basketball	110,000
Basketball Tournament Sponsorship	10,000
Ticket Sales - Basketball	2,500,000
Guarantees - Basketball	25,000
Radio/TV Basketball	250,000
Concessions - Basketball	75,000
Advertising Programs - Basketball	20,000
Program Sales - Basketball	20,000
Subtotal	3,010,000

0341

Football Revenues	
Parking - Football	15,000
Advertising Programs - Football	25,000
Concessions - Football	25,000
Guarantees - Football	600,000
Ticket Sales - Football	430,000
Program Sales - Football	10,000
Radio/TV Football	280,000

Subtotal	1,385,000

Other Sports Programs Revenues	
Gymnastics - Ticket Sales	6,000
Swimming	10,000
Wrestling - Ticket Sales	1,000
Skifing - Corporate Cup	28,734
Softball - Ticket Sales	1,500
Volleyball - Ticket Sales	6,000
Golf	50,000
Soccer - Ticket Sales	4,000
Baseball - Ticket Sales	2,000

Subtotal	109,234

TOTAL	-----
	4,865,269
	=====

4. Reallocation of Sports Revenues

a. Difference of the other revenue columns. This is the balancing amount.

5. Allocation of Lobo Club Support based on:

a. Portion to each Sports Program based on ratio of NCAA authorized scholarships for each sports program to the total authorized for all UNM sports programs.

**ATHLETIC DEPARTMENT FIVE-YEAR PLAN
UNIVERSITY OF NEW MEXICO**

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ARTICLE ONE

MISSION

The mission of Intercollegiate Athletics at the University of New Mexico is to provide opportunities for students to participate in intercollegiate athletic programs as an extension of their academic experiences at the University, to enrich the quality of life for the University and statewide community, and to be a source of pride and encouragement for support of the University among students, faculty and staff, alumni, and citizens of the state and nation.

A successful intercollegiate athletic program at the University must include the following qualities:

- Establishing participation goals for student athletes that are characterized by high standards of academic scholarship and successful completion of academic objectives.

- Encouraging sportsmanship, leadership development, and competitive spirit among its participants.

- Providing opportunities, especially for New Mexico resident students, to participate in a wide range of intercollegiate athletic programs.

- Providing equitable opportunities for men and women to participate in sports programs.

- Fielding sports teams that are competitive at the appropriate level.
- Exhibiting management that is fiscally accountable, and operates within the allocated resources.
- Operating within the policies and rules of the NCAA and any intercollegiate athletic conference in which the University accepts membership, as well as all University academic and business policies and procedures.
- Functioning as a comprehensive, cohesive athletic program, offering as wide a variety of sports programs as can be supported by departmental resources.
- Representing the University in a manner that recognizes the athletic program's capability to generate significant positive public support both for the athletic program and the University.
- Attracting coaches and staff who subscribe to all of the above attributes of a successful intercollegiate athletic program and who represent the University with the highest standards of personal and professional conduct.

ARTICLE TWO

GENERAL POLICIES

The operation and administration of the Department of Athletics will be guided by the following general policies which relate to Title IX regulations and commitment, scope of sports program opportunities, criteria for elimination or retention of sports programs, levels of competition, resident and nonresident student participation, program funding allocations, and selection and retention of coaching staff.

Title IX Regulations and Commitment: The Board of Regents of the University of New Mexico is fully committed to compliance with the spirit and intent of the federal regulations mandating equal opportunity for men and women to participate in intercollegiate athletics. (The federal regulations and 1979 HEW interpretations are summarized in Appendix A.) All policies and regulations contained in this ATHLETIC DEPARTMENT POLICIES AND PROCEDURES MANUAL are nondiscriminatory and, thus, apply equally to men and women. Financial discrepancies between men's and women's athletic programs will be addressed and remedied in an orderly fashion.

Scope of Sports Program Opportunities: It is the objective of the intercollegiate athletic program to offer a wide range of sports programs for student participation. The availability of resources, financial and facilities, may limit the number of programs and the level of competitiveness targeted for each program. Priority will be given to those sports programs well represented in New Mexico high school activities programs; and to sports that are also available for competition in the region and in the conference(s) to which the University holds membership. The

University will support the number of programs sufficient to retain eligibility for membership in the NCAA Division I and appropriate athletic conference(s).

Levels of Competition: The University desires to provide sufficient financial and facility resources to be able to compete at the NCAA Division I level for all of its sports programs and be competitive in its conference and region. Sports programs that generate significant spectator participation and have potential for generating revenues for the athletic programs will be encouraged to seek competition at the national level.

Resource Allocations: All sources of financial support for the University's athletic program will be managed and allocated as departmental funds. The level of funding allocated to any particular sports program will be determined by the Director of Athletics and Director of Women's' Athletics in consultation with the respective coaches. The allocation will be based on the level of investment needed to support the program at the targeted level of competition. Allocations will not be predicated upon the ability of the program to generate revenues.

Operating budgets for the intercollegiate athletic program will include all departmental administration, direct support services (training room, business office, weight room, academic advising, departmental administration, marketing and promotion, etc.), and all sports program expenditures. As a general guideline, the budgeted costs for administration and support services should not exceed 35% of the total departmental budget. Included in sports program budgets will be costs of coaching staffs, team travel, recruitment, game expenses, student athlete financial aid, and any other expense directly related to the specific program.

Fund Raising: Private gifts and donations to the athletic programs will be an increasing source of financial support. The UNM Lobo Club has been designated by the UNM Board of Regents as the primary fund raising organization for UNM athletics. The objective of the athletic department, including all of the sports programs coaches, will be to support the fund raising efforts of the UNM Lobo Club on behalf of the total program. Specific solicitation of gifts and donations for individual sports programs is discouraged. Receipt of such dedicated gifts and donations will be considered in the allocation of "unrestricted" gifts and donations to the athletic department.

Resident/Nonresident Student Participation: Coaches of all sports programs are encouraged to recruit New Mexico students to participate in their programs. To assure maximum effort is given to recruiting New Mexico residents, first priority in the allocation of grants and aid funding will be given to resident athletes. The distribution will be based on the NCAA authorized scholarship level for each sports program.

Selection and Retention of Coaching Staffs: The selection and retention of coaches is critical to the quality of the intercollegiate athletic program, just as the recruitment and retention of well-qualified faculty and staff is critical to high quality academic programs. The high public visibility of the athletic program adds a premium to the value of a quality coaching staff. Coaches should be recruited and retained on the basis of their commitment and performance with respect to:

- The caliber of student athlete recruited for both their scholastic ability and personal character.

- The successful academic progress of their student athletes.
- Their professional participation in the University and the community.
- Demonstrated support for departmental objectives, including participation in the appropriate and necessary public relations and fund-raising activities.
- Ability to teach and motivate student athletes and field successful teams at the targeted level of competition.
- Acceptance of fiscal accountability for those funds allocated to their program.

0049

Y E A R E N D R E P O R T

W O M E N ' S A T H L E T I C S

U N I V E R S I T Y O F N E W M E X I C O

J U L Y 1 , 1 9 8 8 - J U N E 3 0 , 1 9 8 9

Submitted by:

Pat Trainor, Ph.D.
Women's Sports
Information Director

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In High Country Athletic Conference action, the Lobos retained their second place standing in the overall composite ranking. Brigham Young University continued their dominance of the Conference Cup Award, capturing first place for the sixth year in a row.

The highlight of UNM's march to retain second place in the HCAC was the Lobo volleyball team. They took the Conference title, receiving the NCAA automatic bid. The Conference crown was a first in volleyball history, as well as senior setter Karen Saavadra-Warnock became volleyball's first All American. Interim head coach Blase Czerniakowski was named HCAC Coach of the Year. Head coach Laurel Brassey Kessel saw her dream come true in September when she competed on the U.S. Volleyball Team in the 1988 Olympic Games in Seoul, Korea. The Albuquerque Hall of Fame honored Kessel as the Female Athlete of the Year; Coach Czerniakowski was honored as the Coach of the Year; and the Lobo volleyball team shared Team of the Year honors with the West Messa's girls volleyball team.

Golf and track & field garnered second place Conference honors during their championships. This was quite a feat for track and field as they competed with the smallest squad in their recent history. Heptathlon athlete Darcy Ahner was voted Athlete of the Meet and went on to compete in her first NCAA Championship. Golf missed first place by only eight strokes, but Michelle Wooding represented UNM at the NCAA's as an individual.

Third place team finishes were turned in by cross country, skiing, tennis and softball. All four squads had outstanding individual efforts turned in by Lobo athletes. Gwen Willink qualified for the NCAA Cross Country Championships in the fall, earning All America honors. Skiing had three women and three men earning second team All America honors during their national championships in the winter; and Lobo Chris Hoffee from tennis was ranked in both singles and doubles before suffering a knee injury that took her out of competition for the season. Softball third baseman Karla Ismay was selected second team All America.

The gymnastics team finished fifth in their Conference championships. The team had three athletes qualify for the NCAA Regional competition. Lisa Pank finished the highest at 20th.

On a whole, New Mexico was represented well in competition. Nine individuals were named second team All America in four sports. Twenty-one athletes earned first team All HCAC with two others posting honorable mention honors. The track and field team led the way with four athletes collecting all conference honors, followed by cross country, volleyball, golf, and softball with three athletes each receiving honors.

NCAA COMPETITION

Volleyball: NCAA First Round, lost to Kentucky, 3-2
 Cross Country: Gwen Willink, 36/135, 17:22
 Skiing: Finished 5th
 Golf: Michelle Wooding, 54/102, 79-78-79-80=316
 Track & Field: Darcy Ahner, heptathlon, 16/18, 5,189
 Gymnastics: Regional Competition
 Lisa Pank, 20th, 37.55
 Jeanne Parnick, 36.8
 Illiana Garrillo, 36.5

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SUMMARY - COACHING RECORDS

SUMMARY	COACH	YEARS	SEASON	UNM	CAREER	CONFERENCE	NATIONAL
SPORT	ASST. COACH	AT UNM	RECORD	RECORD	RECORD	FINISH	FINISH
GOLF	John Speary	5	Cannot compute win/loss record			2nd	1 ind., 54th
GYMNASTICS	Pete Longdon	7	8-14	72-82	72-82	5th	3 individuala Regionals
SKIING	George Brooks Klaus Weber	19 14	Cannot compute win/loss record			3rd (Regional)	5th
SOFTBALL	Susan Craig Ken Johnson	12 3	29-17 29-17	308-258-1 60-69	308-258-1 60-69	3rd (6-4) 3rd (6-4)	
SWIMMING	Bill Spahn	8	Cannot compute win/loss record			6th	
TENNIS	Kathy Kolankiewicz	4	14-12	57-44	57-44	3rd	
TRACK	Mike MacEachen	7	Cannot compute win/loss record			2nd	1 individual 16th,heptathlon
CROSS COUNTRY	Dick Shanahan	1	Cannot compute win/loss record			3rd	1 individual 36th, All American
VOLLEYBALL	Blase Czerniakowski Laurel Kessel Matt McShane	2(4) 6 2	25-5 ---- (1988 & '89 vb seasons,	36-19 69-57 Kessel was with U.S.	36-19 69-57 National Team)	1st -----	NCAA,1st Round
Women's Athletic Director	Linda Estes	19					
Sports Information Director	Pat Trainer	7 1/2					

HIGH COUNTRY ATHLETIC CONFERENCE
TEAM FINISHES
1988-89

	UNM	BYU	CSU	NMSU	UTAH	USU	WYO	UTEP**	Creighton*	Denver#	Boise St#
SOFTBALL	3rd 6-4 29-17		1st (t) 7-3 37-14	6th (t) 2-8 24-26	4th 5-5 30-27	5th 3-7 34-26			1st (t) 7-3 47-19		
GOLF	2nd 905	3rd 914	5th 1048	1st 887			4th 942				
GYMNASTICS	5th 184.50	2nd 188.80			1st 191.80	4th 186.60				6th 181.60	3rd 186.15
CROSS COUNTRY	3rd 79	1st 49	4th 82	7th 176	5th 92	8th 205	2nd 73	6th 160			
SKIING***	3rd 179				1st 298		2nd 219				
SWIMMING	6th 179	2nd 475	1st 658	5th 186	3rd 389		4th 197				
TENNIS	3rd 32	1st 52	7th 1	5th 20	2nd 47	6th 12		4th 25			
TRACK AND FIELD	2nd 95.5	1st 203	4th(t) 73	8th 2	7th 13	3rd 92.5	4th(t) 73	6th 51			
VOLLEYBALL	1st 10-2 25-5	2nd (t) 9-3 26-11	2nd(t) 9-3 22-12	4th 8-4 22-11	6th 2-10	7th 1-11 10-29	5th 3-9 8-20		14-17		

* Affiliate Member - Softball

** Affiliate Member - Cross Country, Tennis, Track and Field

*** Regional Finish

Affiliate Members - Gymnastics

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1989 High Country Athletic Conference
Conference Cup Award

	BYU	CSU	NMSU	UNM	UTAH	USU	WYO
Basketball	5th	4th	2nd	-	1st	-	3rd
Cross Country	1st	4th	6th	3rd	5th	7th	2nd
Golf	3rd	5th	1st	2nd	-	-	4th
Gymnastics	2nd	-	-	4th	1st	3rd	-
Softball	-	1st	5th	2nd	3rd	4th	-
Skiing	-	-	-	3rd	1st	-	2nd
Swimming	2nd	1st	5th	6th	3rd	-	4th
Tennis	1st	6th	4th	3rd	6th	5th	-
Track & Field	1st	4th	7th	2nd	6th	3rd	4th
Volleyball	2nd	2nd	4th	1st	6th	7th	5th

Total*:	46.5	36.0	30.0	46.0	44.0	19.0	31.5
# of Sports:	8	8	8	9	9	6	7
Cup Points:	5.813	4.50	3.75	5.111	4.889	3.167	4.50
Finish:	1	4(t)	6	2	3	7	4(t)

*7 points for first place down through 1 point for seventh, divide by number of sports each institution sponsors. Affiliate members are not included in the Cup Award.

Conference Cup by Year

	BYU	CSU	NMSU	UNM	UTAH	USU	WYO
1988-89	1st 5.81	4th 4.50	6th 3.75	2nd 5.11	3rd 4.88	7th 3.16	4th 4.50
1987-88	1st 6.25	5th 3.88	6th 3.81	2nd 5.22	3rd 5.17	7th 3.17	4th 4.14
1986-87	1st 6.00	5th 4.13	6th 3.71	3rd 4.65	2nd 5.22	7th 3.42	4th 4.43
1985-86	1st 6.19	5th 3.88	2nd 4.75	3rd 4.50	4th 4.44	6th 3.50	7th 3.43
1984-85	1st 53	5th 31	4th 24.5	2nd 50.5	3rd 41.5	7th 18	6th 19.5
1983-84	1st 40	3rd 25.5	5th 16.5	2nd 35.5	4th 19.5	-	6th 15.0

ALL AMERICA

Cross Country - Gwen Willink, 5K, 36th, 17:22, second team
 Volleyball - Karen Saavedra-Warnock, setter, second team
 Skiing - Henrik Lonnberg, men's GS, 10th, second team
 Ida Lundeborg, women's GS, 9th, second team
 Sindre Mekjan, men's 10K C, 10th, second team
 Maria Nilssen, women's GS, 7th, second team
 , women's S, 7th,
 Maria Seppala, women's 5K C, 9th, second team
 Geir Simonsen, Men's 15K S, 10th place
 Softball - Karla Ismay, third baseman, second team

ALL REGIONAL

Softball
 Beth Unterbrink, pitcher/outfield, first team
 Liz Bogdanovic, centerfield, first team
 Karla Ismay, third baseman, first team
 Julie Garcia, outfield, second team

ALL CONFERENCE

Cross Country
 Gwen Willink, 3rd, 5K
 Cindy Herhahn, 5th, 5K
 Ida-Lise Leyba, 10th, 5K
 Volleyball
 Nao Ikeda-Nagatoma
 Marlo Pennington
 Karen Saavedra-Warnock
 Swimming
 Elisabeth Ahlgren, 100 butterfly (1), 200 butterfly (2)
 Golf
 Wendy Werley
 Susan Wineinger
 Michelle Wooding
 Tennis
 Chris Hoffee, singles
 Rachel Wilson/Chris Hoffee, doubles
 Softball
 Liz Bogdanovic, center field
 Karla Ismay, third baseman
 Beth Unterbrink, pitcher/outfield
 Track & Field
 Darcy Ahner, heptathlon (1), high jump (2), javelin (2)
 Heidi Anderson, heptathlon (2)
 Annette DiLorenzo, triple jump (1)
 Natanya Jones, 400m hurdles (1)

Honorable Mention

Volleyball
 Lori Forrest
 Maria Gurreri

1988-89 UNM LETTER WINNERS

GOLF

Bernadette Lucero
 Laura Spengema
 Jill Trijullo
 Wendy Werley
 Susan Wineinger
 Michelle Wooding

GYMNASTICS

Iliana Carrillo
 Angela Correll
 Wendy Johnson
 Julie Kautz
 Rhea Larry
 Karen Norcia
 Lisa Pank
 Jeanne Parnick

TENNIS

Melanie Breed
 Jenny Cook
 Chris Hoffee
 Inger Sanderud
 Jennifer Toomy
 Rachel Wilson

TRACK AND FIELD

Darcy Ahner
 Heidi Anderson
 Annette DiLorenzo
 Kathy Doyle (xc)
 Teri Florence
 Rene Hodgson
 Natayna Jones
 Carolyn Lopez
 Kitrian Martin
 Rosalyn Powdrell
 Kim Pravda (xc)
 Mary Lee White
 Gwen Willink (xc)
 Misty Wyant
 Dodie Zamora

VOLLEYBALL

Terry Bingaman
 Marmy Chu
 Maria Gurreri
 Lori Forrest
 Jody Hinchy
 Tammy Lansford
 Pauline Manser
 Shelia Mendez
 Nao Nagatomo
 Marlo Pennington
 Dawn Roberts
 Mendy Sheets
 Karen Warnock

SKIING

(Women)
 Holly Archer
 Cathy Collins
 Torunn Drage
 Sanna Harma
 Beate Jensen
 Anna Johansson
 Ida Lundeberg
 Maria Nilsson
 Heidi Scheibleh
 Mari Seppala

(Men)

Bart Bowen
 Magne Knudsen
 Fredrik Landstedt
 Henric Lonnberg
 Pat Marquez
 Sindre Mekjan
 Geir Simonsen
 Toby Smith
 Antti Suhonen
 Mike Vranka

SOFTBALL

Terri Bailey
 Wendy Beeghly
 Liz Bogdanovic
 Chris DeFant
 Julie Garcia
 Jana Harrison
 Sandy Hinojos
 Jacque Illig
 Karla Ismay
 Angel LoGreco
 Jody Lunz
 Raylene Mayer
 Amy Minick
 Kristen Nethery
 Beth Unterbrink

SWIMMING

(Women)
 Elisabeth Ahlgren
 Shannon Beauford
 Dusty Delange
 Susie Durkee
 Lori Haile

CROSS COUNTRY

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The women's cross country team had a good fall season. The Lobos started off with a second place at the NAU Invite, and Lobo Gwen Willink matched the team with a second place individual finish. New Mexico followed with a fifth place at the Aztec Invite which featured many of California's strongest teams. New Mexico was also invited to run in the prestigious Iowa Invitational, which was a preview of the NCAA Championships, finishing 14th.

The Lobos had an aggressive front runner in Willink. Cindy Herhahn stayed close to the front with Willink but the rest of the pack were not close enough to the front runners to decrease their overall time and gain valuable points. Individually, however, the overall performance of each athlete improved a great deal, which pleased first year coach Dick Shanahan. The Lobos were third in the High Country and fifth at the NCAA Regionals. Senior Gwen Willink, the front runner all season, capped off her long distance career with an appearance in the NCAA's, finishing 36th and garnishing All-America honors.

University of New Mexico
1988 Cross Country Roster

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NAME	CLASS	HOMETOWN
Cindy Herhahn	Jr.	Albuquerque, NM
Ida-Lise Leyba	Sr.	Albuquerque, NM
Karen Rogers	Fr.	Hanover, Mass
Gwen Willink	Sr.	Albuquerque, NM
Kim Pravda	Fr.	Belen, NM
Kathy Doyle	Fr.	Kaycee, Wyo.
COACH: Richard Shanahan		

Women's Cross Country
University of New Mexico

Sept. 10	Northern Arizona Invite	Flagstaff, AZ
Sept. 24	San Diego State Invite	San Diego, CA
Oct. 1	Colorado Invite	Boulder, CO
Oct. 17	Iowa Invite	Ames, IA
OCT. 29	NEW MEXICO INVITE	ALBUQUERQUE, NM
Nov. 12	HCAC Championships & Region 7 Championships	Salt Lake City, UT
Nov. 21	NCAA Championships University of Iowa	Ames, IA

0060

UNIVERSITY OF NEW MEXICO
CROSS COUNTRY RESULTS - 1988

	W		H			
N	I	P	E	R		
A	L	R	R	O	L	D
M	L	A	A	G	E	O
E	I	V	A	E	Y	Y
	N	D	H	R	B	L
	K	A	N	S	A	E

MEET

NAU Invite: 2 43 6 24 9 20
 Flagstaff, AZ 17:02 20:52 17:36 19:21 17:56 19:00
 9/10/88
 Team Finish: 2/11
 # of Runners: 100

San Diego St: 4 87 11 84 43 68
 San Deigo, CA 17:11 21:39 17:39 19:23 18:30 19:00
 9/24/88
 Team Finish: 5/18
 # of Runners: 150

Colorado Invite: 12 127 14 104 26 65
 Boulder, CO 17:20 20:26 17:22 19:42 17:53 18:46
 10/1/88
 Team Finish: 6/18
 # of Runners: 159

Iowa Invite: 10 125 23 115 75 95
 Ames, IA 17:17 20:52 17:34 19:38 18:24 18:50
 10/17/88
 Team Finish: 14/19
 # of Runners: 135

UNM Invite: 2 26 4 22 8 DNF
 Albuq., NM 18:16 21:29 18:38 20:58 19:22
 10/29/88
 Team Finish: 2/5
 # of Runners: 42

HCAC Champ. 3 35 5 39 10 27
 S.L.City, UT 17:18 19:52 17:43 20:11 18:10 19:29
 11/12/88
 Team Finish: 3/8
 # of Runners: 50

NCAA Region 7: 3 72 7 83 14 62
 17:18 19:52 17:43 20:11 18:10 19:29
 Team Finish: 5/18
 # of Runners: 117

NCAA Championships: Gwen Willink 36th, 17:20
 # of Runners: 106

The Lady Lobos had an up down season, struggling to find consistency within the team. Throughout the year, the team finished in the middle of the pack. They did, however, have two strong finishes. The first was at the Rainbow Wahine Invitational in Hawaii where the Lobos finished second and just two strokes out of the lead. Lobo Wendy Werley took medalist honors in Hawaii. This must have been a confidence builder because New Mexico turned around and took second at the HCAC Championships.

Michelle Wooding turned in the most top 10 finishes with four, followed by Susan Wineinger at three, Wendy Werley at two and Bernadette Lucero with one. Werley, Wineinger and Wooding were all named to the HCAC All Conference team. Wooding qualified as an individual for the NCAA's, finishing 54th out of a field of 102.

Former Lobo's on the LPGA tour continue to do well and to keep the University of New Mexico in the news. To date four exLobos on tour have collectively earned over \$208,000 during the 1988-89 LPGA season. Leading the pack is Susan Sanders, followed by Kristi (Arrington) Albers, rookie Caroline Keggi, and Kris Monaghan. Coach John Speary also caddied for Keggi during four of the tournaments.

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UNIVERSITY OF NEW MEXICO
WOMEN'S GOLF ROSTER
1988-89

Bernadette Lucero	Sr.	Albuquerque, NM
Laura Spengeman	Jr.	Los Lunas, NM
Jill Trujillo	Jr.	Silver City, NM
Wendy Werley	Sr.	Littleton, CO
Susan Wineinger	Sr.	Green Bay, WI
Michelle Wooding	Sr.	Tacoma, WA

Coach: John Speary (5th yr.)
Asst. Coach: Tara Fleming

UNIVERSITY OF NEW MEXICO
1988-89 GOLF SCHEDULE
UNIVERSITY OF NEW MEXICO

<u>FALL</u>		
Sept. 9-11	Roadrunner Invitational	Las Cruces, NM
SEPT. 29-Oct. 1	MCGUIRE INVITATIONAL	University Course ALBUQUERQUE, NM SOUTH COURSE
Oct. 14-16	Tulsa Invitational	Tulsa, OK
Oct. 28-30	Stanford Invitational	Cedar Ridge CC Palo Alto, CA Stanford Course
Nov. 5-6	SIC Fall Classic	Athens, GA Athens CC
<u>SPRING</u>		
Jan. 23-25	Yamaha/ USC Invitational	Glendale, CA Oakmont CC
Feb. 13-15	Arizona Invitational	Tucson, AZ Randolph Park
Mar. 17-19	Betsy Rawls Invitational	Austin, TX Great Hills CC
Apr. 27-30	HCAC Championships	Ft. Collins, CO
May 24-27	NCAA Championships	Palo Alto, CA Stanford Course

1988-89 WOMEN'S GOLF RESULTS
UNIVERSITY OF NEW MEXICO

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Fall Semester

ROADRUNNER/DIET COKE INVITATIONAL					3/9	Par 74	(6,277 yds.)		
New Mexico					316	317	314	- 947	
(1. NMSU)					299	310	300	- 909)	
6.	Susan Wineinger				77	75	79	- 231	
10.(t)	Michelle Wooding				77	79	78	- 234	
13.(t)	Wendy Werley				76	81	80	- 237	
20.(t)	Bernadette Lucero				88	80	77	- 245	
33.(t)	Jill Trujillo				88	85	81	- 254	
DICK MCGUIRE INVITATIONAL					7(t)/18		Par 73	(6,158 yds.)	
New Mexico					307	320	309	- 936	
(1. Arizona)					308	304	302	- 914)	
7.(t)	Bernadette Lucero				78	75	74	- 227	
23.(t)	Wendy Werley				75	82	77	- 234	
27.(t)	Michelle Wooding				77	82	76	- 235	
43.	Susan Wineinger				77	81	82	- 240	
79.(t)	Jill Trujillo				84	84	87	- 255	
PING TOUR TULSA					9/9		Par 72	(5,994 yds.)	
New Mexico					339	319	325	- 983	
(1. Tulsa)					308	309	298	- 916)	
22.	Michelle Wooding				85	78	77	- 240	
29.	Wendy Werley				83	81	79	- 243	
30.	Susan Wineinger				82	79	83	- 244	
42.	Bernadette Lucero				89	81	87	- 257	
44.	Laura Spengeman				90	86	86	- 262	
STANFORD INVITATIONAL					14/21		Par 73	(5,886 yds)	
New Mexico					317	311	314	- 942	
(1. Oklahoma State)					302	298	295	- 895)	
33.(t)	Susan Wineinger				76	75	80	- 231	
36.(t)	Michele Wooding				79	78	75	- 232	
36.(t)	Wendy Werley				77	77	78	- 232	
84.(t)	Bernadette Lucero				85	81	81	- 247	
94.(t)	Laura Spengeman				87	85	84	- 256	
S.I.C. FALL CLASSIC (Univ. of Georgia-host)					6/8		Par 72	(6042 yds)	
New Mexico					323	328	336	- 987	
(1. Oklahoma State)					314	316	302	- 932)	
7.(t)	Michelle Wooding				73	81	83	- 237	
16.(t)	Susan Wineinger				80	82	80	- 242	
28.(t)	Wendy Werley				81	82	85	- 248	
36.	Laura Spengeman				89	83	91	- 263	
37.(t)	Bernadette Lucero				89	87	88	- 264	

0064
Spring Semester

YAMAHA/USC INVITATIONAL		7/12			Par 73	(6157 yds)
New Mexico		334	323	322	-	979
(1. Arizona State		323	307	315	-	945)
12. (t)	Wendy Werley	82	82	76	-	240
15. (t)	Michelle Wooding	82	77	83	-	242
34. (t)	Bernadette Lucero	88	79	82	-	249
46.	Susan Wineinger	82	85	90	-	257
51.	Laura Spengeman	93	89	81	-	263

ARIZONA INVITE		7/18			Par 71	(6190 yds)
New Mexico		314	310	301	-	925
(1. Arizona		305	302	288	-	895)
5. (t)	Michelle Wooding	76	76	72	-	224
12. (t)	Wendy Werley	78	76	74	-	226
19. (t)	Susan Wineinger	77	77	76	-	230
66. (t)	Bernadette Lucero	85	83	79	-	247
72.	Laura Spengeman	83	83	83	-	251

BETSY RAWLS INVITATIONAL		10/18			Par 72	(5908.yds)
New Mexico		319	314	309	-	942
(1. Texas		298	305	289	-	892)
14. (t)	Wendy Werley	77	75	77	-	229
	Michelle Wooding	77	77	75	-	229
18. (t)	Susan Wineinger	80	76	75	-	231
85.	Bernadette Lucero	85	86	82	-	253
90. (t)	Laura Spengeman	86	87	87	-	260

RAINBOW WAHINE INVITATIONAL		2/8			Par 72	(5908 yds)
New Mexico		302	307	309	-	918
(1. Stanford		309	298	309	-	916)
1.	Wendy Werley	76	74	74	-	224
5.	Michelle Wooding	72	77	78	-	227
8.	Susan Wineinger	76	77	77	-	230
25. (t)	Bernadette Lucero	78	79	87	-	244
31. (t)	Jill Trujillo	88	84	80	-	252

HIGH COUNTRY CHAMPIONSHIPS		2/5			Par 71	(5850 yds)
New Mexico		308	296	301	-	905
(1. New Mexico St.		302	295	290	-	887)
3.	Wendy Werley	75	72	74	-	221
5. (t)	Michelle Wooding	78	72	75	-	225
8.	Susan Wineinger	78	77	72	-	227
11. (t)	Jill Trujillo	77	75	80	-	232
23.	Bernadette Lucero	86	80	85	-	251

NCAA GOLF CHAMPIONSHIPS					Par 73	(5886 yds)
54.	Michelle Wooding	79-78-79-80			-	316

GYMNASTICS

0065

Coach Pete Longdon started the season with a roster made up of upperclassmen who possessed experience and maturity. All American Lisa Pank was back after a red shirt year due to an ankle injury. As the season progressed, however, the Lobos suffered several critical injuries to key athletes. Pank was still experiencing some pain in her injured ankle which ultimately effected her performance. The Lobos finished the regular season with a 8-14 record. The Lobos placed fifth in the HCAC Championships.

Three gymnasts qualified for the NCAA Regionals. Lisa Pank scored a 37.55 to finish 20th in the all-around, while teammates Jeanne Parncik scored a 36.8 and Illiano Carrillo scored a 36.5 in all-around competition.

UNIVERSITY OF NEW MEXICO
1988-89 GYMNASTICS ROSTER

<u>NAME</u>	<u>YEAR</u>	<u>HOMETOWN</u>
Theresa Babigan	Fr.	Albuquerque, NM
Illiana Carrillo	Sr.	Mexico City, Mexico
Adrienne Child	Jr.	Toronto, Canada
Angela Correll	Fr.	Davidsonville, MD
Dayna Curran	Fr.	Hanover, MA
Molly Froats	Sr.	Orlando, FL
Wendy Johnson	So.	Albuquerque, NM
Julie Kautz	Jr.	El Paso, TX
Rhea Larry	Jr.	Fairmont, WV
Karen Norcia	So.	Long Island, NY
Lisa Pank	Jr.	Anchorage, Alaska
Jeanne Parnick	Fr.	Honey Brook, PA
Jenifer Phillips	Fr.	Derby, KS
Andee Wright	So.	Albuquerque, NM

COACH: Pete Longdon
ASST. COACH: Lynn Day

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UNIVERSITY OF NEW MEXICO
1989
GYMNASTICS TEAM RESULTS

DATE	OPPONENT/SCORE	UNM SCORE	W/L	RECORD	H/A
2-3-89	US Air Force 173.85	178.50	W	1-0	A
2-4-89	Denver 182.45	177.7	L	1-1	A
2-10-89	Cal St. Fullerton 187.90	183.80	L	1-2	A
	San Jose St. 174.70		W	2-2	A
2-17-89	Cactus Classic/Arizona				
	Arizona 189.50	179.70	L	2-3	A
	Wisconsin 183.65		L	2-4	
	Auburn 182.90		L	2-5	
2-19-89	Denver 184.40	187.80	W	3-5	H
2-25-89	Illinois 185.0	180.0	L	3-6	A
2-27-89	Utah 191.00	180.25	L	3-7	A
	Oklahoma 187.35		L	3-8	
	Stanford 181.90		L	3-9	
3-5-89	Air Force Academy 177.20	185.05	W	4-9	H
	Western Michigan 182.55		W	5-9	
3-11-89	Utah St. 184.50	188.55	W	6-9	H
	Houston Baptist 185.55		W	7-9	
3-18-89	HCAC				A
	1. Utah, 191.80		L	7-10	
	2. BYU, 188.80		L	7-11	
	3. Boise St., 186.15		L	7-12	
	4. Utah St., 186.60		L	7-13	
	5. UNM, 184.50		x	xxxx	
	6. Denver, 181.60		W	8-13	
3-20-89	Utah St. 188.50	185.70	L	8-14	A
4-1-89	NCAA Regionals	Individuals	xx	A	
	Lisa Pank	37.55, 20th			
	Jeanne Parnick	36.8			
	Illiana Carrillo	36.5			
4-14/15-89	NCAA Nationals	N/A			

RECORD: 8-14
CONFERENCE: 3-7

UNIVERSITY OF NEW MEXICO
1989
GYMNASTICS RESULTS

0067

High Score Event	C	C	F	J	L	P	P	N	W	K	P
V 47.45	O	A	R	O	A	A	A	O	R	A	H
UB 47.30	R	R	O	H	R	N	R	R	I	U	I
BB 46.85	R	R	A	N	R	K	N	C	G	T	L
FX 47.60	E	I	T	S	Y		I	I	H	Z	L
	L	L	S	O			C	A	T		I
	L	L		N			K				P
		O									S

UNM 178.50	Air Force 173.85										
V	9.15	9.35	9.50	9.15	xxxx	xxxx	8.8	8.85	xxxx	xxxx	xxxx
UB	9.3	8.7	8.5	9.4	xxxx	xxxx	9.1	8.75	xxxx	xxxx	xxxx
BB	xxxx	9.10	8.75	xxxx	xxxx	9.15	8.75	xxxx	8.60	7.40	xxxx
FX	xxxx	9.15	xxxx	8.55	xxxx	xxxx	8.3	8.45	xxxx	8.45	7.65
AA	xxxx	36.30	xxxx	xxxx	xxxx	xxxx	34.95	xxxx	xxxx	xxxx	xxxx

Denver 182.45	UNM 177.7										
V	9.0	9.0	9.35	8.35	xxxx	8.4	xxxx	8.55	xxxx	xxxx	xxxx
UB	9.1	8.95	xxxx	9.0	xxxx	8.3	8.8	8.45	xxxx	xxxx	xxxx
BB	8.0	9.05	xxxx	9.0	xxxx	8.5	9.15	xxxx	xxxx	xxxx	8.5
FX	xxxx	9.25	9.4	8.85	xxxx	xxxx	8.8	xxxx	xxxx	8.6	8.6
AA	xxxx	36.25	xxxx	35.20	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Cal St. Fullerton 187.90	UNM 183.80				San Jose St. 174.70						
V	9.05	9.1	9.65	9.15	xxxx	9.3	9.15	xxxx	xxxx	xxxx	xxxx
UB	8.8	8.70	xxxx	8.9	9.30	9.15	9.46	xxxx	xxxx	xxxx	xxxx
BB	9.2	8.85	8.9	8.6	xxxx	9.45	9.4	xxxx	xxxx	xxxx	xxxx
FX	xxxx	9.2	9.1	9.2	8.9	9.4	9.2	xxxx	xxxx	xxxx	xxxx
AA	xxxx	35.65	xxxx	35.85	xxxx	37.30	37.15	xxxx	xxxx	xxxx	xxxx

Cactus C.: AZ 189.50	Wisconsin 183.65				Auburn 182.90				UNM 179.70			
V	xxxx	9.1	9.45	9.1	9.0	9.45	8.9	xxxx	xxxx	xxxx	xxxx	
UB	9.15	8.6	xxxx	9.45	9.1	9.5	8.6	xxxx	xxxx	xxxx	xxxx	
BB	xxxx	7.5	7.90	8.85	8.45	9.30	8.95	xxxx	xxxx	xxxx	xxxx	
FX	xxxx	8.55	8.8	8.35	8.8	9.15	9.05	xxxx	xxxx	xxxx	xxxx	
AA	xxxx	33.75	xxxx	35.75	35.35	37.40	35.50	xxxx	xxxx	xxxx	xxxx	

UNM 187.80	Denver 184.40										
V	xxxx	9.45	9.65	xxxx	xxxx	9.5	9.5	9.35	8.95	xxxx	xxxx
UB	8.8	9.55	xxxx	8.75	9.5	9.55	9.15	xxxx	xxxx	xxxx	xxxx
BB	xxxx	9.25	9.5	xxxx	xxxx	8.85	9.5	xxxx	xxxx	9.2	8.75
FX	xxxx	9.6	9.15	9.25	xxxx	9.8	9.45	xxxx	xxxx	9.4	xxxx
AA	xxxx	37.85	xxxx	xxxx	xxxx	37.70	37.60	xxxx	xxxx	xxxx	xxxx

Illinois 185.05	UNM 180.25										
V	9.0	9.15	xxxx	xxxx	9.05	xxxx	9.05	9.3	xxxx	xxxx	8.8
UB	9.3	7.75	xxxx	xxxx	9.35	xxxx	9.15	9.25	xxxx	xxxx	7.1
BB	8.4	8.95	xxxx	xxxx	xxxx	xxxx	9.35	8.75	8.25	8.35	xxxx
FX	8.75	9.05	xxxx	xxxx	9.15	xxxx	9.5	9.05	xxxx	9.35	xxxx
AA	35.45	34.90	xxxx	xxxx	xxxx	xxxx	37.05	36.35	xxxx	xxxx	xxxx

0068

C	C	F	J	L	P	P	N	W	K	P
O	A	R	O	A	A	A	O	R	A	H
R	R	O	H	R	N	R	R	I	U	I
R	R	A	N	R	K	N	C	G	T	L
E	I	T	S	Y		I	I	H	Z	L
L	L	S	O			C	A	T		I
L	L		N			K				P
	O									S

Utah 191.00	Oklahoma 187.35	Stanford 181.90	UNM 180.25							
V	xxxx 9.25	xxxx 9.3	xxxx 9.6	xxxx 9.3	xxxx 8.85	xxxx 8.8	xxxx 9.1	xxxx	xxxx	xxxx
UB	xxxx 8.1	xxxx 9.4	xxxx 9.65	xxxx 8.85	xxxx 9.15	xxxx 8.35	xxxx	xxxx	xxxx	xxxx
BB	xxxx 8.55	xxxx 8.0	xxxx 8.65	xxxx 9.35	xxxx 8.75	xxxx 9.25	xxxx	xxxx	xxxx	xxxx
FX	xxxx 9.15	xxxx 8.55	xxxx 8.95	xxxx 8.20	xxxx 36.00	xxxx 36.00	xxxx	xxxx	xxxx	xxxx
AA	xxxx 35.05	xxxx xxxx	xxxx 36.85	xxxx 35.70	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

UNM 185.05	Wst. Michigan 182.55	Air Force 177.20								
V	9.25 9.55	9.5	xxxx 9.5	xxxx 9.5	9.45	xxxx 9.45	xxxx	xxxx	xxxx	xxxx
UB	8.75 9.25	xxxx	xxxx 9.55	9.3	9.3	xxxx 9.3	xxxx	xxxx	xxxx	xxxx
BB	7.85 9.5	8.75	xxxx 8.4	xxxx 8.85	xxxx 8.55	xxxx	xxxx	xxxx	xxxx	xxxx
FX	9.3 9.55	9.35	xxxx 9.7	9.0	xxxx 9.15	xxxx	xxxx	xxxx	xxxx	xxxx
AA	35.10 37.85	xxxx	xxxx 36.90	xxxx 36.30	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

UNM 188.40	Houston Baptist 185.55	Utah St. 184.50								
V	9.45 9.35	9.5	xxxx 9.4	9.5	9.3	xxxx 9.3	xxxx	xxxx	xxxx	xxxx
UB	9.15 8.9	xxxx	xxxx 9.6	9.5	9.65	9.3	xxxx	xxxx	xxxx	xxxx
BB	xxxx 9.35	9.5	9.3	9.45	9.1	9.05	xxxx	xxxx	xxxx	xxxx
FX	9.3 9.05	9.55	xxxx 9.7	9.55	xxxx 9.2	xxxx	xxxx	xxxx	xxxx	xxxx
AA	xxxx 36.65	xxxx	xxxx 37.85	xxxx 37.40	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

HCAC Championships:	Utah, 191.8	BYU, 188.8	Boise St., 186.15	Utah St., 180.						
	Denver, 181.60									
V	9.2 9.0	9.4	xxxx 9.45	9.25	xxxx 9.0	xxxx	xxxx	xxxx	xxxx	xxxx
UB	9.25 8.5	xxxx	xxxx 9.55	9.35	xxxx 9.35	xxxx	xxxx	xxxx	xxxx	xxxx
BB	xxxx 8.65	9.10	xxxx 8.45	8.95	xxxx 9.30	xxxx	xxxx	xxxx	xxxx	xxxx
FX	9.15 9.35	9.25	xxxx 9.65	9.05	xxxx 9.05	xxxx	xxxx	xxxx	xxxx	xxxx
AA	xxxx 35.50	xxxx	xxxx 37.20	37.10	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Utah St., 188.50	UNM, 185.70									
V	9.40 9.20	9.55	9.10	xxxx 9.55	9.50	xxxx 9.50	xxxx	xxxx	xxxx	xxxx
UB	8.35 9.0	xxxx	9.55	9.10	9.45	9.35	xxxx	xxxx	xxxx	xxxx
BB	9.25 9.45	8.15	xxxx 8.15	9.0	9.50	xxxx	xxxx	xxxx	xxxx	xxxx
FX	9.15 9.25	xxxx	xxxx 9.50	9.30	xxxx 9.20	xxxx	xxxx	xxxx	xxxx	xxxx
AA	36.15 36.90	xxxx	xxxx 37.50	37.65	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

NCAA Regionals										
V	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
UB	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
BB	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
FX	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
AA	xxxx 36.5	xxxx	xxxx 37.55	36.8	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

NCAA Nationals

NA

SKIING

0069

This years ski team members were basically "Lobo pups" represented by 16 freshmen and sophomores compared to 10 juniors and only four seniors. New Mexico finished third at Regionals; fourth in six races; and one fifth place finish against the other Western ski teams prior to the championships. The lack of consistency may have been due, in part, to the inexperience and maturity level of the skiers. Although the Lobos were not as experienced as some of the other teams, their individual efforts paid off with a full team qualifying for the NCAA's.

Some very good individual performances were turned during the season. Alpiner Maria Nilsson was in the top 20 throughout the season. She capped off the year by finishing seventh at nationals in the slalom and giant slalom which carried second team All America honors. Holly Archer was in the top 20 all season and made the trip to the NCAA's. Ida Lundeberg had strong top 10 finishes in the slalom all season long. Surprisingly, however, at nationals she finished higher in the giant slalom at ninth, earning All-America status. Heidi Scheiblehner also qualified for the NCAA's.

In men's alpine, four athletes qualified for nationals by turning in top 25 performances during the season. The highest national finish was Henric Lonnberg at 10th in the giant slalom. He earned second team All America honors.

0070

Going into the championships Nordic skier Mari Seppala was ranked the highest, taking two first places in skating during the regular season. She earned second team All-America honors for her ninth place national finish in classical skiing. Others qualifying for the NCAA's were Cathy Collins, Torunn Drage and Sanna Harma.

In the men's Nordic competition, Sindre Mekjan topped off a good season with 10th in the classical skiing and second team All America. Geir Simonsen, who had strong performances all season in both the classical and skating events, finished sixth at nationals in skating to earn second team All America. The Lobos as a team finished fifth at the NCAA Championships.

Mike Vranka, a freshman from Boulder, CO, qualified and competed in the Winter World University Games in Bulgaria. His events were the downhill and super downhill.

1988-89 Men's and Women's Ski Roster
University of New Mexico

0071

<u>NAME</u>	<u>YEAR</u>	<u>HOMETOWN</u>
<u>Women's Alpine</u>		
Holly Archer	Freshman	Dillon, CO
Heather Buron	Sophomore	Traverse City, MI
Tanya Droubay	Freshman	Anchorage, AK
Beate Jensen	Sophomore	Kolsas, Norway
Anna Johansson	Senior	Ostersund, Sweden
Cappie King	Junior	Ruidoso, NM
Ida Lundeborg	Junior	Finspang, Sweden
Maria Nilsson	Sophomore	Frosön, Sweden
Heidi Scheiblehner	Sophomore	Crystal Mt., WA

Men's Alpine

Bart Bowen	Junior	Ruidoso, NM
Magne Knudsen	Freshman	Fjerdingby, Norway
Henric Lonberg	Freshman	Bollnas, Sweden
Patrick Marquez	Junior	Vail, CO
David Repshner	Freshman	Frisco, CO
Toby Smith	Sophomore	Taos, NM
Mike Vranka	Freshman	Boulder, CO

Women's Nordic

Cathy Collins	Junior	Rapid City, SD
Torunn Drage	Junior	Oslo, Norway
Sanna Harma	Junior	Liminka, Finland
Benedicte Lutken	Sophomore	Baerum, Norway
Mari Seppala	Sophomore	Karhula, Finland
Ida Syverssen	Senior	Ski, Norway

Men's Nordic

Tero Kemila	Junior	Kjaani, Finland
Fredrik Landstedt	Senior	Solleftea, Sweden
Jouni Leinonen	Junior	Kajaani, Finland
Sindre Mekjan	Sophomore	Hvalstad, Norway
Scott Peterson	Sophomore	Dillon, CO
Geir Simonsen	Senior	Oslo, Norway
Antti Suhonen	Junior	Karttula, Finland
Jason Tillinghast	Freshman	Burlington, VT

0072

1989 SKI SCHEDULE
UNIVERSITY OF NEW MEXICO

Date	Opponent	Location/Ski Area	Team Finish
Dec. 31-Jan. 1	Alaska Invite (xc)	Jacksonhole, WY Jacksonhole	4/6
Jan. 6-7	Utah Invite	Salt Lake City, UT Park City	4/6
Jan. 20-21	Wyoming Invite	Laramie, Wyo	4/4
Jan. 27-28	Colorado Invite	Boulder, CO Lake Eldora/Snow Mt. Ranch	4/4
Feb. 7-8	Alaska-Fairbank Invite (xc)	Fairbank, AK	4/6
Feb. 10-11	New Mexico Invite (a)	Albuquerque, NM Sandia Peak	5/5
Feb. 11-12	Alaska-Anchorage Invite (xc)	Anchorage, AK	4/6
Feb. 17-18	NCAA Regionals UNM hosting	Durango, CO Purgatory	3/5
Mar. 2-5	NCAA Championships Wyoming, hosting	Jacksonhole, WY	5th

UNIVERSITY OF NEW MEXICO
1989 SKI RESULTS

0073

A	U	W	C	A	N	A	R	N
L	T	Y	O	L	E	L	E	C
A	A	O	L	A	W	A	G	A
S	H	M	O	S	S	S	I	A
K		I	R	K	M	K	O	
A		N	A	A	E	A	N	
		G	D	X	X		A	
A			O	F	I	A	L	
					C		S	
					O			

WOMEN'S ALPINE	GS	GS	S	S	GS	GS	S	S	S	GS	GS	S				
. Archer	XX	XX	XX	19	19	15	13	19	11	16	XX	XX	DNF	12	11	27
. Buron	XX	XX	32	32	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
. Droubay	XX	XX	30	DNF	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
. Jensen	XX	XX	26	25	11	18	24	18	DNF	26	XX	XX	DQ	17	XX	XX
. Johansson	XX	XX	16	31	17	DNF	22	21	18	18	XX	XX	XX	XX	XX	XX
. King	XX	XX	XX	42	XX	XX	XX	XX	17	DNF	XX	XX	XX	XX	XX	XX
. Lundberg	XX	XX	23	12	8	7	DNF	10	6	7	XX	XX	DNF	DNF	9	29
. Nilsson	XX	XX	14	16	DNF	DNF	20	14	9	10	XX	XX	6	5	7	7
. Scheiblehner	XX	XX	6	6	15	19	21	16	27	DNF	XX	XX	7	16	13	24

WOMEN'S ALPINE	GS	GS	S	S	GS	GS	S	S	GS	S	GS	S				
. Bowen	XX	XX	33	32	16	DNF	22	25	19	18	XX	XX	20	16	XX	XX
. Knudsen	XX	XX	XX	30	DNF	10	14	12	39	13	XX	XX	5	8	26	25
. Lonngberg	XX	XX	XX	3	7	4	DNF	9	6	DNF	XX	XX	9	24	10	28
. Marquez	XX	XX	16	15	DNF	DQ	8	11	DQ	DNF	XX	XX	4	28	18	15
. Repsher	XX	XX	XX	XX	XX	XX	XX	XX	28	24	XX	XX	XX	XX	XX	XX
. Smith	XX	XX	24	22	26	DNF	19	16	DNF	DNF	XX	XX	DQ	9	28	DNF
. Vranka	XX	XX	28	31	DNF	20	21	DNF	16	15	XX	XX	XX	XX	XX	XX

WOMEN'S NORDIC	C	S	C	S	C	S	S	C	S	C	S	C	S			
. Collins	22	17	XX	10	13	XX	XX	XX	XX	17	19	8	10	34	26	
. Drage	XX	XX	17	11	6	XX	XX	XX	XX	XX	12	13	7	8	11	11
. Harna	8	16	8	20	11	XX	XX	XX	XX	XX	14	20	XX	XX	25	25
. Lutken	XX	XX	20	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
. Seppala	3	1	4	1	8	XX	XX	XX	XX	XX	XX	DNF	DNF	DNF	9	DNF
. Syverssen	21	19	26	28	15	XX	XX	19	XX	XX	XX	XX	XX	XX	XX	XX

WOMEN'S NORDIC	C	S	C	S	C	S	S	C	S	C	S	C	S			
. Kemila	15	DNF	21	28	XX	XX	XX	19	XX	XX	XX	20	DNF	XX	XX	XX
. Landstedt	XX	XX	XX	XX	6	3	XX	XX	XX	XX	6	DNF	XX	17	18	12
. Leinonen	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
. Mekjan	7	4	9	13	8	7	XX	4	XX	XX	15	12	4	3	10	17
. Peterson	27	22	28	23	14		XX	18	XX	XX	30	DNF	XX	XX	XX	XX
. Simonsen	XX	XX	8	5	7	5	XX	XX	XX	XX	11	3	1	4	12	6
. Suhonen	9	DNF	XX	XX	11	13	XX	XX	XX	XX	12	17	XX	18	16	24
. Tillinghast	37	29	39	33	16	14	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX

= CLASSICAL
= SKATING

When spring season started Coach Susan Craig found herself down to only one pitcher, Chris DeFant. DeFant had been converted to pitcher the year before when the Lobos ran into a pitching shortage. Outfielder Beth Unterbrink was brought in and converted to pitcher to help out DeFant. Surprisingly both DeFant and Unterbrink did well and were able to carry the season to a closure of 28-17 overall and 6-4 in conference.

During Conference play, in all but one double header, the Lobos lost the first game but turned around and won the nightcapper. They finally broke the habit in their last double header against Utah State where they took both games. The infield deserves credit for their strong defensive play throughout the season. New Mexico also played a much tougher schedule, facing a number of top 20 teams.

In the Conference Championship, however, the pitching caught up with the Lobos. They won their first game but lost the next two games to exit the tournament and finish in fifth place. Named to the All Conference and Regional teams were Liz Bogdanovic, Karla Ismay and Beth Unterbrink. Julie Garcia was named to the All Region second team. Karla Ismay completed her Lobo career by being named to the All-America second team.

UNIVERSITY OF NEW MEXICO

1989 SOFTBALL ROSTER

0075

No.	NAME	PO	CL	Bat R/L	HT	HOMETOWN
1	Terri Bailey	OF	Fr.	R/L	5-2	Oxnard, CA
2	Julie Garcia	OF	Fr.	R/L	5-3	Santa Fe, NM
3	Jana Harrison	2B/1	Sr.	R	5-10	Warren, MI
4	Raylene Mayer	RF	So.	R	5-8	Durango, CO
7	Beth Unterbrink	LF/P	Sr.	R	5-9	Chelsea, MI
9	Angel LoGreco	C/OF	Jr.	R	5-5	Carson City, NV
10	Wendy Beechly	SS	So.	R	5-4	Fallon, NV
12	Amy Minick	C/1B	Sr.	R/L	5-10	Arcadia, CA
13	Karla Ismay	3B/1B	Sr.	R	5-5	Tucson, AZ
15	Chris DeFant	P/2B	Jr.	R	5-6	Chelsea, MI
16	Jody Lunz	P/OF	So.	R	5-6	North Mankato, MN
19	Jacque Illig	P/1B	Fr.	R	5-7	Excelsior, MN
22	Liz Bogdanovic	CF	Sr.	R	5-8	Lyons, IL
24	Sandi Hinojos	C	Fr.	R	5-4	Hatch, NM
26	Kristen Nethery	RF	Jr.	R	5-6	Albuquerque, NM

HEAD COACHES: Susan Craig & Ken Johnson

RECORD: 29-17

CONFERENCE: 6-4

0076

1989
UNM Softball Schedule

<u>Spring</u>		<u>SCORE</u>	<u>RECORD</u>	<u>/CONF</u>
FEB. 18	SOUTHWEST COLLEGE	12-0	1-0	
	SOUTHWEST COLLEGE	11-0	2-0	
FEB. 19	SOUTHWEST COLLEGE	12-0	3-0	
	SOUTHWEST COLLEGE	22-0	4-0	
FEB. 22	NEW MEXICO HIGHLANDS	6-1	5-0	
	NEW MEXICO HIGHLANDS	2-1	6-0	
FEB. 24-27	N.M. INVITATIONAL			
	TX ARLINGTON	3-2	7-0	
	TX ARLINGTON (darkness)	3-0	—	
	NMSU	2-1	8-0	
	MICHIGAN	4-5	8-1	
	MICHIGAN	6-1	9-1	
Mar. 2-4	New Mexico State Invitational			
	Oklahoma St.	1-18	9-2	
	Michigan	3-4	9-3	
	Arizona	0-1	9-4	
	Nebraska	10-0	10-4	
	Nichols St.	12-0	11-4	
	Wichita St.	3-4	11-5	
Mar. 10-12	South Florida Tourney			
	Temple	4-2	12-5	
	Missouri	3-5	12-6	
	Florida St.	2-3	12-7	
	Williams	2-10	12-8	
Mar. 14	Eastern Michigan	4-1	13-8	
	Eastern Michigan	2-1	14-8	
Mar. 15	North Carolina-Chapel Hill	3-0	15-8	
	North Carolina-Chapel Hill	8-1	16-8	
Mar. 17-19	NIT Invitational			
	Massachusetts	5-0	17-8	
	Berkley	1-3	17-9	
	Indiana	4-2	18-9	
	Kansas	1-6	18-10	
	Adelphi	4-9	18-11	
MAR. 30	NEW MEXICO HIGHLANDS	6-0	19-11	
	NEW MEXICO HIGHLANDS	10-0	20-11	
APR. 4	WESTERN NEW MEXICO	1-0	21-11	
	WESTERN NEW MEXICO	8-3	22-11	
APR. 7	* CREIGHTON	3-4	22-12	0-1
	* CREIGHTON	4-3	23-12	1-1
APR. 8	* COLORADO STATE	0-1	23-13	1-2
	* COLORADO STATE	5-1	24-13	2-2

APR. 15	* NEW MEXICO STATE	1-3	24-14	2-3
	* NEW MEXICO STATE	11-0	25-14	3-3
Apr. 21	* Utah	1-4	25-15	3-4
	* Utah	3-2	26-15	4-4
Apr. 22	* Utah State	7-1	27-15	5-4
	* Utah State	3-1	28-15	6-4
May 11-13	HCAC Championship			
	NMSU	3-0	29-15	
	Creighton	1-4	29-16	
	Utah	5-6	29-17	
May 19-20	NCAA First Round		NA	
May 24-29	NCAA Nationals		NA	

* Conference Games

RECORD: 29-17

CONFERENCE: 6-4

Women:

The women's swim squad was small in number but big in effort. The team, consisting of only seven swimmers, competed in three meets, two in Albuquerque and one in Las Cruces, finishing the season with a 0-3 record.

At the HCAC Championships the Lobos showed spirit and courage, placing sixth in the meet. Elisabeth Ahlgren, successfully defended her titles in the 100 and 200 butterfly, earning All Conference status for the second year in a row.

Due to the tuition waivers allowed New Mexico colleges and universities, money will be available next year for all sports. Coach Bill Spahn will recruit women swimmers in 1989-90 and compete with a full roster in 1990-91.

Men:

The men's swim team was much improved over last season, turning in some good individual performances throughout the year. Their dual meets were against regional and conference opponents, with the team finishing with a 6-4 record. At the WAC Championships, New Mexico moved from a last place finish in 1988 to third place this year. The Lobos high finish at the WAC Championships were due in part to Henrik Leek taking first in the 1650 yard freestyle and Vic Perini taking top honors in the 200 breaststroke. Perini also placed second in the 100 breast. Leek qualified for the NCAA's in the 1650 yard freestyle, where he finished 26th with a time off 15:23.24.

UNIVERSITY OF NEW MEXICO
1988-89
SWIMMING ROSTER

0079

Elisabeth Alghren	Sr.	Malmo, Sweden
Shannon Beauford	Sr.	Anderson, SC
Susie Durkee	Jr.	Albuquerque, NM
Lori Haile	Sr.	Albuquerque, NM
Brandy Spoehr	So.	Honolulu, HI
Dusty Delange	Jr.	Albuquerque, NM
Susan McCullough	So.	Albuquerque, NM

COACH: Bill Spahn

0080

UNIVERSITY OF NEW MEXICO

Men's Swimming - Team Roster 1988-89

Name	YR.	Event	Hometown
Appleby, Don	Jr.	200F, 100F	St. Paul, MN
Baltch, Robbie	So.	200F, 500F	Honolulu, HI
Browne, Anthony	Fr.	100F, 100Fly, 200F	Lakeville, MN
Browning, William	So.		
Bukowski, Steve	So.	50F, 200BK	Anchorage, AL
Doebbling, John	Fr.	100B, 200B, 200IM	Loveland, CO
Dunn, Jim	Sr.	200IM, 200BK, 200BR	Denver, CO
Eaton, Stuart	Jr.	50F, 100F, 100BK	Albuquerque, NM
Finnick, Jesse	Fr.	100BK, 200BK	Loveland, CO
Holmertz, Mikael	Jr.	100F, 100Fly	Sweden
LaMarre, Terry	Jr.	100BK, 200BK, 200IM	Deerfield, IL
Leek, Henrik	Jr.	1000F, 500F	Sweden
Lott, Jordan	So.	1 and 3 meter diving	California
Low, Graham	Jr.	200BK, 100BK, 100Fly	Aberdeen, Scotland
Meagher, Andy	Fr.	50F, 100F	Pueblo, CO
Miles, William	Fr.	200IM, 400IM, 500F	Dallas, TX
Perini, Vic	Jr.	200 Fly, 200BR	Farmington, NM
Pollard, Daniel	Sr.	200 Breast	Honolulu, Hawaii
Pratkelis, Pete	Jr.	1000F, 500F	Estes Park, CO
Rogers, Pete	So.	1000F, 200 Fly	Moses Lake, CA
Smith, Rick	Sr.	200F, 100F	Santa Fe, NM
Stencil, Mike	Fr.	200Fly, 200F, 500F	Kent, WA
Williams, Jay	So.	200IM, 200 Fly	Honolulu, HI
Zea, Urbano	Fr.	50F, 100F, 100Fly	Juarez, Mexico

COACH: Bill Spahn

UNM SWIMMING SCHEDULE
1988-89
MEN'S AND WOMEN'S

0081

Nov. 18, 19, 20	NM Senior Meet	Olympic Pool	Albuquerque, NM
Dec. 3	Intersquad (Cherry / Silver)	Olympic Pool	Albuquerque, NM
Jan. 13	Men vs Utah Women vs BYU	Olympic Pool Olympic Pool	Albuquerque, NM Albuquerque, NM
Jan. 14	Women vs Utah Men vs BYU	Olympic Pool Olympic Pool	Albuquerque, NM Albuquerque, NM
Jan. 21	M&W vs NMSU		Las Cruces, NM
Jan. 27, 28, 29	NM Senior Meet	Olympic Pool	Albuquerque, NM
Feb. 4	Men at USAF		Colorado Springs, CO
Feb. 18	Men at Wyoming		Laramie, Wyo.
Feb. 23-25	HCAC		Ft. Collins, CO
Mar. 2-4	WAC		Provo, UT
Mar. 16-18	NCAA (Women)		Indianapolis, Indiana
Mar. 20-24	M&W Senior Nationals	Olympic Pool	Albuquerque, NM
Mar. 30, 31, Apr. 1	NCAA (Men)		Indianapolis, Indiana

0082

SWIM RESULTS 1989
WOMEN'S & MEN'S

Women

DATE	OPPONENT	LOCATION	TIME	UNM	OPP	W/L	REC
Jan. 13	Utah	Johnson Pool	4:00pm	43	156	L	0-1
Jan. 14	BYU	Johnson Pool	1:00pm	64	102	L	0-2
Jan. 21	NMSU	Las Cruces		71	144	L	0-3
Feb. 23-25	HCAC	Ft. Collins, CO	Placed 6th/6 teams				
		1. Colorado State		658			
		2. Brigham Young University		475			
		3. University of Utah		389			
		4. University of Wyoming		197			
		5. New Mexico State		186			
		6. University of New Mexico		179			

Men

DATE	OPPONENT	LOCATION	TIME	UNM	OPP	W/L	REC
Jan. 13	Utah	Johnson Pool	4:00pm	81	156	L	0-1
Jan. 14	BYU	Johnson Pool	1:00pm	114	127	L	0-2
Jan. 21	NMSU	Las Cruces		136	92	W	1-2
Feb. 04	Air Force	Air Force Academy		131.5	109.5	W	2-2
Feb. 18	Wyoming	Wyoming		145	131	W	3-2
Mar. 2-4	WAC	Provo, UT	Placed 3rd/6teams				
		1. University of Utah		519			
		2. Brigham Young University		403			
		3. University of New Mexico		334			
		4. University of Hawaii		322			
		5. Air Force Academy		305			
		6. University of Wyoming		227			
Mar. 30-Apr.1	NCAA	Indianapolis, Indiana					
	Individual	Henrik Leek	26th 1650 yds. Freestyle				

Tennis was off to a fast start at 6-0 in dual matches. They were on their way to setting yet another record for most wins. It also looked as if 1989 would be the year in which the Lobos would move Utah out of second place in the HCAC tournament. Singles star senior Chris Hoffee was having her best season ever, achieving a national rank of 33rd. Hoffee and doubles partner junior Rachel Wilson were also moving up in the doubles ranking, reaching 15th. Then disaster hit. Hoffee, who had experienced some knee trouble last season, reached the point where the knee required surgery. She could not continue the season. At this point the team was 14-4 with the four losses being to top 20 teams. The team finished the season at 14-12. The Lobos retained their third place spot in the HCAC Championships.

It was unfortunate that Hoffee was hurt. She was the highest ranked Lobo in tennis history. She would have been only the second Lobo to compete at the NCAA's, the first being Leanne Palmisano in 1984. Hoffee and Wilson would have been the first Lobo doubles team to compete at nationals. Hoffee had a singles record of 22-9, while she and Wilson were 17-7 for the year. Another Lobo who showed good progress this season was Inger Sanderud who had a record of 13-4 in the sixth position. Hoffee was All Conference in singles, while she and Wilson were All Conference in doubles.

0084

UNIVERSITY OF NEW MEXICO

TENNIS ROSTER

1989

<u>NAME</u>	<u>AGE</u>	<u>YEAR</u>	<u>HEIGHT</u>	<u>HOMETOWN</u>
Melanie Breed	20	Jr.	5-6	Cape Town, South Africa
Jenny Cook	19	Fr.	5-7	Racine, WI
Chris Hoffee	22	Sr.	5-5	Shreveport, LA
Denise Ready	22	Sr.	5-7	Albuquerque, NM
Inger Sanderud	20	So.	5-5	Penticton, Canada
Jennifer Toomy	21	Jr.	5-8	Waynesboro, VA
Rachel Wilson	21	Jr.	5-9	Christ, New Zealand

1988-89
Women's Tennis Schedule

0985

Fall Schedule

Oct. 14-16	Colorado Flighted Tournament (Co, UNM, Nebraska, Weber St.)	Boulder, Co
Nov. 10-12	ITCA Regionals (ind.)	Topeka, KS
Nov. 30-Dec.3	National Clay Court Championships (Ind, Chris Hoffee)	Location?

Spring Schedule

Jan. 3-8	Milwaukee Tennis Classic (ind.)	Milwaukee, WI
Feb. 3-5	Texas Tech. Invite (Iowa, UNM, TX-San Antonio)	Lubbock, TX
FEB. 17	NEW MEXICO ST.	LOBO CLUB -11:00am
FEB. 18	KANSAS	LOBO CLUB - 11:00am
FEB. 19	COLORADO	LOBO CLUB - 9:00am
Feb. 24	Texas A&M	College St., TX
Feb. 25	Trinity	San Antonio, TX
Feb. 26	Louisiana St.	College Station, TX
MAR. 3	DENVER	LOBO CLUB - 10:00am
MAR. 4	WEBER ST.	LOBO CLUB - 11:00am
MAR. 5	AIR FORCE	LOBO CLUB - 9:00am
MAR. 5	UTEP	LOBO CLUB - 1:00pm
Mar. 11	San Diego St.	San Diego, CA
Mar. 12	Iowa State	San Diego, CA
Mar. 15	Pepperdine	Malibu, CA
Mar. 16	Cal St.-Long Beach	Long Beach, CA
Mar. 24	Houston	Las Vegas, NV
Mar. 25	UNLV	Las Vegas, NV
Mar. 26	Auburn	Las Vegas, NV
Mar. 30	Oklahaoma St.	Stillwater, OK
Mar. 31	Georgia	Stillwater, OK
Apr. 1	Oklahoma	Norman, OK
Apr. 7-9	Roadrunner Invitational (UNM, Texas Tech, San Antonio, UTEP, Grand Canyon, Baylor, Odessa, Midland JC)	Las Cruces, NM
Apr. 15	Arizona	Tucson, AZ
Apr. 26	BYU	Provo, UT
Apr. 27-29	HCAC Championships	Provo, UT

- Oct 14-16 Colorado Flighted Tournament Boulder, CO
 -Singles Champion, Chris Hoffee, 3-0
 -Doubles Champions, Hoffee/Wilson, 3-0
 Toomy, 1-2 Cook, 2-1
 Wilson, 2-1 Sanderud, 2-1
- Nov. 10-12 ITCA Regionals (ind.) Topeka, KS
 -Singles, Hoffee lost 1st round, 0-1
 Toomy lost in 2nd round, 1-1
 Wilson lost in 2nd round, 1-1
 Breed lost in 1st round, 0-1
 Cook lost in prelim, 0-1
 Sanderud lost in prelim, 0-1
 -Doubles Hoffee/Wilson lost in semi-finals, 3-1
 Toomy/Breed lost in first round, 1-1
 Cook/Sanderud lost in first round, 0-1
- Nov. 30-Dec. 3 National Clay Court Championships Location?
 Chris Hoffee, 5-2
- Jan. 3-8 Milwaukee Tennis Classic Milwaukee, WI
 Hoffee, 2-1 Toomy, 2-1 Cook, 0-2

Date	W/L	Opponent/Div.	Score	Location	Dual Record
Feb. 3	W	Texas-S.A., I	9-0	Lubbock, TX	1-0
Feb. 3	W	Iowa, I	7-2	Lubbock, TX	2-0
Feb. 5	W	Texas Tech., I	7-2	Lubbock, TX	3-0
Feb. 17	W	NMSU, I	9-0	Albuquerque, NM	4-0
Feb. 18	W	Kansas, I	6-3	Albuquerque, NM	5-0
Feb. 19	W	Colorado, I	5-4	Albuquerque, NM	6-0
Feb. 24	L	Texas A&M, I	2-7	College Station, TX	6-1
Feb. 25	W	Trinity, I	5-4	San Antonio, TX	7-1
Feb. 26	W	LSU, I	5-4	College Station, TX	8-1
Mar. 3	W	Denver, II	6-0	Albuquerque, NM	9-1
Mar. 4	W	Weber St., I	6-3	Albuquerque, NM	10-1
Mar. 5	W	Air Force, II	8-1	Albuquerque, NM	11-1
Mar. 5	-	UTEP, I	CANCELLED		
Mar. 11	L	San Diego St., I	1-8	San Diego, CA	11-2
Mar. 12	W	Iowa St., I	8-1	San Diego, CA	12-2
Mar. 15	L	Pepperdine, I	3-6	Malibu, CA	12-3
Mar. 16	W	Cal.St.LB, I	8-1	Long Beach, CA	13-3
Mar. 24	L	Houston, I	2-7	Las Vegas, NV	13-4
Mar. 25	W	UNLV, I	5-3*	Las Vegas, NV	14-4
Mar. 26	L	Auburn, I	2-7*	Las Vegas, NV	14-5
Mar. 30	L	Oklahoma St., I	0-9*	Stillwater, OK	14-6
Mar. 31	L	Georgia, I	0-9*	Stillwater, OK	14-7
Apr. 1	L	Oklahoma, I	4-5*	Norman, OK	14-8
Apr. 7	L	Odessa, J.C.	2-7	Las Cruces, NM	14-9
Apr. 8	L	Midland, J.C.	4-5	Las Cruces, NM	14-10
Apr. 15	L	Arizona, I	0-9	Tucson, AZ	14-11
Apr. 22	L	BYU	1-8	Provo, UT	14-12
Apr. 27-29		HCAC	3rd	Provo, UT	

* No Player at #6 (Hoffee injured-required surgery on left knee)

UNIVERSITY OF NEW MEXICO
1988-89 WOMEN'S TENNIS

0087

DUAL RECORD: 14-12 (.538)

SINGLES

POSITION #	#1	#2	#3	#4	#5	#6	TOURNEY	OVERALL
Chirs Hoffee	12-5						10-4	22-9 (.709)
Melanie Breed	1-6	5-4	7-3				2-3	15-16 (.483)
Jennifer Toomy	0-2	8-9	3-4				6-5	17-20 (.459)
Rachel Wilson			3-6	11-6			5-3	19-15 (.558)
Jenny Cook				4-5	10-7		4-5	18-17 (.514)
Inger Sanderud					2-7	13-4	4-3	19-14 (.575)
Denise Ready						0-4	2-4	2-8 (.200)
No Player						0-5		0-5 (.000)
TEAM	13-13 (.500)	13-13 (.500)	13-13 (.500)	15-11 (.576)	12-14 (.461)	13-13 (.500)	33-27 (.555)	112-104 (.518)

* Hoffee injured 3-24-89-required surgery, 3-28-89

DOUBLES

POSITION #	#1	#2	#3	TOURNEY	OVERALL %
Hoffee/Wilson	11-6			6-1	17-7 (.708)
Toomy/Breed	0-2	14-8		3-2	17-12 (.586)
Toomy/Sanderud				2-1	2-1 (.666)
Toomy/Wilson	0-1				0-1 (.000)
Cook/Sanderud			10-8	0-1	10-9 (.526)
Cook/Ready				1-2	1-2 (.333)
Cook/Wilson	0-4	0-2		1-2	1-8 (.111)
Cook/Breed		0-1			0-1 (.000)
Sanderud/Ready			1-3	1-2	2-5 (.285)
TEAM	11-13 (.458)	14-11 (.560)	11-11 (.500)	14-11 (.560)	50-46 (.520)

The track & field team suffered a number of injuries to key athletes during Fall training. As Spring approached Coach Mike MacEachen went into the season with one of the smallest rosters in recent history, but the silver lining were the quality performances turned in by the remaining athletes.

With the HCAC-WAC Championships hosted by UNM, Coach Mike MacEachen was not sure where UNM would end up with a lack of depth in some events. He was in for a surprise. By the end of the four day championships, UNM hung on to beat out Utah State for second place. A remarkable feat! Heptathlon athlete Darcy Ahner was voted HCAC Athlete of the Meet for her win in the heptathlon, and for a second place in the javelin and high jump. Annette DeLorenzo surprised herself and the coaches by taking a first in the triple jump and narrowly missing a school record. Natanya Jones helped the cause by taking first in the 400m hurdles. Heidi Anderson turned in her best score in the heptathlon, capturing second place. All-Conference selections were Darcy Ahner, Heidi Anderson, Annette DiLorenzo, and Natanya Jones.

Darcy Ahner also qualified for the NCAA's in the heptathlon. She finished 16th out of 18 athletes.

UNIVERSITY OF NEW MEXICO
1989 WOMEN'S TRACK & FIELD ROSTER

0089

NAME	EVENT	HT	YR	HOMETOWN
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SPRINTS

Teri Florence	100m, 200m	5'8"	JR	Albuquerque, NM
Rene Hodgson	400m Hurdles & Triple Jump	5'7 1/2"	JR	Albuquerque, NM
Natayna Jones	400m Hurdles	5'6"	FR	Albuquerque, NM
Carolyn Lopez	400m Hurdles	5'4"	FR	Albuquerque, NM

DISTANCE

Kathy Doyle	3k, 5k	5'3"	FR	Kaycee, WY
Dodie Zamora	5k, 10k	5'1"	SR	Albuquerque, NM

FIELD

Darcy Ahner	Heptathlon	5'6"	JR	Indianapolis IN
Heidi Anderson	Heptathlon	5'8"	FR	Albuquerque, NM
Debbie Berger	Long Jump,	5'4"	JR	Thornhill, Ontario Canada
Annette Dilorenzo	Long Jump, 100m	5'5"	SR	Albuquerque, NM
Kitrian Martin	Heptathlon	5'6"	FR	Albuquerque, NM
Rosayln Powdrell	Long Jump	5'7"	SO	Albuquerque, NM
Mary Lee White	High Jump	5'9"	SO	Santa Fe, NM
Misty Wyant	Shot Put, Discus	5'8"	FR	Boone, CO

			<u>RESULTS</u>
Mar. 11	Western State College, Colorado College, NMSU	Albuq., NM	1/4
Mar. 17-18	Willie Williams Classic	Tucson, AZ	non-scoring
Mar. 24-25	Arizona Heptathlon	Tucson, AZ	individual
March 25	Adams State, NMSU	Albuq., NM	1/3
Apr. 1	Northern Colorado	Albuq., NM	non-scoring
Apr. 8	Open		
Apr. 13-14	New Mexico Heptathlon	Albuq., NM	individual
Apr. 15	Air Force, CSU, TX Tech	Albuq., NM	3/4
Apr. 22-23	Mt. SAC Relays	Walnut, CA	non-scoring
Apr. 28-29	Irvine Invitational	Irvine, CA	non-scoring
May 13	Oxy Invitational	Los Angeles, CA	non-scoring
May 17-20	HCAC Championship	Albuq., NM	2/8
May 31-Jun 3	NCAA Championship	Provo, UT	individual

VOLLEYBALL

0031

The volleyball season was one that will not be forgotten in a long time. Looking back, it was like taking a walk across the Milky Way, with each step brighter than the last. The team went on a roll, racking up a 15-0 record before suffering a loss to the CSU Rams. The Lobos came back to take their next six matches, one of which was a win over BYU in Provo, UT. New Mexico had never beaten the Cougars, so history was created that night. Later in the season, the Lobos continued to rewrite the history book by defeating BYU before a home crowd of 1500. By the end of conference play, New Mexico captured the title with a win over NMSU. New Mexico had a conference record of 10-2 while CSU and BYU tied for second with 9-3 records. New Mexico finished the season with a 25-5 record. During conference play, Lobos were named HCAC Player of the Week five times, more than all previous years added together. Three athletes, Karen Warnock, Nao Nagatomo, and Marlo Pennington were named to the All-Conference Team, and Maria Gurreri and Lori Forrest were Honorable Mention.

New Mexico played the University of Kentucky in Lexington in the NCAA First Round. This was only the second time the Lobos had been to post season competition, the first occurring in 1981. This was Kentucky's third trip in as many years to the NCAA's and their maturity showed. The Wildcats defeated the Lobos but the match was only one of two in the First Round to go five games. Senior setter Karen Saavedra Warnock was named second team All-America for her outstanding performance throughout the season.

0032

Warnock was ranked 16th in the nation for assists. Middle blocker Jodi Hinchy was ranked 12th in blocks and the team was ranked 14th for blocks. New Mexico finished the season ranked 19th in the nation.

Upon returning from the NCAA's the team and coaches thought the glory was over, but they were in for a surprise. Soon after their return, the Albuquerque Sports Hall of Fame announced that Laurel Brassy Kessel was to be honored as Female Athlete of the Year; Coach Czerniakowski was named Coach of the Year; and the Lobo's were named Team of the Year, in an unprecedented sweep of Hall of Fame honors. What a way to close out an outstanding volleyball season!

UNIVERSITY OF NEW MEXICO
VOLLYEBALL ROSTER

0033

No.	Name	Ht.	Pos.	Yr.	Hometown
1	Terri Bingaman	5-8	S	So.	Edgewood, NM
2	Marlo Pennington	5-9	OH	Sr.	Albuquerque, NM
3	Sheila Mendez	5-7	DS	So.	Las Cruces, NM
4	Karen Saavedra-Warnock	5-7	S	Sr.	Albuquerque, NM
5	Marmy Chu	5-5	DS	Sr.	Honolulu, HA
6	Lori Forrest	5-10	OH	Sr.	Cedar Rapids, IA
7	Tammy Lansford	5-11	MH	So.	Golden, CO
8	Dawn Roberts	5-9	OH	Jr.	Farmington, NM
9	Maria Gurreri	5-8	OH	So.	Amherst, NY
10	Nao Ikeda-Nagatomo	5-8	OH/S	Jr.	Saitama, Japan
11	Jodi Hinchy	6-0	MH	Jr.	Rancho Santa Fe, CA
14	Pauline Manser	6-0	OH/S	Fr.	Perth, Australia
15	Mendy Sheets	6-0	OH/MH	Fr.	Sidney, VI

Head Coach: Blase Czerniakowski (2nd yr.)

Assistant Coach: Matt McShane

Special Technical Advisor: Lang "Jenny" Ping

RECORD 25-5

CONFERENCE 10-2

0094

1988 LOBO VOLLEYBALL SCHEDULE

AUG. 26	ALBUQUERQUE ALL-STARS (Exhibition Match)	7:00PM, JOHNSON CENTER SOUTH
AUG. 27	ALBUQUERQUE ALL-STARS (Exhibition Match)	7:00PM, JOHNSON CENTER SOUTH
Sept. 8-10	Memphis St. Tournament	Memphis.TN
Sept. 16-17	Colorado Tournament (Miss,CU,Memphis St.,UNM)	Boulder, CO
SEPT. 23-24	DOMINO'S PIZZA CLASSIC (UTEP,CU,HOUSTON,UNM)	ALL DAY, JOHNSON CENTER SOUTH
OCT. 3	SOUTHERN UTAH STATE	7:00PM, JOHNSON CENTER SOUTH
OCT. 7	WYOMING*	7:00PM, JOHNSON CENTER SOUTH
OCT. 8	COLORADO STATE*	7:00PM, JOHNSON CENTER SOUTH
Oct. 13	NMSU*	Las Cruces, NM
Oct. 14	UTEP	El Paso, TX
OCT. 15	UTAH STATE*	7:00PM, JOHNSON CENTER SOUTH
Oct. 20	Brigham Young*	Provo, UT
Oct. 21	Utah*	Salt Lake City, UT
Oct. 22	Utah State*	Logan, UT
OCT. 29	BAYLOR	7:00PM, JOHNSON CENTER SOUTH
Nov. 4	Colorado State*	Ft. Collins, CO
Nov. 5	Wyoming*	Laramie, WY
NOV. 10	UTAH*	7:00PM, JOHNSON CENTER SOUTH
NOV. 11	BRIGHAM YOUNG*	7:00PM, JOHNSON CENTER SOUTH
NOV. 16	NMSU*	7:00PM, JOHNSON CENTER SOUTH
Nov. 18-19	Volleyball Monthly Invite (Cal Poly SLO,Iowa,TX,UNM)	San Luis Obispo, CA
Dec. 1-3	NCAA First Round	Lexington, KY
Dec. 8-10	NCAA Regionals	TBA
Dec. 15-17	NCAA Final Four	Minneapolis, MN

Home Games in CAPS

*High Country Athletic Conference Match

Opponent	Results	Date	Location
U. of Toledo	Win 3-0	9-8-88	Memphis, TN
	Game scores: 15-10, 15-10, 16-14		
Clemson	Win 3-0	9-8-88	Memphis, TN
	Game scores: 15- 6, 15- 2, 15- 0		
U. of Alabama-Birm	Win 3-0	9-9-88	Memphis, TN
	Game scores: 15-10, 15- 7, 15- 9		
Valarpraiso	Win 3-0	9-9-88	Memphis, TN
	Game scores: 15- 5, 15- 5, 15- 2		
Memphis St.	Win 3-0	9-10-88	Memphis, TX
	Game scores: 15- 7, 15- 2, 15- 5		
Fresno St.	Win 3-1	9-10-88	Memphis, TN
	Game scores: 12-15, 15- 7, 15-12, 15-10		
Memphis State	Win 3-0	9-16-88	Boulder, CO
	Game scores: 16-14, 15- 8, 15-11		
Virginia Tech	Win 3-0	9-16-88	Boulder, CO
	Game scores: 15- 6, 15- 3, 15-13		
U. of Wyoming	Win 3-0	9-17-88	Boulder, CO
	Game scores: 15- 7, 15- 9, 15- 8		
U. of Colorado	Win 3-2	9-17-88	Boulder, CO
	Game scores: 6-15, 15- 2, 11-15, 15- 0, 15- 7		
U. of Colorado	Win 3-1	9-23-88	Albuquerque, NM
	Game scores: 9-15, 15- 7, 15- 4, 15-10		
U. of Texas-El Paso	Win 3-0	9-24-88	Albuquerque, NM
	Game scores: 15- 7, 15-10, 15-12		
U. of Houston	Win 3-0	9-24-88	Albuquerque, NM
	Game scores: 15- 8, 15-13, 15- 4		
Southern Utah State	Win 3-1	10-3-88	Albuquerque, NM
	Game scores: 15- 4, 12-15, 15-10, 15- 4		
U. of Wyoming	Win 3-0	10-7-88	Albuquerque, NM
	Game scores: 15-11, 15- 9, 15- 6		
Colorado State Univ.	Loss 1-3	10-8-88	Albuquerque, NM
	Game scores: 11-15, 15-13, 12-15, 8-15		
New Mexico State	Win 3-2	10-13-88	Las Cruces, NM
	Game scores: 15-10, 10-15, 15-10, 12-15, 15- 6		
U. of Texas-El Paso	Win 3-0	10-14-88	El Paso, TX
	Game scores: 15- 6, 15- 8, 15-13		
Utah State	Win 3-0	10-15-88	Albuquerque, NM
	Game scores: 15- 3, 15-12, 15-12		
Brigham Young	Win 3-2	10-20-88	Provo, UT
	Game scores: 15-13, 9-15, 7-15, 15-12, 15- 5		
U. of Utah	Win 3-0	10-21-88	Salt Lake City, UT
	Game scores: 15- 3, 15-10, 15- 4		
Utah State Univ.	Win 3-1	10-22-88	Logan, UT
	Game scores: 10-15, 15- 5, 15- 7, 15- 6		
Colorado St.	Loss 1-3	11-4-88	Ft. Collins, CO
	Game scores: 8-15, 15-11, 9-15, 6-15		
Wyoming	Win 3-1	11-5-88	Laramie, WY
	Game scores: 2-15, 15- 5, 15-13, 15-11		
Univ. of Utah	Win 3-1	11-10-88	Albuquerque, NM
	Game scores: 7-15, 15-10, 15- 9, 15- 9		

denotes Conference Match.

0086

Opponent	Results	Date	Location
* Brigham Young Univ.	Win 3-2	11-12-88	Albuquerque, NM
	Game scores: 11-15, 13-15, 15- 8, 15-10, 15-10		
* New Mexico St.	Win 3-0	11-16-88	Albuq, NM
	Game scores: 15- 6, 15- 9, 15- 9		
Univ. of Texas	Loss 0-3	11-18-88	San Luis Obispo, CA
	Game scores: 7-15, 7-15, 2-15		
Univ. of Iowa	Loss 2-3	11-19-88	San Luis Obispo, CA
	Game scores: 11-15, 15-11, 15-11, 16-18, 6-15		
U of Kentucky	Loss 2-3	12-3-88	Lexington, KY
	Game scores: 14-16, 1-15, 15-12, 15- 9, 9-15		

* denotes Conference Match.
RECORD ---- Overall -- 25- 5
- Conference -- 10- 2

July 1, 1988 - June 30, 1989

George Anselevicius, Dean

Stephen Dent, Chair, Architecture

Richard Anderson, Chair, Community & Regional Planning

FROM THE DEAN (this has been taken from our '89
Newsletter)

The first Newsletter of the School of Architecture and Planning was published in Fall 1983, two years after I joined the School as Dean, and it has helped us to keep in touch with our alumni(ae) which now numbers around 700. This is therefore the seventh newsletter and much has changed at the School since the first one was published.

Let me describe some of the changes and developments since 1983. Four new full-time faculty positions were added, two in architecture and two in planning, and in 89/90 we will be advertising for three tenure-line faculty positions in architecture, which will include a Structures position to teach this subject matter within our own faculty. Dean Robert Cohlmeier retired, and Associate Professor Stephen Dent has been appointed Associate Dean, starting in Fall 89 after Associate Professor Nicholas Markovich left at the end of the 88/89 academic year.

Three annual publications were established, the

0033 NEWS, which you are now reading and which is somewhat late this year, MASS, a Journal of opinion, and PORTFOLIO, the work of students. The lecture series, generally ten per semester, has brought over 140 important architects, planners and landscape architects to Albuquerque since 1983, and an exhibition program permits us to have 2-3 exhibits at the School every semester. Without the support of the "Friends of the School", organized in 1982, none of the above would have been possible.

The Architecture program received continued national accreditation and good reports from the Accreditation Board. The Planning program achieved national accreditation for the first time, with a laudatory report, which was an important achievement for a comparatively new program. Of course one is never satisfied with the curricula and committees are ever hard at work, adjusting and developing our programs, and integrating many new courses which we have established into the curricula. We now offer 5-6 Continuing Education courses per semester, which are useful both to our students and to local professionals.

Grants and Awards to faculty and students have increased markedly over the last years, as you can see from our newsletters. The Design and Planning Assistance Center continues to offer assistance to underprivileged groups. Despite the fact that the VISTA

program, which brought us many architecture graduates from all over the country, was discontinued by the government, just about when I arrived, the slack has been taken up since then by our own students.

During the last four years we have started a summer program with the general subject and title: "Genesis of Form." It has been held to date in New Mexico, Siena, Italy and San Miguel de Allende Mexico (more about that later), and we intend to continue this effort in the years ahead.

In 1983 we established a program bringing distinguished foreign architects to teach in a graduate design studio. Architects from Spain, Switzerland, England, Finland, Germany, Israel and India have been here and have taught and lectured.

As to our physical facilities, we have not yet achieved our long-range goal in getting an Iron clad promise for a new building on the campus but we are working on this issue. We have increased our space by about 75% by occupying a building across Stanford. We have, and will be remodelling, much of our existing space. Some of this remodelling at a cost of over \$300,000 was to occur during the summer of 1989, but for a number of reasons had to be postponed until the summer of 90. Still, the School is full and to provide more space for students we are now looking for additional space.

0100 As part of our facilities we established a Resource Center in the lower level of the School (a euphemism for basement). It now carries 1500 basic books and is a useful addition to the library which, as you well know, is located in the College of Fine Arts. We open the Resource Center only in the afternoons, as there is some shortage of staff, but it has become an extremely useful component of our facilities. Our comparatively new computer facility was completely remodelled in conjunction with the UNM Computer Information Resources and Technology Center. We now have 22 stations available to our students and we are continuing to buy appropriate hardware (generally McIntosh computers) and appropriate software. The Computer "Pod" is always well-attended, which shows our students' interest in these new tools. We are experimenting with bringing computers closer to specific studios, where they are to be integrated as a creative design tool. These are some of the many changes and developments that have occurred since our first Newsletter. These achievements are due to our fine faculty, the student body and the staff of the School. I am deeply thankful to all.

The University as a whole has gone through some difficult moments in search for stability. I have now served under at least three Vice Presidents for Academic Affairs and one Provost, and under four Presidents. In 89/90 the University will again be searching for a new

President and a Vice President for Academic Affairs. I am sure that the School will continue its good relations with the University Administration, which on the whole has been responsive to our needs and has assigned budgets to the School which made many of the changes possible. Yet without money from the Friends organization, we would not be where we are today.

I have now lived nine years in Albuquerque, and as one gets older time seems to pass even faster. While in some ways I consider myself a newcomer to New Mexico, I am now the Dean with the longest tenure at the University (except the Dean of the Medical School.) Strange, but true!

I still continue to be director of the "Professional Seminar Consultants" architecture program sending architects, planners and landscape architects as leaders of professional educational tours to foreign countries. I personally have led tours to the USSR, and have visited China. I have sent others to Spain, Greece, the USSR and China. I continue to do some consulting, serve on award committees and am on the Board of the Albuquerque AIA. As some of you may know, I was honored by the AIA and became a Fellow based on my achievements both as architect and educator.

I have had to close my architecture practice in St. Louis, which I established when I was the Dean of the School of Architecture at Washington University, and

which was run by my partner William Rupe. It was simply too difficult to have a practice so far away even if I lately acted essentially as a consultant. In many ways I miss doing architecture, as in most of my professional life I tried to balance the demands of practice, teaching and administering. This has never been easy. However administration has never been enough for me, so I do continue to teach a graduate design studio here.

The summer of 89 has been a busy one for me. I organized a 5-week summer "Genesis of Form" workshop during July and August in San Miguel de Allende Mexico, one of the most beautiful colonial towns in that country. I know it well as my wife, a well known tapestry designer, has a studio there where she is working on large tapestries.

I invited Charles Moore, now teaching in Texas, and Jerzy Soltan, Professor Emeritus from Harvard to be part of the "Genesis of Form" program, and Ricardo Legorreta, who I believe is Mexico's best architect, came to San Miguel and lectured. I too taught in the program and Edward Norris, director of DPAC, coordinated the workshop and taught as well. Sixteen students joined us, ten from our School and six from other schools in the USA. The program was a great success and students were extremely pleased. It kept me busy much of the summer and is one of the reasons the Newsletter is somewhat late.

We expect to offer "Genesis of Form-Mexico" in San Miguel de Allende again in the summer of 90.

One of its attractions was that it was held in one of the most beautiful buildings in San Miguel, an old convent, with a wonderful large courtyard. It is now the "Bellas Artes" school supported by the Mexican government.

I have re-read a statement I made in our first Newsletter and hope you do not mind if I repeat it here:

"As an Architect, Educator, and newcomer to New Mexico I am struck by our regional realities which have universal applications: the very special quality of light, epic dimensions and scale, and subtle colors, abundant sunshine scarcity of water, powerfully dominate our environment. Crosscultural currents bring both richness and conflict. All this demands resource conscious approaches and ethnic/cultural scrutiny." This statement seems to me as true today as when I wrote it in 1983, and one tries to respond to these awesome conditions.

I hope and believe that we at the School of Architecture can play a part in the struggle to make a sensible and sensitive human-made environment in harmony with nature. For some of this we need not only ideas and ideals, but also resources, to publish, to bring far-sighted professionals to New Mexico, and to support our students. I am sorry if I sound like a broken

record, but I hope that those who have not yet joined the Friends will do so in the coming year.

To those who have already joined I send my heartfelt thanks, however let me reassure you that as an alumnus(a) we want to keep in contact with you and you will continue to receive all our publications, such as this Newsletter, whether you join the Friends or not.

Best regards from Albuquerque, the blue skies and the Sandias.

George Anselevicius, FAIA, Dean

PROGRAMS AND COURSES

The Architecture Curriculum

The Curriculum Committee of the School of Architecture (Prof. Dent, Chair) met only during the Fall semester of 1988 due to the time-consuming efforts of all committee members on the Faculty Search Committee during the Spring semester of '89. Three major issues were addressed and several resolved. First, a discussion about major changes in the curriculum was begun and will continue in 89/90. The new faculty positions created through retirements and moves creates a great opportunity for the School and must be acted upon with care and introspection.

The primary charge of the Curriculum Committee for 89/90 (Prof. Cherry, Chair) will be to address the

overall curriculum with the intent of setting out any major changes before the Spring faculty searches begin. A third architecture history course, taught by Prof. Mead, is now in place and required of undergraduates. Also, many courses were re-numbered or given permanent course names for the first time. This creates an overall numerical structure for all courses and puts many courses in the graduate catalog for the first time.

Community and Regional Planning
Curriculum

There were few changes in the planning curriculum except for those in the landscape architecture option, under the direction of Baker Morrow. In this track students are now allowed to substitute CRP 402, urban design studio, for CRP 520, advanced planning studio, and Architecture 562, methods of site analysis, for CRP 512, planning analysis and forecasting. With the added changes the landscape architecture option now requires 52 hours of work.

Continuing Education Courses

This special program offers five to six courses each semester to both professionals and to our students. They are offered jointly with the Division of Continuing Education.

Fall 88

Furniture Design -- Instructor, Nicholas Markovich
History of Southwest Architecture -- Instructor, Michel

Presentation Techniques for Architecture -- Instructor,
Mark Eshelman

Real Estate Development Process -- Instructor, Gregory
Polk

City Planning Development Process -- Instructor, Sheryl
Azar

Spring 89

Legal Issues In Architecture -- Instructor, Stanley
Sager

Architectural Criticism and Writing -- Instructor, V.B.
Price

Commercial Interiors -- Instructors, Chris Calott and
John Bess

Architectural Photography -- Instructor, Kirk Gittings

Environmental Planning -- Instructor, W. Paul Robinson

Regional Architecture and Historic Preservation Courses

The School has initiated a series of courses on regional architecture and historic preservation to be offered in a two year rotation. These will be partially funded by the Historic Preservation Division of the New Mexico office of Cultural Affairs. The first course, "The History of New Mexico Architecture" was taught in Spring 1989 by architectural historian Chris Wilson. Other courses will include: "Introduction to Historic Preservation", "Historic Building Survey and Research Methods," and "Historic Preservation Internship."

San Miguel de Allende

A special five week program "Genesis of Form" was offered in San Miguel de Allende in Mexico during July and August 1989. Instructors included Charles Moore, Jerzy Soltan, from Harvard, Ricardo Legorreta, from Mexico City, Edward Norris, director of D.P.A.C., who coordinated the program. Sixteen students attended, ten from UNM and six from other schools in the U.S.A. The program included travel to other cities in Mexico, short projects, sketching, lectures and discussions. It was a success and it is expected that this program will be repeated in summer 1990.

Santa Fe

For the first time a planning course was offered at the UNM Center for Graduate Studies in Santa Fe during summer 1989. The course: "Land Development Economics" was taught by Associate Professor William Siembieda.

Albuquerque

The following courses were offered at the School during Summer 1989: 1) D.P.A.C. Studio (Borbas & Norris); 2) Architecture 104 (Markovich); 3) Planning Graphics (Borbas); and 4), Architectural Graphics (Callot & Devereux.)

CONFERENCES AND WORKSHOPS

Pueblo Style and Regional Architecture: The Mystique of New Mexico

0103 This important conference was held October 1-4 at the La Posada Hotel in Albuquerque.

The keynote address was given by Professor Amos Rapoport of the University of Wisconsin-Milwaukee. Over 30 papers by academics from 15 universities were read and discussed. They will be published as a book by Nostrand Reinhold later in 1989. The Conference was well attended by over 150 people and was rated as very successful. Project director was Professor Wolfgang F.E. Preiser, exhibit coordinator was Associate Professor Nicholas C. Markovich and symposium coordinator was Professor Fred G. Sturm.

Community Land Trust Conference

The School of Architecture and Planning was one of the sponsors of the community land trust conference held in Albuquerque in April, 1989. The conference dealt with such issues as community land trusts interaction with development corporation, state and city agencies, financial institutions and local communities. Among the speakers was Joan Forester Sprague, architect and consultant from Boston.

Architecture and Children Workshop

This 3 1/2 day interdisciplinary workshop was offered in March 1988. Organized by Professor Anne Taylor, its mission was to help teachers and designers to teach children to use the built environment as a way of helping them to understand the world around them.

This was not to be a new subject but a way of
Integrating math, physical sciences, social studies and
art.

0100

COMMUNITY

The Design and Planning Assistance Center (DPAC)

Twenty years after its founding, DPAC continues as the community service arm of the School of Architecture and Planning. Under the direction of faculty member Edward B. Norris, students of Architecture and Planning provide service to low-income families, community groups, non-profit organizations and rural communities throughout the State of New Mexico, northeastern Arizona and to rural groups in Mexico.

Projects for the Fall semester included: Community Development for Mora, support for Womens' Housing Coalition of Albuquerque, a Cultural Center for Grants, Reconstruction studies for the YWCA Camp at Tijeras, Conference Center Design for Mora, and Site Planning and Design for San Jose Church in Albuquerque.

During the Spring semester, students worked on: Rodeo Facilities for Grants and Milan, additions to San Jose Church in Albuquerque, a shopping center for Ramah, Head Start additions at Santa Ana Pueblo, Landscape Design for Mount Calvary Cemetery in Albuquerque, a solar addition in Los Abeytas, a cabin in the Jemez mountains, handicapped housing study in the South Valley and planning studies for the communities of Amalia and

0110 Anthony. Also, a baseball field layout for Zia Pueblo.

Summer semester projects included: Monument design for the Sangre de Cristo Land Grant, playground design for Zuni Pueblo, east mountain area study for Bernalillo County, community facilities for Mora County, land use planning for Placitas, building re-use studies for Anthony, Interior design for Adelanta Rehabilitation Center in Albuquerque, housing modules for the Forest Service, plaza design at Espanola and presentation models for Taos.

Construction of the Rural Demonstration Project in Chiapas, Mexico proceeds slowly due to the economic crisis. Sr. Adid Gonzalez Blanco, project director, informed DPAC that funding has been received from the National Association of the Partners of the Alliance, in Washington, D.C., to support crop experimentation and for basic farm implements and tools. The DPAC Demonstration House, "Casa Ecologica", at Suchiapa should be completed this year.

Women's Housing Coalition

The Women's Housing Coalition (WHC), formed to serve the housing, job and training needs of low-income, single women in and around Albuquerque, received funding for its Housing Management Enterprise in October 1988 from Levi Strauss. The WHC is a project of the Design and Planning Assistance Center of UNM's School of Architecture and Planning, with Judy Ricci as director

and with Joan Forester Sprague, architect from Boston, as consultant. The Coalition will create skill training, job and entrepreneurship opportunities in housing management and maintenance for women, while currently reclaiming under-utilized and vacant housing for single parents and welfare recipients.

Community Planning Studies

Graduate planning students developed projects under the direction of Paul Lusk and Marie Varela as part of the Comprehensive plan for Mora County, and graduate architecture students worked with Paul Lusk, Don Schlegel and Steve Borbas on urban design projects in the Madden/Martineztown area.

ACTIVITIES

Monday Lecture Series

The following 19 lectures were given during 88/89. The lectures were supported by the Friends of the School of Architecture and Planning, the University of New Mexico Foundation, the University of New Mexico Centennial Committee, by the Albuquerque, the Santa Fe, and the Southern New Mexico Chapters of the AIA, and by the New Mexico Society of Architects.

Fall 1988

Sim Van der Ryn, Architect, Ecological Designer,
Professor, University of California: "What
Architects Leave Out"

0112

David Lewis, Architect, Urban Designer, Planner,

Pittsburgh: "British and U.S. Cities, Making
Democracy Work"

Judith Chafee, Architect, Educator, Tucson, Arizona:

"Points of Departure, Sources and Evolution of
Architectural Ideas"

Hanno Weber, Architect, Chicago: "A Dialogue with
Context"

Peter McCleary, Professor of Architecture, University of

Pennsylvania: "A Technological Critique of Lou
Kahn's Kimbell Museum"

Martin Price, Professor of Architecture, University of

Texas, Arlington: "For a Landscape, Groundscape
Architecture"

Philip Herr, Architect, Planner, Educator, MIT:

"Building the Vision, Town Plans and Architects'
Designs"

Romaldo Giurgola, Architect, New York: "Recent Work"

Spring 1989

Kenneth Frampton, Historian, Chairman Department of

Architecture, Columbia University: "Avant Garde
and Continuity", (a UNM Centennial speaker)

Lars Lerup, Professor of Architecture, University of

California Berkeley: "At the End of the
Architectural Promenade"

Anatole Senkevich, Jr., Historian, Professor of

Architecture, University of Michigan: "Soviet

Avant Garde Architecture In the Twenties and Its ⁰¹¹³
Current Echoes"

John Pastier, Architecture and Urban Design Critic, Los Angeles: "Las Vegas, Growth and Pragmatism"

Livio Dimitriu, Professor, Director, Building Design Program, Columbia University, Pratt Institute: "Recent Projects, Landscape vs. Cityscape"

Anant Raje, Architect, Educator, Ahmedabad, India: "Recent Architecture In India"

Jean-Louis Bourgois, Historian, and Carollee Pelos, Photographer: "Magnificent Mud, Earthen Architecture from Mauritania to Afghanistan"

Grady Clay, Journalist, Louisville: "Ephemeral Places"

Stefanos Polyzoïdes, Associate Professor of Architecture, University of Southern California, Partner Debretteville and Polyzoïdes: "Architecture without 'ISMS'"

William Turnbull, Jr., Architect, San Francisco: "Buildings In the Landscape"

Exhibits

Exhibits were sponsored by the Friends of the School of Architecture and Planning, and by the University of New Mexico Centennial Committee.

Fall 1988

September 12 - October 7 -- "Inhabited Landscapes"

October 10 - November 11 -- "Pueblo Style & Regional Architecture"

0114 November 14 - December 14 -- "Neutra: Traveling

Sketches"

Spring 1989

January 23 - February 17 -- UNM Centennial Exhibit:

Architecture at the University of New Mexico

February 20 - March 17 -- "Thirty-five Years of Design
on the Land,

The Work of Sasaki Associates"

March 20 - April 21 -- "Romanesque Cistercian Abbeys of
France"

April 25 - Summer -- Student Work

Other Lectures

Important lectures, beyond the Monday night series were given at the School, generally at noon time. Among others were the following:

Sam Balen, executive director of the National Council of Architectural Registration Boards (NCARB) spoke on Architectural Programs (IDP). His visit is by now an annual event.

Helmut Borchardt, architect and educator from West Germany, gave a lecture on "New Museums in West Germany."

The Fourth Annual Convocation

The Annual Convocation, honoring graduating students of the School, now a tradition, was held for the first time in Keller Hall, which was filled with parents, relatives and friends of those graduating.

After a few introductory remarks by Dean Anselevicius, 0115
degree recipients, as well as all student awards, were
announced. The main address was given by Albuquerque's
distinguished architect, Antoine Predock.

Publications

MASS

MASS is the Journal of the School of Architecture
and Planning and is the production of the students and
faculty of the School. It reaches about 3,000
individuals, practicing architects, professionals,
community members, and is sent to universities in this
country and abroad.

The latest MASS had as its theme "Urbanity", and
included the following articles:

"Nurturing Urbanity" by George Anselevicius; "The
Tall building Humanistically Reconsidered," by Moshe
Safdie; "Urbanity in China," by James Richardson;
"Reconstruction: Deconstruction" by Steve Yates; "Walls
and Gates," by William J. Siembleda; and "Chain Link
Fences," by Ramsey Rose.

Editor and graphic layout in MASS: Cynthia
Figueroa-McInteer; Editing assistance by Leslie Campbell
and Mickey Holmes; Faculty advisor, Dorothy Dyer.

Portfolio

The second issue of "Portfolio", the design and
graphic work of architecture students, was published.
Editor was Edmund A. Boniface; photography, Edmund A.

0115 Boniface and Anthony Richardson. Special thanks went to Suzanne Watson and Kramer Woodard for their assistance.

Its contents included work of students from different years, independent study, thesis and sketches of the "Genesis of Form" program in New Mexico.

GRANTS/AWARDS

ACSA Case Study Grant -- Adjunct Associate Professor Min Kantrowitz and Associate Professor Stephen Dent received a grant of \$12,000 from the ACSA and the U.S. Department of Energy to develop curriculum materials integrating design and energy concerns using a built project as a case study. They chose La Luz del Sol by developer Ray Graham and Architect H. Barker. La Luz del Sol was selected because of its environmental sensitivity, regional style and climate responsiveness, and the availability of adjacent undeveloped land.

New Mexico Energy, Minerals and Natural Resources Department Grant -- Associate Professor Steven Dent received a grant of \$92,890 for an energy conscious remodeling of the Architecture Annex (formerly the TAC building). The design, developed by Professor Dent with assistance of graduate student Jorge Burbano and Sam Pellisier, would totally reorganize the interior of the building and adjust some exterior elements such as the entrance and the south elevation. A private patio would also be created. If all aspects of the remodeling were implemented the building would use about 70% less energy

and provide a much higher quality environment. For 0117 completion, additional funding from the University will be required.

ACSA Research Grant -- Professor Wolfgang Preiser, Ph.D. was awarded a \$5000 grant by the American Institute of Architects/ Association of Collegiate Schools of Architecture Research Council to undertake a survey of architectural research in the schools of architecture.

H.U.D. Grant -- In April, Professor Ric Richardson was notified by HUD that his application for funds to support students in the Community and Regional Planning Program had been approved. This prestigious program allows qualified students to undertake graduate studies in planning and to serve an internship with a local public agency. Under the grant, the Planning Program has received funding to fully support three students. The grant enables the Planning Program to actively recruit economically disadvantaged and minority students who otherwise could not afford the opportunity to attend graduate school.

The grant is for \$66,240.

Levi Strauss Grant -- A grant of \$75,000 by the Levi Strauss Foundation was made to the Design and Planning Assistance Center (DPAC) of the School to serve the housing, job and training needs of low income single women. Twenty-three women participated in a training

program and nineteen have secured employment due to their newly acquired property maintenance skills. Joan Sprague, architect and planner of Boston, who is a consultant to the project was greatly instrumental in bringing this grant to the School. Judy Ricci is director of the program.

Ford Foundation Grant -- In the fall of 1988 Assistant Professor Richardson was awarded a grant from the Ford Foundation to evaluate an economic development program being carried out by the Rocky Mountain Institute, consisting of a series of eight workshops designed to build community leadership, assess the business environment, create ideas about economic development and implement specific projects.

Professors Richardson and Siembleda are working together to provide the evaluation in two components: First, an economic base analysis of the area, and secondly, a study of citizen attitudes. The research, which will span the next two years, will be useful in identifying methods to encourage and implement broad local participation in rural economic development.

FACULTY

Faculty Seminars

Informal faculty seminars are held during evenings at the homes of various faculty members. These included "Designing and Planning Affordable Housing" with guests

Joan Forester Sprague, architectural consultant from **0119**
Boston and Michael Passi, director of Planning and
Research, Department of Human Services, Albuquerque.
"Aesthetics", a dialogue with an artist and a
philosopher, with guests Youn Ja, artist and poet, and
Ted Storm, professor at the Department of Philosophy at
UNM. Assistant Professor Claudia Isaac spoke on
"Village Planning in Mexico" and Professor Don Schlegel
on "Architecture in Hawaii".

New Faculty

The following faculty members were appointed at the
end of the academic year 88/89 and will start their
duties in 89/90:

Assistant Professor Michael Borowski has joined us
after an extensive national search. He will be offering
courses in construction technology as well as teaching a
design studio, where he will emphasize the role of
building construction materials and methods on the
generation of architectural form and ideas. He
completed his undergraduate work at the University of
Illinois and received his Master of Architecture from
Harvard University. Previously, he has taught at
Arizona State University and the Art Institute of
Chicago. He is a licensed architect with more than ten
years of work experience with the Chicago architectural
firms of Jack Train Associates and Skidmore, Owings &
Merrill. He has also worked in London, England for

0120 Tegglin & Taylor, Architects and in Stockholm, Sweden for
Jan/Ralf Studio.

Visiting Assistant Professor Stephen Schreiber has joined the school and will be teaching the second year design studio and a seminar on architectural graphics. Schreiber has taught previously at the University of Miami. In 1987, the School of Architecture, at the University of Miami, awarded him the Wilkins Award for Outstanding Teaching. He is a graduate of Dartmouth College and the Harvard University Graduate School of Design. As a practicing architect, he has supervised the design and construction of numerous housing and commercial projects. His design work has been published in "Architecture" magazine and other journals.

Golden E. Lane Jr. will join the faculty on a part-time basis to teach all the required structures courses and consult in studios. He received his Ph.D. in Civil Engineering from UNM, has been teaching in the Civil Engineering Department at UNM and has done research in a variety of areas. He now has his own firm as a Consultant Structural Engineer.

Full Time Faculty

Associate Professor Richard Anderson continued as the Director of our Planning Program. He has devoted most of his research and creative energies to Spanish, urban simulation, and Mexico. He received a visiting lectureship to the Instituto de Ingeniería y Arquitectura

de la Universidad Autonoma de la Ciudad Juarez for the ⁰¹²¹ summer. He lectured on his work on India and Egypt and worked with the Community Land Use Game. The game has been translated into Spanish and played several times with the planning students at the Instituto. He later presented his research at the ACSF meeting in Portland, Oregon.

Other activities included four lectures to various civic groups in Albuquerque through the UNM speakers' bureau and co-directing two seminar-workshops with Professor Richardson. One focused on planning and development issues in Albuquerque for the Albuquerque Chamber of Commerce. The other discussed regional specializations within the School of Architecture for Central American students in the LAPE program. He also presented a brief lecture (in Spanish) discussing the use of operational gaming in urban planning to visiting dignitaries taking part in the UNM Centennial celebration.

Visiting Assistant Professor Steve Borbas taught in the 401 Design Studio, and the 402 Urban Design Studio. He organized the Socorro Urban Design Workshop to develop the City's main plaza, and in the course Urban Design Concepts and Methods lectured about the history, elements, techniques and implementation of Urban Design projects. He also taught graphic skills to planning students. He was a finalist in the Nob Hill Gateway

01.22 competition, and continued his consulting on urban design projects.

Associate Professor Edith Cherry was selected to receive one of this year's New Mexico Heritage Preservation Awards for outstanding service to preservation efforts in New Mexico as an architect, teacher, and past member of the Cultural Properties Review Committee. Her firm (Cherry/See Architects) received a TACA (the Albuquerque Conservation Association) award along with Southwest Land Research for the Northwest Mesa Escarpment Plan. Professor Cherry continues to teach architectural programming and design studio. Last fall her graduate studio produced designs for a futuristic city near Albuquerque. The ideas are documented in a publication entitled "Pueblo Puerco 2020 AD". Professor Cherry will serve next year as the School's representative to the UNM Faculty Senate.

Associate Professor Stephen D. Dent, through a contract with the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD) prepared an energy conscious redesign of the Architecture Annex with the assistance of graduate students Sam Pellisier and Jorge Burbano. A proposal for funding the remodeling is currently being considered by EMNRD.

In collaboration with Min Kantrowitz, Professor Dent received a \$12,000 grant from the Association of

Collegiate Schools of Architecture for developing and testing a Case Study based syllabus for the design studio. The project selected was H. Barker's La Luz del Sol for developer Ray Graham. The case study was the basis for the Spring NAG studio taught by Dent and Kantrowitz.

He continued to teach design studio and energy related courses, was chairman of the Curriculum Committee, coordinator of the graduate emphasis in Energy Conscious Design, and completed four years as Faculty Senator. He continues his outside architectural practice and consulting on energy and daylighting.

Assistant Professor Claudia Isaac has joined the full-time Planning faculty. She directed the establishment of a CRP concentration in the Latin American Studies program, and in related work has been developing curriculum in Latin American Planning, and in Gender and Economic Development. She has presented her continuing research on "Women's Production Cooperatives in Central Mexico" at the Pacific Sociological Association Meetings and at the Universidad Autonoma de Ciudad. Juarez (UAJ). This summer, she was conducting a module on "Establishing Urban Social Infrastructure in Rural Places" in an urban sociology seminar, also at UAJ.

Associate Professor Paul Lusk, in the Spring semester, coordinated interrelated planning and urban

design projects in two studios. In the graduate Advanced Planning Studio, student-selected urban design projects and buildings were developed for the Madden/Martineztown area with Don Schlegel and Steve Borbas, and in the Computer Aided Design studio with Dick Nordhaus. He also consulted on urban design and land design projects in the Rio Grande and Rio Puerco Valleys, and on community issues in the South Valley.

Assistant Dean and Associate Professor Nicholas C. Markovich co-hosted the Pueblo-Regional Style Conference at UNM and the 6th Annual Basic Design Conference in New Orleans. He was Co-Editor of the book "Pueblo Style and Regional Architecture", to be published by Van Nostrand Reinhold. He directed the School's Basic Design Program. It is our regret that he is leaving to take a position at Louisiana State University. We thank him for his fine efforts at our School and wish him the best of luck.

Professor Richard Nordhaus was invited in May 1989 by the French government to attend a two day conference in Paris as an international observer. The conference, Banlieues 89, received a six year program established by the President of France to address issues of suburbanization in the environs of Paris and several other large French cities. He was one of a group of eight invited foreign observers and the only American. The conference itself attracted over 1000 participants

from throughout France.

The Banlieues 89 program is a multi-year effort of a Mission reporting to President Mitterrand, established to address social, cultural, economic and aesthetic issues of suburban life, searching for new forms of urbanism that increase the vitality and identity of outlying districts as well as strengthening the sense of community within the city. The Mission has initiated and supported a wide range of urban interventions including urban planning and analysis, architectural compositions, cultural events, housing renewal and urban enhancement projects.

Professor Nordhaus continued to serve as the chair of the School's computing committee. The School and the Computing Center currently provide 22 workstations in two spaces, supporting introductory and advanced computer courses and a computer based design studio. Professor Nordhaus also completed a year as Chair of the University Computer Use Committee and as a member of the University's Computer Information Policy Board.

Lecturer Edward Norris continues as Director of the Design and Planning Assistance Center (DPAC). He also teaches courses in the Technology sequence and serves on various school committees and thesis and independent project committees in the graduate program. He is a board member of the Spanish Colonial Research Center, the Women's Housing Coalition, and serves on the Faculty

0125 Concilium of the Latin American Institute/UNM. He chairs the Community Development Committee of the New Mexico Partners of the Americas and is Editor of the Partners Quarterly "Noticias". He has been active in the City of Albuquerque's Housing Task Force during the past year. He was Coordinator of the school's summer program Genesis of Form/Mexico which was held in San Miguel, Guanajuato.

Professor Wolfgang F.E. Preiser received a citation in the 36th annual "Progressive Architecture" awards program for the book "Post-Occupancy Evaluation", jointly authored with Harvey Z. Rabinowitz of the University of Wisconsin and Edward T. White of Florida A&M University. He was made a Fellow of the Institute of Human Ecology. He has lectured in Sweden, the Netherlands and Ireland and was invited to lecture for three weeks at Belgrano University in Buenos Aires, Argentina where he conducted lectures, seminars and field research for graduate students and faculty on post-occupancy evaluation. He has done a worldwide survey of current Architectural Research and Publications at Schools of Architecture and Planning. He organized the Pueblo-Style and Regional Architecture Symposium at UNM. He continues to publish articles and chapters in many books and magazines, and is at work on a number of new books.

Assistant Professor James R. Richardson was

principal investigator on a research project funded by ⁰¹²⁷ the Ford Foundation to evaluate an economic development program being carried out by the Rocky Mountain Institute, and is working with Associate Professor William Siembleda on the project, which will span the next two years. He received funding from the Department of Housing and Urban Development for an Internship program that will provide full financial support for three minority and economically disadvantaged students in our Planning Program.

He led a group of architects on a study-tour of China last summer before beginning a consulting assignment in Arizona to organize and manage public participation in an environmental impact statement. Together with professor Greg Howell in the School of Engineering, he is working on a project to research development and construction disputes dynamics. Professor Richardson was nominated this spring for a University of New Mexico "Outstanding Teacher of the Year" award.

Professor Don Schlegel once again visited Hawaii, but this time he served as a consultant to the visiting accreditation team and reviewed the new proposal for a Doctoral Program as a professional degree at the School of Architecture, University of Hawaii.

During the past year, he continued to serve as Chairman of the New Mexico Board of Examiners for

0123 Architects and as a member of the Architectural

Registration Examination Building Design Committee for NCARB. As the School's ACSA councilor, he coordinated the western regional conference to be held in Albuquerque in September with guest speaker Robert Gutman, a field trip to Chaco Canyon, and a party at El Rancho Hotel in Gallup.

Associate Professor William J. Siembleda was re-elected to the Executive Committee of the Association of Collegiate Schools of Planning as the representative of the Southcentral Region. He has also published articles in the "Journal of Planning Education and Research", "MASS" magazine, and "Planning" magazine. He and Professor Richardson continue to work on their Ford Foundation funded evaluation of small-town economic development programs in Colorado. Professor Siembleda also gave invited lectures at the Conference on Border Development sponsored by the University of the City of Juarez; and on "Models of Planning Practice in the United States" to the Graduate Sociology Program of the University of Guadalajara.

Professor Anne Taylor is collaborating with Dr. James Wise, Barbara Wise and Architect George Vlastos to research and develop the Headstart Classroom of the Future through a grant from the U.S. Department of Education. She also developed the "Architecture and Children" program, a project of the School Zone

Institute and the American Institute of Architects. She and architect George Vlastos developed a design curriculum to teach architecture and design to children. In summer 1988 she trained 30 teachers as trainees in this program at the university of Washington and in summer 1989, 30 teachers from New Mexico in a week long seminar at our School.

Associate Professor Robert Walters continued his progressions of designs toward completion of work on a Graham Foundation Grant in Architecture. This project grant (from the Chicago-based Foundation) is a "monograph" entitled "Genesis of Form" and involved a search into abstractions to reach metamorphic transformation in composition and formalistic conclusions in architectural design. The intention is a series of graphic plates and writing for publication.

Walters (who had been a GI Bill "art student apprentice" of Orozco in Mexico City in 1948) said to see the Maestro's very emotional personal search in the last year of his life for mas alla (the beyond) was deeply moving because it brought on recollections of his own "youth" and all the grand plans which promised to be ahead...laid-out against the "realities" which finally dominate life. A sobering but not necessarily destructive consequence of Mexico. He is currently included in a large exhibition at the UNM Museum of Fine Arts called "Abstract Painting 1950's." This early fall

he presented one of the public lectures relative to "Abstract Expressionism in Post-War America."

Early in the calendar year of 1989 he held a one-man exhibition of paintings and drawings in a gallery in Albuquerque. These large oils on canvas, and black and white graphics were "expressionistic" works influenced by the power (he states) that comes from the "metaphysical darks" experienced in Spain during a sabbatical journey in 1986. Adding to those sources of imagery has been a more recent time in Morelia and Guadalajara, Mexico this past summer. While there, Walters studied the final studio works of the Mexican artist Jose Clemente Orozco, who died in 1949.

Visiting Assistant Professor Kramer Woodard completed his masters degree from Columbia University in New York, and returned to New Mexico to pursue his interests both in the education and practice of architecture. He writes that his position at the School has been a major force in his life and is an opportunity he cherishes. With regards to practice, three significant events have taken place over the year. An installation piece was built for Art Windows 66 (a juried exhibition), the thesis work he completed at Columbia was published in "Arte Costruita" (an international art and architectural magazine), and he opened a small studio on Lead Avenue. Currently, several houses are on the boards and construction should

commence in 1990.

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Part Time Faculty

Dorothy Dyer, faculty advisor to "MASS" Journal is a partner of "Urbanitas" (Dyer and Dyer). They have been working on a New Communities Study, Rio Puerco on the northwest mesa, and on the Corrales Village Center Project, the creation of a plaza for Corrales Center. They are beginning a study for the urban design of the Boston City Hall Plaza, its surroundings and connections.

Assistant Professor Theodore S. Jojola was selected to the Martin Luther King-Cesar Chavez-Rosa Parks Visiting Professorship at Northern Michigan University. The one week academic exchange was hosted by the Department of Geography & Planning. He worked as the Onsite Coordinator for a project funded by the US Department of Health & Human Services. Entitled "The Head Start Classroom of the Future", the project builds on previous research conducted by Dr. Jojola utilizing Macintosh technology with preschool children at the Pueblo of Isleta. The principal investigator of the project is Dr. Anne Taylor, who is on our faculty. His presentation entitled "Modernization & Pueblo Lifeways: Isleta Pueblo" appears as a chapter in "Pueblo Style & Regional Architecture", co-edited by Nicholas Markovich, Wolfgang Preiser and Fred Sturm and published by Van Nostrand Reinhold.

0132 Adjunct Associate Professor David Henkel visited Bangladesh twice in 1989 as part of a design team on higher agricultural education and rural development. He continues to teach courses in planning at the main campus and the UNM Graduate Center in Santa Fe, international management at UNM's Anderson Schools of Management, and has recently completed work on an economic base analysis for the village of Chama, New Mexico. Essays on socioeconomic aspects of the upper Rio Grande will be published as part of a larger collection sometime in 1990.

Adjunct Associate Professor Min Kantrowitz won a "Progressive Architecture" award this year for her work on Design Aesthetics and Postal Image for the U.S. Postal Service (with Jay Farbstein). This is her third PA award in the past four years. She served as a member of the Advisory Committee for the Rudy Bruner Award for Excellence in the Urban Environment. Ms. Kantrowitz, along with Steven Dent, received an ACSA grant for preparing a Building and Energy Case Study Syllabus; taught in the experimental Water Resource Administration graduate program; and was invited to present at the "Putting Water Planning into Planning" conference at Arizona State University. Ms. Kantrowitz coauthored three book chapters this year. She continues an active consulting practice with local, state and national clients.

Baker H. Morrow led a tour of landscape architects and planners to five cities in the USSR and met with the chief city architects of Moscow, Tbilisi, Sochi, Moscow and Leningrad. He is now finishing his new book on "Best Plants for New Mexico Gardens and Landscapes" and has signed a contract to edit Sir Richard Burton's "City of the Saints." His landscape firm received the Beautiful Albuquerque Award for Park Square and the Beautification Committee plaque for the renovation of St. Joseph's Square. He continues his work as government strategy advisor to the Society of Landscape Architects.

Adjunct Associate Professor Donald Peterson has continued as a senior advisor to the Albuquerque City Council on land use and legal matters, and drafted revisions to the new "Albuquerque/Bernalillo County Comprehension Plan", the "Southwest Area Plan", and numerous sector development plans; as well as a number of amendments of the City's Zoning Code. He is working on refinements to the City Charter amendments. He continues to serve on the Steering Committee for the City Development Process Manual. At the request of the APA Chapter, he made a presentation on land use law to help prepare candidates for the AICP examination.

Toby Pugh is a senior project manager in the firm of Flatow, Moore, Bryan, Shaffer and McCabe. He was responsible for large scale hotel projects in California

and Colorado and numerous commercial projects, as well as the completion of church projects in Socorro and Las Lunas. He is past president of the Albuquerque AIA chapter and is on the Board of the New Mexico Society of Architects.

V.B. Price continues as columnist for the "Albuquerque Tribune" and as architecture editor for "Artspace" magazine. He became a member of the Board of Directors of the New Mexico Architecture Foundation, and participated in the "Pueblo Style and Regional Architecture Symposium". He continues to teach in the UNM Honors Program, is drafting a book-length work of fiction and has completed a number of poems, some of which, as part of a collaborative exhibition "Chaco Body" with Kirk Gittings, were purchased by the Albuquerque Museum.

William Paul Robinson is Research Director of Southwest Research and Information Center, a community-oriented natural resource policy and analysis organization. In 1989, he was invited speaker on Solid Waste planning before the New Mexico Senate Judiciary Committee and Interim Legislative Committee on Environment, Land Use and Solid Waste. Since 1985, he has worked with the Northern New Mexico Water Project, a Ford Foundation-funded program, providing technical assistance and educational services to Hispanic and Indian communities of northern New Mexico. Recent

activities have addressed coal developments in San Juan County, National Forest roadbuilding in Sandoval County, and uranium-related research and development impacts in San Miguel County.

Adjunct Assistant Professor Chris Wilson teaches architectural history and historic preservation courses. He published "New Mexico Architecture in the Tradition of Romantic Reaction" in the December 1988 "Artspace", an article which will also appear in "Pueblo Style and Regional Architecture". He has a book, "Community and Continuity: the History, Architecture and Cultural Landscape of La Tierra Amarilla", coauthored with David Kammer of the English Department, due out from the state Historic Preservation Division and the Ancient City Press. He also serves on the mayor-appointed Lead/Coal Corridor Task Force.

STUDENTS

Student Statistics

Below are the number of students at the School in Fall 1988, as well as their ethnic and gender composition.

Undergraduate Architecture -- 146

Undergraduate Environmental Design -- 9

Graduate Architecture -- 99

Grad Community in Regional Planning -- 31

Total number of students -- 285

Foreign Student

5.6%

Native Americans

2%

Black 1%

Asian 5%

Hispanic 21%

Women 32%

Total student credit hours have increased considerably over the years. Graduate architecture credits in 82/83 were 606; in 87/88, they were 1,107. Undergraduate architecture credits were 4,263 in 82/83; in 87/88 they were 5,122. Total credit hours increased from 6,052 in 82/83 to 7,501 in 87/88.

The following students graduated in 88/89:
Bachelor of Arts in Architecture

Deborah Adams-Bowen
 Daniel Andrade
 Richard Aylward
 Albert Benavidez
 Barbara Bergmann
 Wesley Burgess
 Yolanda Campo
 Kevin Cantrell
 Michele Caruthers
 Jeffrey Chlavetta
 John Creamer
 Stephen Cummings
 Jon D'Andrea
 Patrick Garin
 Daniel Gates
 Patrick Gay
 Ted Grumblatt
 Michael Jones
 David Kress
 Steven Kuhn
 Franz Lee
 Armando Lopez
 Romeo Medina

Loren Miller
Russell Miller
Joanne Montague
Luella Noles
Flint Ogden
Vincent Payne
Francine Pilgreen
Todd Pilgreen
Hadrian Predock
Ruben Ramirez
John Rhinehart
James Sattler
Michael Smeltzer
Brandon Sprague
Samuel Sterling
Melissa Sunnygard
Raul Torres
James Visscher
Michael Wewerka
David Williams
Scott Wrasman

Bachelor of Arts in Environmental Design

Cynthia Dobson
Steve Peloquin

Master of Architecture

Thomas Barr (distinction)
Edmund Boniface (distinction)
Muklit Cheong
David Hrabel (distinction)
Peter Karsten (distinction)
Dong-Joon Kim
Scott Leonard
Rosemary Molnar
David Reddy (distinction)
Curtis Scharfenaker (distinction)

Master of Community and Regional Planning

Jacqueline Gullbault (dual degree with Public
Administration)
Marsha McMurray-Avila
Silvana Pena
Sally Van Etten

Dean's List

Margaret Agullar
Daniel Andrade
Helen Aragon
Linda Armstrong

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Timothy Asselin
Barbara Bergmann
Bart Bowen
Deborah Bowen
Gabriele Browne
Westley Burgess
William Calhoon
Lawrence Carabaja
John Creamer
Andres Cunningham
Cynthia Dobson
Andrew Dunn
Kerry Honsinger
David Kress
Peter Lagomarsino
Aurora Lujan
Kelly Mahan
Michael Mann
Daniel Monger
Daniel Mouk
Eran Montoya
Donna Otero
James Sattler
Tim Veitkamp
James Visscher
John Walker
Scott Wrasman
Robert Ybarra
Thomas Zavadii

Student Awards 88/89

The School is pleased to announce both national and "in house" awards:

National AIA Awards

Henry Adams Medal to the first ranked graduating Architecture graduate student, David Reddy.

Certificate of Merit to the second ranked graduating Architecture student, Thomas Barr.

Alpha Rho Chi Medal to the graduating Architecture student who has shown leadership, service and merit, Jorge Burbano.

Awards

To first-year undergraduate in Architecture, Craig Calvert (book); to second-year undergraduate in Architecture, David Abbott (\$150); to second-year undergraduate in Architecture, Kelly Mahan, (\$150); to third-year undergraduate in Architecture, Ken Ashe (\$150); to third-year undergraduate in Architecture, Albert Bustamante (\$150); to non-Architecture graduate, Steve Collins (\$150); to non-Architecture graduate Kay Schumacher (\$150); to fifth-year graduate in Architecture, Geoffrey Adams (\$300); to fifth-year graduate in Architecture, John Kirkpatrick (\$300).

To sixth-year graduate in Architecture, Edmund Boniface (\$300); to first-year graduate in Planning, Amy Shelhammer (\$300); to second-year graduate in Planning, Anne Lockhardt (\$300); to Planning student Susan Butler (\$300).

SCHOLARSHIPS AND AWARDS

La Cienega Prize (\$250) to an outstanding student in design: Curtis Scharfenaker.

Frontier Scholarship (\$500) to a fourth-year student: Joey Andrade.

Albuquerque AIA Chapter John Heimrich Scholarship (\$350) to a fifth-year Architecture student: John Kirkpatrick.

Santa Fe AIA Chapter John Gaw Meem Scholarship

0140 (\$350) for outstanding work in design: David Hrabal.

Lath and Plaster Industry Scholarship (\$350) to an undergraduate or graduate student with financial need and academic ability: Shan Jiang.

New Mexico Masonry Association Scholarship (\$100) to an undergraduate or graduate student with financial need and academic ability: Albert Diemer.

Graduate ACT Fellowship (\$7200) -- This fellowship is intended to increase UNM graduate enrollment of students from under represented groups: Loren Miller and Stephanie Willis.

American Association of University Women Educational Foundation Fellowship (\$6000) -- These fellowships are offered to women who have achieved high standards of academic excellence and show promise of distinction in their fields: Margaret Favour.

National AIA/AIA Foundation Scholarships (\$1500): Richard E. Rivera.

HUD Community Development Fellowships -- This program permits students in our Planning program to undertake graduate studies and serve an Internship with a local public agency. Awards are: a) tuition up to \$3,500 per annum; b) a work stipend of \$5,040 for 20 hours per week as an Intern; and, c) a stipend for books, conferences, and sponsored meetings up to \$1,5000 per annum. Students are eligible for two years of support: Milton Espino, Lucy Lopez and Robert Taylor.

Beijing Studio Scholarships -- Summer 1988. This studio in Beijing, China, taught by M.I.T. faculty and Assistant Professor Ric Richardson; and faculty from Quinghua University in Beijing brought together students from the US and China. Christopher Purvis received a teaching assistantship of \$3450 and Karen Hesse support from the local AIA, the School, the University and Quinghua University.

William Van Allen Competition -- The William Van Allen Memorial Fellowship sponsored its 17th annual international student design competition. The topic was the design of three monuments to replace the Washington Monument, the Eiffel Tower, and the Campanile of San Marcos. Two of our students received awards. Daniel J. Andrade received a first honorable mention (\$750), and Patrick N. Gay an honorable mention (\$200). 229 entries were received including 71 from the U.S.A. and 158 from foreign countries. A total of 16 awards were given.

Phi Kappa Phi Honor Society -- Three students of the School were initiated into the Phi Kappa Phi Honor Society, which recognizes their academic achievements. They were: Cynthia S. Dobson, Michael L. Jones and Gregory Kalso.

39th International Design Conference in Aspen.. Richard Rivera writes: "The Italian Manifesto: The Culture of Nine Hundred and Ninety-Nine Cities" was the title of this year's IDC held June 13-18 in Aspen,

Colorado. Featuring such notable Italian designers as Ettore Sottsass and Gianfranco Ferré, topics of discussion included architecture, industrial design, graphic design, fashion, art, history, politics and the culinary arts.

The most memorable speakers, whether Italian or not, represented that which is best in Italian design: commitment and energy. These speakers included Federico Zevi, a modern-day Italian guru whose insights into the culture were surprisingly candid and knowledgeably self-critical; Emilio Ambasz, whose works and thoughts consistently re-affirm his place among a handful of premier architects around the world; and Achille Castiglioni, whose multi-faceted personality and multi-media presentation of his product designs brought down the house.

Through the generous support of the National Endowment for the Arts and the Graham Foundation, four UNM-SAAP graduate students, Erik Burlingame, Mark DePree, Catherine Mullinax-Jones, and Richard Rivera, attended the conference as part of the ICS Student Fellowship Program.

Other Events

Beaux Arts Ball

A Beaux Arts Ball organized by the architecture students of the School was held in the La Posada de Albuquerque ballroom on February 17th, 1989, featuring

Linda Cotton and Streetlife. Masks were required, but
tails remained optional.

Student Noon Time Series

The student-organized noontime series continued with lectures and films. Among them were lectures given by Michel Pillet, Christopher Mead, Claudia Isaac, Bart Prince and Antoine Predock.

Conceptions Southwest

A number of projects by architecture students were shown in the Spring 89 issue of "Conceptions Southwest", a journal in literature and art published by the Student Publications Board at UNM. These were: Palazzo Ducale by Ruben Miguel Ramirez, Elementary School by Eric Neil Burlington, and Museum of Viking Heritage by Hadrian Predock.

OBITUARIES

The School notes with sadness the death of three friends and colleagues during the 89/90 academic year. They will be missed.

Harvey Hoshauer, a distinguished Albuquerque architect with a great number of friends at the School, both faculty and students. He participated in many student reviews and lectured at the School.

Professor William Gafford, who for over 35 years, with deep concern for his students, taught all the required structure courses in the School and consulted in many design studios.

Tina Taylor was on the staff of the School for five years. Her special efforts on behalf of the faculty was deeply appreciated and remembered.

FRIENDS

The Friends of the School of Architecture and Urban Planning continue as the essential support organization of the School. The total number of Friends currently numbers over 200. Without their support we would not be able to publish this Newsletter, MASS Journal and PORTFOLIO, the work of students. Nor could we offer student merit awards, help them in their travels, bring important lecturers and exhibits to Albuquerque and buy books for our Resource Center.

Our annual luncheon for the Friends is now a tradition. Last year we moved to an outdoor terrace at the Student Union Building. About 60 Friends attended and I gave a short talk about the School and its plans. A phonathon was again organized and resulted in a good number of new Friends. We have sent a letter to all our alumni(ae) who have not yet joined the Friends to do so. We have also contacted registered architects in New Mexico who are not alumni(ae) but can benefit from the School (especially those who live in Albuquerque) through our lectures, exhibits and evening courses.

* * * *

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COLLEGE OF ARTS AND SCIENCES

ANNUAL REPORT

July 1, 1988 - June 30, 1989

HOBSON WILDENTHAL, DEAN

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I. OVERVIEW

The 1988-89 academic year was one of steady progress in the College of Arts and Sciences, as advances were recorded in teaching, research and administrative structures and procedures. The College marked increases in student enrollments for 1988-89 (4% more than 1987-88) and in student credit hours (1% more than 1987-88). More significant than these trends, however, is the clear shift in the College's teaching efforts from lower-division courses (for which the student credit-hour count actually declined) to upper division and, even moreso, graduate instruction. Given the weighting attached to these three categories in the state funding formula the College recorded significant gains in this measure of productivity. Research activity funded by extra-mural agencies also showed a significant increase in 1988-89 over 1987-88, from \$8,383,000 to \$9,506,000.

The comprehensive report on scholarly achievements issued by the Vice President for Research details the truly impressive record of book and journal article publications by our faculty during this same period.

The ranks of College faculty increased by a net of 1 FTE as a result of actions during 1988-89 as 23 new faculty were hired for the 1989-90 academic year. Funds budgeted of the College were adequate to produce a 6.7% average increase salary for returning Arts and Sciences faculty members from 1988-89 to 1989-90. This increase follows upon a 7.7% figure for increases from 1987-88 to 1988-89. Unfortunately, as also was the case last year, no other component of the budget received appreciable help and the quality and productivity of College programs remain compromised by inadequate investments in graduate assistantships, supplies and expenses,

professional development and equipment. Likewise, shortages of classroom space and of offices and laboratories increasingly is also causing serious deterioration in the quality of our teaching and research activities.

II. ADMINISTRATION

In the College office the principal administrative changes involved the appointment of five new Associate Deans, Jean Civikly of Communication, Robert Fleming of English, Gordon Hodge of Psychology, MariLyn Salvador of Anthropology and Terry Yates of Biology. Concurrently, Associate Dean Julian (Bob) White assumed the new title of Vice Dean for Student Affairs. The Associate Deans were selected after a thorough intra-college search to assume 0.33 FTE academic-year appointments of 2-4 years duration. The concept of the newly construed Associate Deanships is to bring a cross-section of faculty experience and creativity into the College office for relative short appointment periods, so that the College administration is supplied with a steadily renewed infusion of ideas and energy and so that a significant number of faculty members will be exposed to supra-departmental administrative issues.

Major procedural issues addressed this year involved the allocation of the College's share of the funds generated by indirect costs and externally funded grants and contracts and the development of a document on College principles, policies and procedures on promotion and tenure.

After extensive discussions and considerations with the Departmental Chairpersons and, in turn, the faculty, the College implemented a new algorithm for the distribution of the 60% of generated indirect costs on research grants and contracts that is returned to it by the central

administration. In the previous distribution of this 60%, 20 went directly to the departments with which the faculty-members PI's are associated and the other 40 was retained by the College to fund several on-going entities such as the New Mexico Historical Review and the Institute of Meteoritics and also to fund "major" and "minor" one-time-cost projects.

In the new distribution plan, the College retains 35 of the 60%, the Departments are allocated 17.5 and the PI's are allocated 7.5. The rationale for this distribution plan is that of reinvesting resources in proven fertile ground and of providing reliably predictable incentives. The rationale and the detailed workings of the plan were distributed as an official College position paper.

Experience with promotion and tenure actions during Fall 1987 and Fall 1988 revealed the need for a new and comprehensive document which expressed the College consensus on the underlying principles of promotion and tenure, on the policies with which these principles are implemented and on the operational procedures through which decisions are reached in this realm. An ad hoc committee was formed to work on this project under the leadership of Jan Roebuck of History (see Table 2). Working with a sketch of a possible document provided by the College office, the Committee produced a draft document that constitutes a significant advance over what was previously available for the guidance and information of both Departments and individual faculty members. The so-called P³ draft will be submitted to the Departmental faculties for review and comment prior to be edited into a final document which will be submitted to the faculty for approval.

At the level of Departmental administration, Ron Cummings assumed responsibility as Chairperson of Economics and Frank Gilfeather as

Chairperson of Mathematics and Statistics. Paul Hain, Chairperson of Political Science announced his resignation in consequence of his accepting appointment as Dean at the University of Texas at Corpus Christi and Klaus Keil resigned as Chairperson of Geology to return to full-time service in teaching, research and the Directorship of the Institute of Meteoritics.

III. AFFIRMATIVE ACTION

Direct College involvement in enhancing the diversity of the academic environment focussed on faculty hiring and faculty development and retention. Of the twenty three new appointments to the tenure-stream faculty of the College which will take effect for AY 1989-90, six were women. In terms of racial/ethnic classification, the group of twenty three included one Asian, one Native American and three Hispanics.

However, of the twenty two faculty members from AY 1988-89 who will not return AY 1989-90, four were women, three were Hispanic and one was Native American. In these particular instances, retention efforts focussed on Louis Owens, Rafael Diaz and David Montejano. These three young Associate Professors were rapidly ascending to positions of institutional and national leadership. UNM had recognized their excellence with early promotions and significant salary advances. Even so, when they received extremely strong offers from prestigious universities (University of California, Stanford and University of Texas) to which they also each had personal ties, we found it impossible to retain them in spite of substantial and creative counteroffers. We can only hope that we are not repeatedly faced in the future with such concatenations of prestige, wealth and personal predilections as bested us this year.

In addition to the strenuous efforts which were exerted to retain

these faculty members, we ourselves made attempts to parlay similar combinations of appeals to recruit a senior Hispanic scholar of international renown. In spite of great encouragement and cooperation from the Department involved and the central administration this recruitment did not, for the time being, bear fruit.

IV. RESEARCH AND SCHOLARLY ACTIVITY

As noted, the scholarly and creative activities of our faculty in terms of publications of articles and books is thoroughly annotated in the volume Faculty Publications and Creative Works issued for each calendar year by the Office of the Vice President for Research. The faculty and staff of the College also continued their exemplary record of successful proposals for extra-mural funding of research and development projects. A summary of College activity for 1988-89 is presented in Table 12.

Highlights of the year in research included the funding by the NSF of the Biology Department's proposal for the Sevilleta Long-Term Ecological Research Program and the NSF's selection of Diane Marshall of Biology to receive a Presidential Young Investigator Award. The Sevilleta grant has the potential for major, long-term support of one of our outstanding research efforts. Diane Marshall's award constitutes recognition of one of our young faculty members by a highly prestigious, very selective and strongly funded program.

V. TEACHING

Summary data on various aspects of the College's teaching efforts are presented in Tables 5, 6, 7, 8, 9, 10 and 11.

VI. SPECIAL PROJECTS AND FUNCTIONS

Advisement and Records Center

Under the supervision of the Vice Dean for Student Academic Affairs, this section of the A&S administration is responsible for student advisement, admission, graduation, probation, suspension, and all aspects of student record keeping on the college level. Annually, about 15,000 students receive personal advisement, with an additional 20,000 advised by telephone. During peak periods of registration, especially in November, we see as many as 1,200 students a week. Advisors are available daily throughout the year, between 8 a.m. and 5 p.m., including the noon hour. In addition to the items mentioned above, the office also handles all student petitions and is often the initial step in student grievance procedures. Advisors are also responsible for all pre-professional advisement, primarily for admission into such professional schools as law, medicine, dentistry, veterinary medicine, etc. Addition of computer terminals, connected with central university records, has facilitated record accessing responsibility so that we manage to do the same tasks with fewer advisors and an increase in Arts and Sciences majors.

One or more advisors, as usual, participated in such extramural activities as the Career Fair, Advisement Centers Update Conferences, Pre-Med Day, advisement sessions at the Gallup, Valencia, and Los Alamos branch campuses, Adult Re-Entry Committee, monthly meeting of advisement centers, College Enrichment Program Orientation, ACT Conference, etc.

One of our most important responsibilities is service on the Health Sciences Advisory Committee which studies the dossiers and applications for

admission to medical and dental schools, interviews applicants, and writes evaluations for medical and dental schools throughout the country. This committee is chaired by the Vice Dean and consists of two professional advisors for each applicant, serving on a rotational basis, and a member each from the faculty of the Departments of Biology and Chemistry.

The A&S Undergraduate Academic Affairs Office is composed of the following personnel: Julie Bustamante, Monique Denzler, Carolyn Beske, Roxanne Jarrard, and Vice Dean J.E. White, Jr.

Graduate Committee

The A&SGC met twice during the Spring Semester. Following are summarized minutes of the A&SGC for 1988-89.

On February 25, 1989 the Committee met for the first time. Robert Fleming, Associate Dean, was elected Chair of the Committee.

The following subcommittees were constituted: (Chair is underlined)

Faculty Subcommittee: Garland Bills, Ivan Melada, Wolf Elston, Erik Trinkaus.

Evaluation Subcommittee: Eric Toolson, Ken Frandsen, Jane Slaughter, Shaul Ben-David.

Curriculum Subcommittee: Brad Cullen, Fred Schueler, Peter White, Peder Johnson.

Representatives to Senate Graduate Committee: Cary Morrow, Ivan Melada, Shaul Ben-David.

On April 28, 1989 the Committee met for a second time.

Wolf Elston was elected as a replacement for Cary Morrow as representative to the Senate Graduate Committee for 1989-90.

Members present indicated whether they would be their departments' representatives for 1989-90.

Since Eric Toolson was not present, Jane Slaughter was asked about the progress of the Subcommittee on Evaluation. She reported that the Committee has no report to offer at this time. The Committee as a whole discussed the issues and problems connected with evaluations of departments. It is hoped that the Subcommittee on Evaluation will have a report by our next meeting, early in the fall.

At the request of the Dean, the Committee discussed the reactions of its members to the idea of a separate graduate faculty. With the exception of one member, Committee members were against the establishment of a separate graduate faculty.

Undergraduate Committee

The A&S faculty approved the following recommendations made by the A&S Undergraduate Committee (11/30/89):

1. Group Requirements: Approval of request by the Dept. of Anthropology to divide course listings between Biological/Behavioral Sciences (courses 150-169; 250-269; 350-369; 450-469), and Social Sciences (courses 100-149; 170-199; 200-249; 270-299; 300-349; 370-399; 400-449; 470-499).

2. Interdisciplinary Minor in Science, Technology, & Society: Approval for the A&S Undergraduate Committee to serve in an oversight capacity for the operation of this minor, and coordination of the departments involved (American Studies, Philosophy, Physics, History, Mechanical Engineering, Sociology).

3. Individual Interdisciplinary Major: Deletion of this option from the 1989-91 catalog.

4. Curricular Changes: Approval for the Undergraduate Committee to serve as the decision-making body for matters of undergraduate curriculum. Should there be a need to seek faculty review or should any aggrieved party wish to present and appeal its concerns to the A&S faculty, the Undergraduate Committee will make arrangements to do so.

Summer Session

The funds allocated to the College for Summer Session activities and specially budgeted costs were increased somewhat over 1988. The focus of our summer programs is increasingly concentrated upon activities that are unique to the Summer Session, such as Anthropology and Geology field schools, the German Summer School in Taos and the French Summer School in Albuquerque, and International Study programs in Guadalajara, Mexico and Essex, England. Under current state funding rules and university policies we expect to see this trend continue. Summary budget data are presented in Table 14.

Travel

As previewed in last year's annual report, the travel budget of the College was increased for 1988-89 to approximately \$80,000. While this constituted a major improvement over the previous level of \$20,000, it is still less than half of an appropriate budget for a faculty of our size and level of scholarly activity. \$70,000 of the travel budget was distributed to the Departments on a per FTE faculty member basis, with \$10,000 being

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retained in the College office to support special initiatives. Summary data are presented in Table 15.

Arts and Sciences Participatory Seminars (ASPS)

During the 1988-89 academic year, the Arts and Sciences Participatory Seminar program (ASPS) met its two central objectives: (1) the development and implementation of faculty development work sessions, and (2) the offering of 16 ASPS courses for undergraduate students. A brief summary of these two projects is provided as well as a discussion of extensions of the ASPS program.

1. Faculty Development Work Sessions. The purpose of these sessions was to assist the ASPS faculty in techniques for developing students' critical thinking abilities as demonstrated in their writing, speaking, and class interaction skills. During the week prior to Fall classes (Wednesday through Friday, August 17-19), the ASPS faculty participated in three full-day sessions with two consultants/professors in the field of critical thinking instruction: Professor Chet Meyers (Metropolitan State University, Minneapolis) and Professor Vincent Ruggiero (SUNY-Delhi). Topics included in the sessions were: obstacles to critical thinking, assessment of critical thinking development, development of syllabi and class exercises, and evaluation of written assignments. Professor Ruggiero also spoke at a breakfast meeting for university administrators about the role of administration in critical thinking instruction. During the Fall semester, the ASPS faculty participated in a half-day session (Saturday, November 12) at which time the six Fall ASPS faculty discussed their experiences and recommendations for their faculty peers scheduled to teach

in the Spring semester. During the Spring 1989 semester, the work session (March 4th) focused on the facilitation of class discussion, group interactions, and the development of students' articulation of ideas. For each faculty development work session, the faculty were provided with pertinent reading materials (approximately 20-25 pages per session). The sessions were very interactive. Faculty comments during the sessions indicated a high level of interest and enthusiasm to share information and ideas about facilitating students' critical thinking abilities. Faculty expressed appreciation and support for the program and for the rare opportunity it provided to discuss their teaching concerns. One faculty member described the ASPS program as "an oasis in the desert." The ASPS faculty also expressed appreciation for the Dean's visits to the faculty work sessions.

2. ASPS Offerings. Sixteen undergraduate seminars were offered during the 1988-89 academic year. The six courses offered during the Fall 1988 semester were: Topics in Field Herpetology (Biology, Howard Snell), Communication and Technology (Communication, Jan Schuetz), Economic Geography (Geography, Brad Cullen), Introduction to Philosophy (Philosophy, John Bussanich), Law in the Political Community (Political Science, Harry Stumpf), and Introduction to Child Research (Psychology, Karen Hayes). The ten courses offered during the Spring 1989 semester were: Technological Myth and American Culture (American Studies, Jane Caputi), Prehistoric Fiction (Anthropology, Jeff Froehlich), Sophomore Biochemistry Seminar (Biochemistry, Robert Loftfield), Interdisciplinary Approaches to the Black Novel (English, Robert Fleming), Physical Geology (Geology, Rod Ewing), The U.S. and the Third World (History, Linda Hall), Critical Thinking, Writing,

and the Mass Media (Journalism, Clark Edwards and Bob Gassaway), Introduction to the Uses of Mathematics in Modern Society (Mathematics and Statistics, Richard Griego), 20th Century Russian Civilization (Modern and Classical Languages, Natasha Kolchevska), and Introduction to Sociology (Sociology, Pat McNamara). Course evaluations by students were overwhelmingly positive, with requests for additional ASPS course offerings each semester.

3. Extensions and Continuation of the ASPS program. The College of Arts and Sciences has provided support for the offering of ten ASPS courses during the 1989-90 academic year. The ASPS Program Director (J. Civikly) met with faculty in A&S departments (March 1989) to discuss the program and solicit proposals. Information about the ASPS program was distributed to UNM's president, Gerald May, and to the university's Board of Regents. Requests for ASPS support from other sources continue to be made. Funding from the Ford Foundation was requested, but the Foundation is not continuing the Grants for Literacy and the Liberal Arts program at this time. Other adaptations of the ASPS program have been pursued in the form of a proposal co-sponsored by the UNM Office of Graduate Studies to the Fund for the Improvement of Post-Secondary Education (FIPSE). Proposals to the UNM Special Projects program, and to the state's Office of the Governor are also in process.

London Semester

The 1988-89 year began with an administrative change for the London Semester program. Associate Dean Elinore Barrett received a sabbatical leave during the Fall 1988 semester and then returned to regular faculty responsibilities in the Department of Geography. Dean Wildenthal and

Assistant to the Dean Raqui Martinez are now directing and coordinating the program.

Seven students participated in the London Semester Program during the 1989-90 academic year. Professor Richard Barrett (Department of Anthropology) was selected to participate as the university's faculty representative and student contact in London during Fall 1988. Professor Barrett taught two courses, which is a program requirement.

During the Spring 1989 semester, UNM did not send a faculty representative to London. Instead we entered into an agreement with New Mexico State University by which Professor Chris Burnham of NMSU served as the student contact for the University of New Mexico participants. Subsequently, New Mexico State University terminated their affiliation with the American Institute for Foreign Studies (AIFS), the sponsoring agency. This precludes any future London Semester reciprocal interactions between NMSU and UNM.

The American Institute for Foreign Studies held their annual meeting of program coordinators on a weekend in January 1989, in Phoenix, Arizona. Much student recruitment information was exchanged as well as interactions and discussions about the program with the London administrators and the Greenwich, Connecticut organizers. Guidelines and informational packets about the program were distributed. Sales type speeches were given as examples of how to conduct the recruiting meetings which are suggested to be held by all institutions in March. Raquel Martinez, Assistant to the Dean, attended this workshop as the UNM-College of Arts and Sciences representative. The University of New Mexico's recruitment meetings took place in early March and received a promising turn-out.

Faculty recruitment for the opportunity to teach in the Fall 1989 term

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took place in early Fall 1988 but received minimal response. After two choices declined the offer, due to other career enhancement opportunities, the College opened the position to part-time instructors. Again, minimal response with the added pressure of budgetary constraints, caused the decision not to send a faculty member for the upcoming Fall 1989 semester.

VII. DEPARTMENTAL REPORTS

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

TABLE 1

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CHAIRPERSONS AND INTERDEPARTMENTAL
PROGRAM DIRECTORS, 1988-89

Departments

AMERICAN STUDIES
Marta Weigle

ANTHROPOLOGY
Karl Schwerin

BIOLOGY
Don Duszynski

CHEMISTRY
Robert Paine, Sem. I
Richard Holder, Sem. II

COMMUNICATION
Kenneth Frandsen

COMMUNICATIVE DISORDERS
Richard Hood

ECONOMICS
Ron Cummings

ENGLISH
David McPherson

GEOGRAPHY
Stan Morain

GEOLOGY
Klaus Keil

HISTORY
Jonathan Porter

JOURNALISM
Fred Bales

LINGUISTICS
Alan Hudson-Edwards

MATHEMATICS & STATISTICS
Frank Gilfeather

MODERN & CLASSICAL LANGUAGES
Dick Gerdes

PHILOSOPHY
G. Fred Sturm

PHYSICS & ASTRONOMY
Daniel Finley

POLITICAL SCIENCE
Paul Hain

PSYCHOLOGY
Douglas Ferraro

SOCIOLOGY
Richard Coughlin

Interdepartmental Programs

ASIAN STUDIES (minor)
Jonathan Porter

BIOCHEMISTRY (major)
Robert Loftfield

IBERO-AMERICAN STUDIES (Ph.D)
Jon Tolman

**LATIN AMERICAN STUDIES (minor,
major, M.A.)**
Garland Bills

COMPARATIVE LITERATURE (major)
Joe Zavadil

CRIMINAL JUSTICE PROGRAM (major)
Paul Steele

ECONOMICS-PHILOSOPHY (major)
D. Lee

ENGLISH-PHILOSOPHY (major)
D. Johnson, H. Tuttle

EUROPEAN STUDIES (minor)
Janet Roebuck

PEACE STUDIES (minor)
MacAllister H. Hull

MEDIEVAL STUDIES (minor)
Helen Damico

QUARTERNARY STUDIES (minor)
Roger Y. Anderson

RELIGIOUS STUDIES (minor,
major)
Andrew Burgess

RUSSIAN & EAST EUROPEAN STUDIES
(minor, major)
Natasha Kolchevska

ITALIAN STUDIES (minor)
Elizabeth Salembeni

SCIENCE, TECHNOLOGY & SOCIETY
(minor)
Rose-Mary Sargent

STANDING AND SPECIAL COMMITTEES
COLLEGE OF ARTS AND SCIENCES, 1988-89

A&S Graduate Committee

Robert Fleming, English, Chair
 Peter White, American Studies
 Erik Trinkaus, Anthropology
 Eric Toolson, Biology
 Fritz Allen, Chemistry
 Ken Frandsen, Communication
 Edward Shirkey, Communicative Disorders
 Shaul Ben-David, Economics
 Michael Fischer, English
 Elinore Barrett, Geography
 W.E. Elston, Geology
 Jane Slaughter, History
 Sherman Wilcox, Linguistics
 Alex Stone, Mathematics
 John Bergen, Modern and Classical Languages
 Fred Schueler, Philosophy
 David Wolfe, Physics
 Shane Phelan, Political Science
 John Gluck, Psychology
 Robert Fiala, Sociology
 Edward DeSantis, Graduate School

A&S Undergraduate Committee

Jean Civiky, Communication, Chair
 Mary Jane Young, American Studies
 Jeff Froehlich, Anthropology
 Scott Altenbach, Biology
 Roy Caton, Chemistry
 Robert Barraclough, Communication
 Edward Shirkey, Communicative Disorders
 Al Parker, Economics
 Paul Davis, English
 Bradley Cullen, Geography
 Robyn Wright, Geology
 Charlie Steen, History
 Fred Bales, Journalism
 Sherman Wilcox, Linguistics
 Howard Fegan, Mathematics
 Natasha Kolchevska, Modern and Classical Languages
 Brom Anderson, Philosophy
 Colston Chandler, Physics (Fall)
 Harjit Ahluwalia, Physics (Spring)
 Gregory Gleason, Political Science
 Eligio Padilla, Psychology
 Pat McNamara, Sociology

A&S Human Subjects Committee

Gordon Hodge, Psychology, Chair
 Jan M. Brodie, Community Representative
 Terry Dunbar, Community Representative
 Gill Woodall, Communication
 Dolores Butt, Communicative Disorders
 Mary E. Steir, Counseling & Family Studies
 John P. Gluck, Psychology
 Dodd Bogart, Sociology

A&S Promotion Committee for the Humanities

Michael Conniff, History, Chair
 Mary Jane Young, American Studies
 Helen Damico, English
 Robert Lawrence, Journalism
 Alfred Rodriguez, Modern and Classical Languages
 Andrew Burgess, Philosophy

A&S Promotion Committee for the Social Sciences

Louise Lamphere, Anthropology, Chair
 Richard Jensen, Communication
 Shaul Ben-David, Economics
 Bradley Cullen, Geography
 Jean Newman, Linguistics
 Karen Remmer, Political Science

A&S Promotion Committee for the Natural Sciences and Mathematics

Douglas Brookins, Geology, Chair
 Randy Thornhill, Biology
 Ulrich Hollstein, Chemistry
 Linda Riensche, Communicative Disorders
 Lambert Koopmans, Mathematics
 William Gordon, Psychology
 V.M. Kenkre, Physics

A&S Tenure Committee

Lawrence Straus, Anthropology, Chair
 Oswald Baca, Biology
 Thomas Niemczyk, Chemistry
 Janice Schuetz, Communication
 Barry Gaines, English
 Frank Szasz, History
 Carla Wofsy, Mathematics
 Diana Robin, Modern and Classical Languages
 Russell Goodman, Philosophy
 Marc Price, Physics
 Peter Lupsha, Political Science
 Susan Tiano, Sociology

TABLE 2 (continued)

A&S Ad Hoc Committee on Promotion and Tenure Policies, Procedures and Standards

Janet Roebuck, History, Chair
Louise Lamphere, Anthropology
Alfonso Ortiz, Anthropology
Oswald Baca, Biology
Robert Paine, Chemistry
Micha Gisser, Economics
Helen Damico, English
Hector Torres, English
Douglas Brookins, Geology
Carla Wofsy, Mathematics
Diane Robin, Modern and Classical Languages
William Gordon, Psychology

Changes in status of tenure-track faculty in the College of Arts and Sciences: Decisions reached in AY 1988-89 to take effect in 1989-90

Promotion to Full Professor

Peter White	American Studies & English
J. Scott Altenbach	Biology
Kathryn Vogel	Biology
Carlos Bustamante	Chemistry
Janice Schuetz	Communication
Dolores Butt	Communicative Disorders
James Barbour	English
Lee Bartlett	English
Stephen Wells	Geology
Richard Robbins	History
Philip May	Sociology
Patrick McNamara	Sociology

Promotion to Associate Professor and Positive Tenure Decisions

Jane Caputi	American Studies
Ronald Natvig	Biology
Peter Ogilby	Chemistry
J. Vincent Ortiz	Chemistry
Beverly Burris	Sociology

Positive Tenure Decisions

Glen Harrison	Economics
Timothy Goldsmith	Psychology

Positive Mid-Probationary Reviews

Margaret Connell-Szasz	History
John Taber	Philosophy

Positive Three-Year Reviews

James Boone	Anthropology
Jeffrey Long	Anthropology
Wirt Wills	Anthropology
Bruce Milne	Biology
Charles Wisdom	Biology
Thomas Bein	Chemistry
Hector Torres	English
Laura Crossey	Geology
Nancy Gonzales	Mathematics & Statistics
Deborah Sulsky	Mathematics & Statistics
Walter Putnam	Modern & Classical Languages

Nebojas Duric
 Gregory Gleason
 Karen Hayes

Physics & Astronomy
 Political Science
 Psychology

New Appointments

Ann Ramenofsky
 Timothy Lowrey
 Stephen Stricker
 Richard Crooks
 David Keller
 Alberto Davila
 Philip Ganderton
 Richard Santos
 Michael Campana
 Virginia Scharff
 Diane Lamb
 Henry Trewhitt
 Mary Ann Willie
 Joan Bybee
 Alejandro Aceves
 Jens Lorenz
 Benjamin Mann
 Yisong Yang
 David Dunlap
 Richard Waterman
 Paul-Amrhein
 Lynette Cofer
 Edward Gilliland

Anthropology
 Biology
 Biology
 Chemistry
 Chemistry
 Economics
 Economics
 Economics
 Geology
 History
 Journalism
 Journalism
 Linguistics
 Linguistics
 Mathematics & Statistics
 Mathematics & Statistics
 Mathematics & Statistics
 Mathematics & Statistics
 Physics & Astronomy
 Political Science
 Psychology
 Psychology
 Sociology

Resignations/Retirements

James Chisholm
 William Martin
 Miriam Malm
 James Satterlee
 Barbara Conrad
 Paul Jonas
 Louis Owens
 Robyn Wright
 Peter Bakewell
 Clark Edwards
 Ivan Innerst
 Andrew Mulhaupt
 Robert Holzapfel
 George Peters
 Sabine Ulibarri
 Paul Schmidt
 Larry George
 Paul Hain

Anthropology
 Biology
 Biology
 Chemistry
 Chemistry
 Economics
 Economics
 English
 Geology
 History
 Journalism
 Journalism
 Mathematics
 Modern & Classical Languages
 Modern & Classical Languages
 Modern & Classical Languages
 Philosophy
 Political Science
 Political Science

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TABLE 3 (continued)

Debra Rosenthal
Rafael Diaz
Frank Logan
* Thomas Friden
David Montejano

Political Science
Psychology
Psychology
Psychology
Sociology

* Deceased

TABLE 4

FTE BUDGETED FACULTY, 1988-89

<u>Department</u>	<u>Regular Faculty</u>	<u>Residual Instruction</u> *	<u>GA/TA</u> **
American Studies	4.33	0.85	2.00
Anthropology	23.63	1.10	5.00
Biology	32.25	1.36	19.25
Chemistry	20.50	1.61	17.25
Communication	11.00	1.95	2.50
Communicative Disorders	5.00	2.56	1.00
Economics	17.21	1.04	6.50
English	35.83	14.86	15.50
Geography	5.55	2.75	1.25
Geology	18.00	0.15	7.00
History	26.50	2.78	6.75
Journalism	5.00	2.18	0.00
Linguistics	5.05	3.41	0.50
Mathematics & Statistics	35.33	22.12	13.50
Modern & Classical Lang.	28.00	6.60	20.75
Philosophy	12.00	0.00	2.25
Physics & Astronomy	27.00	3.22	11.00
Political Science	15.00	1.79	2.50
Psychology	25.00	1.85	10.00
Sociology	16.47	3.51	6.00
ARTSCI	368.65	75.68	150.50

* Residual = Total Faculty Expenditures - Total Tenure Stream Salaries + Released Salaries divided by \$20,400

** TA/GA count determined by dividing total TA/GA Expenditures by \$13,000 and rounding off to nearest 0.25 FTE.

Data Sources: Final FRS reports and A&S Faculty Salaries database.

TABLE 5
 NUMBER OF STUDENTS ENROLLED
 COLLEGE OF ARTS AND SCIENCES

<u>Year</u>	<u>Semester I</u>	<u>% Inc. Over Previous Year</u>	<u>Semester II</u>	<u>% Inc. Over Previous Year</u>
1979-80	2,267	-5.4	2,205	- 5.0
1980-81	2,099	-7.4	2,350	6.6
1981-82	2,492	18.7	2,580	9.8
1982-83	2,725	9.3	2,896	12.2
1983-84	3,044	11.7	3,192	10.2
1984-85	3,139	3.1	3,238	1.4
1985-86	3,520	12.1	3,333	2.9
1986-87	3,509	-0.3	3,548	6.5
1987-88	3,648	4.0	3,730	5.1
1988-89	3,794	4.0	3,875	3.9

Data Source: 21 Day Report

TABLE 6

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STUDENT CREDIT HOURS TAUGHT, UNM AND A&S

COLLEGE	88 YR	87 YR	83 YR	% 1-YR	% 5-YR
A&S	284,164	280,028	259,098	1.48	9.7
Anderson	33,809	32,222	28,548	4.93	18.4
Architecture	7,806	7,501	6,395	4.07	22.1
Engineering	35,288	36,270	46,483	-2.71	-24.1
Dental	1,553	1,788	1,642	-13.14	-5.4
Education	57,918	57,742	55,594	0.30	4.2
Fine Arts	35,567	33,613	31,395	5.81	13.3
Gen College	6,875	11,348	16,610	-39.42	-58.6
Law	9,523	9,396	9,885	1.35	-3.7
Univ College	----	----	----	----	----
Nursing	6,682	5,919	8,267	12.89	-19.2
Pharmacy	6,097	4,938	3,635	23.47	67.7
Public Admin	1,539	1,779	1,965	-13.49	-21.7
Gen Library	109	68	----	60.29	----
Other	4,602	4,222	3,500	9.00	31.5
UNM TOTAL	491,532	486,834	473,008	0.97	3.9
	A&S %	A&S %	A&S %		
	57.8	57.5	54.8		

Data Source: Planning & Policy Studies Student Credit Hour Reports (UNM IR020-1)

TABLE 7

STUDENT CREDIT HOURS BY DEPARTMENT

COLLEGE	88-89	87-88	83-84	% 1-YR	% 5-YR
Amer. Studies	2,676	2,027	2,631	32.0	1.7
Anthropology	8,209	8,219	7,595	-0.1	8.1
Biology	16,612	17,193	18,288	-3.4	-9.2
Chemistry	13,694	14,394	17,300	-4.9	-20.8
Comm. Dis.	2,828	3,191	2,503	-11.4	13.0*
Communication	9,091	13,068	7,328	-30.4	24.1
Economics	17,551	13,278	14,612	32.2	20.1
English	31,488	31,552	28,355	-0.2	11.0
Geography	5,859	5,806	4,852	0.9	20.8
Geology	7,761	8,018	7,466	-3.2	4.2
History	21,923	20,170	13,786	8.7	59.0
Journalism	2,967	3,118	2,986	-4.8	-0.6
Linguistics	3,025	2,236	1,447	35.3	104.8*
Math & Stat.	40,364	41,181	44,292	-2.0	-8.9
M&CL	19,923	19,209	15,915	3.7	25.2
Philosophy	6,637	6,885	5,176	-3.6	28.2
Physics	14,833	14,908	13,373	-0.5	10.9
Pol. Science	11,153	11,245	9,958	-0.8	12.0
Psychology	26,597	26,829	21,970	0.9	21.1
Sociology	17,618	16,757	13,832	5.1	27.4
Other	811	744	417	9.0	94.5
ARTSCI	281,620	280,028	254,092	0.6	10.8

* Sign-Lang transferred from ComDis to Ling

Data Source: Planning & Policy Studies Student Credit Hours Reports (UNM IR020-1)

TABLE 8

DEGREES AWARDED
COLLEGE OF ARTS AND SCIENCES

<u>Year</u>	<u>Bachelor's Degrees</u>		<u>Advanced Degrees</u>					
	<u>No. Degrees</u>	<u>% Inc. Over Prev. Yr.</u>	<u>Master's (a)</u>		<u>Doctor's</u>		<u>Total</u>	
			<u>No.</u>	<u>% Inc.</u>	<u>No.</u>	<u>% Inc.</u>	<u>No.</u>	<u>% Inc.</u>
1980	627	8.7	123	-14.0	58	5.5	181	-8.6
1981	500	-20.3	121	-1.6	73	25.9	194	-7.1
1982	453	-9.4	165	36.4	51	30.1	216	11.3
1983	523	15.5	153	7.3	55	7.8	208	-3.7
1984	460	-12.0	171	11.8	54	-1.8	225	8.2
1985	519	12.9	199	16.4	65	20.4	264	17.3
1986	587	13.1	127	-22.1	76	16.9	231	-12.5
1987	595	1.4	153	20.5	66	-13.2	229	-0.9
1988	665	11.8	164	7.2	62	-6.1	226	-0.9
1989	732	10.1	170	3.7	63	1.6	233	3.1
10 Year Change	155	26.9	27	18.9	8	14.5	35	17.7

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

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

TABLE 9

DEGREES AWARDED BY DEPARTMENT¹

Department	Bachelor's				Master's				Doctoral			
	1986	1987	1988	1989	1986	1987	1988	1989	1986	1987	1988	1989
Astrophysics	1	1	-	2	-	-	-	-	-	-	-	-
Biochemistry	-	2	5	8	-	-	-	-	-	-	-	-
American Studies	4	-	4	5	4	6	6	2	3	2	5	2
Anthropology	24	15	28	15	14	14	20	11	5	4	8	3
Art ²	40	21	1	2	20	10	10	-	7	5	1	-
Biology	50	60	62	69	9	6	11	15	10	7	5	7
Chemistry	17	10	17	16	9	12	7	9	4	9	6	8
Communication	36	48	30	68	3	4	3	9	-	-	-	-
Comm. Disorders	-	5	17	15	-	-	14	16	-	-	-	-
Comp. Lit.	-	-	-	-	-	-	1	-	-	-	-	-
Creative Wrtg.	4	1	6	11	-	-	-	-	-	-	-	-
Criminal Justice	-	-	18	48	-	-	-	-	-	-	-	-
Economics	59	59	66	65	3	3	5	11	7	1	3	1
Econ-Phil	-	-	-	-	-	-	-	-	-	-	-	-
English	41	43	51	61	14	14	15	12	4	1	-	6
English-Phil.	2	4	3	7	-	-	-	-	-	-	-	-
Family St.	-	-	-	-	-	-	-	-	-	-	-	-
Geography	15	11	10	11	2	2	4	5	-	-	-	-
Geology	20	16	8	16	3	15	7	11	1	-	3	5
German St.	-	-	-	-	-	-	-	-	-	-	-	-
History	28	23	33	35	4	5	3	6	6	3	5	1
Home Econ. ²	-	2	1	-	6	1	6	-	-	-	-	-
Ibero-Amer. St.	-	-	-	-	-	-	-	-	2	1	1	1
Journalism	26	26	33	22	-	-	-	-	-	-	-	-
Linguistics	1	4	4	1	4	2	6	3	-	-	-	-
Lat.Amer.St. ³	2	3	2	5	7	16	10	5	-	-	-	-
Math & Stat.	30	25	25	26	12	6	3	5	1	10	5	5
M&CL	18	27	28	36	-	12	13	20	-	1	5	2
Philosophy	2	2	6	2	7	1	7	2	1	-	1	1
Physics & Astr.	9	3	3	10	9	9	6	15	4	8	8	7
Political Sci.	73	62	71	81	8	8	3	3	1	-	1	-
Psychology	84	89	112	111	9	5	8	6	7	12	3	15
Religious St.	1	2	-	6	-	-	-	-	-	-	-	-
Russian St.	4	1	1	3	-	-	-	-	-	-	-	-
Sign Lang. Int.	4	1	1	3	-	-	-	-	-	-	-	-
Sociology	27	35	23	37	1	2	1	-	3	2	2	-
TOTAL ⁴	618	600	677	790	148	153	164	170	66	66	62	63

¹ Previous years included Art History, etc., (belonging in Fine Arts).

² Not a department of the College of Arts & Sciences, but major or minor is allowed.

³ Interdisciplinary program at the doctoral level.

⁴ Bachelor's degrees granted with double majors are counted once in each department, so this total will not agree with Table 9.

* Includes summer, fall and spring graduates.

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

TABLE 10

ACADEMIC PROBATIONS, SUSPENSIONS AND RELEASES
COLLEGE OF ARTS AND SCIENCES

	1984-85		1985-85		1986-87		1987-88		1988-89	
	No.	%	No.	%	No.	%	No.	%	No.	%
<u>Semester I</u>										
On Probation	318	10.1	171	4.9	312	8.9	296	8.1	311	8.2
Suspended	107	3.4	89	2.5	79	2.3	65	1.7	70	1.9
Released	86	2.7	59	1.7	27	.8	64	1.7	41	1.1
<u>Semester II</u>										
On Probation	344	10.6	215	6.5	334	9.4	318	8.5	334	8.6
Suspended	153	4.7	110	3.3	62	1.8	69	1.8	86	2.3
Released	109	3.4	73	2.2	84	2.4	71	1.9	67	1.7

Number of Students Enrolled in Arts and Sciences:

Semester I, 1988-89	3,794
Semester II, 1988-89	3,875

DEGREES GRANTED WITH HONORS

Honors in General Studies

Summa Cum Laude	6
Magna Cum Laude	14
Cum Laude	13

Departmental Honors

Anthropology	2
Communication	1
Economics	1
English	6
Geology	2
History	4
Political Science	1
Psychology	11

Initiated into Phi Beta Kappa 37

Initiated into Phi Kappa Phi 90

* Requirements completed Semester II, 1988-89; Summer 1988;
Semester I, 1988-89.

TABLE 12

NEW RESEARCH AND TRAINING GRANTS, 1988-89

<u>Department</u>	<u>Dollars</u>	<u>Number of Faculty</u>	<u>Number of Grants</u>
American Studies	\$ 2,000	1	1
Anthropology	226,595	8	12
OCA	1,071,685	3	29
Maxwell	338,233	2	2
Biology	2,316,989	21	34
Chemistry	1,146,060	9	24
Economics	237,051	6	11
Geology	729,676	14	26
Meteoritics	279,865	3	4
History	27,000	1	1
Mathematics & Stat.	303,310	12	12
Modern & Classical Lang.	78,000	1	1
Philosophy	10,000	1	1
Physics & Astronomy	1,650,084	17	32
CAS	410,332	4	3
Political Science	20,500	2	3
Psychology	783,308	6	11
Sociology	98,487	2	3
TOTAL	\$ 9,729,175	114	211

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TABLE 13

BUDGETED GAS/TAs, RESEARCH AND
PROJECTED ASSISTANTS 1988-89

<u>Department</u>	<u>GAS & TAs</u>	<u>RAs & PAs</u>
American Studies	2.00	0
Anthropology	4.00	0
Biology	19.50	4.00
Chemistry	15.00	6.00
Communication	2.00	0
Communicative Disorders	1.00	0
Economics	4.00	0
English	22.00	0
Geography	1.50	0
Geology	6.50	7.00
History	7.00	.50
Journalism	0	0
Linguistics	.50	0
Mathematics & Stat.	15.00	.50
Modern & Classical Lang.	17.00	0
Philosophy	2.00	0
Physics & Astronomy	10.00	7.50
Political Science	2.00	0
Psychology	8.25	4.50
Sociology	3.00	0
TOTAL	142.25	30.00

TABLE 14

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SUMMER SESSION DATA, 1988 AND 1989

<u>Department</u>	<u>Final 1988 Figures</u>		<u>Final 1989 Figures</u>	
	<u>Allocation</u>	<u>%</u>	<u>Allocation</u>	<u>%</u>
American Studies	\$ 8,934	1.3%	\$ 10,470	1.41%
Anthropology	24,208	3.6%	24,202	3.22%
Biology	41,171	6.1%	39,688	5.33%
Chemistry	41,619	6.2%	35,899	4.82%
Communication	25,361	3.8%	27,378	3.67%
Communicative Disorders	8,265	1.2%	4,357	0.58%
Economics	28,362	4.2%	30,094	4.40%
English	88,120	13.1%	97,346	13.07%
Geography	14,657	2.2%	12,594	1.69%
Geology	18,578	2.8%	27,404	3.68%
History	33,190	4.9%	48,124	6.46%
Journalism	15,047	2.2%	14,149	1.90%
Linguistics	10,344	1.5%	15,917	2.14%
Mathematics & Stat.	77,158	11.5%	90,931	12.20%
Modern & Classical Lang.	107,731	16.0%	107,349	14.41%
Philosophy	15,629	2.3%	17,295	2.32%
Physics & Astronomy	30,826	4.6%	34,843	4.68%
Political Science	22,078	3.3%	22,893	3.07%
Psychology	32,665	4.8%	39,887	5.35%
Sociology	25,991	3.9%	25,114	3.37%
International Programs	3,650	0.5%	19,300	2.59%
TOTAL	\$673,584	100.0%	\$745,052	100.0%

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TABLE 15

A&S TRAVEL DISBURSEMENTS, 1988-89

<u>Department</u>	<u>General/Departmental Allocations</u>	<u>Special Request Allocations</u>
American Studies	\$ 820.00	\$ 100.00
Anthropology	4,360.00	500.00
Biology	5,810.00	200.00
Chemistry	3,630.00	100.00
Communication	2,000.00	350.00
Communicative Disorders	1,000.00	100.00
Economics	3,450.00	200.00
English	8,170.00	2,154.23
Geography	1,360.00	200.00
Geology	3,270.00	200.00
History	4,900.00	2,097.00
Journalism	900.00	100.00
Linguistics	900.00	200.00
Mathematics & Statistics	6,900.00	1,815.68
M&CL	5,080.00	620.46
Philosophy	2,180.00	100.00
Physics & Astronomy	4,900.00	877.74
Political Science	2,720.00	100.00
Psychology	4,540.00	682.00
Sociology	3,090.00	1,423.99
TOTAL	\$69,980.00	\$12,121.11

THE REPORT OF THE DEPARTMENT OF AMERICAN STUDIES
COLLEGE OF ARTS AND SCIENCES

July 1, 1988, to June 30, 1989

Marta Weigle, Chair

The American Studies Department operated somewhat shorthanded this year with Professors Charles Biebel (fall) and Vera Norwood (fall and spring) on sabbaticals. Nevertheless, the remaining faculty worked effectively as a committee of the whole to guide the graduate program, supervised by graduate adviser Professor Peter White, and the expanding undergraduate program, headed by undergraduate and Southwest Studies adviser Professor M. Jane Young. Following reviews this year, effective in the fall of 1989, Professor Jane Caputi will be a tenured associate professor of American Studies, Professor Gary Scharnhorst tenured in American Studies, and Professor Peter White a full professor of American Studies.

Throughout the year, we were fortunate to have Dr. Gerald L. Davis, Associate Professor of Africana Studies at

Rutgers University, as Research Associate Professor of American Studies. Recipient of a Ford Foundation Postdoctoral Fellowship for Minorities, Davis has been conducting fieldwork, primarily at Zuni Pueblo, on "The Moor in the 16th Century Southwest: Esteban Remembered in Southwest Pueblo Oral Tradition." He has worked with several graduate students and faculty colleagues and has proved a welcome addition to the department.

A. Significant Achievements

The faculty continues its high level of professional activity. Those with books appearing this year are Professor Gary Scharnhorst, Nathaniel Hawthorne: An Annotated Bibliography of Criticism Before 1900; Professors Marta Weigle and Peter White, The Lore of New Mexico; Professor Peter White (with Lynne Beene), Solving Problems in Technical Writing; Professor M. Jane Young, Signs from the Ancestors: Zuni Cultural Symbolism and Perceptions of Rock Art. Professor Vera Norwood's and Janice Monk's The Desert Is No Lady received the 1988 Southwest Book Award from the Border Regional Libraries Association. The New Mexico Historical Society gave their 1989 Ralph Emerson Twitchell Award for a significant contribution to the field of history in areas of fine arts or allied professions to Professors Marta Weigle and Peter White for The Lore of New Mexico.

All faculty members published book chapters, articles, and/or reviews and/or spoke at or attended professional meetings and conferences, notably the American Studies Association, the American Anthropological Association, the American Folklore Society, the Modern Language Association, the 46th International Congress of Americanists, the Western Social Science Association, and the Rocky Mountain American Studies Association. Professor Jane Caputi served as contributing editor of Trivia: A Journal of Ideas; Professor Gary Scharnhorst as co-editor of American Literary Realism; Professor Marta Weigle as co-editor of the University of Illinois Press's Folklore and Society Series and on the editorial boards of Journal of American Folklore, Journal of Anthropological Research, Journal of the Southwest (through spring 1989), and Western Folklore (through fall 1988); Professor Peter White as co-editor of American Poetry and editorial director of the New America Book Series; Professor M. Jane Young as consulting editor of Archaeoastronomy and on the editorial board of the Journal of the American Studies Association of Texas. Professor Vera Norwood was president of the Rocky Mountain American Studies Association; Professor Weigle a member of the Centennial Coordinating Council of the American Folklore Society and chair of its Publication Committee; and Professor M. Jane Young a member of the Executive Board of the American Folklore Society. Professor Charles Biebel was consultant for the New Mexico Historic Preservation

Division; Professor Vera Norwood for the new M.A. in American Studies at the University of Colorado at Colorado Springs; and Professor Marta Weigle for the Hispanic Heritage Wing at the Museum of International Folk Art, Santa Fe, and for the American Studies Task Force at the University of Arizona.

Dr. Adrian H. Bustamante (Ph.D. 1983), Division Head of Arts and Sciences at Santa Fe Community College and president of the Museum of New Mexico Board of Regents, was this department's distinguished alumnus in the Commencement 1989 Centennial Salute to Distinguished Alumni.

B. Significant Plans and Recommendations for the Future

At the graduate level, the Department has supplemented its general courses in American life and thought with four areas of special concentration: (1) Southwestern and Regional Studies; (2) Environment, Technology and Culture; (3) Folklore, Media, Popular and Material Culture; and (4) Gender Studies. In the coming years, these should continue to be developed vigorously. A priority is to incorporate studies of ethnicity and social class either into a fifth area or into an expanded version of the fourth area. This continues to require carefully coordinated discussions, proposals, and associations with Afro-American Studies, Chicano Studies, Native American Studies, Southwest Studies, and Women Studies programs on campus. Both a

college-wide and a campus-wide assessment and vision of resources and possibilities are crucial. A second, pressing priority is to develop resources, including additional faculty, in popular culture, an area generating increasing student interest.

The expanding undergraduate program poses a dilemma. As graduate students teach more introductory-level sections, more undergraduates are attracted to the department as majors and minors. It then becomes difficult for this small faculty to meet the demands of required and specialized coursework at both graduate and undergraduate levels. Additional faculty will soon be required, since both undergraduate growth and increased graduate student support must continue and grow.

Given the productive, professionally active American Studies faculty and the high quality of graduate students, a realistic goal is to become ranked among the top ten departments of American Studies in the country. A large portion of such a national reputation will probably depend on a viable, visible, and university-wide Southwest Studies program.

C. Appointments to Staff

Faculty percentage appointments in American Studies for 1988-89 are as follows: Biebel (.33), Caputi (1.00),

Norwood (1.00), Scharnhorst (.17), Weigle (.50), White (.50), and Young (1.00)--a total of 4.50. Ronald Reichel served as .33 Visiting Assistant Professor of American Studies, giving a total of 4.83 FTEs.

Margaret Gilmore's position as department secretary was reclassified as staff assistant, an altogether appropriate upgrade. She continued her stellar work in supporting the entire department and all its activities and was assisted in her considerable chores by work-study student Catherine Skoropad.

D. Separations from Staff

None

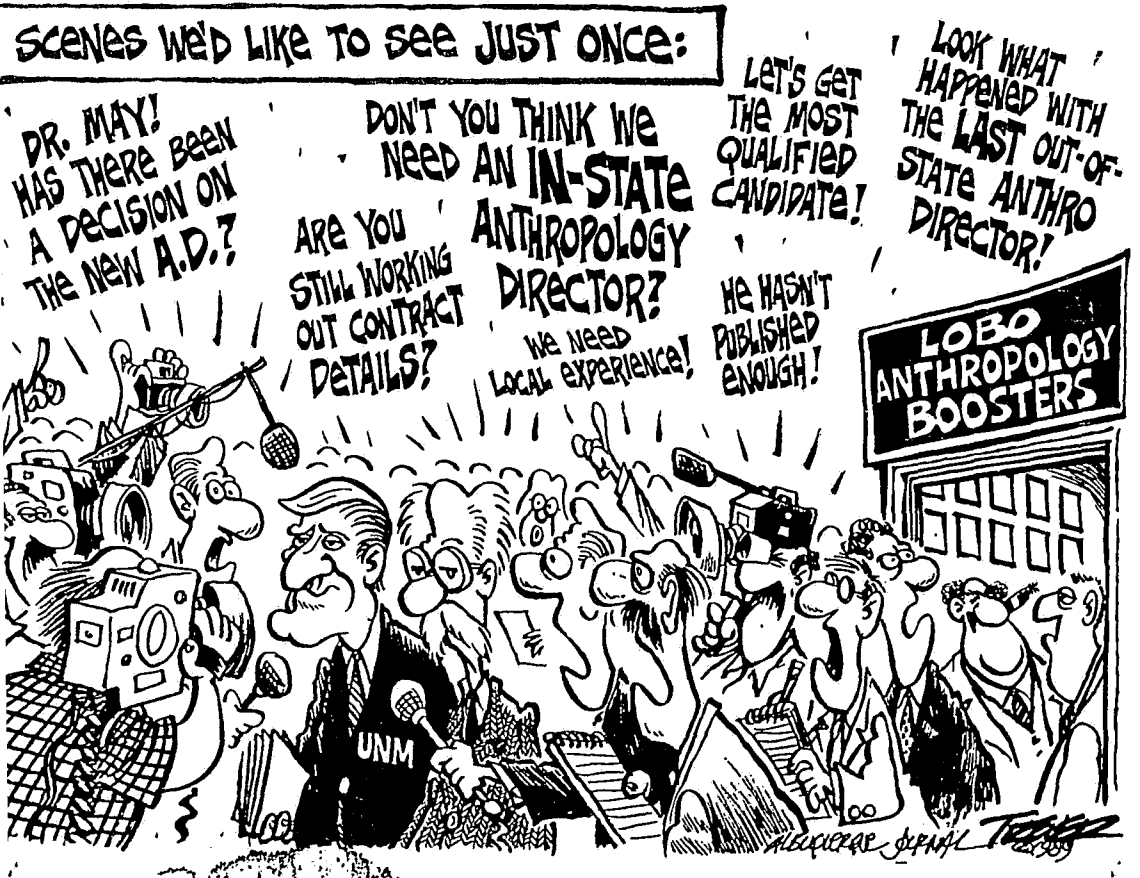
E. Sponsored Research

(a) Two American Studies faculty members, or 33% of all those associated wholly or partially with the Department, submitted proposals to outside agencies during this period.

(b) One faculty member received an award from an outside agency during this period.

UNIVERSITY OF NEW MEXICO
DEPARTMENT OF ANTHROPOLOGY

Annual Report
1 July 1988 - 30 June 1989



UNIVERSITY OF NEW MEXICO
DEPARTMENT OF ANTHROPOLOGY
Annual Report
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I DEPARTMENT OF ANTHROPOLOGY

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Annual Report of
The Department of Anthropology

1 July 1988 - 30 June 1989

Karl H. Schwerin
Chair

A. Significant Achievements During 1988-1989

Our stature as a nationally ranked department and as a leading academic unit within the University was maintained and enhanced during the past year. Steps were taken to further strengthen existing programs and to attract first rate graduate students. Faculty and students continued to earn recognition through the receipt of prestigious awards and through their success in grant approvals. Faculty also continued active in national professional organizations. The visibility of the Department remained undiminished. Some mention of the Department, the Museum and/or the Office of Contract Archeology appears in nearly every issue of the Campus News; while frequent stories relating to the Department appeared in local newspapers, including several feature articles on various members of the faculty.

1. **External Graduate Unit Review**

The largest undertaking for the Department this year was the External Graduate Unit Review, held in April. Approximately six months were devoted by the Chair and the Office Manager, Mimi

Stephens, in preparing an extensive document reviewing all aspects of the graduate program. Major contributions to the document were made by the Maxwell Museum and OCA, as well as reviews of subfield programs prepared by the convenors of those areas. The document presented a general review of the graduate program and its objectives, then detailed faculty and departmental organization. Information was presented on faculty careers and research activity, as well as faculty salaries. A special section was devoted to the role of graduate and teaching assistants. Departmental administrative policies were reviewed, the operation and administration of the Department discussed, and the nature and extent of resources was assessed. A separate section dealt with instructional programs, with a brief review of undergraduate and general education programs, then a more lengthy and detailed assessment of the graduate program in all five subfields. The document concluded with a look toward the future, giving consideration to needs, thoughts, plans and goals projected over the next decade.

The Unit Review was held from 18-21 April. Members of the Review team were Robert Whalon (archeologist, Univ. of Michigan) elected as Chair, Oswald Werner (ethnologist, Northwestern Univ.), Jane Buikstra (biological anthropologist, Univ. of Chicago), Joel Sherzer (linguistic anthropologist, Univ. of Texas), and Nancy Howell (biosocial anthropologist, Stanford Univ. and Univ. of Toronto). Marcus Price, former Dean of the Office of Graduate

Studies and Professor of Physics at UNM served as institutional member of the committee.

In its report the Review Committee judged that

"Compared to peer institutions, the anthropology department at UNM is active and visible, with regard to scholarship, research, and teaching. It clearly merits the high national ranking it has received. It has both traditional strengths, areas it has long been known for, and new and developing strengths, areas that show every promise of continuing to make this a prominent national department."

Five major problems and four lesser concerns were identified as facing the Department. These will be discussed in more detail below under Plans and Recommendations for the future. The Review Committee concluded that

"UNM receives the regional, national, and international recognition of the Department at bargain cost. We understand why UNM as the flagship of the universities of New Mexico must seek a well rounded coverage of the academic universe. However, it cannot afford to neglect one of its Departments that has maintained a highly visible national standing for at least the last 50 years. In part, UNM's Department was able to maintain its position because it is situated on a treasure trove of archeology

and a rich cultural and linguistic diversity that is vibrantly on-going today. UNM can best fulfill its obligation to the rich New Mexican past and its present cultural pluralism by supporting a strong program in anthropology."

2. Changes in Faculty

This year saw the addition of two outstanding faculty. Sylvia Rodriguez joined us from U.C.L.A. as an Assistant Professor, sharing a joint appointment with the Southwest Hispanic Research Institute. Her interests include comparative ethnic relations, urbanization of small communities, religion, Mesoamerica and the Southwest. Her current and long term research is centered in Taos, where she is investigating a variety of topics including tourism, ethnic relations, and ethnohistory. She has taken initial steps to establish a field station in Taos, which will serve as a center for training students in the field. In the Spring semester, Keith Basso joined us from Yale University. He is a well known linguistic anthropologist who specializes in Apachean languages and cultures. His current work involves construction of an ethnogeography of Apache territory and the creation of a tribal constitution for the Cibecue Apache. Both these individuals have generated great enthusiasm among the students.

The resignation of James Chisholm, effective 1 January 1989, to take a position at U.C. Davis represented a significant loss to the

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Biosocial program, and to the Ethnology program where he served as an effective liaison. On the positive side, through the very positive support of Dean Wildenthal, the Department successfully countered an offer to Prof. Ortiz from U.C. Riverside, serious negotiations from Stanford with Prof. Trinkaus, and consideration of Prof. Lamphere for a position at U.C. Irvine.

Long time service awards were presented this year to Prof. Karl H. Schwerin for 25 years at UNM, to Assoc. Prof. Jeffery W. Froehlich for 15 years, and to Assoc. Prof. Robert S. Santley for 10 years.

3. Salary

Due to a concerted effort on the part of the University administration to address salary needs this year, significant improvements were achieved in salaries for the Assistant and full Professor ranks. Unfortunately, there was not enough money available to address adequately the salary levels for Associate Professors. Furthermore, salaries in this Department continue to lag behind national and regional means. Comparison of the mean salaries overall shows that UNM is about two years behind national means. Although departmental means are depressed, gender disparity is minimal. Female faculty are at or ahead of the means of their male colleagues at the Assistant and Associate levels, with women full Professors lagging by about \$1,000.

Unfortunately, even within the College of A & S, the Department

suffers from an invidious comparison. Even though we are one of only two nationally ranked departments within the college, our salaries are significantly less than the college means (as computed by the Office of Planning and Policy Studies). For the current fiscal year it was the Chair's goal to increase all Assistant Professors to a minimum of \$25,000 (achieved), all Associate Professors to a minimum of \$30,000 (not achieved, three remained below), all full Professors to a minimum of \$40,000 (not achieved, two remain below by \$3,500), with four of them making at least \$45,000 (achieved).

4. Budget

The 1988/89 budget saw an increase of slightly less than \$2,500 in Supplies and Expenses. Travel funds were increased significantly from \$1,450 to \$4,360, which made possible much more extensive support of faculty participation in professional meetings, both nationally and internationally. On the other hand work study support was cut from \$5,830 (which had never been adequate) to \$5,000.

An important shift in policy with respect to graduate student support came through the initiative of Dean Wildenthal who allocated one additional FTE GA/TA position and increased that budget line by nearly \$14,000.

5. Subfield Programs and General Courses

The revised Ethnology graduate program was implemented during the year, with notable success. A new 500 level course on "Qualitative Methods and Logistics" was introduced to complete the group of methods courses required for majors in this subfield (see Attachment 1). The addition of Prof. Sylvia Rodriguez stimulated fresh ideas and considerable enthusiasm among graduate students. During the Spring semester six local and visiting anthropologists offered lectures to the Ethnology Brown Bag series (see Attachment 2). There were 35 Graduate students in Ethnology for 1988/89.

The program in Biological Anthropology continued strong. Prof. Long worked with Prof. Leonard in archeology to revise Anth 371 into a general research methods course with emphasis on mathematical and computer methods, which would be offered for all undergraduate and graduate majors, but especially recommended for students in biological anthropology and archeology. Eleven distinguished scholars were brought to campus throughout the year to share their knowledge and expertise with students and faculty in the Invited Lecture Series in Biosocial Anthropology (see Attachment 3). Graduate enrollment in Biological Anthropology for 1988/89 was 27 in Biological and 17 in Biosocial.

Revision of the archeology methods course Anth 371 was discussed in the previous paragraph. Anth 230 Ancient New Mexico was revised into a two semester sequence Anth 223/423 Ancient New Mexico I and

Anth 224/424 Ancient New Mexico II (see Attachment 1). The UNM Distinguished Lecturers in Archeology series brought six renowned archeologists from the U.S. and Europe to share the findings of their latest research. Seven other noted archeologists also presented lectures during the year (see Attachment 4). For 1988/89 there were 72 graduate students in Archeology.

Linguistic Anthropology continued to suffer from insufficient faculty, meaning that mostly introductory courses are taught. The addition of Prof. Keith Basso in the Spring helped relieve the burden somewhat. At the same time his courses proved extremely popular, thereby producing a significant increase in enrollment. Prof. Basso holds a half time appointment in which he will teach only during Spring semesters. The need for additional faculty in Linguistic Anthropology remains critical and is further emphasized by growing enrollments. Accordingly, a search was initiated this Spring for an additional faculty person to be appointed jointly in Anthropology and Linguistics. Three graduate students were enrolled in the program for 1988/89.

Publication this year of the Centennial Edition of the UNM general Catalog provided an opportunity to complete renumbering of undergraduate courses (upper division and graduate courses were renumbered last year, see Annual Report for 1987/88). Lower division courses are now listed according to the following scheme:

<u>AREA</u>	<u>NUMBERING SEQUENCE</u>	
General	100-109 190-196	200-209 290-296
Linguistics	110-119	210-219
Archeology	120-129 170-179	220-229 270-279
Ethnology	130-149 180-189	230-249 280-289
Biological	150-169	250-269

Publication of the new catalog also permitted modification of the Group Requirements moving Anthropology from the Biological/Behavioral Sciences to the Social Science requirement. Only courses in Biological Anthropology (numbered between 150-169, 250-269, 350-369, 450-469) may be used to satisfy the Biological/Behavioral Sciences requirement. Although the count of undergraduate majors is inaccurate, we believe there were 109 undergraduate Anthropology majors in Fall 1988.

6. Leaves

Three faculty were on leave during the year. Prof. Chisholm completed his sabbatical leave during the Fall semester. Prof. Bock took sabbatical leave during the Spring semester. Prof. Kaplan was on leave without pay for the entire year while conducting field research in eastern Peru.

7. Staff

During the year there was a nearly 100% turnover in Departmental

Office staff. Vel Begay, Department Secretary, was reduced to half time. At the end of October Mimi Stephens was hired for the new position of Office Manager. At the beginning of April the Administrative Assistant, Merilyn Williams, resigned. After posting and interviewing for her replacement, the Chair promoted Mimi Stephens to the position. In May Rebecca Thomas resigned from the position of Graduate Secretary.

At this point Ms. Stephens and the Chair devised a formal plan of operation for the Office. This involved a clearly specified outline of job descriptions for each of the office positions, stimulation of a positive and cooperative work atmosphere, and a backup system whereby each individual would become familiar with the tasks assigned to at least one other person in the office. In this way absence due to illness, vacation, or any other reason would not seriously impede the flow of work within the office. Plans were also made to develop a series of data bases for use in record keeping and preparation of reports.

In June Yolanda Lopez was hired as Office Manager and Velala Begay as Graduate Secretary. Dean Wildenthal has authorized hiring a full time Department Secretary, and a search is currently under way to fill that position.

Funds made available through the Vice President for Finance made possible the remodeling of poorly utilized lab space in the Annex

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to provide two GA/TA offices. Further remodeling projects are scheduled for 1989/90.

8. Research and Scholarship

Faculty and graduate students maintained their usual high level of research and scholarship. Fourteen faculty presented papers at professional meetings within the United States, five faculty presented papers at international meetings. Several others attended. Prof. Lamphere presided at the annual meeting of the American Ethnological Society in Santa Fe, delivering the Presidential address as one of her last official duties. In addition, Prof. Wills was invited to present a series of lectures at Cambridge University during late Spring. Graduate students evinced a high level of participation in professional meetings, with 26 presenting papers, while a number of others attended without presenting papers. Fourteen of these were archeology students who presented papers at the Society for American Archeology meetings in April.

Research activity involved submission of 20 proposals to outside agencies by 12 faculty, representing 44 per cent of the total faculty (see Attachment 8). During the year seven faculty, or 26 per cent of the total, received nine grants from outside agencies, marking a 45 per cent success rate. Two adjunct faculty were also funded by outside grants (see Attachment 9).

Brenda Manuelito continued with a Patricia Roberts Harris Fellowship. Steven Churchill received an endowed Graduate Fellowship. James Enloe was awarded a Fulbright grant for dissertation research in France. The Department recognized Miguel Leatham, a Masters level student, who presented the Frieda D. Butler Memorial Lecture on Wednesday, 9 November, entitled "Imperio de la Virgen: The Growth of a Mexican Millenarian Community. Barbara Mills, a Doctoral candidate, was recognized with the Ruth E. Kennedy Memorial Lecture on 14 April 1989, entitled "Form, Function and Style in Northern Anasazi Ceramics." Richard Dickhaut received the Sigma Xi Doctoral Student Award for outstanding dissertation.

Several scholarly honors were received by faculty. Prof. Binford was named an "Eminent Scholar" by the State Commission on Higher Education. Louise Lamphere completed her tenure as President of the American Ethnological Society. A group of local citizens recognized Prof. Trinkaus as a Distinguished Scholar. In conjunction with the Alumni Association Centennial Salute to Distinguished Alumni, the Department recognized two of its outstanding alumni--V. Barrett Price as one of our distinguished B.A.s and W. James Judge as a distinguished doctorate.

The series of Distinguished Lecturers in Archeology brought six leading scholars to campus during the year (see Attachment 4). Eleven scholars visited us under the aegis of the Invited Lecture series in Biosocial Anthropology (see Attachment 3). A Centennial

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Lecture Series organized by Prof. Stuart and jointly sponsored with the Maxwell Museum is highlighting for the general public the varied ways in which UNM anthropologists are directly benefitting the Albuquerque and greater New Mexico community. Three lectures were presented during the Spring; four more will be presented during the coming Fall (see Attachment 5).

Twenty-one individuals held letters of academic title with the Department. Thirteen of these were adjuncts; six who were employed elsewhere within the university, were Assistant or Associate Professors (part-time); one was named Research Asst. Professor, and one was a Visiting Scholar (see Attachment 6).

9. Interdepartmental Activities

A growing collaboration with other departments was evidenced in a variety of activities during the past year. The Department continues to cross list and share teaching responsibilities with Linguistics in the introductory courses in Linguistic Anthropology. Prof. Gorbet holds a non-salaried appointment in Linguistics, and the two departments are engaged in a search for a linguistic anthropologist who will hold a joint appointment between them. Several courses are also cross listed with American Studies and Prof. Weigle holds a joint appointment with these two departments. Prof. Rodriguez holds a joint appointment with the Southwest Hispanic Research Institute (SHRI), and has been actively working with both units to establish a field research station in Taos. A

special appropriation was passed during the last legislative session to fund this station during its first few years.

All anthropology faculty with Latin American interests participate at one level or another in the activities of the Latin American Institute (LAI), serving on committees, on the Board of Directors, etc. With History we jointly administer the Wertheim/Snead endowed lectureship. The first grantee was named this year, from History. Next year the award will be made in Anthropology. Out of this collaboration there developed joint sponsorship in April of a quincentenary colloquium "Native American and European Contact in the Americas 1492-1900." Faculty and students from both departments presented papers at this two day symposium. Anthropology helped to sponsor a similar symposium with Modern and Classical Languages in March on "The Venerable Bede and His Age: The Anglo-Saxon Frontier." For the first time this year the University introduced decentralized commencement ceremonies. Within the College of Arts and Sciences further decentralization was encouraged. The Department of Anthropology joined forces with American Studies, Geography and Linguistics to organize a joint ceremony. Personnel of the Maxwell Museum collaborated in making arrangements. The ceremony was held in the Anthropology lecture hall, followed by a reception in the Maxwell Museum. In Anthropology 20 Bachelors degrees were awarded, 12 Masters and 4 Ph.Ds. All participants agreed that the exercise was extremely successful.

B. Plans and Recommendations

The External Review Committee identified a number of major problems facing the Department, which are detailed as follows:

1. There is limited support for graduate students. A concerted effort needs to be made to develop new sources of support, especially to enable this Department to compete effectively with other leading departments nationwide.

2. There is a critical shortage of space for offices, laboratories, archives and storage, and the problem is getting worse. Efforts should be made to address these needs on a long term basis.

3. Faculty salaries lag behind the mean for Ph.D. granting departments across the nation. This makes it difficult to retain top quality faculty in competition with other programs. As a nationally ranked department, one might expect that salaries would be ahead of the national mean. Other support is also limited, in terms of laboratory facilities, equipment and supplies, costs for xeroxing, long distance telephone, etc.

4. Computer facilities are limited for graduate students, almost non-existent for undergraduates. The Review Committee recommended that a concerted effort be mounted to develop formal training in computer skills for all graduate students and to the extent possible for undergraduates as well.

5. To maintain its national standing, and to develop current programs to their full potential, it is recommended that new

positions be made available to the department, especially in Biological Anthropology and Linguistic Anthropology.

In addition, the committee identified a great potential for raising funds from non-traditional sources outside the university. They felt that there is a great deal we can do to make ourselves more visible. They encouraged us to dedicate significant effort to a development program. In their opinion interested supporters would willingly contribute toward Department goals, provided they had a clear sense of where the money goes. Several concerns were also identified within the Department. They observed a public relations problem with the central administration which seems to maintain an unhealthy skepticism concerning the quality of the Department. They urged that faculty who are not actively engaged in research and publication should teach more courses than those who are so engaged--a policy that is already followed by the Chair. Other specific points addressed by the committee were:

1. The current trend toward training students across subdisciplines should be encouraged and developed further. Ideally, each subfield should require training in other subdisciplines as a part of each student's course of study.

2. Students complain that they often do not know or understand faculty expectations. This affects student morale. The review committee recommended that more effort should be addressed to improving communication between faculty and students.

3. The committee perceived what they considered a certain

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amount of sexism, particularly among the archeology faculty and in OCA. Steps have been taken to address this problem and the situation has already changed for the better.

4. It was also suggested that steps be taken to implement better and more regular teaching evaluations.

Some of these matters, such as the issue of sexism, have already been addressed. The problems of graduate student support, space needs, and faculty salaries will require action over a longer period of time. The Chair had already begun to address these issues prior to the external review and will continue to focus on them in succeeding years. Plans are under way to organize a comprehensive long term development plan for the Department and it is hoped that initial steps may be taken during the coming year.

Although the salary situation has improved over the past two years, the Department still lags behind national means. Efforts will continue to improve our relative standing. With better salaries within the Department, it will be more difficult for other major institutions to try to raid our best faculty. Furthermore, as a nationally ranked department (probably about eighth nationwide), we should be ahead of national means and competitive with other ranked departments.

During the coming year the Chair plans to explore options for increasing the number of students that can be supported by the

Department and for improving the level of support.

A complete turnover of office staff has made it possible to revise and reorganize job responsibilities among the staff. We will work on making the staff more efficient and effective in serving the needs of faculty, students and the public, as well as in accomplishing the variety of administrative tasks required of them. In order to secure these goals, it will be essential to seek a permanent line for the Department Secretary, who is funded only for the next fiscal year.

The cost of supplies and equipment continues to rise, while growth in student enrollments and faculty research activity places a growing burden on these resources. The exponential growth of computer use in particular is placing a heavy burden on these expenditures. We plan to explore some reallocation of costs and charges in this category during the coming year. Not only will the Chair seek to increase this budget line for future years, but he will also explore alternative ways of responding to these needs.

A search is now under way for a person to fill the joint position in Anthropology and Linguistics. The pool will close in October, and we expect to complete initial screening during the Fall semester. It is hoped that a decision can be made by early 1990.

Space needs have become critical. Construction will begin in July

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on remodeling three GA/TA offices for an instructional computer lab. This leaves us short of space for six GA/TAs. The hiring of Ann Ramenofsky makes necessary another faculty office, a good sized laboratory for research and instruction, and associated storage space. The OCA, which was already pressed for space, has also begun a major project for which they require an office, a lab and storage room. Dean Wildenthal is exploring possibilities to meet these needs, but it is clear that they will have to be provided for no later than the beginning of Spring semester.

Looking to the longer term, space remains one of our continuing critical needs. The Clark Field Archive needs more space and more satisfactory space for reading, study and research. More offices must be found for GA/TA use, as we are currently operating with as many as three to a room. Laboratory facilities for analysis and storage of the paleontological collection are inadequate. Ancillary to, but not wholly independent of, the Department are the OCA operation, which has no more space into which it can expand its operation, and the Maxwell Museum, which is almost out of space to house its collections. It is already storing some of its less used research collections off campus. Space will remain a major planning issue for several years to come.

Plans are under way to initiate a development program. We want to involve as many as possible of alumni, 'students' families, and interested members of the public in a support organization for the

Department. Through an outreach program we hope to be able to initiate and build one or more endowment funds that will help to support important scholarly activities for the Department, such as student fellowships, student and faculty research and travel, a permanent publication fund to support the Clark Field Archive, and other similar programs.

The Anthro 2000 committee will continue its work in developing a comprehensive plan to guide the Department over the next decade. In particular we will focus on the kind of theoretical orientations that should characterize the Department up to the beginning of the next century, as well as the sort of subfield balance that would be optimal for our program(s). We must also clarify the kind of research support that will be necessary in order to achieve these goals. With recent changes in the Department Office the role of the support staff has been modified and enhanced. This year we will seek to chart our support needs in terms of personnel and facilities up through the year 2000.

C. Attachments

ATTACHMENT 1
1988/89 NEW COURSES IN ANTHROPOLOGY

- 223/423....Ancient New Mexico I
Part I of a two semester general series on the archeology of New Mexico. The period of New Mexico's earliest settlement at 10,000 B.C. to the advent of early pithouse villages at about A.D. 500 is covered each fall semester. Students may enroll for either 200 level or 400 level credit. (Stuart)
- 224/424....Ancient New Mexico II
Part II of a two semester general series on the archeology of New Mexico. The period from the advent of early pithouse villages (A.D. 500) to the rise and fall of Chacoan society, to the arrival of Spanish settlers in 1595 is covered each spring semester. Students may enroll for either 200 level or 400 level credit. (Stuart)
- 535.....Qualitative Methods and Logistics
Survey of current formal and informal anthropological field methods. Societies ranging from forager to industrial. Logistics of entry and self-maintenance in the field. Anthropological ethics. (Alvarado)

ATTACHMENT 2
1988/89 ETHNOLOGY BROWN BAG SERIES
Anthropology

SYLVIA RODRIGUEZ (UNM)

The Matachines Dances at Taos: Ritual Symbolism and
Interethnic Relations (01/30/89)

JOANNA KIRKPATRICK (Bennington College)

Popular Art & Culture in Bangladesh (02/06/89)

DICK BARRETT (UNM)

Paradoxical Anthropology of Leslie White (02/20/89)

ASOKA BANDARAGE (Visiting Scholar)

The Current Crises in Sri Lanka (02/27/89)

LOUISE LAMPHERE (UNM)

Elsie Clews Parson, the AES and Feminist Anthropology
(03/20/89)

KARL SCHWERIN (UNM)

Carib Social Organization (04/10/89)

ATTACHMENT 3
1988/89 INVITED BIO-SOCIAL LECTURE SERIES
Anthropology

BILL MCGREW (University of Sterling, Scotland)
Cotton-top Tamarin Family Life: Philopatry & Dispersion
(11/14/88 - 12:00 PM)

Brains, Hands and Minds: Why is Ape Tool-Use so Confusing?
(11/14/88 - 4:00 PM)

JAMES BOONE & JAMES SNYDER (UNM)
Third Generation Reproductive Success of the 15th and 16th
Century Portuguese Nobility (12/02/88)

SAMUEL WASSER (University of Michigan)
The Measurement of Hormonal Status from Feces in Primate Field
Studies (12/05/89 - 12:00 PM)

The Evolution of Mechanisms Leading to Reproductive Failure
Among Female Mammals (12/05/89 - 4:00 PM)

PETER SMOUSE (University of Michigan)
Mitochondrial DNA and the Human, Gorilla, Chimpanzee
Trichotomy: The Holy Trinity Revisited (01/26/89)

TED CLOAK (UNM)
Is Culture Necessary for a Bio-social Anthropology (01/27/89)

GARY BELOVSKY (University of Michigan)
Hunter-Gatherer Foraging and its Role in Their Population
Dynamics (02/13/89)

FRITZ TAYLOR (UNM-Biology)
How to Study an Adaptation (02/24/89)

RANDY THORNHILL (UNM-Biology)
Sexual Selection in Jungle Fowl: Experimental Testing of
Competing Hypotheses (03/10/89)

HENRY HARPENDING (Penn State University)
Paleodemography: Interpreting Skeletal Age Profiles
(03/27/89 - 12:00 PM)

The Cost of Sex and the Cost of Children: Infertility,
Parenting and Fostering Among Herero Pastoralists
(03/27/89 - 4:00 PM)

SARAH HRDY (UC-Davis)

Parental Investment after Death (04/17/89 - 12:00 PM)

Sex Ratio Manipulation of Offspring by Human Parents

(04/17/89 - 4:00 PM)

PAT DRAPER (Penn State University)

The Process of Aging: Problems in the Study of Aging among the !Kung Bushmen (05/01/89 - 12:00 PM)

Ecology of Mating: Effects of Culture Change among the !Kung

(05/01/89 - 4:00 PM)

ATTACHMENT 4
1988/89 DISTINGUISHED LECTURERS IN ARCHEOLOGY SERIES
Anthropology

- MICHAEL MOSELEY (University of Florida)
Punctuated Equilibria in the Peruvian Archeological Record
(11/28/88)
- HENRY WRIGHT (University of North Carolina)
State Origins: The Case of Madagascar (02/27/89)
- JAMES O'CONNELL (University of Utah)
Foraging Strategies of the Hadza (Tanzania) (03/08/89)
- VINCAS STEPONAITIS (University of North Carolina)
Late Prehistoric Political Organization in the Southeastern U.S. (03/23/89)
- OFER BAR-YOSEF (Harvard University)
Kebara Cave and the Middle of Upper Paleolithic Transition in the Levant (04/03/89)
- IAN HODDER (Cambridge University, UK)
Post-Processual Archeology: Current Developments (04/10/89)
- OTHER LECTURES IN ARCHEOLOGY:
- JAMES EBERT (Ebert & Associates)
The Economics and Future of Archeology as a Science and Profession (11/04/88)
- GARY TUNNELL (University of Auckland, New Zealand)
On Early Hominid Subsistence, Scavenging, and Actualistic Studies (11/21/88)
- ANN RAMENOFSKY (Louisiana State University)
Problems of the Contact Period in the Southwestern U.S.
(02/22/89)
- THOMAS DILLEHAY (University of Kentucky)
Ethnoarcheology of the Mapuche (Peru) (03/01/89)
- ANNA ROOSEVELT (American Museum of Natural History)
The Archeology of Marajo Island, Brazil (03/06/89)
- ROBERT FOLEY (Cambridge University, UK)
The Evolution of Hominid Social Behavior (04/12/89)
How Many Hominid Species Should There Be? (04/13/89)
- FRANCOISE AUDOUZE (CNRS, France)
The Open Air Magdalenian Site of Verberie (Paris Basin)
(04/14/89)

ATTACHMENT 5
1988/89 CENTENNIAL LECTURES
Anthropology

DAVID STUART

UNM: Building our Understanding of Southwestern Archeology
and Cultures (02/15/89)

MICHAEL ROBERTSON

Project Care and Albuquerque's Mentally Ill Homeless
(03/15/89)

KATHRYN SARGEANT

Indian and Spanish Settlements in Albuquerque's North Valley
(04/19/89)

CHIP WILLS

A Guest Archeological Curator at the Maxwell Museum (09/13/89)

STAN RHINE

Murder in the Maxwell (10/18/89)

MARY SMITH

Adventures in Learning: Outreach Anthropology Programs for
Schools and Community Groups (11/15/89)

MARIAN RODEE

How the Maxwell Stimulates Indian Craft Economy and Public
Awareness of New Mexico's Indians (12/13/89)

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ATTACHMENT 6
1988/89 LETTERS OF ACADEMIC TITLE
Anthropology

<u>NAME</u>	<u>TITLE</u>	<u>1st APPOINTMENT</u>
ARNOLD, Philip J.	Adj. Asst. Professor Archeology, ceramic analysis; Mesoamerica	1988/89
BANDARAGE, Asoka	Visiting Scholar Women, development; South Asia	1988/89
BECKER, Thomas	Asst. Professor (part-time) Epidemiology, disease ecology	1986/87
BURBANK, Victoria	Adj. Asst. Professor Adolescence in crosscultural perspective, Australian ethnography, cognitive anthropology, ethnographic theory and method	1983/84
CAMILLI, Eileen	Adj. Asst. Professor Archeology, methodology; Southwest US, Great Basin	1986/87
CHAPMAN, Richard C.	Asst. Professor (part-time) Archeology, cultural resource management; Southwest US; Assoc. Director, OCA	1982/83
CORDELL, Linda S.	Adj. Professor Archeology, North America	1987/88
DEAN, Glenna	Asst. Professor (part-time) Archeobotany, palynology, coprolite analysis, paleodiet, paleoecology; Southwest, Great Basin	1988/89
FRITZ, John M.	Adj. Assoc. Professor Archeology, theory and method; western North America, India	1980/81
HARRISON, Peter D.	Adj. Assoc. Professor Archeology, Mayan agriculture; Mesoamerica	1980/81
HILL, Kim R.	Adj. Asst. Professor Ethnology, evolutionary ecology, subsistence and reproductive strategies, hunter-gatherers; South America	1986/87
HOGAN, Patrick F.	Asst. Professor (part-time) Archeology, cultural ecology and evolution, paleoenvironmental reconstruction; Southwest, Great Basin; Asst. Director OCA	1988/89
MATHIEN, F. Joan	Adj. Asst. Professor Archeology, exchange systems; southwestern US	1982/83

<u>NAME</u>	<u>TITLE</u>	<u>1st APPOINTMENT</u>
MYERS, J. Emlen	Research Asst. Professor Archeological ceramics, trace element studies, neutron activation analysis; Late Medieval and Early Modern western Mediterranean	1988/89
SABLOFF, Jeremy A.	Adj. Professor Archeology, prehistory; Mesoamerica	1986/87
SMYTH, Michael P.	Adj. Asst. Professor Archeology, ethnoarcheology, method and theory; Mesoamerica, Andean South America	1988/89
SOBUS, Joseph C.	Adj. Asst. Professor Human sociobiology, cultural anthropology, paleoanthropology	1987/88
STAFFORD, Thomas W.	Adj. Asst. Professor Geochronology, radiocarbon dating; paleolithic Europe, paleoindian in the New World	1988/89
STEINBOCK, R. Ted	Adj. Asst. Professor Radiology, paleontology, paleopathology	1982/83
THORNHILL, Nancy W.	Asst. Professor (part-time) Evolution of human social behavior, inbreeding in humans, male sexual behaviors, human emotional responses	1987/88
TOURTELLOT, Gair III	Adj. Asst. Professor Mayan archeology	1983/84
TRINKAUS, Kathryn	Asst. Professor (part-time) Old World archeology, lithics, complex societies; Research Assoc., Maxwell Museum	1983/84
WINTER, Joseph C.	Assoc. Professor (part-time) Archeology, cultural resource management; California, Southwest Director OCA	1980/81

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ATTACHMENT 7.a
1988/89 BACHELOR DEGREES CONFERRED
Anthropology

BACHELOR OF ARTS

Summer 1988

none

Fall, Semester I

Davis, Joshua Hart
Lauxman, Timothy George
Marreel, Stephany A.
Nabahe, Rolf Jay
Raab, Joyce Marie
Reed, James Casey

Spring, Semester II

Adams, Meira J.
Aragon, Luz Loretta
Benfer, Ardith
Emerson, Mark Cooper
Good, Andrea T. F.
McGill, Janet C.
Wolff, Charles Bodell

BACHELOR OF SCIENCE

Summer 1988

none

Fall, Semester I

none

Spring, Semester II

Docter, Adina Jo
Gallagher, Patricia A.
Menke, Kurt A.
Sandoval, Ruby A.
Stephen, Linda Jeanne
Trask, Lance K.
Yu, Pei-Lin

DEPARTMENTAL HONORS

Seniors who have fulfilled the requirements of the Honors Program by exhibiting outstanding ability in the field of independent research.

Fall, Semester I

Lauxman, Timothy G., Summa Cum Laude

Spring, Semester II

Docter, Adina Jo, Summa Cum Laude
Stephen, Linda J., Cum Laude
Wolff, Charles B., Summa Cum Laude

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ATTACHMENT 7.b
1988/89 MASTERS DEGREES CONFERRED
Anthropology

MASTER OF ARTS

Fall, Semester I

Churchill, Steven Emillo
Heller, Julie Ann

Spring, Semester II

Converse, Susan Kay
Lawson, Michael Joe (with distinction)
Manuelito, Brenda Kay
Redmond, Louis Arthur
Reed, Heidi

MASTER OF SCIENCES

Spring, Semester II

Murphy, Lynne Marie

ATTACHMENT 7.c
 1988/89 DOCTORAL DEGREES CONFERRED
 , Anthropology

<u>SESSION</u>	<u>DISSERTATION CHAIR</u>	<u>SUBFIELD</u>
Summer 1988 SMYTH, Michael P.	Louis Binford	Archeology
	<u>Storage Behavior in the Puuc Region of Yucatan, Mexico: An Ethnoarcheological Investigation</u>	
Fall 1988 LEKSON, Stephen Henry	Wirt H. Wills	Archeology
	<u>Sociopolitical Complexity at Chaco Canyon, New Mexico</u>	
Fall 1988 DICKHAUT, Richard	Jeffery Froehlich	Biological Anthro.
	<u>Electromagnetic Characteristics of Brain Information Processing</u>	

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ATTACHMENT 8
1988/89 OUTSIDE FUNDING PROPOSALS SUBMITTED
(Faculty and Adjuncts)
Anthropology

AMERICAN PHILOSOPHICAL SOCIETY

Wirt WILLS, Asst. Professor, Archeology
An Analysis of Archeological Collections from the
SU Site, Western New Mexico
submitted 2/8/89 \$1,348

DEPARTMENT OF HEALTH & HUMAN SERVICES

Hillard KAPLAN, Asst. Professor, Ethnology/Biosocial Anthro
Diet, Growth, and Reproduction in Amazonian Peru
submitted 9/28/87 (\$131,245 1st year) \$503,694
revision submitted 10/28/88 (\$132,431 2nd year) \$508,609

Jane LANCASTER, Professor, Biosocial Anthropology
Male Parenting in NM: Resources, Relationships,
Fertility
submitted 7/11/88 (first yr \$145,947) \$335,176

WILLIAM T. GRANT FOUNDATION

Jane LANCASTER, Professor, Biosocial Anthropology
Male Parenting: Resources, Relationships, Fertility
(planning grant)
submitted 24/5/89 \$10,000

MARGARET CULLINAN WRAY CHARITABLE LEAD ANNUITY TRUST

Robert LEONARD, Asst. Professor, Archeology
The Zuni Aggregation Project
submitted 3/29/89 \$2,810

NATIONAL ENDOWMENT FOR THE HUMANITIES

John M. FRITZ, Adjunct Associate Professor, Archeology
Imperial Style: Vijayanagara. A South Indian Case Study
submitted 08/01/88 (first yr \$127,459) \$256,552

NATIONAL GEOGRAPHIC SOCIETY

James L. BOONE,
Archeological Investigations at Alcaria Longa
submitted 02/15/89 (\$43,886 for 3 yrs) \$14,337

NATIONAL SCIENCE FOUNDATION (NSF)

Wirt H. WILLS, Asst. Professor, Archeology "Radiocarbon Support for the Study of Early Agricultural Economies in the Mogollon Highlands of western New Mexico submitted 10/28/88	\$8,881
Robert D. LEONARD (Asst. Professor, Archeology) Jeffrey C. LONG (Assoc. Professor, Biol. Anthro.) Anthropology Computer Laboratory submitted 11/18/88	\$49,889
Robert D. LEONARD (Asst. Professor, Archeology) Puebloan Aggregation at Zuni submitted 12/16/88	\$88,473
Jane B. LANCASTER (Professor, Biological Anthropology) Hillard S. KAPLAN (Asst. Professor, Ethnology) Male Parenting in New Mexico: Resources, Relationships, Fertility submitted 1/25/89	\$132,208
Hillard KAPLAN (Asst. Professor, Ethnology) Research Experience for Undergraduates Supplement submitted 3/29/89	\$4,140
Jeffery FROEHLICH (Biological Anthropology) Science in Developing Countries Program proposal not funded, 3/30/89	-0-
Robert SANTLEY, Assoc. Professor, Archeology Ponciano ORTIZ, Philip ARNOLD, Ronald KNEEBONE Specialized Craft Production in the Tuxtlas Mountains, Veracruz, Mexico submitted 05/30/89 (total \$136,962)	\$76,889

ROCKEFELLER FOUNDATION

Louise LAMPHERE, Ethnology; Patricia Zavella (UC-Santa Cruz); Felipe Gonzales (UNM Sociology) "Working Mothers and Sunbelt Industrialization: New Patterns of Work and Family" submitted 1/88	\$70,189
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ATTACHMENT 8.a
1988/89 INSIDE FUNDING PROPOSALS SUBMITTED
(Faculty and Adjuncts)
Anthropology

UNM FOUNDATION

Robert D. LEONARD & Wirt H. WILLS (Archeology)
funding for the Southwest Symposium
submitted 2/28/89 \$9,785
not funded 5/26/89

Jane B. LANCASTER & Jeff C. LONG (Biological Anthropology)
Microcomputer and software requested for
cross-cultural research in biosocial anthropology
submitted 2/29/89 \$9,034
not funded 5/26/89

ATTACHMENT 9
1988/89 OUTSIDE FUNDING RECEIVED
(Faculty and Adjuncts)
Anthropology

AMERICAN PHILOSOPHICAL SOCIETY

Wirt H. WILLS, Asst. Professor (Archeology)
awarded 06/09/89 \$1,300

NATIONAL ENDOWMENT FOR THE HUMANITIES

John M. FRITZ, Adjunct Associate Professor, Archeology
Imperial Style: Vijayanagara. A South Indian Case Study
submitted 08/01/88 (first yr \$127,459) \$256,552

NATIONAL GEOGRAPHIC SOCIETY

Wirt H. WILLS, Asst. Professor, Archeology
"Emergence of Agricultural Communities in the American
Southwest"
approved 1/21/88 \$5,000

Lawrence S. STRAUS, Professor, Archeology
Upper Paleolithic Research in Portugal, Phase II
submitted 8/31/87 \$7,400, approved 1/88 \$4,400

NATIONAL SCIENCE FOUNDATION (NSF)

James BOONE, Asst. Professor, Archeology
Archeological Investigations of Medieval Settlements in
Southern Portugal \$9,728

Hillard KAPLAN, Ethnology
Comparative Ecology of Subsistence, Health, and
Parenting in Manu National Park, Peru
awarded 2/1/88 \$125,252

Gair TOURTELLOT, Adjunct Asst. Professor, Archeology
"Household Storage Behavior of the Puuc Region of
Yucatan, Mexico: The Analysis Phase of an Ethno-
archeological Investigation"
6/15/87 - 8/31/88 \$5,170

James L. BOONE, Asst. Professor, Archeology
Archeological Investigations at Alcaria Longa: A
Medieval Islamic Village in Southern Portugal
submitted 12/7/88 (3 yrs \$191,422) \$70,527
approved 06/89

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UNIVERSITY OF PITTSBURGH

Gair TOURTELLOT, Adjunct Asst. Professor, Archeology
A Study of Ancient Maya Settlement and Community
Patterns at the Site of Sayil, Puuc Region, Yucatan,
Mexico \$6,160

ATTACHMENT 9.a
 1988/89 INSIDE FUNDING RECEIVED
 (Faculty and Adjuncts)
 Anthropology

UNM - BIOMEDICAL RESEARCH SUPPORT GRANT

Jane LANCASTER, Professor, Biological/Biosocial Anthropology
 Reproductive and Marital Decisions Through the Life
 Course Among New Mexican Men

submitted 1/26/88	\$4,900
resubmitted 3/7/88	\$2,500
approved 3/25/88	\$2,990

Erik TRINKAUS, Professor, Biological Anthropology
 "Humeral Diaphyseal Cross-Sectional Geometry and
 Asymmetry: Biomechanical reflections of activity
 levels and aging"

submitted 3/20/89	\$1,773
approved 05/08/89	\$1,881

UNM FOUNDATION

Thomas W. STAFFORD, Jr. & Robert S. SANTLEY (Archeology)
 Development of laboratory facilities for radiocarbon
 dating and geochemistry research

submitted 1/10/89	\$39,740
approved 05/22/89	\$15,850

Tom STAFFORD (Adjunct, Archeology)
 Geochemistry Facility for Accelerator Radiocarbon
 Dating and Stable Isotope Analyses

submitted 2/22/89

UNM - LATIN AMERICAN INSTITUTE

Hillard KAPLAN, Asst. Professor, Ethnology/Biosocial
 Nutrition, Parental Care and Children's Health and
 Development among Subsistence Peoples in Lowland Peru
 for foreign air travel

\$1,607

UNM - RESEARCH ALLOCATIONS COMMITTEE (RAC)

James BOONE, Asst. Professor, Archeology Archeological Investigation of Medieval Rural Settlements in Southern Portugal submitted 1/88, approved 2/88	\$4,650
Hillard KAPLAN, Asst. Professor, Ethnology/Biosocial Nutrition, Parental Care and Children's Health and Development Among Subsistence Peoples in Lowland Peru. #88-221 for field supplies	\$2,360
Lawrence STRAUS, Professor, Archeology Isotopic Analyses and Dating for the Meso-, Neo-, & Chalcolithic of Portugal supplemented with \$900 from Dean of A & S submitted 12/1/88, approved 12/88	\$900
Robert D. LEONARD, Asst. Professor, Archeology "Prehistoric Population Trends at Zuni: The Petroglyph Ridge Community," submitted 1/25/89	\$4,497

ATTACHMENT 10
1988/89 OUTSIDE FUNDING PROPOSALS SUBMITTED
(Graduate Students)
Anthropology

L.S.B. LEAKEY FOUNDATION

Lewis R. BINFORD, Distinguished Leslie Spier Prof., Archeology
Mary C. STINER, Archeology
The Role of Cave Sites in the Foraging Adaptations
of Mousterian Hominids of west-central Italy:
Seasonality and taphonomic investigation of the
Mousterian Cave Faunas.
submitted 3/5/88 \$3,720

NATIONAL SCIENCE FOUNDATION

Robert S. SANTLEY, Associate Professor, Archeology
Rani T. ALEXANDER, Archeology
Archaeology and ethnohistory at Yaxuna, Yucatan,
Mexico
submitted 03/09/88 \$10,000

Louise LAMPHERE, Professor, Ethnology
D. Scott WILSON, Ethnology
Social Competence and Pragmatic Communication
among Male Prostitutes
submitted 04/04/88 \$7,511

Jeffrey W. FROEHLICH, Associate Professor, Biological
Jatna SUPRIATNA, Biological Anthro
Genetic differentiation and speciation of four taxas
of Macaca in Sulawesi
submitted 02/01/88 \$19,750

Richard A. BARRETT, Associate Professor, Ethnology
Jorg OPPERK, Ethnology
Gender Relations in Sweden: Ideology and Practice
submitted 05/16/89 \$9,160

Erik TRINKAUS, Professor, Biological
Robert L. TOMPKINS, Biological
Relative Dental Development in Upper Pleistocene
Hominids and Recent Humans
submitted 6/2/89 \$9,666

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NEW MEXICO ENDOWMENT FOR THE HUMANITIES

Ronald R. KNEEBONE (Archeology)
June-el PIPER (Archeology)
The Organization of Land and Space Use, Technology and
Activities in Past and Present Societies. A Symposium
in honor of Lewis R. Binford
submitted 05/30/89 \$4,312

SIGMA XI

Michael BERMAN, Archeology
Research in South Africa \$600

SOCIAL SCIENCE RESEARCH COUNCIL

Karl H. SCHWERIN, Professor, Ethnology
Nancy L. NELSON, Ethnology
Economic Brokers and Petty Commodity Traders: Street
Vending in Bogota, Colombia
submitted 10/23/87

WENNER-GREN FOUNDATION

Robert S. SANTLEY, Associate Professor, Archeology
Rani T. ALEXANDER, Archeology
Archeology and Ethnohistory at Yaxuna, Yucatan, Mexico
submitted 4/15/88 \$10,000

Louise LAMPHERE, Professor, Ethnology
D. Scott WILSON, Ethnology
Social Competence and Pragmatic Communication
among Male Prostitutes
submitted 4/27/88 \$9,990

WOODROW WILSON NATIONAL FELLOWSHIP FOUNDATION

Lewis R. BINFORD, Distinguished Leslie Spier Prof., Archeology
Martha GRAHAM, Archeology
Raramuri Residence & Mobility: An Ethnoarcheological
Study of Settlement
submitted Fall 1987

0233

WORLD WILDLIFE FUND

Hillard KAPLAN, Assistant Professor, Bio-social
Michael S. ALVARD, Biosocial Anthropology
"Human Predation on the Animal Communities of Manu
National Park, Peru,"
submitted 9/14/87

\$7,500

ATTACHMENT 10.a
 1988/89 INSIDE FUNDING PROPOSALS SUBMITTED
 (Graduate Students)
 Anthropology

LATIN AMERICAN INSTITUTE
 (Mellon Foundation & Tinker Foundation)

Robert S. SANTLEY, Associate Professor, Archeology	
Rani T. ALEXANDER, Archeology	
Archeology and Ethnohistory at Yaxuna, Yucatan, Mexico	
submitted 3/7/88	\$1,223
Wirt H. WILLS, Assistant Professor, Archeology	
Raymond P. MAULDIN, Archeology	
Developing Methods for Assessing Agricultural Dependence in the Archeological Record	
submitted 3/14/88	\$989
Heidi E. REED, Archeology	
Medieval Rural Settlement in rural southern Portugal	
submitted 3/8/88	\$1,000

GSA PROJECTS COMMITTEE

Mary STINER (Archeology) & Robert FRANCISCUS (Biological)	
Travel to invite Dr. Robert Foley (Cambridge Univ.) as guest speaker for the Anthropology Graduate Students	
submitted 10/3/89 (cost \$683)	\$500

STUDENT RESEARCH ALLOCATIONS COMMITTEE (SRAC)

Jim ENLOE (Archeology)	
Attend AAA Meetings in Phoenix to present a paper	\$150
Support research travel to France	\$150
submitted 9/19/88	
Daniel S. AMICK (Archeology - Binford)	
Research on Folsom collection at Univ. of Oklahoma	\$100
Presenting paper at Plains Anthro Soci. supplemented with \$50 from Dept.	
Steven E. CHURCHILL (Biological Anthro - Trinkaus)	
The Neandertal Shoulder	\$150
supplemented with \$50 from Maxwell & \$50 from AGS	
19/9/88	
Lynne MURPHY (Archeology)	
Pollen analysis from the SU site	\$120

Suzanne COWAN (Biosocial) present paper at Navajo Studies Conference supplemented with \$130.20 from Maxwell Museum travel to AAA in Phoenix	\$50 \$100
Mary Jane McREYNOLDS (Ethnology) travel to AAA meetings - Phoenix	
Andrea CARVEY (Archeology) attend Presenting the Past: Media, Marketing, and the Public, Univ. of Minnesota & conduct research	\$150
Bradley VIERRA (Archeology) attend SAA meetings	\$150
Trenton HOLLIDAY (Biological Anthro) attend AAPA meetings	\$256
Nancy STONE (Archeology) organize and videotape symposium at SAA meetings supplemented with \$50 from Chair's Fund	\$150
Mary C. STINER (Archeology) organizing sessions at AAPA and SAA supplemented with \$50 from Chair's Fund	\$378
Stephen CHURCHILL (Biological Anthropology) travel for research in Europe and the Near East supplemented with \$50 from Chair's Fund	\$150
Michael BERMAN (Archeology) attend SAA meetings	\$150
Julie HELLER (Biological Anthropology) present paper at AAPA meetings supplemented with \$50 from Chair's Fund supplemented with \$50 from Physical Anthropology Lab fund	\$250
George A. McCUE (Biosocial Anthropology) research on varied sexual behavior	\$150
Guido RILEY (Biological Anthropology) present paper at AAPA meetings supplemented with \$50 from Chair's Fund	\$150
Marsha D. OGILVIE (Biological Anthropology) attend AAPA meetings	
Charles E. HILTON (Biological Anthropology) present paper at AAPA meetings	\$125
Robert L. TOMPKINS (Biological Anthropology) attend AAPA meetings	\$281

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Phillip MONTOYA (Ethnology)	
travel to Costa Rica for summer research	\$250
Dan AMICK (Archeology)	
present paper at SAA meetings	\$150
supplemented with \$50 from Chair's fund	
Kenneth JUELL (Archeology)	
present paper at SAA meetings	\$150
supplemented with \$50 from Chair's fund	
D. Scott WILSON (Ethnology)	
research on Hustlers and Family Milieus in Denver	\$150
Christopher D. DORE (Archeology)	
pilot reconnaissance at Sayil, Yucatan, Mexico	\$2,302
submitted 04/21/89	

UNM FOUNDATION

Lu-Ann WANDSNIDER (Archeology)	
Ramiro JORDAN (EECE)	
Design and Implementation for Development of an	
Augmented Local Positioning System	
submitted 2/28/89	\$10,140

ATTACHMENT 11
 1988/89 OUTSIDE FUNDING RECEIVED
 (Graduate Students)
 Anthropology

L.S.B. LEAKEY FOUNDATION

Lewis R. BINFORD, Distinguished Leslie Spier Prof., Archeology
 Steven L. KUHN, Archeology
 Investigation of Mousterian Raw Material Economy
 at Grotta Breuil (Lazio, Italy)
 submitted 4/13/88 \$2,515
 approved Feb.-Apr. 1989 \$1,000

Erik TRINKAUS, Professor, Biological
 Robert L. TOMPKINS, Biological Anthropology
 Relative Dental Development in Upper Pleistocene
 Hominids and Recent Humans
 submitted 2/23/89 \$14,939
 approved

NATIONAL SCIENCE FOUNDATION

Lewis R. BINFORD, Distinguished Leslie Spier Prof., Archeology
 James G. ENLOE (Archeology)
 Paleolithic archeology in the Paris basin
 submitted 07/12/88

William Troy TUCKER
 Graduate Fellowship Award (for 3 years) \$12,300/annum

ORGANIZATION OF AMERICAN STATES

Rani T. ALEXANDER, Archeology
 Summer 1988

PATRICIA ROBERTS HARRIS GRADUATE STUDY FELLOWSHIP

Brenda MANUELITO, Ethnology (\$575/mo.) \$6,900

0233

ATTACHMENT 11.a
1988/89 INSIDE FUNDING RECEIVED
(Graduate Students)
Anthropology

STUDENT RESEARCH ALLOCATIONS COMMITTEE (SRAC)

Brad VIERRA Archeology	
1/27/88 to attend Southwest Symposium	\$117
1/27/88 to attend SAA Meetings	\$133
Susan CONVERSE Archeology	
2/8/89 to attend SAA meetings	\$150
George A. McCUE Biological Anthropology	
2/8/89 to attend Human Biology Council meetings	\$150
Signa LARRALDE Archeology	
2/8/89 for SAS license	\$75
2/8/89 to attend SAA meetings	\$150

UNIVERSITY OF NEW MEXICO

Willow POWERS, Biosocial Anthropology, Graduate Tuition Fellowship	
Jutta DALE, Ethnology, Graduate Achievement Award	
James ENLOE, Archeology, University Fellow	
Adriana RAMIREZ DE ARELLANO, Graduate Opportunity Fellowship 1989/90	\$7,500
Francine ROMERO, Graduate Fellowship Act Fellowship 1989/90	\$7,200

LATIN AMERICAN INSTITUTE
(Mellon Foundation & Tinker Foundation)

Robert S. SANTLEY, Associate Professor, Archeology	
Rani ALEXANDER, Archeology Archeology and Ethnohistory at Yaxuna, Yucatan, Mexico	
Hillard KAPLAN, Assistant Professor, Biosocial	
Michael ALVARD, Biosocial Anthropology Human Predation on the Animal Communities of Manu National Park (Peru)	

Wirt H. WILLS, Assistant Professor, Archeology
Raymond MAULDIN, Archeology
Developing Methods for Assessing Agricultural
Dependence in the Archeological Record (Bolivia)

Kenneth ROBEY, Ethnology
Siblingship in Afro-Caribbean Matrilocal Family
Organization, the Garifuna of Belize

ATTACHMENT 12
1988/89 APPOINTMENTS AND SEPARATIONS
Anthropology

Faculty Appointments:

Keith H. Basso	Professor	12/28/88
Sylvia Rodriguez	Assistant Professor	08/15/88

Part-Time Faculty Appointments:

Philip Arnold	Instructor	Semester I
Thomas Becker, M.D.	Instructor	Semester I
Robert Franciscus	Instructor	Sem. I & II
Elizabeth Hoobler	Instructor	Semester II
Nancy Lerman	Instructor	Semester II
Joseph C. Sobus	Instructor	Semester II
Nancy Thornhill	Instructor	Semester II
Joseph C. Winter	Instructor	Semester II

Staff Appointments:

Mimi Stephens	Administrative Assistant	04/25/89
Yolanda Lopez	Office Manager	06/05/89
Vel Begay	Graduate Secretary	05/30/89
Gayle Pearce	Department Secretary	07/17/89

Faculty Separations:

Harry W. Basehart	Professor Emeritus (deceased)	12/27/88
James S. Chisholm	Associate Professor	12/31/88

Staff Separations:

Merilyn Williams	Aministrative Assistant	04/07/89
Rebecca Thomas	Graduate Secretary	05/11/89

0241

II JOURNAL OF ANTHROPOLOGICAL RESEARCH

Annual Report of
The Journal of Anthropological Research

1 July 1988 - 30 June 1989

Philip K. Bock
Editor

Four issues were produced in 1988-89 totalling 502 pages and including a special UNM Centennial Issue (Spring, 1989) on "Anthropology in New Mexico," with contributions by present and former faculty and students. Approximately 88 manuscripts were processed during this period. Subscriptions remained relatively stable: the 36 new institutional subscriptions may indicate the success of our advertising in the "Serial Librarian's Buyer's Guide." Also, sales income increased during the fiscal year by \$6,000 as a result of raising institutional rates from \$30 to \$40 per year. (Only four institutions requested cancellations during the this period.)

The death of Editor Emeritus Harry W. Basehart in December, 1988 deprives us all of his wise counsel. Professor Jane Lancaster has agreed to serve, temporarily, on the Editorial Board, together with Editor Bock and continuing board members Lamphere, Straus, Brody and Weigle. The Board will become more active in the coming year, especially in guiding the review of manuscripts and books by appropriate scholars.

0243

III OFFICE OF CONTRACT ARCHEOLOGY

Annual Report of
The Office of Contract Archeology

July 1, 1988-June 30, 1989

by
Joseph C. Winter
Director

A. Review of Activities and Achievements

FY 88-89 was another very successful year. For the third year in row, OCA brought in over \$1.1 million in new contracts, completed a number of important large projects, and started up a number of new ones. Descriptions of projects and finances are presented below.

1. Reports and Projects

Major reports produced this year include *The Casamero and Pierre's Outliers Survey*, by Randy Harper, Marilyn Swift, Barbara Mills, James Brandi, and Joseph Winter; *Cultural Resources Inventory of the NMERI Test Site*, by Timothy Seaman; *Analysis and Interpretation of the Bear Canyon Site*, by Matthew Schmader; *Toward An Archeology of Landscapes*, by Timothy Seaman, William Doleman, and Richard Chapman; *Stone Circles, Ancient Forts, and Other Antiquities of the Dry Cimarron Valley*, by Joseph Winter; *The Holloman Test Track Impact Area Archeological Survey* by William Doleman; *The 1986 GBFEL-TIE Sample Survey on White Sands Missile Range*, by Timothy Seaman and William Doleman; and *Archeological Investigations at Sites 030-3895 and 030-3900*, by Timothy Seaman, Peggy Gerow, and Glenna Dean. All of these reports represent the completion of extensive, multiyear projects that have been described in earlier Annual Reports. In addition, several large projects are now in the writeup stage, including the following:

Timothy Seaman (with Richard Chapman as Principal Investigator) directed a data recovery program at 11 sites on Guadalupe Mountain, a high altitude volcanic vent located between the Rio Grande Gorge and the Sangre de Christo Mountains near Questa, NM. All of the site locations are multicomponent, spanning late Paleoindian through early historic time periods; and most consist of extremely dense distributions of basalt tools and manufacturing debris deriving from local sources on Guadalupe Mountain. Preliminary geomorphological analysis by Frank Pazzaglia (Dept. of Geology, UNM), combined with excavation results, demonstrates that the archeological record of Guadalupe Mountain consists of surface deposits, thus obviating application of conventional small-scale spatial analytical techniques to the assemblages. Major problem domains guiding the analysis emphasize the effects of multiple occupations upon assemblage variety and tool reuse, examination of regional large game movements as they relate to hunting strategy expectations for early Archaic through Puebloan adaptations, and variation in activity performance across large scale topographic features characterizing the Guadalupe Mountain locale.

Jeanne Schutt (with Richard Chapman as Principal Investigator) completed a testing program at 27 sites in the southern Tularosa on White Sands Missile Range, New Mexico as part of OCA's continuing multistage GBFEL-TIE archeological project. Results of testing demonstrated that a significant portion of the basin floor archeological record is buried under relatively modern (Q4) sand dune deposits; and that subsurface testing is required in all cases to assess the extent, depth and integrity of remains differentially visible on the surface. Detailed examination of assemblages recovered from mid-Archaic through late formative (El Paso Phase) period deposits revealed significant differences in content between surface and immediate subsurface artifacts due apparently to microgeomorphic sorting. At the same time many assemblages apparently retain surprising horizontal spatial integrity at a scale of 10s of centimeters, despite having been deflated as much as 75 cm vertically from their original depositional contexts. Content analyses indicate that a diversity of activity-specific assemblages exist on the basin floor, in addition to conventionally expected multicomponent reoccupied sites.

Randy Harper and Joseph Winter also excavated one pithouse and a bell-shaped pit at the Taylor Ranch Site (LA 33223/18125), in Albuquerque. Carbon-14 samples and ceramics indicate that the two features were used in Pueblo II times. Other features at this large, multicomponent site date to Basketmaker II, Basketmaker III/early Pueblo I, and early Pueblo IV times.

Janette Elyea (Project Director) and Joseph Winter (Principal Investigator) carried out a 10% sample survey of 49,086 acres (4908 actually surveyed) and an intensive survey of 640 acres throughout west-central New Mexico. One hundred and fifty five sites were recorded, reflecting periodic human occupations from Paleoindian Indian through historic Native American and Euro-American eras. The survey areas were west of Quemado, along the Arizona border, north-northwest of Quemado, south of Acoma, along Ceboletta Mesa, and southeast of Canoncito.

Janette Elyea (Project Director) and Patrick Hogan (Principal Investigator) supervised the first phase of excavations at two large mid-to-late Archaic sites near Farmington, New Mexico. Fieldwork this year focused on an area with four structures arrayed in an arc. The structures are shallow basins, 3.5 to 4.0 m in diameter, with post molds around their peripheries. Hearths and small storage pits were common interior features. Exterior features included hearths, dense lithic artifact concentrations, and a diffuse scatter of bone. The regular spacing of the structures and the patterning of extramural features suggest that all of the structures might have been occupied concurrently.

Peggy Gerow (Project Director) and Patrick Hogan (Principal Investigator) supervised excavations at 12 prehistoric sites in the middle Rio Puerco valley near Albuquerque, New Mexico. This cluster of sites included structures and short-term camps probably dating to the late Archaic/Basketmaker II periods, Basketmaker III pithouses and limited use areas, and early Pueblo I habitations. Preliminary indications suggest that the data from these sites may allow us to document the local transition from an economy based on hunting and gathering to one based on horticulture.

Under the supervision of Patrick Hogan, Kurt Anschuetz and Jeanne Swarhout, crews from OCA Batcho and Kauffman Associates surveyed scattered parcels of BLM lands in south-central New Mexico totaling over 9500 acres. Ninety-two sites were recorded during the project, 31 of which were tested. Analysis of survey records should provide a partial description of Archaic and Formative settlement patterns in the Mesilla Valley and southern Tularosa Basin.

Finally, ongoing projects or projects where only the fieldwork has been completed included a survey of 2300 acres on the Mesa del Sol property near Albuquerque; a survey of approximately 4000 acres around El Malpais National Monument; test excavations of 3 sites near Belen; test excavations at 2 sites at Holloman Airforce Base; and excavations at the Cox Land Exchange sites. Ongoing field projects include excavations at one site in Valencia County and at one site along Cuchillo Negro Creek. The status of all of these projects is shown in Table 1.

2. Financial Statement

For a third year in a row, OCA brought in over \$1.1 million in new projects worth over \$280,000.00 in Indirect Cost. Table 2 lists these new contracts. Most of the funds are from our large BLM and Army Corps of Engineers open-ended contracts, but a considerable amount is also from a Museum of New Mexico contract, while the rest is from many smaller contracts.

As summarized at the end of Table 2, OCA's operating budget for FY 88-89 was \$124,987.00. With \$24,281.00 in salary credits in contracts applied against this, our budget was actually \$100,706.00. Total new IDC represented by new contracts was \$289,678.00, meaning that we brought in a potential "surplus" of \$188,972.00 for UNM.

Table 1
 Summary of OCA Activities
 7/1/88-6/30/89

Project	Sponsor	Brief Description	Status
185-185a/b	Transwestern Corp.	Lithic analysis	Report in Preparation
185-227	Corps of Engineers	Survey of 50,000 acres	Completed
185-272	FAA	Excavation of 14 sites	Final Report in Preparation
185-302	Pac Tex Co.	Pipeline survey	Project shut down, due to payment problem, and turned over to UNM lawyers
185-247I	BLM	Part II Roswell overview	Completed
185-247o	BLM	Santa Teresa Survey	Final report in preparation
185-316	Albuquerque Academy	Analysis and Report of One Site	Completed
185-247U	BLM	Excavation of Bolack Navajo Sites	Draft Report under review
185-123M	Ft. Bliss	Mark Stiger Assignment	Completed
185-324C	U.S. Army Corps	Geomorphological Study at White Sands	Draft Report in review
185-324D	U.S. Army Corps	Survey of Oro Grande	Draft Report under review
185-247X	BLM	Excavation of Bolack Anasazi Sites	Draft Report under review
185-324L	Army Corp of Engineers	Excavation of 3 sites at White Sands	Draft Report in review
185-324N	Army Corp of Engineers	Monitoring, Survey, and coordination at	Completed White Sands

Table 1
Summary of OCA Activities (Continued)
 7/1/88-6/30/89

Project	Sponsor	Brief Description	Status
185-342	NM Office of Military Affairs	Testing at 12 Hawk Facility Sites	Completed
185-340C	BLM	Excavation of 11 Features of Dona Ana	Completed
185-346	State Engineer	Expert Witness for Water Rights Litigation	Ongoing
185-347A/G	BLM	Survey of 2 Chacoan Outliers	Completed
185-324Q	Army Corps	Monitoring at White Sands	Completed
185-353/A	Wilson & Co.	Excavation at Montano Bridge	Completed
185-363	BLM	Excavation of Bolack Archaic Sites	Phase I Fieldwork completed
185-347E	BLM	NZ/State Mineral Exchange Survey	Final Report in Prep.
185-361	Office of Cultural Affairs	Mesa del Sol Survey	Final Report in Prep.
185-364E	BLM	Cox Ranch Exchange Survey	Draft Final Report in Prep.
185-366	Army Corps of Engineers	Holloman AFB Survey	Completed
185-367	Salt River Project	Survey of Fence Lake Exclusion Area	Completed
185-000	NMERI	Survey near Zia	Completed
185-365A	BLM	Fossil Forest Survey	Completed
185-370	Ken Marron & Assoc.	Isleta Blvd. Survey	Completed
185-371	Socorro County	Waterline Survey	Completed
185-369	Bohannon-Huston	Gallup Survey	Completed

Table 1
Summary of OCA Activities (Continued)
 7/1/88-6/30/89

Project	Sponsor	Brief Description	Status
185-372	Office of Military Affairs	Hawk Missile Excavation	Draft Final Report in Prep.
185-373	Tohojiilee Bus. Council	Cayoncito Survey	Completed
185-374	Kells and Craig	Lincoln Monitoring	Completed
185-375	HSR	Map Reproduction	Completed
185-376	Gruen Associates	Alameda Blvd Survey	Completed
185-378	BLM	Ft. Craig Survey	Completed
185-379	BLM	Produce Report	Completed
185-385	BLM	Guadalupe Mtn. Excavation	Report being Reviewed
185-386	Gruen Associates	Ruidoso Survey	Completed
185-390	U.S. West	Drainage Survey	Completed
185-388	BLM	Santa Teresa Monitoring	Field Work In Progress
185-389	Wilson & Co.	Road Survey	Completed
185-391	Rockwell International	Kirtland Survey	Completed
185-387	BLM	Malpais Lifeway Study	Final Report In Prep.
185-393	Tech-Inc.	Grants Survey	Completed
185-394	Bohannon- Huston	Literature Search	Completed
185-395	Trisect Landfill	Road Survey	Completed
185-400	Mus. of NM	Valencia Excavation	Fieldwork ongoing

Table 1
Summary of OCA Activities (Continued)
 7/1/88-6/30/89

Project	Sponsor	Brief Description	Status
185-401	Nature Conservancy	Cox Ranch Excavations	Field Work Completed
185-403	Corps of Engineers	Cuchillo-Negro Excavation	Fieldwork ongoing
OCA-002	Robt. Witter Assoc.	Española Survey	Completed
185-408	BLM	Pueblito Survey	Draft Report in Prep.
185-407	BLM	El Malpais Class II Survey	Field Work Complete
OCA-005	Wilson & Co.	Survey of Lift Station	Complete
185-410	Army Corps	Testing at Holloman AFB	Draft Report Complete
185-411	BLM	El Malpais Class III Survey	Draft Report Complete
185-412	Wilson & Co.	Belen RR Yard Testing	Field Work Complete

Table 2
Summary of OCA Contracts Awarded In
FY 88-89

0252

Proposal	DateProposal #	Sponsor	Description	Total Award Amount	IDC Amount
6/8/89	185-412	Wilson & Co.	Testing at Belen RR Yard	\$14,123.00	4581.00
5/17/89	185-411	BLM	Malpais Class III Survey	8,777.00	2128.00
4/2/89	185-410	Army Corps	Holloman AFB Testing	12,111.00	3460.00
3/31/89	OCA-005	Wilson & Co.	Survey of Lift Station	641.00	107.00
3/20/89	185-407D	BLM	Malpais Class II Survey	79,620.00	19302.00
3/8/89	185-408	BLM	Navajo Pueblito Survey	16,196.00	3926.00
1/9/89	OCA-002	Robert Witter & Associates	Survey at Espanola	907.00	220.00
1/12/89	185-403A	Army Corps	Cuchillo Negro Excavation	169,282.00	48,366.00
12/14/88	185-401B	BLM	Cox Exchange Excavation	182,193.00	44,192.00

OCA-9

Table 2

Summary of OCA Contracts Awarded In
FY 88-89 (continued)

Proposal Date	Proposal #	Sponsor	Description	Total Award Amount	IDC Amount
12/22/88	185-400A	MUS of NM	Valencia Excavation	258,184.00	62,590.00
11/04/88	185-396	Trisect Landfill	Road Survey	485.00	157.00
10/27/88	185-395	Trisect Landfill	Road Survey	1,069.00	347.00
10/14/88	185-394	Bohannon- Huston	Literature Search	226.00	73.00
10/1/88	185-393	Tech-Inc.	Grants Survey	1,533.00	497.00
9/1/88	185-387A	BLM	Malpais Lifeway Study	12,244.00	3,915.00
9/27/88	185-391	Rockwell International	Kirtland AFB Survey	2,034.00	606.00
9/22/88	185-389	Wilson & Co.	Road Survey	1,409.00	457.00
9/16/88	185-388	BLM	Santa Teresa Monitoring	21,304.00	5,164.00
9/16/88	185-390	US West	Drain Survey	614.00	199.00
9/13/88	185-386	Gruen Assoc	Ruidoso Survey	2,321.00	753.00

OCA-10

0273

Table 2

Summary of OCA Contracts Awarded In
FY 88-89 (continued)

Proposal Date	Proposal #	Sponsor	Description	Total Award Amount	IDC Amount
9/12/88	185-385	BLM	Guadalupe Mt Excavation	117,325.00	29,769.00
8/10/88	185-379	BLM	Produce Report	2,825.00	717.00
7/28/88	185-377	BLM	Ft. Craig Survey	6,853.00	1,739.00
8/4/88	185-364M	BLM	Additional Cox Ranch Survey	33,151.00	8,412.00
7/25/88	185-376	Gruen Assoc.	Alameda Blvd. Survey	1,501.00	487.00
7/25/88	185-375	HSR	Map Reproduction	118.28	38.00
7/25/88	185-374	Kells & Craig	Lincoln Co. Monitoring	3,983.00	1,292.00
7/25/88	185-373	Tohojilee Bus. Council	Canyoncito Survey	3,240.00	1,051.00
7/18/88	185-372	Office of Military Affairs	Hawk Missile Excavation	94,911.00	30,782.00

OCA-11

0254

Table 2

Summary of OCA Contracts Awarded In
FY 88-89 (continued)

Proposal Date	Proposal #	Sponsor	Description	Total Award Amount	IDC Amount
9/22/88	185-123o	Ft. Bliss U.S. Army	Mark Stiger Assignment	65,758.00	5,978.00
6/15/88	185-370	Marron & Assoc.	Isleta Blvd. Project	10,854.00	3,520.00
6/7/88	185-369	Bohannon- Huston	Gallup Survey	5,941.00	1,927.00
5/20/88	185-365A	BLM	Fossil Forest Survey	11,531.00	2,926.00
3/21/88	185-361	State of NM Survey	Mesa Del Sol	10,000.00	--
TOTAL				1,153,364.28	289,678.00

OCA-12

0255

Table 2

Summary of OCA Contracts Awarded In
FY 88-89 (continued)

0215

Salary Credits For FY 88-89

<u>Date</u>	<u>Amount</u>
11/24/88	\$10,625.00
3/1/89	4,568.00
6/8/89	9,088.00
	<hr/>
	24,281.00

Overall Financial Summary

Total 1-18065 Budget	\$124,987.00
Total Salary credits	+24,281.00
	<hr/>
Total new IDC	-100,706.00
	+289,678.00
	<hr/>
Potential Surplus	+188,972.00

OCA-13

B. Plans and Recommendations

The major challenge facing us this year is the fact that all three of our large, open end contracts have or will run out during the year. The GBFEL-TIE White Sands contract is totally over and will not be re-advertised, while the BLM and Army Corps contracts will be re-advertised. There is no guarantee that we will win these new contracts, however, and so far this year (12 days into FY 89-90) there are no other large projects in sight. We are now carrying out many of the \$1.1 million in contracts awarded in FY 88-89, but there may be few new contracts coming in, which means that by the end of the year we may have to cut back on our staff and budget. Our greatest challenge may therefore be to balance our budget while cutting back our operation.

C. Staff Appointments

Six individuals were hired as 1/2 time permanent staff:

Tim Seaman (Project Director) - 9/20/88
Janette Elyea (Project Director) - 9/16/88
Peggy Gerow (Project Director) - 2/1/89
Barbara Lane (Editor) - 2/1/89
Jeanne Schutt (Project Director) - 2/1/89
Martha Binford (Lab Supervisor) - 2/1/89

Separation From Staff

Lenora Olson (Lab Supervisor) - 1/30/89
Kurt Anschuetz (Project Director) - 8/10/88
Mark Stiger (Research Associate-Staff) - 6/27/89

IV MAXWELL MUSEUM OF ANTHROPOLOGY

COLLEGE OF ARTS AND SCIENCE
Maxwell Museum of Anthropology
Annual Report for 1988-89
Dr. Garth L. Bawden, Director
Katherine M. Pomonis, Administrative Coordinator

SECTION A

Significant Achievements

Ethnology

The museum acquired and catalogued 134 items. In addition to cataloging current items, 98 were updated as part of an on-going inventory project to supplement and correct old entries. Special requests from other departments included filming for a UNM Centennial TV program; use of collections for eight classes including museology, a pottery class, art history and Continuing Education's "Upward Bound" class. The Smithsonian used the collections to video tape a program on the Hopi and Zuni; Dr. Brody received a grant to produce a film on Mimbres pottery which will be distributed to educational TV stations and was shot using Maxwell's collection; and a photo setup was prepared for Newsweek on Tony Hillerman by Collection's staff.

Inventory was done on 1963 items in the Basketroom and 1619 on the Lew Binford loan. In preparation for a conservation project on the vast kachina collection, 60 kachinas were photographed and a catalog on 500 was updated. Data entry is being done by two half-time persons with 188,071 lines entered in the past year.

A total of 206 people toured the Collection's area.

Archaeology

The archaeological collection has continued to expand with the addition of 58,000 new accessioned items. The materials have been actively used for research purposes. Space continues to be at a

premium, with the warehouse 98-99% full. Storage areas roofs continue to leak. This year a major flood occurred again in the Pottery Mound lab, wetting objects from Pottery Mound and Comanche Springs. This year, the main concern has been to develop a legally sound repository agreement, along with policies and procedures to provide the kind of access and record-keeping now required. We now have a repository agreement, loan policy, access policy, requirements for submitting collections to the museum and forms documenting projects, their associated objects and field documentation. This legal contract was written by R. E. Bienstock, an attorney with the university counsel's office.

New demands in the form of federal curation regulations and an unusually large quantity of new acquisitions taken in under these more demanding regulations have displaced long and short-term projects.

The National Park Service has supported two full-time and three part-time employees since last summer to recatalog and repack the Chaco Canyon collection. Approximately \$100,000 has been invested in this mammoth effort over the past year. The Chaco library has received 23 new publications. Use of the Chaco collection has increased dramatically with over 100 in the first half of 1989.

Education

The 32 volunteer docents served 21,610 people (1,000 over last year) with their presentations, mostly through classroom teaching visits. They traveled 9,654 miles - and to accomplish this, the docents

donated 6,500 hours to the museum. These hours were spent on training, researching, preparing and giving presentations. The training consisted of twenty-one half day sessions with lectures given by the faculty of the Anthropology Dept.

Workshops were presented to Art Education 493/200; third grade curriculum development teams; Junior Block students (CIMTE); and a half day workshop on museum programs for classroom teachers. A special cooperative project with Music Education class 295 and an outdoors hands-on archaeological unit on Tijeras Pueblo at Pinon Canyon YWCA camp were developed.

Museum Store

The revenue at the Museum Store increased 30% this past fiscal year. The proceeds from the Annual Sale alone were almost ten thousand dollars - more than three times the sale proceeds last year. Product development is continuing with plans for more educational materials for children, another full-card line of ethnographic items from the collection and the development of educational labels for all items in the store.

Complete remodelling of the store in connection with the construction of the new permanent gallery began January, 1989.

Public Programs

Eleven lectures, 2 tours, 2 exhibit openings, one musical event, 2 childrens' workshops and 1 adult workshop were offered to the UNM and Albuquerque communities. Roughly 2000 people participated. The money received through admission, workshop and tour fees were used to support the free programs and expenses. Most programs were structured around the Maxwell's UNM Centennial exhibit "Legacy of

a Leader." Commitments were received from the Yale Alumni Association, The New Mexico Speakers Bureau and the UNM History Dept. for an additional \$3,300 to be used for programs in the Fall of 1989.

Osteology

Skeletons accessioned into the collection this past year included eight prehistoric skeletons, 10 forensic, 3 Easter Island skull casts and 1 documented specimen. The major growth vector continues to be in the contemporary specimens. DBone entries continue with attention having shifted to the forensic collection. No additional work has been done on the prehistoric collection.

We received some 70 burials from the Guadalupe Church for analysis. Upon completion of this volunteered analysis, the remains will be returned for reburial.

Internal research continued with more than a half-dozen projects being worked on by graduate students. A small increase in the lab budget last year led to the offer of a \$50 grant by the lab to students and resulted in presentation of 3 papers at the American Association of Physical Anthropologists annual meeting. Two presentations were made at the American Academy of Forensic Sciences meetings.

Continued as OMI's forensic anthropologist, handling 46 OMI cases.

Exhibits

Three exhibits were closed and dismantled during the fiscal year and five were installed - one of these at the Tijeras Ranger Station.

During this time remodelling of the North Gallery space was completed. This included the removal of the existing display cases and soffits and the construction of storage and exhibits preparation and staging areas. In October exhibits relocated the Museum Store to the North Gallery, designing and constructing several new display cases for them. For the Museum GALA open displays were arranged and temporary mini exhibits prepared for the seven departments in the museum.

A great deal of time was spent on the design of the structure and content of the new permanent exhibit "Ancestors". In addition to finalizing the material content of the exhibit, the exhibit crew constructed the case structures. Also a great deal of time was spent on the design of the structure of "People of the Southwest" another major permanent exhibit.

Remodel continues on the South Gallery and Museum Store area with extensive on-site supervision by the exhibit director. This has involved coordinating the needs and desires of both the Museum Store and the museum in the entire remodel process.

SECTION B

Significant Plans and Recommendations for the Near Future

The primary efforts of the Maxwell Museum during the past year have been directed towards updating and expanding its permanent exhibition space. Fund raising and planning for the two new permanent exhibits --"People of the Southwest" and "Ancestors" is mostly complete and construction is well under way.

The 1989-90 year will see continuation and completion of the in-house project and initiation of its logical counterpart--further development of the community education program. With major funding provided by the Institute of Museum Services (\$64,536) a comprehensive program of planning will continue throughout the year. The aim of this planning will be to expand the Maxwell's existing collaborative teaching program with the Albuquerque Public School Systems into the rural communities, thus providing a much needed augmentation to their social service curriculum. The program will involve consultants and support staff drawn from UNM and beyond.

Additional plans, already initiated, involve assessment of the Maxwell's library archival needs and if possible initiation of the means by which these important collections can be better utilized for research and teaching. Further planning with the University Architect and Dean of Arts and Sciences will be required in order to plan spatial expansion for the much-used archaeological and ethnological collections. Finally we shall continue to develop the Maxwell's Anthropological Research Center in conjunction with Dr. Frank Hibben who has already donated his home and entire collections of artifactual and documentary material for this purpose.

SECTION C

0205

Appointments to Staff

Elaine Price - Public Program Coordinator, 12/1/88

Eugenia Lane - CS IV, 3/1/89

SECTION D

Separation from Staff

Rachel Maurer - Public Program Coordinator, 9/88

Amy Jamison - CS IV, 1/25/89

SECTION E

Awards from Outside Agencies

Education: Albuquerque Public Schools - \$2500
Maxwell Museum Association - \$3000

Public Programs: Maxwell Museum Assoc. - \$3000
Centennial Lectures - \$1500
Deluxe Check Printers - \$1000

Archaeology: UNM Foundation - \$5150

Collections: UNM Foundation - \$2500
NMHC - \$ 489
Private Donors - \$ 750

Administration: Institute for Museum
Services - \$64,536

Exhibits: UNM Centennial - \$7500

COLLEGE OF ARTS AND SCIENCE
Maxwell Museum of Anthropology
Annual Report for 1988-89
Dr. Garth L. Bawden, Director
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AUG 07 1989

COLLEGE OF ARTS
AND SCIENCES

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Archaeology:	UNM Foundation	- \$5150
Collections:	UNM Foundation	- \$2500
	NMHC	- \$ 489
	Private Donors	- \$ 750
Administration:	Institute for Museum Services	- \$64,536
Exhibits:	UNM Centennial	- \$7500

ANNUAL REPORT
OF THE DEPARTMENT OF BIOLOGY

July 1, 1988 - June 30, 1989

Donald W. Duszynski,

Professor and Chairman

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Annual Report of the Department of Biology

July 1, 1988 - June 30, 1989

Donald W. Duszynski, Professor and Chairman

I. General Information

A. Significant Achievements

On June 30, 1989 I completed my seventh year as chair. I gratefully acknowledge the support and hard work of my assistant chair, Professor Kathryn Vogel, and our superb professional staff including (but not limited to) Sharon Kubler, Diane Schlatter-Thomas, Carol Martindale, Claudia Crawford, Irene Farmer, Rhonda Germano, David Opasik, Peter Curtiss, Beth Dennis, Roy Ricci, Bill Gannon, David Bleakly, Barbara Wright and Kelly Burks.

1. Building Renovations. The work on the renovation of the Biology Annex was finally completed including the restucco of the outside of the building. There were also major renovations in the main building. After years of negotiating, the floors in the old wing of our building were retiled, all new lighting fixtures were installed, and the hallways were painted on all three floors. In addition, lecture room 100 was completely renovated as a state of the art lecture hall with the work being completed in September 1988. Renovation of laboratory spaces for Drs. Taylor and Werner-Washburne were promised for FY 1988-89, but never were begun by the Remodel Section of the Physical Plant. We are hoping this will be resolved in FY 1989-90. One bright spot emerged near the end of the FY that will go a long way toward solving some of our most critical remodel needs for teaching and research space in the near future. It was learned in late June that the 1989-90 Operating And Capital Budget Plans for the Main Campus include \$415,000 for Biology renovations (see Appendix A).

2. The Biological Society of New Mexico (BSNM). In July 1989, the BSNM sent its Fifth Annual Newsletter (Appendix B) to nearly 2,000 alumni and supporters of our program in Biology. During the FY, funds in the Society's account were used (1) to sponsor recruitment of prospective graduate students; (2) as awards to teaching assistants for demonstrated excellence; (3) to help graduate student research projects; (4) to assist in sponsoring departmental seminar

speakers; (5) to help pay for the production of our Biology Department Video; (6) to pay for the production of our newsletter; (7) to pay for our Centennial Mailing Campaign (see Appendix C) to be initiated in Fall 1989 and to coincide with UNM's final fund-raising effort that will conclude its Centennial year; (8) to support our first ever Departmental Graduation Exercise; and finally (9) to give our first Outstanding Undergraduate Award to a graduating senior Biology major. This Award was shared between Rosanna Humphrey and Paulette Ford during our May 13th Commencement Ceremony (Appendix D).

3. Undergraduate Curriculum. The emphasis in Biology at the undergraduate level remains teaching Biology as a broadly based liberal art and our faculty and teaching assistants are dedicated to providing students with a selection of high-quality courses that are current and meaningful. Biology remains one of the most popular majors in the College of Arts and Sciences with 359 registered majors as of Fall Semester 1988.

During the FY we added four 400-level courses to our undergraduate curriculum and all of them either carry graduate credit or are listed as 400/500-level courses. Thus, to avoid redundancy, these new courses will be listed under new graduate courses added (p. 4). We have also put enough courses in place during late afternoon and evening hours so that non-traditional students easily can earn a minor in Biology. Our new B.A. degree was approved by the faculty Senate at its meeting on September 13, 1988 and in late November it was approved by the Regents. Students now should be able to earn that degree by taking evening classes.

During the FY we generated 17,458 semester credit hours (including summer session) and awarded 74 B.S. degrees during the Summer 1988 (7), Fall 1988 (22), and Spring 1989 (45). This number was 40.9% of the 181 B.S. degrees awarded by A & S for the FY. We also awarded our first two B.A. degrees, one to John Sprague in the Fall and the second to Karen Romero in the Spring. This is the beginning of what we hope will be a very successful degree program and fills a niche that has been empty since the early 1970's. An additional 37 students who got B.S. or B.A. degrees with other majors graduated with minors in Biology. Our undergraduate advisors for the FY (G. Johnson, W. Johnson, W. Martin, M. Molles) served over 100 majors and minors during the FY.

Based upon student input from a variety of sources, we have created a unique new B.A. degree that offers a program of studies that allows greater flexibility and, in particular, fosters a broad intellectual view with an emphasis in Biology. This degree program which was reported in last year's Annual Report, has received all College, University and Regent approvals and is now an official degree program at UNM.

Finally, during the FY we produced a 14-minute Nova-type video about UNM Biology. Funding came from the UNM Centennial Committee (\$5,000), the Vice President for Research (\$2,500), and Biology overhead funds (\$2,500) and Shawn Wallworth Productions produced the video and donated about \$8,000 in time and services.

Our video is directed at high school juniors and seniors who are thinking about going to college and who may have an interest in the natural sciences. In essence, it is Biology's personalized attempt at an outreach program.

We, as a department, have taken it upon ourselves to produce this video because we have the sense that sometimes UNM is not perceived in the best light by the citizens of our state. If that perception is true, then the quality of the people and programs here, Biology being one example, doesn't receive the recognition or attention that might be deserved. We, like others in the state, are concerned about the "brain drain" to other state institutions and about keeping the best and the brightest of New Mexico's high school graduates in state. We want these students to know that we care about them and we want the high school science teachers and counselors to know that there are first-class programs here and that we are willing to work with them in getting kids turned on to these programs. We also strongly believe that the people of this state have every reason to begin to take a great deal of pride in their state's major institution of higher education.

I have shown this video to Mr. Charles Serns, Core Subjects Supervisor for APS, and he has volunteered to lend his support to help get this video to the APS high school science teachers. I have shown it to Mr. Bev Graham, with the State Department of Education, and he has agreed to help facilitate getting our video to most of the 140+ other high schools in the state. I have also shown it to Shirley Casados, Director of Programming at KNME-TV and, in September, KNME-TV will produce a monthly program that will discuss issues pertaining to New Mexico educational

institutions. Ms. Casados has indicated it may be possible to incorporate our video into this series. I have also sent a copy of this video to Regents Robert Sanchez, Ken Johns, Roberta Cooper Ramo and Siegfried Heckar and to Judy Zanotti, President of the UNM Alumni Association, Governor Garrey Carruthers (see his response, Appendix E), and Alan Morgan, State Superintendent of Public Instruction. I have been in contact with Joanne Metzler, organizer of the New Mexico Math and Science Teacher's Conference, in an attempt to show our video at their fall 1989 meeting in Gallup. Finally, I also will show this video to the Legislature's ad hoc Committee on Higher Education when they meet in Albuquerque in August 1989.

4. Graduate Curriculum

a. Graduate courses. We taught five new courses during the FY that were either strictly graduate courses or were courses that carried graduate credit: Summer 1988, 407L/507L - Bosque Biology; Spring 1989, 515F - Research Field Biology; 446/546 - Lab Methods in Molecular Biology; 467/567 - Evolutionary Plant Ecology; and 469/569 - Plant Herbivore Interactions. In addition, eight other new graduate or senior/graduate level courses were approved by the various university committees and will be taught in the next FY. These include: 444 - Molecular Biology; 471/571 - Plant Physiological Ecology; 480 - Biology of Disease Vectors; 498 - History of Biology; 511 - Community Ecology; 521L - Advanced Behavioral Ecology; 511 - Molecular Biology and Evolution; and 523 - Systematics.

Our new core curriculum for graduate students, reported in last year's Annual Report, was approved by the Biology faculty during the FY and became an official requirement in our graduate program on 1 July 1989.

b. Graduate student recruitment. This FY we recruited and interviewed three outstanding potential graduate students in an effort to entice them to enter our graduate program. These included Douglas Emlen from Cornell University, Damian Gessler from Beloit College, and Alan Nowicki from the University of Wisconsin. Damian Gessler decided to join our Ph.D. program (but later followed professor William Rice to U.C. Santa Cruz). Funds for recruiting these students were provided by The Biological Society of New Mexico. In the seven years we

have been actively recruiting "blue chip" graduate students to improve the quality of our program, 10 of 21 students recruited have entered our Ph.D. program.

c. Degrees awarded. During the FY we awarded 7 Ph.D. degrees, 12 M.S.I degrees and 3 M.S.II degrees. The students who received these degrees, their major professors, and the current whereabouts of each follows:

Ph.D.s

Parvathi Charv (Natvig). Parvathi teaches at TVI.

Scott Gardner (Duszynski). Scott is a Research Associate for the Department of Biology, UNM.

David Joseph Germano (Fritts, Snell). David is a postdoc in California.

Kerry Kilburn (Altenbach). Kerry is an Assistant Professor at West Virginia St. College, Institute, WV.

Arch McCallum (Ligon). Arch is a Postdoctoral Fellow at the Savannah River Ecology Laboratory in Aiken, SC.

Sandra Mitchell (Scott). Sandra is an Assistant Professor of Biology at Western Wyoming College, Rock Springs, WY.

M.S.I

David C. Brown (Vogel). David works as a Technician for Dr. Werner-Washburne, Department of Biology, UNM.

Jessie David Cornett (G. Johnson). Dave is a Ph.D. student at Iowa State University, Ames.

Ellen DeBruin (Martin). Ellen is a Ph.D. student in the Department of Biology, UNM.

Allen Dickerman (Yates). Allen is a Ph.D. student at the University of Wisconsin, Madison, WI.

Patricia Gegick (Altenbach). Patricia is Ph.D. student in Entomology, at the University of Wisconsin, Madison, WI.

Marliss Hohmann (Kodric-Brown). Marliss is medical student in New York.

Marie C. Nieuwolt (Snell). Marie is a Ph.D. student in the Department of Biology, UNM.

Miles Price (Barton). Miles is a Commissioned Officer in the Air Force.

Constance Wash (Duszynski). Constance is a 4th year medical student at UNM.

Chen-Yi Wu (G. Johnson). Chen-Yi is living in Colorado Springs, CO and expecting a baby.

Gerard Paul Zegers (Snell). Gerry moved to California with his wife, Ellen Hostert, one of two graduate students who followed Professor Bill Rice to the University of California, Santa Cruz.

M.S.II

Diane Marie Andrews (Crawford). Diane works for the Aspen Center for Environmental Studies in Aspen, CO.

Richard C. Calabro (Loker). Richard teaches at TVI.

Sang Hsu (Trujillo). Sang is a Laboratory Technician at the Massachusetts Institute of Technology.

d. Graduate student teaching awards. This year's winners of our department's "Outstanding Graduate Student" teaching awards (\$100) were: Summer 1988 - Greg Farley; Fall 1988 - Miriam Roman and Ken Schoenly; and Spring 1989 - Steve Evanko.

e. Graduate student committee service. During the FY the following graduate students served the department as members of important standing committees: Computer Use - O. Fuller, B. Gannon; Graduate Policy - S. Bandoni, M. Roman; Representatives to Faculty Meetings - B. Hager, S. Sommer; Research Allocations - E. Hostert, S. Loftin, D. Oliveras, M. Yeaman; Graduate Student Selection - T. Newberry; Seminar - S. Kucera; SRAC Representative - D. Oliveras; Undergraduate Policy - J. Seeley, G. Zegers; Biological Society of New Mexico - D. Cimino, W. Gannon.

f. Graduate student professional accomplishments. During the FY our graduate students made numerous professional contributions and received professional recognition that was exclusive of whatever was accomplished by their major professors. These included 40 papers presented at regional, national and international meetings; 11 publications in refereed journals; 4 awards for outstanding student papers (Chary, Gardner, Jennings, McCallum); 10 grants/awards received for research support from professional societies/state or federal granting agencies (Cook, Davis, Fitzgerald, Germano, Hartmen, Jennings, Nieuwolt, Oliveras, Sullivan, and Sugg -2

awards). These awards and grants came from Sigma Xi (3), the World Wildlife Fund, the Latin American Institute (2), NSF, DOE, the Mellon Foundation, New Mexico Fish and Game, and the US Fish and Wildlife Service and the total awards brought more than \$126,000 to UNM. Our students also won a Graduate Achievement Award (Cook) and over 30 grants funded by SRAC/VPGRF/A&S at UNM. These many achievements are in addition to departmental teaching awards (item d, p. 6), jobs/postdocs secured by our degree recipients (pp. 5-6), and departmental research and travel awards of which there were 10.

5. Adjunct Professors, Joint Appointments, etc. Several of our faculty hold joint appointments in other departments and a number of professionals in other academic units, the private sector, industry, and in government labs hold appointments in Biology. Our joint appointments lend breadth and strength to our overall program and the number of joint appointments in Biology now totals 67 (Appendix F).

6. Professional and Technical Support Staff. One of the most important components of our department is our support staff. The Department could not function without this group of dedicated professionals.

7. Biology Faculty, Professional Activities, 1988 (see Appendix G).

8. Museum of Southwestern Biology (MSB). The MSB consists of six divisions each with its own curator: Herbarium (Martin), Herpetology (Snell), Ichthyology (Molles), Invertebrates (Crawford), Mammalogy (Yates) and Ornithology (D. Ligon). Dr. J.S. Findley is the Director of the MSB and serves to coordinate the activities of the "museum process."

The functions of the MSB are research, education and service. The annual reports from the various divisions that were submitted this year are presented in Appendix H.

9. Castetter Laboratory for Ethnobotanical Studies (CLES). The CLES provides modern vegetational studies and paleoethnobotanical analyses in coordination with archaeological investigations. An update on the CLES Technical Series for the FY is attached (Appendix I).

10. Electron Microscope Facility. Our Department's EM Facility was directed by Dr. Robert Chiovetti, Jr. who left the Department on 31 December 1987. Ms. Angela Welford took over supervision of the lab until a new director could be hired, and during the FY we were

fortunate to attract and hire Dr. Stephan A. Stricker, who begins his duties with UNM in August 1989. The annual report prepared by Ms. Welford for FY 1988-89 is attached (Appendix J).

11. National Ecology Center, Denver Fish & Wildlife Service (NEC/DFWS). Details of the cooperative agreement with NEC/DFWS, of the U.S. Fish and Wildlife Service, were noted in a previous Annual Report (FY 1986-87). The annual report of the NEC/DFWS is attached (Appendix K).

12. Land Holdings. See our 1984-85 Annual Report for current land holdings. No new land was acquired in FY 1988-89 although we have been working with the Nature Conservancy to acquire additional acreage on Mt. Taylor currently owned by Mr. Donald Fenton.

13. L.D. Potter Endowed Chair. A detailed history of the development of the Potter Chair is given in our 1984-85 Annual Report. Currently the Potter Chair exists under the name, the Ross-Brown Endowment (No. 067002, subcode 3620) in the General Accounting Office. As of 30 June 1989, this fund is now worth \$115,414.18. I have recently approached Vice President for Finance, David McKinney, and he has given his support to try to achieve our goal of \$250,000 by July 1, 1991, the date the First Potter Chair will be announced. We will try to achieve this goal in two ways. First, by working with the Centennial Committee through the UNM Foundation to identify the Potter Chair Endowment as one of the goals of the Centennial fund-raising campaign and second, by trying to seek matching funds from the New Mexico Legislature through HB524 passed during last year's session that, "creates an Educational Endowment Act to provide matching funds for endowed professorships and faculty chairs."

14. Melinda Bealmear Memorial Scholarship Fund. The development of this Scholarship Fund was detailed in a previous departmental Annual Report (FY 1986-87). The balance in this fund, as of 30 June 1988, is \$2,183.38.

15. Departmental Seminar Series. We devote about \$5,000 of our overhead return each year to support a strong seminar program that features distinguished outside speakers in many disciplines. During FY 1988-89 we featured the following individuals:

Dr. C. Ault, New Mexico Fish and Wildlife, "Revelations from the Boot Heel of New Mexico." or "The Current Status of the Proposed Gray Ranch National Wildlife Refuge in Southwest New Mexico."

Dr. G. Belovsky, University of Michigan, "The Role of Competition and Predation in Structuring Grasshopper Communities."

Dr. R. Byles, US Fish and Wildlife Service, "Aspects of the Biology of Sea Turtles."

Dr. J. Crow, University of Wisconsin, "Why is Mendelian Segregation So Precise?"

Dr. P. Ehrlich, Stanford University, "The State of Our Environment."

Dr. R. Feldmeth, The Claremont Colleges, "The Effect of High Temperature on Reproductive Behavior and Physiology in Pupfish."

Dr. S.E. Freeman, Lovelace Medical Foundation, "Variability in UV-induced DNA Damage and Repair in Human Skin: Improved Methods of Detection Using Video Densitometry."

Dr. M. Gromko, Arizona State University, "Predictability of Direct Response vs. Unpredictability of Correlated Response to Selection for Increased and Decreased Copulation Duration in Drosophila melanogaster."

Dr. J. Hardin, Duke University, "Push and Pull During Gastrulation: Mesenchyme and Epithelium in the Sea Urchin Embryo."

Dr. J. Hart, Forest Genetics Lab, Placerville, CA, "Conifers and Rust Fungi: Phylogeny and Coevolution."

Dr. H.C. Krivan, National Institute of Diabetes and Digestive and Kidney Diseases, NIH, "Binding of Pulmonary Pathogenic Bacteria to Carbohydrate Sequences Found in Glycolipids."

Dr. Y. Linhart, University of Colorado, "Ecological and Genetic Consequences of Patchiness in Ponderosa Pine Forests."

Dr. T. Lowrey, National University of Singapore, "Studies in the Systematics and Evolutionary Biology of Insular Plants: Polynesian Daisies and Malayan Pitcherplants."

Dr. B. Menco, Northwestern University, "The Beauty in Your Nose: A Look into the Olfactory Apparatus and its Development."

Dr. R. Olmstead, University of Michigan, "Phylogeny and Evolution in the Scutellaria agustifolia complex."

Dr. P. Opdam, Research Institute for Nature Management/The Netherlands. "Fragmentation in Dutch Agricultural Landscapes: A Problem of Ecological Research."

Dr. C. Pittendrigh, Stanford University, "Latitudinal Cline in the Behavior of a Circadian System."

Dr. M. Rose, University of California at Irvine, "Evolution of Senescence."

Dr. A. Savory, Center for Holistic Resource Management, Albuquerque, "Desertification of New Mexico and Its Relation to Global Climatic Change."

Dr. K. Schreiber, "Microcatchments in the Negev Desert."

Dr. M. Sopori, Lovelace Medical Foundation, "In Vitro Models of Autoimmunity."

Dr. S. Stricker, University of Wisconsin, "Changes in Nuclear Structure and Composition During Oocyte Maturation."

Dr. C.R. Tracey, Colorado State University, "Interrelationship Between Herbivory and the Abiotic Environment in Ectotherms."

Dr. C.J. Tucker, NASA Spaceflight Center (Maryland), "Satellite Studies of Vegetation on Regional, Continental, and Global Scales."

B. Plans and Recommendations

Plans for the upcoming FY include: (1) adding several new courses both to the undergraduate and graduate levels; (2) Replacing Professor Rice; (3) developing plans to implement an M.A. in Biology; (4) complete development of a departmental flier to accompany our video presentation, these to be targeted at directing NM high school students toward careers in Biology at UNM; (5) working out the details and financing for Biology Faculty to visit all major high schools in Albuquerque, Las Cruces, Los Alamos and Santa Fe to inform students why they should enter graduate programs in Biology at UNM; (6) continuing to push the concept that Biology should be UNM's number one priority to include a new Biology building where Marron Hall now stands. A computer program for the new building is complete and a scale model of the design by Dr. Elsa Taylor will be completed in the Fall, 1989.

C. Appointments to Staff

July 1988. Scott Gardner joined the staff as a Research Associate II.

February 1989. David Bleakly replaced David Opasik as Lab Tech III with the responsibility of Building Coordinator as well as Laboratory Supervisor.

April 1989. Barbara Wright replaced Diane Thomas as Administrative Assistant.

May 1989. Jillene Rawson replaced Rhonda Germano as Clerical Specialist V Receptionist.

D. Separations from Staff

January 1989. Rhonda Germano returned to UNM as a student to complete her bachelors degree.

February 1989. David Opasik relocated to Washington. Diane Thomas resigned as Administrative Assistant in order to complete her Master's Degree.

May 1989. Kulkanya Donahoe left to start her own business.

June 1989. Ernestine Arguello retired after 15 years of service in the Biology Department.

E. Staff Promotions

July 1988. Sharon Kubler was reclassified from Administrative Coordinator to Department Administrator IV. Diane Thomas, Office Manager was reclassified to Administrative Assistant. Rhonda Germano was reclassified from clerical Specialist IV to Clerical Specialist V.

May 1988. J. Scott Aitenbach and Kathryn Vogel were promoted from Associate Professor to Professor and Donald O. Natvig was promoted from Assistant Professor to Associate Professor and awarded tenure, all effective on 1 July 1989.

F. Sponsored Research

During 1988, 28 of our 33.2 FTE professors (84%) submitted 64 proposals to outside agencies (see Appendix G). Also during 1988, 21 of 33.2 FTE professors (63%) received new awards/contracts from private, state and federal agencies outside UNM. The outside contracts in force in Biology during FY 1988-89 totalled \$3,247,386 (Appendix L).

G. Employees, Department of Biology, FY 1988-89

At the request of A & S Dean, B. Hobson Wildenthal, I have included a complete roster of all Department of Biology Employees for FY 1988-89 (Appendix M).

H. Course Offerings, Department of Biology, FY 1988-89

Also at the request of Dean Wildenthal, I have included a complete listing of all courses and laboratories offered by Biology during FY 1988-89 (Appendix N). The total number of student credit hours may differ somewhat from those provided by the Office of Institutional Research (p. 2) because the latter are based on the "21 day count" whereas the figures in our Table 3 are taken from final grade reports issued at the end of each semester.

I. Five Year Plan

Vice President Garcia has requested that we include a short statement detailing Biology's Five Year Plan. In addition to the items identified in B (above), the most important of which is a new Biology building, Biology's priorities over the next five years include: (1) expanding our work in the Sevilleta National Wildlife Refuge now that NSF has designated it to be a Long Term Ecological Research (LTER) site and has awarded Biology a 6 year (\$2.4 million) grant to study there; (2) continue to explore funding opportunities for the Latin American Biodiversity Program, a newly conceived cooperative effort with the Latin American Institute at UNM; (3) develop our Bosque Biology Program in cooperation with Region 2 of the U.S. Fish and Wildlife Service and coordinate these efforts with individuals working on the LTER; (4) continue our collaborative efforts with several state agencies in the areas of biotechnology and management of New Mexican wildlife, biodiversity studies, and historical data banks; (5) expand our new collaborative effort with research scientists at Lovelace Medical Foundation in both research and teaching; and (6) continue to develop our strategy to strengthen molecular biology as presented in the Loker/Duszynski memo to Dean Wildenthal in August 24, 1987.

J. Affirmative Action

It is the policy of the Department of Biology to provide equal opportunity in all personnel actions, institutionally sponsored education, training, tuition assistance, social and recreational

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programs and advancement, without regard to race, color, religion, national origin, sex, handicap, age, or veteran's status.

Hiring procedures for Biology Department faculty and staff are conducted within Affirmative Action guidelines with respect to advertising, search committees, interviewing, and selection. Student employee, work-study, and other job opportunities are advertised on campus and within the department.

Job descriptions are periodically reviewed and revised for accuracy in relation to actual functions and duties; reclassifications are now in process for four staff employees. Employees are also encouraged to upgrade their skills through participation in University sponsored seminars and training programs.

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APPENDICES
1988-89 ANNUAL REPORT
DEPARTMENT OF BIOLOGY

APPENDIX A

Money appropriated in FY 1989-90 to complete classroom
and laboratory remodel/renovation projects in Biology

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Reproduced from: Operating And Capital Budget Plans, Main Campus,
The University of New Mexico, FY 1989-90 (p. 60).

II. CLASSROOMS AND LABORATORIES REMODEL AND RENOVATION PROJECTS

The 1989 Legislature appropriated \$1,200,000 for the continuation of the University's efforts to upgrade and modernize it's teaching facilities on the Main Campus.

Project Allocations:

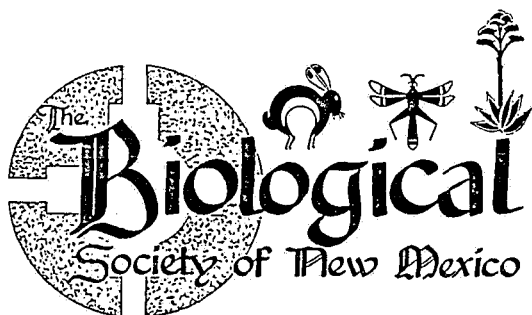
Biology - Labs, Rms 202, 205, and 205A	\$100,000 ***
Biology - Labs, Rms 112, and 112A	65,000 ***
Old Biology Building Labs Renovation	250,000 ***
Chemistry Labs Renovation	250,000
Communications Disorder Classroom	15,000
Law School Classrooms Remodel	85,000
Journalism Bldg, Remodel for Communications	175,000
Fine Arts Programs, Remodel Teaching Spaces	260,000
	<hr/>
	\$1,200,000
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APPENDIX B

BSNM Newsletter, Vol. 5, July 1989

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Vol. 5, July 1989
1989 NEWSLETTER

Greetings

Thanks to all of you who supported our Department this past year. We sincerely appreciate that many of you care enough to stay in touch and we look forward to hearing from even more of you this year. For those who were able to contribute financially to our program, I can assure you that your generosity played a substantial role in many of our achievements and we offer our heartfelt thanks for your support. Don't stop now!

A lot of exciting things have happened in the Department this past year: we have hired superb new faculty, produced our own Nova-type departmental video, said farewell to Bill Martin as he retired after 30 years of dedicated service, hosted and conducted our own graduation ceremony, started a unique "sister-campus" program with the University of Wisconsin, became one of only 17 Long Term Ecological Research (LTER) sites funded by the National Science Foundation, helped the University celebrate its centennial anniversary, and took enjoyment and pride in the success and accomplishments of our faculty, staff and students. We hope you will share our excitement in learning about some of these developments as you read our 5th Annual Newsletter. Enjoy.

Donald W. Duszynski
Professor & Chairman

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Faculty Highlights

Cliff Dahm spent August 28 to September 14 at sea off the coast of Washington on the Woods Hole Oceanographic ship the Atlantis II. The Atlantis II is the mother ship to the submersible ALVIN, probably best known for its discovery of the Titanic. Dr. Dahm was involved in a cruise to study the geology, chemistry, and biology of marine hydrothermal vents on the Endeavor Ridge, a site approximately 200 miles west of Seattle. The research program involved 15 dives on ALVIN to a site at 2200 meters where unique oases of marine life are found supported by chemical energy rather than light energy. Waters that are the hottest ever discovered on earth, 352 C, enter the deep ocean from volcanic hot springs at this site. Cliff was the chief scientist on two dives with ALVIN that sampled the chemistry and microbiology of these extraordinary marine ecosystems.

Randy Thornhill is the recipient of a "Senior Distinguished Scientist Award" (Humboldt-Preis) of the Alexander Von Humboldt Foundation of the Federal Republic of Germany. This is the highest award that the Humboldt Foundation can bestow on a scientist. Dr. Thornhill will use funds from the award to cover expenses associated with his upcoming sabbatical research in England and West Germany. Expenses involved in moving his family to Europe for his sabbatical year of 1990 are also covered.

Diane Marshall was awarded a prestigious Presidential Young Investigator Award by the National Science Foundation in March. 197 awards were made nationwide, with only

4 awarded in Dr. Marshall's area of study, ecological sciences. Diane is the only recipient of this award in New Mexico this year.

This PYI award provides support for Diane's research in plant reproductive ecology. She studies mating patterns in plants and their implications for selection. This research addresses basic questions about plant reproduction and is relevant to studies of breeding crop plants. The award can provide up to \$100,000 per year for five years for research support in a combination of NSF and matching funds.

Jim Brown and Astrid Kodric-Brown will be visiting the Soviet Union this summer at the invitation of the USSR Academy of Sciences. Professors Rogovin and Shenbrot have invited the Browns to spend a few days at the Academy in Moscow and then travel to one of their field sites in the deserts of eastern Asia. The Browns will spend two weeks in late July and early August in the USSR. They will also attend the International Ethological Congress in Utrecht, the Netherlands, drive through France, and attend the International Theriological Congress in Rome, Italy before returning to Albuquerque.

Manuel Molles and Cliff Crawford, along with the city of Albuquerque, would like to know what's next for the Bosque? The city and state are charged with managing the Rio Grande State Park which runs right through Albuquerque. Students in Cliff and Manuel's unique field course, Bosque Biology (Biol. 407/507) are examining this 25 mile stretch of river and woodland. Born out of the need to "explore our own backyard", this ecology class is taught somewhat differently each semester. Enrollment is limited to 15 students; prerequisites include previous exposure to biology and a strong desire to learn about the Bosque. A critical, written evaluation of class research results is expected from each student.

To date, students have approached the course with enthusiasm despite exposure to heat, cold, precipitation, and Russian Olive thorns. Tree demography and tree-soil relationships in permanent plots are current foci. Class data are being summarized for distribution to member agencies of the Albuquerque Open Space Technical Planning Team, to which Manuel and Cliff belong. In all, students get "hands-on" field experience that translates into environmental

management. Migrating birds will someday be grateful.

Jim Brown and Jonathan Roughgarden of Stanford organized a workshop on "Ecology for a Changing Earth". Held in Santa Fe November 30 to December 2, 1988, it was sponsored jointly by the National Science Foundation and the Department of Energy. About 25 diverse ecologists (including Bruce Milne of UNM) and 15 observers from government agencies participated. Discussions included the need for ecological research to address the enormous changes in climate, land use, and biological diversity that the earth is presently experiencing as a result of the expanding human population and its global impacts on land, water, air and living things. These problems are critical. The continued habitation of the planet by our own species and by millions of other species of living things is in jeopardy. The scientists noted that most recent ecological research has been experimental studies of short duration on small, homogeneous sites where there has been minimal human disturbance. The workshop called for increased research on the roles of humans and on the effects of scale, heterogeneity, and the openness in ecological systems, and it recommended the creation of a new federal agency to give highest priority to research on critical environmental problems.

Howard Snell organized a symposium/workshop on the herpetology of the Galapagos Islands. This international symposium, funded in part by a grant from the Tinker Foundation, Inc. was co-sponsored by the Herpetology Division of the Museum of Southwestern Biology and the Department of Biology. Between the 29th of May and the 11th of June, 1988, 72 scientists, students, and resource managers met at the Galapagos National Park Service offices in Puerto Ayora, Galapagos, Ecuador, to review research and management priorities for a number of threatened and endangered reptiles. Participants came from Latin American countries, Europe, Australia, New Zealand, and North America. Our department was well represented by several undergraduate and graduate students, faculty, and other associates including Phil Heise, Pimmy Nieuwolt, Derrick Sugg, Bruce Milne, Bill Rice, Tom Fritts, and Howard and Heidi Snell.

The results of the event will help the Galapagos National Park Service and the Charles Darwin Research Station manage the 21 species of tortoises, turtles, iguanas, lizards, and snakes that comprise the reptile fauna of the islands. Approximately 97% of those species are endemic to the archipelago, and at least 30 populations of those are threatened with extinction. The basic message of the symposium/workshop was that we know woefully little about the ecologies, genetics, and distributions of these organisms. Unfortunately, in many cases there is not enough time to conduct the necessary research before trying to manage the populations. Consequently, the plan for the next 20 years involves balancing research and management in a manner that hopefully will insure the greatest possible diversity of reptiles for the future.

William C. Martin

Professor Martin retired in May after 30 years of teaching, research, writing and community service in the Department of Biology. Dr. Martin joined the faculty at UNM in 1958, just after completing his PhD in plant taxonomy at Indiana University. During his years at UNM Dr. Martin has served as the Curator of the Herbarium of the Museum of Southwestern Biology and supervised the growth of the collection to its present status as a major research facility. Under Bill's guidance the Castetter Laboratory for Ethnobotanical Studies was established in association with the Herbarium in 1980.

When Bill began his career at UNM his teaching assignment included plant taxonomy, genetics, evolution, and microtechniques. As the faculty grew Bill continued to teach a wide variety of courses in the botany area emphasizing plant taxonomy, but also including plant anatomy, mycology and plant pathology, as well as special topics in ethnobotany, evolution of floras, and plant genetics. In his course, the Flora of New Mexico, he has stimulated the interest of 2 generations of students, many of whom have gone on to do graduate work in plant taxonomy and other areas of biology both at UNM and at other Universities. It is appropriate that he is known as the The Plant Chief or P.C. to the many students who have studied and worked in the Herbarium.

Dr. Martin and Dr. Charles R. Hutchins published the monumental 2 volume series,

The Flora of New Mexico in 1980-1981. Martin and Hutchins, with illustrator Robert DeWitt Ivey, have recently published a series of 3 volumes which are used by both professional botanists and amateur naturalists in the field identification of plants: Spring, Summer, and Fall Wildflowers of New Mexico.

In addition to his teaching responsibilities, which include direction of graduate student research and advisement of undergraduates, Bill has had a very active role in the community, providing a wealth of botanical information to the public. His assistance to the Poison Control Center in providing plant identifications and information on plant toxins has been invaluable in many cases of suspected poisoning. He has also provided extensive training in plant identification for employees of state and federal agencies.

After his retirement to Emeritus status, Bill will maintain an office in our Department to continue his research and writing and he will continue to be involved in the planning and development of Albuquerque's new Botanical Garden. Bill's long term plans include building a home and planting an orchard on land that he and Evelyn own adjacent to the national forest near Silver City, New Mexico.

A reception and dinner party were recently given in honor of Dr. Martin's retirement. These events were attended by many former students and collaborators as well as current members of the Biology Department. A plaque that will be placed in the Herbarium in his honor states, "he has given generously of his time and self for the benefit of others during his 30 years of service in the Department of Biology".

Department News

Video Review

The Department has a professionally produced video! During 1988 we combined funding from 2 outside sources, the Centennial Committee and the Office of the Vice President for Research, with departmental funds to contract the production of a "Nova" style video to be used in promoting our Department and recruiting students. The first step was to find a quality producer we could afford. After hours reviewing sample videos, we decided on Shawn Wallwork Productions. Shawn worked with us for 8 months accumulating footage from Department personnel, the BBC, and

many other sources. He interviewed faculty, filmed research and teaching activities, and produced a script.

Once the script was approved, only a couple of days of filming remained before Shawn began the final production work of editing, sound dubbing, and welding it all into a complete story. The final product is impressive and highlights the Department's breadth in biology by covering a few research projects in depth, and providing an exciting visual summary of many others. We'll use the video to promote our Department by sending copies to many of the high schools in New Mexico, the Regents of the University, and several state legislators. Segments of the video will be broadcast by Channel 5 during the rest of the university's Centennial Year. We also have a limited number of copies available for purchase. If you would like one, copies cost \$10 and can be purchased by completing the form on the last page of this newsletter.

LTERR Project Started

In October, the Biology Department received a grant of \$2,400,000 for 6 years from the National Science Foundation for the Long-Term Ecological Research (LTERR) project. Research will be conducted on the Sevilleta National Wildlife Refuge. This area encompasses nearly 250,000 acres, from the Los Piños Mountains in the east across the Rio Grande to the Ladrone Mountains in the west. It contains at least 5 major habitat types: juniper woodland, grassland, Chihuahuan Desert shrubland, Great Basin Desert shrubland, and riparian woodland.

The Sevilleta is one of 17 LTERR sites across the North American continent from the arctic to the tropics. It is by far the largest and most diverse of the sites. UNM research will take advantage of this size and heterogeneity to focus on temporal and spatial variation in ecological processes. UNM biologists intend to use the environmental gradients and sharp boundaries on the Sevilleta to study the ways that climatic fluctuations over time are reflected in spatial changes in plant and animal distributions and in biogeochemical processes. There is particular interest in the year-to-year variation in precipitation in the Southwest and its relation to the El Nino climatic and oceanographic fluctuations in the Pacific Ocean. Long-term monitoring programs and experimental manipulations will follow the responses of everything from

plant, animal and microbe populations to the hydrology of entire watersheds.

The project coordinator, Bob Parmenter (PhD Utah State) and data manager, James Brunt (MS New Mexico State) will work with 18 UNM faculty and many graduate students. In addition, the project employs 3 full-time technicians, 8 graduate student research assistants, and 4 part-time graduate technicians. The Biology Department will involve undergraduates in the research activities and field experiences the LTERR offers. This summer Bob Parmenter has 11 undergraduates working on the project.

Commencement

The Biology Department held its first Commencement Ceremony ever on May 13. Fifty students, 30 faculty and over 350 guests attended. The festivities began with an open house including videos, poster displays, a buffet lunch, and a cajun band.

To date, the Biological Society of New Mexico (BSNM) has focused on aiding graduate student and faculty research and related activities. The BSNM widened its scope starting with this Commencement. It featured the presentation of an Award to an Outstanding Graduating Senior in Biology, Rosanne Humphrey. Criteria for the award included performance in formal courses and contributions to the research activities of the Department. Rosanne, while maintaining an excellent grade point average, also completed research on chromosomal variation in a mammal species and is preparing manuscripts for publication. Honorable mention was given to Paulette Ford for her outstanding contribution to parasitology. Paulette has 2 publications. Previously little had been done to recognize undergraduates who contribute to the excellence of our Department.

Outstanding teaching assistants were recognized, and outstanding alumni were introduced. The Department plans to continue these new traditions allowing recognition and congratulates of all of its fine students, past and present.

Sister Campus

This spring, through the initiative of Dr. Margaret Werner-Washburne, we initiated a sister-campus program with the University of Wisconsin-Madison. As part of this program, Wisconsin will send faculty members to UNM to give talks and to interact with students. Wisconsin is funding this program because of the large numbers and high quality of the undergraduate

minority students at UNM and, specifically, in the Biology Department.

The first guest lecturer was Dr. James Crow of the University of Wisconsin Genetics Department. Dr. Crow is a member of the National Academy of Sciences, Editor of the journal Genetics, and a world renowned population geneticist.

This type of program is mutually beneficial in that Wisconsin has access to faculty advisors and students and the UNM Biology Department is able to strengthen its academic program by inviting additional, excellent seminar speakers without additional expense. Dr. Crow's visit was received with overwhelming enthusiasm by the Department.

Just The FAX, Ma'am!

This seems to be the year of the Fax and yes, it has come to the UNM Biology Department also. It enables us to have rapid communication with researchers in remote locations of Europe and South America. If you'd like to contact us our number is 1-505-277-0304.

Undergraduate Biology Degrees

Two degrees are now offered by the Department, a Bachelor of Science degree (B.S.) and a Bachelor of Arts degree (B.A.). The B.S. remains essentially unchanged and is more specialized providing a directed program of studies with an intensive focus on biology and related disciplines. The B.A. degree is more innovative and will hopefully help serve an increasing diversity of students.

The B.A. degree allows greater flexibility in the design of a program of studies. Supporting scientific subjects will encourage exposure to a broad base of scientific information and analytic tools. "Restricted" electives, outside the field of biology, have been added to improve the student's understanding of the philosophical or historical foundations of science, to enhance the ability to communicate professionally in various media, and to provide exposure to a diversity of approaches to problem solving or policy formation. To balance the greater number of course requirements outside of biology, fewer biology credit hours are required. Increasingly, biologists are working in multidisciplinary teams or are addressing complex problems that include facets outside the field of biology. Hopefully, our new B.A. degree, with its broad focus, will help cultivate graduates better prepared to be effective professionals in these demanding situations.

100 Years at UNM

UNM is 100 years old this year, but it wasn't until 1913 that Biology was first listed in a UNM catalogue as an "official" department. Before then, biology courses were taught as part of the science and engineering curriculum. Dr. Edward Castetter, for whom the Biology Building on Yale Avenue is named, came to UNM as Professor and Chairman in 1928 and for the next 5 years the Department consisted...of Dr. Castetter and 1 other faculty member! From 1933-1944 Biology had only 3 faculty members. Dr. Castetter remained Chairman for 28 years and since then there have been 7 others thrown into the breach: William Koster was Chairman for 1 year; Howard Dittmer was Acting Chairman for 1 year; Loren Potter, for whom the "new" wing (completed in 1965) is named, was Chairman for 14 years, from 1958-1972; Paul Silverman was Chairman for 1 year; Clifford Crawford was Acting Chairman for 1 year and Chairman for 4 years; James Findley was Chairman for 4 years; and Donald Duszynski has been Chairman since July, 1982.

We can find no record of when the 1st undergraduate degree was awarded in Biology, but it must have been before the 1st Master's degree, which was given in 1928, the same year that Dr. Castetter arrived. The 1st PhD wasn't awarded until 1952 and, in the 71 years since 1928, including the May 1989 graduating class, 589 graduate degrees (450 MS, 139 PhD) and well over 2000 Bachelor's degrees have been earned by students from this Department.

Today, Biology stands as one of the pillars of the University of New Mexico: 34 full-time faculty and over 50 adjunct faculty, 95 graduate students, about 250 undergraduate majors, and 19 superb technical and professional support staff. In a typical year we can expect to produce 19,000 student credit hours, teach over 450 courses, sections of courses and labs, generate \$1-3 million in federal and state research money, employ about 250 people, and spend over \$3 million dollars, only some of which ends up in the red.

This is a program in which alumni, friends and supporters, can take a great deal of pride. It is a program with national and international acclaim in some areas and a growing development of respect in others. One of the reasons that Biology's reputation is quickly gaining strength regionally, nationally, and internationally--besides having an incredibly good, young faculty and

an excellent support staff--is because of YOU, our graduates and friends. You are the foundation upon which we stand and your past, present and continued support--in many different ways--is both appreciated and an essential part of our future growth and potential for achievement.

Alum News

Carolyn Bell-Prince (BS 1982) is currently a Life Sciences Technician in the National Flow Cytometry Resource Department at Los Alamos National Laboratory. She is raising her one year old daughter and enjoys traveling, skiing and hiking.

Ann J. (Krummes) Bonnell (BS 1959) is now involved in a great deal of volunteer work at Roxborough State Park in Littleton, CO. She volunteers in the visitor's center, is a volunteer naturalist, and is involved with research in a number of bird species, plant species and population studies. Ann and her husband Jack have 2 children, John and Mary.

Martin J. Boyd (BS 1974, MD 1978) currently holds the title of Chief in the Department of Emergency Medicine at the Gallup Indian Medical Center. He enjoys skiing, scuba diving and photography.

Bradford L. Cambron (BS 1986) is a medical student at UNM expecting to graduate in 1992. Bradford toured the Soviet Union for 21 days on a goodwill tour in 1987. He is married to Sandra Jeanne Cambron who graduated from UNM in 1984. She is currently a medical technician.

Howard Campbell (BS 1937) is now retired from his position as a biologist for the New Mexico Department of Game and Fish. He was with the department for about 30 years. Since his retirement he occupies his time with reading, writing, traveling and basically just enjoys life.

Frank Ciaccio (BS 1987) is a Deputy Medical Investigator for the UNM School of Medicine.

Victoria Radoslovich Cibicki (BS 1984) is an electronics technician at Sandia National Laboratory. She also is an avid folk dancer and a mother of 2 boys.

Susan Rose Comfort (BS 1986) is a second year medical student at UNM and enjoys gardening, hiking and collecting wild flowers.

Lee Couch (BS 1987) is a graduate student in Parasitology at UNM.

Carl F. Cramer (BS 1944, MS 1947) received a Ph.D. in Physiology from the University of California at Berkeley in 1953. He is an Emeritus Professor retired from the Department of Physiology at the University of British Columbia.

James W. Cutler (BS 1967) is now the District Ranger at Theodore Roosevelt National Park, Medora, ND. He is a trustee of St. Mary's Catholic Church and twice Post Commander of the American Legion Post 144.

Burt Ensley (BS 1976, MS 1978) earned his PhD from the University of Georgia and is now a Research Director of Specialty Chemicals in Georgia. His interests are vintage cars and music, and he has 2 little girls.

Richard Forbes (MS 1961) earned his PhD from the University of Minnesota in 1964 and is now a Professor of Biology in Portland, OR. He is involved in wildlife photography and distance running.

Elizabeth Tatum Frederick (BS 1937) received her MS in 1943 and is now a retired teacher of high school biology. She taught for 20 years mostly in Truth or Consequences, NM. She paints in watercolors and has been featured in many shows. Elizabeth and her husband George celebrated their 50th wedding anniversary in June of 1987.

Thomas Gagliano (BS 1981) received a MA in Secondary Education in 1988. Thomas is currently a middle school science teacher at Cleveland Middle School in Albuquerque. He is also a frequent illustrator for "New Mexico Wildlife Magazine."

Larry J. Gordon (BS 1949, MS 1951) received an M.P.H. from the University of Michigan School of Public Health. He is retired as New Mexico Cabinet Secretary for Health and Environment and is now Health Consultant to UNM. Larry is married to Nedra Callender who received her BS in Biology here in 1949.

Michael I. Harrison (BS 1987) is a U.S. Navy Ensign and a 2nd year medical student at the Uniformed Services University of the Health Sciences School of Medicine. He enjoys skiing and fishing.

Dennis Heinemann (Ph.D. 1984) is a seabird ecologist at the Manomet Bird Observatory in Manomet, MA.

Jean Cordes Hoffman (BS 1974) currently keeps very busy as a homemaker and a full time mother to 2 girls in Abbotsford, British Columbia.

Grafton Houston (MS 1984) received a DVM from Colorado State University in 1989. He is now a fisheries Biologist for the U.S. Fish and Wildlife Service in Ft. Collins, CO.

Sean P. Houtman (BS 1986) is now a botanist for Plants of the Southwest in Santa Fe, NM.

Cheryl Imes (BS 1978) received a M.A. in experimental psychology at Bradley University in 1982. She is currently working on her dissertation to complete her PhD from Indiana University.

Stacy Kaser (BS 1985) is the analytical electron microscopy lab technician in UNM's Geology Department.

Fenton C. Kelley (BS 1951, MS 1954) earned a Ph.D. in Physiology from the University of California at Berkeley in 1967. Fenton is now retired from Boise State University after 19 years as a Professor of Zoology and currently works as an independent consultant in aquatic biology.

Dolores Kepner (BS 1966) is currently a medical technologist. She is involved with Parents Anonymous and Parents Without Partners Unity in Anniston, AL.

Grethchen Quelle Kinzie (BS 1957) is a Cytogenetic Technician at the Children's Hospital of the Kings Daughters, Norfolk, VA. She is a square dancer par excellence!

John E. Leder (BS 1965) received an MS from the University of Washington in 1973. He is now an Environmental Scientist - Planner and is a Captain in the U.S. Naval Reserve. He also coaches youth soccer.

Ralph Leisy (BS 1962) received an MS from Texas A&M University in plant pathology.

He is a pesticide applicator technician for Texas A&M.

Carol M. Márquez (BS 1983, MD 1988) is now an intern at the University of Arizona in the Department of Family and Community Medicine.

Thomas McConnell II (BS 1979) is the Chief Estimator for J.R. Hale Contracting Co., Inc. He enjoys hunting, fishing and is a hot air balloon pilot and airplane pilot.

Marilynne McKay (BS 1964) received her M.D. at UNM and is now an Associate Professor of Dermatology and Gynecology at Emory University School of Medicine. She practices dermatology at the Emory Clinic and is Chief of Dermatology at Grady Memorial Hospital in Atlanta.

Leona (Rusty) Miller (BS 1970) is a biology teacher at Highland High School in Albuquerque. She and her husband raise and show Arabian horses.

W. Pat Morrison (BS 1967, MS 1969) received his PhD in 1972 at the University of Kentucky and is now an extension entomologist at Texas A&M University, Lubbock, TX. Pat and Don Wilson were 2 Biology graduates honored by UNM and the Department as Distinguished Alumni during our 1989 Commencement.

Cynthia (Stephenson) Muncey (BA 1975) is currently a medical technologist at Children's Hospital in Boston. She and her husband, Mark, enjoy cruising the New England Coast aboard their 29 ft. sailboat "Splash".

Letitia Creveling Peirce (1954) is the Executive Secretary for the New Mexico Zoological Society at the Rio Grande Zoo in Albuquerque. She is involved in the New Mexico Herpetological Society and sits on the Rio Grande Nature Center Advisory Board.

Susan Yeich Pickering (BS 1985) is the Quality Assurance Chief for Sandia National Laboratory at the WIPP site in NM and has her own zoo at home: horses, dogs, cats, peacocks, turkeys, and pheasants!

Benjamin L. Pilcher (PhD 1969) is currently a Professor of Biology at McMurry College in Abilene, TX and is also the Director of the McMurray Honors Program.

Clay Prvor (BS 1981) received an MBA in 1985 at UNM, and is currently a programmer analyst at Sandia Laboratory. He is involved in motorcycle trials competition and studies the bible.

Ray Quintana (BS 1982) received an NTS from the New Mexico School of Natural Therapeutics and is now a student at UNM studying Medical Laboratory Technology. He and his wife Anna-Lena have a 2 yr. old son, Toby.

Charles Reith (Ph.D. 1983) is an environmental scientist for Jacobs Engineering. He is leading a DOE research project on the ecological manipulation of water balance and contaminant migration of near-surface waste repositories.

John B. Roberts (BS 1949, MS 1952) is the leading ear, nose and throat specialist (ENT) in Albuquerque, according to Chairman Don Duszynski. John has operated on Don's broken nose at least twice and has cured ear problems for both of Don's sons.

Gerald Rodriguez (BS 1962) earned his MD from the University of California and has a private practice as a gynecologist in Santa Fe, NM. He is Chairman-elect of the NM section of the American College of Obstetricians and Gynecologists (ACOG).

Lyman B. Spaulding (MS 1969, PhD 1972, MD 1975) currently has a private practice of obstetrics, gynecology and infertility in California. He is the Assistant Clinical Professor of Obstetrics and Gynecology at the University of California, San Francisco. He is a member of the District IX Bureau Medical Quality Assurance and the Chief of Staff at Sacred Hospital in Hanford, CA.

Craig Steiner (BS 1977) received an MS in Geophysics at the University of Houston and is currently working as a geophysicist at AMOCO Production Co. in Texas.

N. Thomas Stephens (BS 1955) earned a Ph.D. in Environmental Engineering from the University of Florida. He is currently Professor and Head of the Chemical and Environmental Engineering Department at Florida Institute of Technology in Melbourne, FL.

Cydney Stewart (BS 1977, MS 1981, MD 1985) is the Chief Medical Resident at West Los Angeles Veterans Hospital.

Richard Storey (BS 1968) earned his Ph.D. from Oklahoma University in 1977 and is currently an Associate Professor at Colorado College in Colorado Springs, CO.

Agnes (Naranjo) Stroud-Lee (BS 1945) earned her Ph.D. in Biological Sciences at the University of Chicago, IL. She is now retired from the Life Sciences Division at Los Alamos National Laboratory. In her retirement, she spends a great deal of time golfing in Rio Communities in Belen, NM.

Michael E. Toliver (BS 1973) received a Ph.D. from the University of Illinois. In 1987 he won the Helen Cleaver Distinguished Teaching Award. On sabbatical last fall, he worked to complete a manuscript on the butterflyes of New Mexico. He and his wife, Peg, also had a baby in July of 1988.

Sue Tornquist (BS 1980, MS 1987) earned her D.V.M at Colorado State University in 1985 and is now a veterinarian in Albuquerque.

Juan R. Velasquez (BS 1972) is Vice President and Manager of Environmental Affairs for the United Nuclear Corp in Albuquerque. He is also on the Board of Directors for the New Mexico Council on Crime and Delinquency.

David J. Velasquez (MS 1977) received a PhD from the University of Rochester in 1981 and is now a research specialist in the Biosciences Laboratory for the 3M Company, St. Paul, MN. He is married and is involved in 3M's Science Encouragement Program designed to foster interest in science in grade school students.

Richard D. Volk (BS 1977) received an MPA in Development Management at the Monterey Institute of International Studies. He is an environmental planner for the American Samoa Coastal Management Program, Pago Pago, American Samoa. His interests include South Pacific folklore and natural history.

Warren L. Wagner (MS 1977) received his PhD from Washington University in 1981. He is now an Associate Curator (Pacific Botanist) for the Smithsonian Institute in Washington DC. He and 2 coauthors have

written a book Manual of the Flowering Plants of Hawaii. He enjoys record collecting, traveling, camping and photography.

Charles D. Wise (PhD 1962) is Professor of Biology at Ball State University. Among some of his activities, he is involved in research, public service and environmental activism. He enjoys travel, genealogy and grand-parenting.

Ted Yaeger (BS 1973) received his MD in 1981 and is a staff physician at Halifax Medical Center in Daytona Beach, FL. He enjoys sailing, surfing and sunning.

Gary Zahm (BS 1966) is now the Refuge Manager at the San Louis National Wildlife Refuge of the U.S. Fish & Wildlife Service. He is also an internationally known wildlife/nature photo journalist.

Robert Zimmerman (BS 1941) received a D.D.S. at St. Louis University and is now a retired dentist. He was a Captain in the U.S. Air Corps (Aerial Photography) in World War II and a Captain in the Dental Corps of the Air Force in the Korean Conflict.

Other Friends and Supporters of the Society and the Department:

Dr. Roger Conant
 Dr. John O. Corliss
 Dow Chemical USA
 Henry A. Garcia MD
 Mollie Hayes
 Jan Holland Hickey
 Dorothy McGuire
 James W. Meares DDS
 Dr. Wendell R. Mullison
 Dr. Loren D. Potter
 Dr. Harry W. Springfield
 Ted A. Torrey
 Drs. Albert & Kathryn Vogel
 Nelda L. Subia

BSNM

The Biological Society of New Mexico is a tax-exempt organization under the New Mexico Nonprofit Corporation Act and the United States Internal Revenue Code. The object of the Society is to establish and maintain endowments, trusts, foundations, and other funds, all for the purposes of

encouraging, fostering, and pursuing excellence in education in the Department of Biology at the University of New Mexico.

The Society is authorized to receive grants, stipends, honoraria, property, or any other interests for educational purposes. Tax-exempt gifts may be given with designation to be used for specific purposes, e.g., student fellowships, research support, or whatever, as long as the purpose fits the objectives of pursuing excellence in biological education and research at UNM.

Your gift can be earmarked for specific purposes! Donations and annual membership fees, unless otherwise specified, are placed in our Unrestricted Gift Account. These funds are used primarily to support both undergraduate and graduate student recruitment, research, travel to meetings to present papers, and awards for teaching excellence. In addition, we have 3 other accounts that may have special interest to you.

L.D. Potter Endowed Chair in Plant Ecology.

For the last 4 years we have been building an endowment from private donations and other sources to create the 1st Endowed Chair in Biology. When Loren Potter retired in June, 1985, it seemed appropriate to honor his teaching and research efforts in field plant ecology not only because of his personal contributions to the discipline and to our Department over the years, but because we recognize the importance of plant ecological studies as they pertain to our natural resources. Thus, the idea of an Endowed Chair in his honor was conceived and a goal of generating funds to support that chair was set. To date we have about \$110,000 in our endowment and we hope, at least, to double that amount by the time the 1st Potter Chair is awarded on July 1st, 1991.

Melinda Bealmear Scholarship.

Melinda Bealmear was a dedicated and beloved staff member in our main office, who died in a tragic car accident in October 1986. Our graduate students, faculty and staff, along with help from her parents Dorothy and Dale, established a scholarship fund in her memory. The fund now has about \$2000. We would like to accrue enough principal, say \$50,000, so that the annual interest could be used to support the program of a needy graduate student in Biology.

Museum of Southwestern Biology-Mammals.

The purpose of this Museum account is to support any and all aspects of mammalogical and field research conducted by faculty and graduate students in Biology at UNM.

Membership

Any person contributing \$15 or more annually becomes a member of the Society and will receive the Annual Newsletter.

All memberships and contributions are tax exempt.

0305

Please mail memberships and contributions by check payable to "The Biological Society of New Mexico" to:

Secretary-Treasurer,
Biological Society of New Mexico
Biology Department
The University of New Mexico,
Albuquerque, New Mexico 87131

DETACH AND MAIL -- If you haven't responded before, we'd really like to hear from you and learn about what you're doing. Thanks for your continued support and interest!

Name _____ UNM Degree(s) _____ Year(s) _____

Other Degrees _____

Complete Current Mailing Address _____

Phone No. _____

Current Occupation _____

Activities and interests:

Enclosed check \$ _____

0303

APPENDIX C

BSNM Centennial Fund Raising Brochure

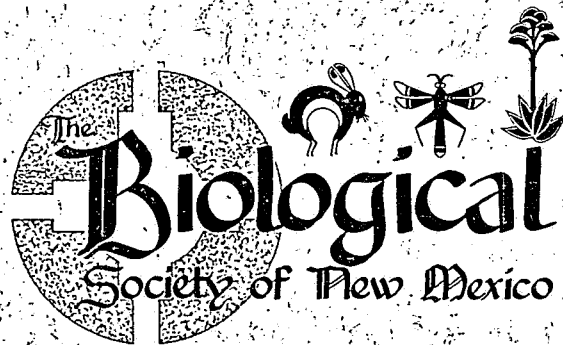
Our quest for excellence very much involves you.

Gifts from our graduates and friends over the past two years have made an important impact on Biology's efforts to achieve some creative funding priorities (e.g., teaching awards). Your gift this year can help assure our reputation and give us a margin of excellence; it will allow us to create new incentives in our program. Contributions to the Bealmear Scholarship Fund focus on graduate student excellence.

The strength of your Biology Department will be enhanced by your contribution. If it is possible, please participate. Whatever amount you decide, it is important. We need you now, more than ever before. The very best to you and your family for a wonderful 1989.



Department of Biology
The University of New Mexico
Albuquerque, New Mexico 87131



Our quest for excellence

involves you

It is not by chance that the Department of Biology at UNM is rated as one of the nation's outstanding biology departments. High scholastic standards and academic goals established by past and current faculty and students have contributed to the department's success. Funding from numerous federal, state and private sources acknowledge the quality of our work. Recently we were identified as one of only 17 Long Term Ecological Research (LTER) programs in the country. From the study of molecules to the vast expanse of total ecological systems, the department has a respected reputation --both in structured research and practical teaching. Our quest for excellence is unending. If we are to realize this department's total potential, it will be because of you. Now, we seek your financial support--so important and vital to our educational mission.

We invite your participation

- Patron** A thousand dollar donation could extend the L.D. Potter Endowed Chair in Plant Ecology, assist with the Melinda Bealmer Scholarship Fund for eligible graduate students, or be designated as you wish.
- Benefactor** A five hundred dollar contribution is a significant gift, used where the need is the greatest or where the benefactor would desire, perhaps our Faculty Excellence Fund.
- Investor** A two-hundred and fifty dollar gift can do much to assist us in graduate student research and provide the impetus to continue to attract capable students in all areas.
- Friend** A one hundred dollar gift is the mainstay of our continuing efforts, a "Centennial" contribution matching 100 years of excellence.
- Member** Gifts from \$15 to \$100--whatever the amount--are important and urgently needed. Your contribution at whatever level is essential.

- Patron, \$1,000 or more
 Benefactor, \$500 to \$999
 Investor, \$250 to \$499
 Friend, \$100 to \$249
 Member of the Society, \$15 to \$99
 Special Gifts: real estate, securities, trusts, bequests

The Chairman, faculty, graduate students and staff of the Biology Department at UNM sincerely appreciate your membership in the Biological Society of New Mexico. THANKS!!!

(Gifts are tax deductible to the extent authorized by law. Please make checks payable to: Biological Society of New Mexico. If you are a matching gift company, please enclose the necessary forms.)

Enclosed is my 1989 Biology gift of \$_____ or my pledge of \$_____ payable by December, 1989.

Please bill me monthly _____, quarterly _____, or once, in the month of _____

My gift designated for _____

Name _____

Class Year _____ Degree _____

Spouse's Name (if applicable) _____

Address _____

City _____ State _____

Zip _____ Home Telephone Number _____

Thank you.



The Biological Society of New Mexico
 Department of Biology
 The University of New Mexico
 Albuquerque, New Mexico 87131

Please enclose this form with your contribution.

0310

APPENDIX D

Program: Biology's 1st Graduation Ceremony, May 1989

Maria Caterina Rieunoir (Snell) Thesis: Saddle-back Giant Tortoises: Interactions of Morphology and Social Behavior.

Gerard Paul Zegers (Snell) Thesis: The Distribution of Burrows of the Burrowing Wolf Spider Geolycosa rufescens (Chamberlin): Active Habitat Selection or Differential Mortality?

SUMMER 1989

Deborah Carr (Dahm) Thesis: Retention Mechanisms in Streams: Effects on Oxygen and Nutrient Concentrations in Interstitial Waters.

Ross Coleman (Dahm) Thesis: Anaerobic Zones in Streams: Effects on Aquatic Primary Production.

Carl Shuster (Yates and Hafner) Thesis: The Phylogenetic and Historical Biogeographic Relationships Among Least Shrew (Cryptotis parva) Populations at the Western Periphery of Their Range.

Ph.D. Degree

SUMMER 1988

Sandra Mitchell (Scott) Dissertation: The Consequence of Non-random Mating in Bufo woodhousi.

FALL 1988

Scott L. Gardner (Duszynski and Yates) Dissertation: Phyletic Coevolution Between Nematode Parasites and Their Rodent Hosts in Bolivia.

Kerry Kilburn (Altenbach) Dissertation: Functional Morphology of Two Species of Kangaroo Rat (Rodentia: Heteromyidae): Mechanics of Digging and Foraging, and Their Relationship to Habitat Partitioning.

Arch McCallum (Ligon) Dissertation: Alternative Emigration Strategies and the Adaptive Significance of Natal Dispersal in a Population of Mountain Chickadees (Parus gambeli).

Robert M. Sullivan (Yates) Dissertation: Biogeography of Southwestern Montane Mammals: An Assessment of the Historical and Environmental Predictions.

SPRING 1989

Parvathi Chary (Natvig) Dissertation: A Biochemical and Genetic Study of Antioxygenic Enzymes in Neurospora crassa.

David Joseph Germano (Fritts and Snell) Dissertation: Growth and Life Histories of North American Tortoises (genus: Gopherus) with special emphasis on the desert tortoise (G. agassizii).

SUMMER 1989

Kenneth Schoenly (Crawford) Dissertation: Empirical Tests of Food Web Theory.

The Dept. of Biology is grateful for gifts that made these graduation festivities possible.
Thank you:

Melloy Brothers, Inc.
Professional Office Services
Albuquerque Public Schools
L.R. and Sheila Doucette
Biology Graduate Students Association
Biological Society of New Mexico

Cliff and Rhea Dahm
Norman and Joan Scott
Dave and Rhonda Germano
Jim and M.J. Gosz
Terry and Nancy Yates
Jim and Astrid Brown

The Department of Biology
University of New Mexico

Graduation Program

May 13, 1989

GRADUATION PROGRAM
DEPARTMENT OF BIOLOGY

Welcome - Dr. Kathryn Vogel

"Yesterday, Today and Tomorrow" - Dr. Donald W. Duszynski, Chairman

Introduction of Distinguished Alumni - Dr. Clifford Crawford

Dr. William Morrison, B.S., M.S. 1969, Entomologist, Texas Agricultural Extension Service, Texas A & M, Lubbock, TX

Dr. Don Wilson, Ph.D. 1970, Chief, Biological Survey, U.S. Fish and Wildlife Service, National Museum of Natural History, Washington, D.C.

Presentation of Biological Society of New Mexico Award to Outstanding Undergraduate - Dr. Diane Marshall

Presentation of Graduates
B.S. Degree
M.S. Degree
Ph.D. Degree

Closing announcements

LIST OF GRADUATES

BS Degree

SUMMER 1988

James S. Calanni
Patrick L. Claxton
Ernesto M DeLilla

Walter A. Duran
Stephen Irving Fisher
Brian N. Mathwich

Alvin J. Rafelito

FALL 1988

Dean Pete Argyres
James Baldwin
Andrea Beckel
David Caldwell
Pam Carpenter
Rita S. Esquibel
Diane Ewert
Stephen C. Flint

Brian D. Frank
Eric Furman***
William A. Kouri, Jr.
Patricia Dungan Miller
Christopher M. Padilla
Theresa Rupert
David M. Russell
Thomas Sisneros

Lisa Somora
John G. Sprague
Douglas Thal
Rebecca Weber
Aimee J. Williams
Barry Wright

SPRING 1989

Timothy D. Bajema
Daniel Bales
Hope Barkhurst

Neal T. Bull
Mariel Cambell
Celia Ann Cooper

Stacy M. Cooper
Patrick D. Coriz
Courtney H. Crombie

Diana Marle de la Rosa
Aaron Depuy
Sima Desai
Patrick Doherty
Sheila A. Doucette
Theresa M. Elliott
Wendy Sue Ferguson
Paulette Ford
Craig Alan Fox
Jennifer Lee Garthan
Michael D. Gerwin
Carissima-Angelique F. Heise
Chris Hanosh
Rosanne L. Humphrey**

Danny Jarrett
Norma J. Kreisler
Alexis Lewis
Rolanda Maez
Bruce VanLeer Mahits
Michael S. Melloy
Sean O'Grady
Regina Diana Ortiz
Smita N. Patel
Rebecca Pease
Corinne Peek**
Leland Pierce
Wendy Pollack
Kristine Price

Gary Rauch
Karen Marie Romero
Kenneth Saland
Christopher Schreiner
Arthur Tulloch***
Lisa Ann Valle
Cheryene Ward
Rayanne Wert
Christopher T. Whisonant
Robert W. Woodruff, Jr.
Tze-Hei Yong***
Dolores Terese Zamora
* cum laude
*** magna cum laude
summa cum laude

MS Degree

SUMMER 1988

Dianne Marie Andrews (Crawford) Plan II, Non-thesis

Richard C. Calabro (Loker) Plan II, Non-thesis

Ellen A. DeBruin (Martin) Thesis: Vascular Plants and Lichens on Lava and Sandstone Substrates in Cibola County, New Mexico.

Marlies E. Hohmann (Kodric-Brown) Thesis: Osprey (*Pandion haliaetus*) Foraging Behavior in the Gulf of California: The Influence of Environmental Conditions and Search Tactics.

Miles Price (Barton) Thesis: Characterization of Ferrocyclase and Metallochelase Activities in Membranes of *Azospirillum brasilense*.

Chen-Yi Wu (G. Johnson) Thesis: Metabolic Factors Regulating Iron Reduction by Soybean [Glycine max. (L.) Merrill].

FALL 1988

Allan W. Dickerman (Yates) Thesis: Systematic Status of the Subgenus *Oligoryzomys* (Genus *Oryzomys*).

Patricia Jane Gegick (Altenbach) Thesis: Musculo-skeletal and Wing-form Architecture in Relation to Gestational Load Carrying in the Red Bat, (*Lasiurus borealis*).

Sang Hsu (Trujillo) Plan II, Non-thesis

Diana Eleanor Northrup (Crawford) Thesis: Community Structure of the Arthropods of Carlsbad Caverns Emphasizing Rhabdiphoridae of the Genus *Ceuthophilus*.

Constance Wash (Duszynski) Thesis: Enzyme Variation of *Eimeria arizonensis* from *Peromyscus truei* and *P. boylii*.

SPRING 1989

David C. Brown (Vogel) Thesis: Development of an *in vitro* Binding Assay to Characterize the Interaction Between Small Proteoglycans and Collagen

Jessie David Cornett (G. Johnson) Thesis: Iron Chelate Reduction: A Comparison of Soybean Suspension Cultures and Roots.

0313

APPENDIX E

Response From Governor's Office to Biology Video

0314

GARREY CARRUTHERS

Governor

July 20, 1989



OFFICE of the GOVERNOR

State of New Mexico

Santa Fe 87503

Mr. Donald W. Duszynski
Professor and Chair
The University of New Mexico
Biology Department
Albuquerque, New Mexico 87131

Dear Professor Duszynski: 

Governor Carruthers asked me to convey his appreciation to you for sharing your video tape on UNM's biology department. Your faculty is to be commended on this excellent recruiting effort. It is also a way of soliciting public support for higher education.

Be assured we shall use it when appropriate requests to this office present themselves.

University of New Mexico is fortunate to have your leadership.

Sincerely,

Handwritten signature of Marlis Mann.

Marlis Mann
Education Policy Analyst

MM/jg
89/07/0723

APPENDIX F

Joint, Adjunct, Research, Affiliate Faculty, Biology, UNM

0315

ANCILLARY FACULTY, DEPARTMENT OF BIOLOGY

1988/89

Joint Appointments (with other departments or areas):

Robert Kelley, Prof., Anatomy
Tokio Kogoma, Prof., Cell Biology
Paul Risser, Prof., Vice President for Research

John Trotter, Prof., Anatomy
Robert Waterman, Prof., Anatomy

Adjuncts (not on UNM payroll):

Richard Aguilar, Asst. Prof., Forest Service
Cynthia Amett, Asst. Prof., Univ. of Wisconsin
William H. Baltosser, Asst. Prof., NMG&F
Celestyn Brozek, Assoc. Prof., Lovelace Foundation
Rex Cates, Prof., Brigham Young Univ.
A. Cowan Collins, Asst. Prof., UNM School of Medicine
Roger Conant, Prof., Univ. of Colorado
John O. Corliss, Prof., Univ. of Maryland
Harry Crissman, Prof., Los Alamos National Labs
Steven Freeman, Asst. Prof., Lovelace Foundation
Phillip R. Fresquez, Asst. Prof., Forest Service
Thomas Fritts, Assoc. Prof., DWRC
Gary Graham, Asst. Prof., NMG&F
David Hafner, Asst. Prof., NMMNH
John Horner, Asst. Prof., Bucknell University
David Hsi, Prof., NMSU
John P. Hubbard, Assoc. Prof., NMG&F

Kristine Johnson, Assoc. Prof., TVI
In Cheol Kim, Prof., Lovelace Foundation
Ronald D. Ley, Prof., BRD, Lovelace Foundation
John E. Lobdell, Assoc. Prof., Univ. of Alaska
Gary M. Malvin, Asst. Prof., U. Washington, Seattle
William Rice, Asst. Prof., UC-Santa Cruz
Michael Richard, Asst. Prof., Dept. of Psychology, UNM
Eugene Rypke, Prof., Lovelace Foundation
Norman Scott, Assoc. Prof., DWRC
George M. Shopp, Jr., Asst. Prof., Lovelace Foundation
Richard Smartt, Asst. Prof., NMMNH
Mohan Sopori, Prof., Lovelace Foundation
Nancy Thornhill, Asst. Prof., Guggenheim Foundation
John Wiens, Distinguished Prof., Colorado State Univ.
Stephen Wood, Prof., Lovelace Foundation
Bruce D. Woodward, Asst. Prof., Univ. Northern Colorado
Marlene Zuk, Asst. Prof., UC-Riverside

Research or Visiting Status (usually on UNM payroll):

James Bednarz, Research Asst. Prof.
Gerardo Ceballos-Gonzales, Visiting Scholar
Jack F. Cully, Research Asst. Prof.
Herbert Grover, Research Asst. Prof.
Edward J. Heske, Visiting Research Asst. Prof.
Thomas Koob, Research Asst. Prof.
Lyndall Meuli, Research Asst. Prof.
Gary Miller, Research Asst. Prof.
Hugh B. Musick, Jr., Research Asst. Prof.

Kathryn Ono, Research Asst. Prof.
Robert Parmenter, Research Assoc. Prof.
Peter Stacey, Research Assoc. Prof.
Nancy Thornhill, Research Asst. Prof.
Eleonora Trotter, Research Asst. Prof.
Francisco Tomei-Torres, Visiting Asst. Prof.
Sandra Turner, Research Asst. Prof.
Maribeth Watwood, Research Asst. Prof.
Carelton White, Research Asst. Prof.

Herbarium Affiliates:

Margaret Caffey-Moquin, M.S.
Elizabeth Crowder, B.S.
Anne Cully, M.S.
Ellen DeBruin, Assoc. of Biol.
Reggie Fletcher, M.S.
Paul Knight, M.S.
Yavonn Wilson-Ramsey, Assoc. of Biol.

Herbarium Research Associates:

Karen Clary, M.S.
Glenna Dean, Ph.D.
Molly Toll, M.S.

Emeriti:

William Degenhardt
Howard J. Dittmer
Loren D. Potter
William Martin

30 June 1989

0317

1988 REPORT
SCHOLARLY AND CREATIVE ACHIEVEMENTS
of the
FACULTY, DEPARTMENT OF BIOLOGY

Submitted by

Donald W. Duszynski
Professor and Chair
13 March 1989

0313

APPENDIX H

Annual Report, Museum of Southwestern Biology

0310

Aug. 29, 1989

TO: Donald Duszynski, Chairman, Department of Biology

FROM: James ~~St.~~ Findley, Director, Museum of Southwestern
Biology.

SUBJECT: Annual Report of the Museum of Southwestern
Biology for 1988

The size and activities of the Museum of Southwestern Biology continued to expand during 1988. Notable events in the year's activities included the especially vigorous growth of the programs of the Division of Herpetology, the search for a replacement for retiring Professor William Martin as Curator of the Herbarium (which culminated in the hiring of Dr. Timothy Lowrey of the Botany Department, National University of Singapore, who will join the Museum staff in January, 1989), the implementation of the Museum's Research Associate Program, and the sudden quantum increase in the activities of the Division of Invertebrate Zoology as a result of its involvement in the Sevilleta Long Term Ecological Research Program.

A summary of some statistics for the Mammal and Herpetology Divisions is given in Table 2. Here it may be seen that the level of activity for 1988 remained stable or increased for most categories. But especially notable is the increase in the productivity of the Herpetology Division. The success of the Division in attracting graduate students of high quality is partly responsible, and this of course reflects the dedication of Professor Snell and his associates. The high level of productivity of the Mammal Division has been in effect for a number of years, and continues despite the fact that Professor Yates has accepted a part-time assignment as an Associate Dean of the College of Arts and Sciences.

Professor Martin retired as Professor and Curator of the Herbarium in May, 1989, after a distinguished career as the State's dean of botanists. His replacement, Professor Lowrey, will assume his duties in January, 1990. In the interim the Herbarium is in the capable hands of Patricia Barlow, who is acting as Interim Curator.

The Museum Associates Program is designed to recognize scientists whose work brings them into especially close contact with one of the divisions of the MSB, in a relationship that is beneficial to them as well as to the Museum, its curators, staff, and students. Two equal classes have been established, Curatorial Associate for individuals who contribute time and expertise in the day-to-day curation of the collections, and Research Associate for those whose research importantly involves ongoing use of the

collections, and whose presence thereby contributes to the intellectual atmosphere in the Museum and Biology Department. Associates are nominated by a member of the Museum staff and approved by the Board of Curators. Current associates are listed in Table 1.

The Division of Invertebrates has long been the smallest and least active section of the MSB. The influx of materials from the Sevilleta National Wildlife Refuge in connection with the LTER has changed that status overnight, and the Division is now experiencing growing pains. Professor Crawford notes that the pains come in part from lack of collection expansion space and work space. This formerly small division illustrates in a particular dramatic way the urgent need of the entire museum for substantial room for growth in the proposed new addition to the Biology Building.

In summary the MSB continues to play a central role in the Biology Department, a role that seems to be expanding at a greater rate than we anticipated, in part because of our involvement with the LTER project. I attach reports from the Divisions of Mammalogy and Herpetology. A certain lacuna in the administrative ranks of the MSB has made it difficult for me to assemble comparable statistics from all divisions as is the usual practice, to wit: Professor Crawford has just returned from Namibia, Professor Ligon is in Australia, Professor Martin has retired, and the Director was on leave spring semester, and only recently returned from Indonesia. Hopefully next year we can keep everyone in place long enough for them to attend to the annual report.

Table 1.--Individuals associated with the MSB as Curatorial or Research Associates.

MUSEUM OF SOUTHWESTERN BIOLOGY

Roster of Museum Associates

Curatorial Associates

William H. Baltosser	Ornithology
Kevin R. Bestgen	Ichthyology
Charles M. Bogert	Herpetology
James H. Brown	Mammalogy
Robert W. Dickerman	Ornithology
Steven P. Platania	Ichthyology
David L. Propst	Ichthyology
Norman J. Scott, Jr.	Herpetology
Peter Stacey	Ornithology

Research Associates

J. Scott Altenbach	Mammalogy
Sydney Anderson	Mammalogy
Robert J. Baker	Mammalogy
Troy L. Best	Mammalogy
Roger Conant	Herpetology
Thomas H. Fritts	Herpetology
Gary L. Graham	Mammalogy
David J. Hafner	Mammalogy
Bruce J. Hayward	Mammalogy
John P. Hubbard	Ornithology
Clyde J. Jones	Mammalogy
Astrid Kodric-Brown	Ichthyology
Charles W. Painter	Herpetology
James L. Patton	Mammalogy
Richard A. Smartt	Mammalogy

Table 2.--Summary of statistics for the Mammalogy and Herpetology Divisions, 1988.

	Mammalogy	Herpetology
Visitors	1118 (1137)	180 (-)
Loans	85 (62)	8 (14)
Accessions	2101 (1020)	1411 (217)
Courses Assisted	12 (8)	6 (-)
Publications	13 (10)	35 (16)
Grants in force	11 (10)	19 (16)
Grant applications	8 (8)	12 (13)
Graduate Students	16 (11)	16 (10)
Papers at meetings	23 (22)	18 (26)

ANNUAL REPORT
 1 JANUARY TO 31 DECEMBER 1988
 DIVISION OF MAMMALS
 MUSEUM OF SOUTHWESTERN BIOLOGY
 DEPARTMENT OF BIOLOGY
 UNIVERSITY OF NEW MEXICO
 ALBUQUERQUE, NM 87131

Prepared by W. L. Gannon

NUMBER OF VISITORS

The Division of Mammals hosted 1118 people who used the collection for a total of 139 days. These included 26 professional biologists from outside the Biology Department, 67 professionals within the University, and 165 community professionals. Roughly 900 school-aged children as well as many other groups, educators, artists, and members of the community were also served.

NUMBER OF LOANS

The mammal collection processed 85 outgoing loans, including 17 loans of frozen tissues for use in electrophoretic or DNA studies, 6 loans of karyotype slides, 1 loan of frozen sperm, and 3 loans of bacula. We also handled 23 incoming loans.

NUMBER OF ACCESSIONS AND SPECIMENS CATALOGED

The Mammal Division accessioned 12 groups of specimens and cataloged 2101 specimens into the main mammal collection (MSB 58018-60119).

UNIVERSITY COURSES USING THE COLLECTION

The Division of Mammals assisted 4 Biology Department classes and 2 other UNM classes (Anthropology, Art) with loans of specimens from our teaching collection or use of the collection in the Museum:

Biology 121: Principles of biology	2 loans
Biology 122: Principles of biology	4 loans
Biology 386: General vertebrate zoology	2 loans
Biology 489: Mammalogy	8 loans
Art 412: Museum management	1 loan
Anthro 449: Paleontology	2 loans

The following courses used the collection extensively as part of their coursework:

Biology 489: Mammalogy	- 18 students
Biology 490: Principles of Biological Systematics	- 16 students

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Biology 402/502: Topics in Cytogenetics - 5 Students
 Biology 502: Topics in Chromosomal Evolution - 6
 students
 Biology 651: Advanced Field Biology - 3 students
 Biology 512: Population Biology - 14 students

PUBLIC SERVICE

The Division of Mammals hosted 48 groups of public school children as well as gave numerous tours to interested "drop-ins". The Museum also answered 30 to 45 phone inquiries each week.

INFORMATION DISSEMINATION (see below)

Mammal Division supported 16 Ph.D. dissertations and M.S. theses, 15 grants, 5 published papers, 8 papers in press, 16 submitted as manuscript, and 23 papers presented at scientific meetings during this time.

MISCELLANEOUS

MSB expanded its computer pod and computer applications abilities. The Pod has developed into a core for manuscript production and data analysis. Access to mainframe computers was made possible by an Ethernet connection. Application software development was begun and should be completed by August, 1989 to drive the museums dbase IV database management system for patron use and other utilities. Other developments should also be completed next year such as a LAN.

Distinguished Departmental Visitors Hosted:

Dr. Michael Smith, Director, Savannah River Ecology
 Laboratory

Dr. Ira F. Greenbaum, Professor, Texas A&M, University

Dr. Sydney Anderson, Curator, American Museum

Mr. William Lopez-Forment, professor UNAM

Dr. Rodney Honeycutt, Assoc. Professor, Harvard

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GRANTS AND CONTRACTS, EXTRAMURAL AND INTRAMURAL.
Submitted to all agencies in 1988

Intern Training of Latin Americans in Museum Conservation Techniques. W. L. Gannon, T. L. Yates, and J. A. Cook. 2 yrs.

Mammalian Diveristy in Bolivia - The Yungas and Valles. T.L. Yates, S. Anderson, and J.A. Cook, NSF, \$266,678.00, 3 years.

Premanagement laboratory analyses of New Mexico Vertebrates (year 7). T.L. Yates. New Mexico Game and Fish, \$35,000, 1 Yr.

Endangered Fishes in New Mexico and Adjacent States, T.L. Yates, Steven Platania, and Kevin Bestgen, New Mexico Game and Fish, \$82,000, 18 months.

Long-term Ecological Research - the Sevilleta. Co-PI, NSF, \$2,400,000, 6 Years.

Population Structure and chromosomal evolution: evidence from the Bolivian Tuco-tuco - dissertation improvement, T.L. Yates and J.A. Cook, NSF, \$7,640, 1 year.

Genetic Factors affecting host specificity in parasites and their mammalian hosts, T.L. Yates and D.W. Duszynski, NIH - MBRS program, \$57,000, 4 years.

Systematics and biogeography of North American Pikas (Ochotona princeps). with David Hafner, NSF, \$135,000. 1988 was year 2. (Robert Sullivan).

Awarded with 1988 initial start date

Genetic Factors affecting host specificity in parasites and their mammalian hosts, T.L. Yates and D.W. Duszynski, NIH - MBRS program, \$57,000, 4 years.

Premanagement laboratory analyses of New Mexico Vertebrates (year 7). T.L. Yates. New Mexico Game and Fish, \$35,000, 1 Yr.

Endangered Fishes in New Mexico and Adjacent States, T.L. Yates, Steven Platania, and Kevin Bestgen, New Mexico Game and Fish, \$82,000, 18 months.

Long-term Ecological Research - the Sevilleta. Co-PI, NSF, \$2,400,000, 6 Years.

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Awards in force from previous years

Survey of endangered fishes of the Rio Grande, T.L. Yates, Steve Platania, and Kevin Bestgens, New Mexico Game and Fish, \$100,000. 2 Years.

Phylogenetic relationships and historical biogeography of Onychomys (Rodentia: Cricetidae) in western North America - dissertation improvement, T.L. Yates and Brett Riddle, NSF, \$10,000. expires May, 1989.

Zoogeography and Coevolution of Helminth parasites and their rodent hosts in Bolivia - dissertation improvement, T.L. Yates and S.L. Gardner, NSF, \$10,000, expired May, 1988.

Other Grants and Awards:

Joe Cook,
Genetics of Bolivian Tuco-tucos, Mellon Foundation, \$1000.
Graduate Achievement Award, UNM, \$1000

Forrest Davis,
Genetic variation in fossorial rodents, F.W. Davis, Society of Sigma Xi, \$400.00, 1988.

Scott Gardner,
Challenge Assistantship, 1987-1988, \$6000, UNM
Best student paper, systematics. Annual meeting, American Society of Parasitologists.

Gregory Hartman,
Department of energy graduate fellowship, Savannah River Ecology Laboratory, \$8000.00.

PUBLICATIONS

The Mammal Division supported many types of publications in 1988. Among these are included book chapters, refereed journal articles, oral presentations, and published abstracts.

PAPERS AND OTHER PRESENTATIONS:

Abstracts:

Cook, J.A., R. Humphrey, and J. Salazar. 1988. Preliminary assessment of a chromosomal zone of contact in Ctenomys boliviensis, Annual meeting, Southwestern Association of Naturalists, San Angelo, Texas, April.

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- Gannon, W. L. 1988. An examination of vocalization characters at species contact zones. Presented at the Annual Meeting of the American Society of Mammalogists, 24 June 1988 at Clemson University, Clemson, SC.
- Gannon, W.L., T.L. Yates, and F.W. Davis. 1988. Ancillary data management at the Museum of Southwestern Biology. Annual meeting, American Society of Mammalogists, Clemson, S.C., 22 June, 1988.
- Kleyboecker, K. and T.L. Yates. 1988. Small mammals on an island in the gulf of California: an island mainland comparison. Annual meeting, American Society of Mammalogists, Clemson, S.C., 22 June, 1988.
- Dragoo, J., J.R. Choate, and T.L. Yates. 1988. Systematics of arid land foxes. Annual meeting, Southwestern Association of Naturalists, San Angelo, Texas, April, 1988.
- Frank, B. and T.L. Yates. 1988. Chromosomal evolution in South American Marsupials. MBRS symposium, Los Angeles, California, October, 1988.
- Janecek, L.L., D.W. Moore, C.F. Nadler, T.L. Yates, and R.S. Hoffmann. 1988. Genic variation among voles of the genus Clethrionomys (Rodentia). Annual meeting, Southwestern Association of Naturalists, San Angelo, Texas, April, 1988.

Papers:

- Gannon, W. L. 1988. Zapus trinotatus. Mammalian Species No. 315:1-5.
- Gardner, S.L. and G.D. Schmidt. 1988. Cestodes of the genus Hymenolepis Weinland, 1858 sensu strictu from pocket gophers in Colorado and Oregon, with a discriminant analysis of four species of Hymenolepis. Can. J. Zool. 66: 896-903.
- Gardner, S.L., R.L. Rausch, and O.C.J. Camacho. 1988. Echinococcus vogeli Rausch and Bernstein, 1972 from the paca, Cuniculus paca L. (Rodentia: Dasyproctidae) in the departamento de Santa Cruz, Bolivia. J. Parasitology 74: 399-402.
- Sullivan, R.M. and K.E. Petersen. 1988. Systematics of Southwestern populations of least chipmunks (Tamias minimus). Occasional papers Mus. Southwestern Biol. Univ. New Mexico, 5: 1-27.

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Yates, T.L., S. Anderson, R. Urjel, and H. Bermudiz. 1988. The importance of collecting biological specimens in Bolivia. Bull. Cenetrop, Santa Cruz, Bolivia. 8pp.

Seminar Presentations, UNM and Elsewhere:

Cook, J.A. 1988. Investigaciones geneticas en los mamiferos de Bolivia. Invited seminar, Universidad Autonomia Gabriel Rene Moreno, Santa Cruz, Bolivia, July.

Cook, J.A. 1988. Population genetics and conservation in Bolivia. Invited seminar, Latin American Institute, November.

Yates, T. L. Invited seminar presented at the University of Northern Arizona entitled "Chromosomal evolution in fossorial mammals: drift or selection." Flagstaff Arizona, October, 1988.

Contributed Talks at Professional Meetings:

Campbell, M.L., and S.L. Gardner. 1988. Helminth parasite of Bolivian marsupials: distribution and ecology. Annual meeting, Southwestern Association of Parasitologists (SWAP), Lake Texoma, Oklahoma, April.

Davis, F.W., J.R. Choate, and E.G. Zimmerman. 1988. The taxonomic significance of chromosomal races of Geomys bursarius. Annual meeting, SWAN, San Angelo, Texas, April.

Dragoo, J., J.R. Choate, and T.L. Yates. 1988. Systematics of arid land foxes. Annual meeting, Southwestern Association of Naturalists, San Angelo, Texas, April, 1988.

Frank, B. and T.L. Yates. 1988. Chromosomal evolution in South American Marsupials. MBRS symposium, Los Angeles, California, October, 1988.

Gannon, W. L. 1988. An examination of vocalization characters at species contact zones. Presented at the Annual Meeting of the American Society of Mammalogists, 24 June 1988 at Clemson University, Clemson, SC.

Gannon, W. L., T. L. Yates, and F. W. Davis. 1988. Ancillary data management at the Museum of Southwestern Biology. Presented at the Annual Meeting of the American Society of Mammalogists, 22 June 1988 at Clemson University, Clemson, SC.

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- Hafner, D.J., R.M. Sullivan, and T.E. Lawlor. 1988. Genic variation within and among isolated populations of the nearctic pika, Ochotona princeps. Annual meeting, American society of mammalogists, Clemson University, June.
- Hartman, G.D. and John M. King. 1988. Phallus morphology in the eastern mole, Scalopus aquaticus, (Insectivora: Talpidae). Annual meeting, ASM, Clemson, SC, June.
- Janecek, L.L., D.W. Moore, C.F. Nadler, T.L. Yates, and R.S. Hoffmann. 1988. Genic variation among voles of the genus Clethrionomys (Rodentia). Annual meeting, Southwestern Association of Naturalists, San Angelo, Texas, April, 1988.
- Kleyboecker, K. and T.L. Yates. 1988. Small mammals on an island in the gulf of California: an island mainland comparison. Annual meeting, American Society of Mammalogists, Clemson, S.C., 22 June, 1988.
- Lambert, C.R., S.L. Gardner, and D.W. Duszynski. 1988. Coccidia from the fossorial rodent Ctenomys opimus Wagner (Ctenomyidae) from Bolivia, South America. Annual meeting, SWAP, Lake Texoma, Oklahoma, April.
- Riddle, B.R. 1988. Phylogeny and endemism in grasshopper mouse (Onychomys) mitochondrial DNA: implications for North American desert and grassland vicariant structure, Annual meeting ASM, Clemson, SC, June.
- Riddle, B.R. 1988. Historical Biogeography of Southwestern deserts based on grasshopper mice MtDNA patterns, Annual Evolution meetings, Asilomar, California, June.

GRADUATE EDUCATION.

Masters degrees awarded:

- Dickerman, Alan. 1988. Systematic status of the subgenus Oligoryzomys (genus Oryzomys). December.

Doctors degrees awarded:

- Sullivan, R.M. 1988. Biogeography of southwestern montane mammals: a test of the ecologic and historical hypotheses. December.

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Gardner, S.L. 1988. Phyletic coevolution between Nematode parasites and their rodent hosts in Bolivia. December. (with D. Duszynski)

Students Supervised by the Curator:

Biol 699 (fall) spring)	551 (fall)	599 (fall &
Joseph Cook	Forrest Davis	Allan Dickerman
Scott Gardner	Marianne Martin	
Greg Hartman		
Brett Riddle		
Robert Sullivan (spring)		
Joseph A. Cook		
Greggory D. Hartman		
Robert M. Sullivan		
Brett R. Riddle		

PERSONNEL

Curatorial Staff, Division of Mammals

Terry L. Yates	Curator of Mammals
William L. Gannon	Collections Manager
Joseph A. Cook	Assistant Curator
Marian P. Skupski	Curatorial Assistant
Rosanne L. Humphrey	Head Preparator, work-study
Mariel L. Campbell	Preparator, work-study
Roberto U. Gutierrez	Preparator, work-study
Lisa A. Valle	Preparator, work-study
Stan Moolenijzer	Preparator, volunteer
Monica K. Rusk	USFWS, Preparator
Susan C. Peurach	volunteer
Brian D. Frank	Karyotype lab, MBRS
Tom G. Roe	Museum, MBRS

Other Mammalogists and Professionals Associated With the Division of Mammals

Dr. Sydney Anderson	MSB Research Associate Curator, Mammals, American Museum of Natural History
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1988 MSB Mammal Division Annual Report

J. Scott Altenbach	Associate Biology Professor Chiropteran Anatomy and Physiology
William Baltosser	MSB Research Associate UNM Department of Biology
Troy L. Best	MSB Research Associate Assistant Professor, Biology Mammalian Morphology and Systematics; <u>Dipodomys</u>
James H. Brown	Professor of Biology Mammalian Biogeography Community Ecology
Astrid Kodric-Brown	Associate Professor Community Ecology
Joseph A. Cook	Ph.D. candidate, Frozen Tissue Collection studies in <u>Ctenomys</u>
Donald W. Duszynski	MSB Research Associate Chair, Department of Biology Mammalian hosts of coccidian parasites
James S. Findley	Director of MSB, MSB Ecomorphology, Community Ecology Curator Emertis, Mammal Division

Curatorial Associates:

James H. Brown	UNM Department of Biology
Robert W. Dickerman	Museum of Southwestern Biology

Research Associates:

J. Scott Altenbach	UNM Department of Biology
Sydney Anderson	Mammal Division American Museum of Natural History New York
Robert J. Baker	The Museum Texas Tech University Lubbock, TX

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Troy L. Best	Department of Biology Auburn University
Sarah B. George	MSB Research Associate. Curator of Mammals, IA County Museum of Natural History
Gary L. Graham	MSB Research Associate Bat Conservation International
David J. Hafner	MSB Research Associate New Mexico Museum Nat. History Historical Biogeography and Systematics
Bruce J. Hayward	Department of Biology Western New Mexico University Silver City, NM
Clyde Jones	The Museum Texas Tech University Lubbock, TX
James L. Patton	Museum of Vertebrate Zoology University of California Berkeley, CA
Richard A. Smartt	Curator of Zoology, New Mexico Museum of Natural History.

Ph.D. STUDENTS ASSOCIATED WITH THE DIVISION OF MAMMALS

Joseph A. Cook
Forrest W. Davis
Kris A. Ernest
Jennifer Frey
Scott G. Gardner
Greg G. Hartman
Marianne Martin
Brett R. Riddle
Jorge Salazar B.
Marian P. Skupski
Robert M. Sullivan

1988 ANNUAL REPORT OF THE DIVISION OF HERPETOLOGY
MUSEUM OF SOUTHWESTERN BIOLOGY
THE UNIVERSITY OF NEW MEXICO

Derrick W. Sugg and Howard L. Snell

CURATOR'S SUMMARY

Research Activities

This summary encapsulates the information contained in the following report of the activities of the Division of Herpetology in the Museum of Southwestern Biology for 1988. Division personnel and associates were involved in a number of regional, national and international activities. We organized and sponsored an international symposium on the Herpetology of the Galápagos Islands, held at the Charles Darwin Research Station on Isla Santa Cruz, Ecuador. We also co-hosted the Guild of Rocky Mountain Population Biologist Annual Meetings at Ghost Ranch, New Mexico. We continued our major research programs at the international, national, and state levels: evolutionary ecology of land iguanas, lava lizards, and tortoises in the Galápagos, Ecuador; ecology and control of brown tree snakes in the South Pacific; ecology and management of tegu lizards in Argentina; feeding ecology of caimans in Paraguay; developmental ecology of Isla San Esteban chuckwallas, Mexico; ecology and conservation of Harter's water-snake in Texas; population biology and ecology of desert tortoises in California, Nevada, and Arizona; ecology and conservation of the Jemez and Sacramento Mountain salamanders, New Mexico; ecology and distribution of New Mexico's leopard frogs; and community ecology of lizards in Hildago Co., New Mexico.

A major new research effort will center around the Division's involvement in the Biology Department's Long Term Ecological Research Project at the Sevilleta National Wildlife Refuge, Socorro Co., New Mexico. We will be studying geographic and temporal variation in the ecology of reptiles at the population and

community levels for at least the next six years. We also began the initial survey work for a project that will involve experimental island biogeography at Elephant Butte Reservoir in Socorro and Sierra Counties, New Mexico.

Thirty-five papers and reports of Division personnel or associates were either published or in press by the end of the year, and an additional 12 were in review. Faculty, students, and associates of the Division presented 26 seminars, papers, or posters at international, national, and regional meetings; universities; and research institutes. Funded research included 20 active grants and 13 new proposals.

Division Growth and Improvement

The Herpetology Division continued to grow and expand during 1988. We computerized all of the operations of the collection, but we still need to computerize the collection itself, that is a primary goal of next year. We catalogued specimen number 50,000 in November, and ended the year with a total collection of 50,190 specimens. The collection has grown steadily since the first specimen was catalogued in 1961 (Figure 1).

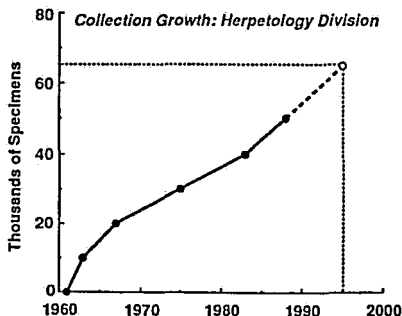


Figure 1: Growth of the collection. Dotted lines and clear points are extrapolations based upon current rates of accessioning.

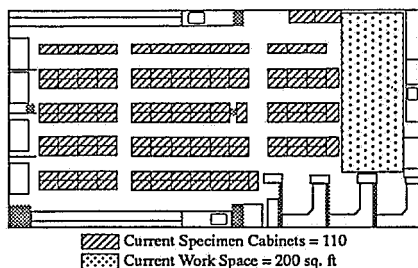


Figure 2: Current use of Space in the Herpetology Division.

However, we are currently severely overcrowded with no room for expansion (Figure 2). This will become a serious problem within the next year, because we have two major systematic collection efforts underway that will deposit more than 3,000 specimens per year into the collection (the Hildago Co. and Sevilleta projects). Because no

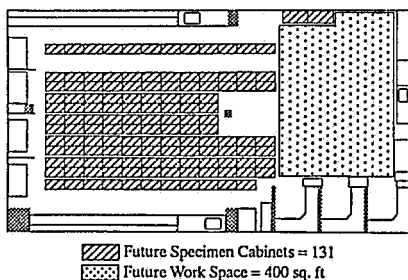


Figure 3: Anticipated use of space with Spacessaver System.

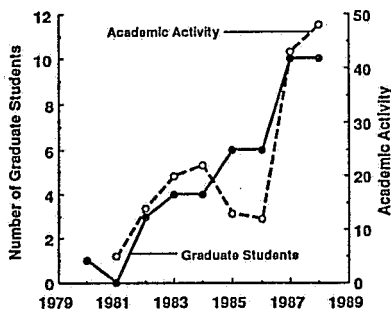


Figure 4: Growth in graduate students and academic activity since 1980. Academic activity is the sum of papers and reports published and presentations given.

more space is available for expansion within the Biology Department, we are searching for funds to purchase a Space Saver Compactor System that will increase our usable space by 60% (Figure 3). That should allow us to grow at projected rates for approximately 5 more years. By that time construction of a new biology building with new collection facilities should be underway. While the growth of the collection is impressive, and represents much hard work by all personnel associated with the Division, the most impressive growth is that which has taken place in academic activities and graduate student recruitment (Fig. 4). Everyone associated with the Herpetology Division deserves a tremendous amount of thanks for their efforts in making us one of the most productive Divisions in the Museum of Southwestern Biology.

COLLECTION GROWTH AND USE

Accessions—One hundred and five lots, totaling 1,554 specimens were accessioned in 1988. Additionally, the accessions catalog has been computerized to facilitate information retrieval.

Catalogued—One thousand four hundred and eleven specimens were catalogued in 1988, bringing the total collection size to 50,190 specimens.

Specimen Loans—Eight loans totaling 76 specimens were made to other institutions during 1988.

Guests—Approximately 30 guests from other schools and institutions visited the museum in 1988 for research purposes. An additional 150 school children visited the division on school tours.

Phone Inquiries—Approximately 100 inquiries about museum function and herpetology were received from the public during 1988.

University Course Support—The following courses utilized specimens or other resources on the Herpetology division during 1988.

- Biology 121: Principles of Biology
- Biology 122: Principles of Biology
- Biology 379: Conservation Biology
- Biology 386: General Vertebrate Zoology
- Biology 402/502: Topics in Herpetology
- Biology 402/502: Topics in Field Herpetology

COMPUTERIZATION:

During the course of 1988 the Herpetology division computerized several aspects of collection management. A brief summary of these activities follows:

Accessions—The entire accessions catalog, totaling 305 entries, was computerized. This database includes information about date of collection, number of specimens, general locality, collector, and species composition of the lot. This database will facilitate retrieval of information requested by researchers concerning the status of specimens contributed to the collection. Additionally, it should provide relational information when used in conjunction with existing and future databases such as the planned database for the entire collection.

Topographic Maps—The division's collection of 7.5" and 15" topographic maps were re-curated during 1988, and a computerized database was developed. This database should allow rapid searches of the map collection for specific maps, maps of a given county, and quadrangle names.

Inventory—An inventory of frequently used disposable items was made and a computerized listing was developed. This database should allow more accurate estimates of materials and supplies used on a yearly basis.

Purchases—All purchases made during the fall of 1988, and the vendor supplying the materials,

were recorded in a computerized database. This information will speed the process of ordering.

Computer use—A computerized log of use of the computer in the Herpetology division has been kept since August of 1988. The information contained in the log includes the user, purpose, time, date, and number of pages of paper used. This log will help document existing and future computer needs of this division. For a complete breakdown of this information see table 1.

PERSONNEL:

Curator

Howard L. Snell (50%).

Curatorial Associates

Charles M. Bogert.

Norman J. Scott, Jr.

Curator Emeritus

William H. Deganhardt.

Assistant Curators

James A. Seely (2 mo., 50%).

Derrick W. Sugg (10 mo., 50%).

Research Associates

Roger Conant.

Thomas H. Fritts.

Charles W. Painter.

Student Hourly

Leischen A. Bauke (5 mo., 15 hr./wk.).

Philip Heise (5 mo., 20 hr./wk.).

John P. Kerby (5 mo., 3 hr./wk.).

William H. Schaedla (5 mo., 15 hr./wk.).

High School Mentor Students

Andrea L. Allen (5 mo., 6 hr./wk.).

Ariel S. Farmer (5 mo., 6 hr./wk.).

RESEARCH:

The following personnel used the Herpetology collection on a regular basis for research activities in 1988.

Chris S. Altenbach, Lab Tech (Ichthyology).
Marilyn J. Altenbach, U.S. Fish and Wildlife.
Aida Luz Aquino-Ortiz, Graduate Student.
Kevin R. Bestgen, N.M. Game & Fish (Ichthyology)
Richard C. Calabro, Graduate Student.
Roger Conant, Adj. Prof., Research Associate.
Lee Fitzgerald, Graduate Student.
Thomas H. Fritts, Adj. Assoc. Prof., U.S. Fish and Wildlife, Research Associate.
David Germano, Graduate Student.
Randy Jennings, Graduate Student.
William A. Mabry, Graduate Student.
Carol Malcom, Graduate Student, U.S. Fish and Wildlife.
Sandra Mitchell, Graduate Student.
Charles W. Painter, N.M. Game & Fish, Research Associate.
Lee Pierce, Undergraduate Student.
Steven P. Platania, N.M. Game & Fish (Ichthyology).
David L. Propst, N.M. Game & Fish (Ichthyology)
Cindy, A. Ramotnik, U.S. Fish & Wildlife.
William H. Schaedla, Undergraduate Student.
Norman J. Scott, Jr., Adj. Assoc. Prof., U.S. Fish and Wildlife, Curatorial Associate.
James A. Seely, Graduate Student, Assistant Curator.
Heidi M. Snell, Science Applications International, Inc.,
Howard L. Snell, Asst. Prof, Curator.
Derrick W. Sugg, Graduate Student, Assistant Curator.
Gerard P. Zegers, Graduate Student.

STUDENT TRAINING:

During 1988 the following students were involved in research under the direction of faculty associated with the Herpetology Division.

Troy L. Best:

Richard C. Calabro, M.S.

Thomas H. Fritts:

David J. Germano, Ph.D.

Maria C. Nieuwolt, M.S.

Norman J. Scott, Jr.:

Aida Luz Aquino-Ortiz, M.S.
 Lee A. Fitzgerald, M.S.
 Randy D. Jennings, Ph.D.
 Sandra Mitchell, Ph.D.

Howard L. Snell:

Lee A. Fitzgerald, M.S., Ph.D.
 David J. Germano, Ph.D.
 Randy D. Jennings, Ph.D., U.S. Fish and Wildlife, Research Associate
 Maria C. Nieuwolt, M.S.
 Lee Pierce, B.S.
 William H. Schaedla, B.S.
 James A. Seely, M.S.
 Derrick W. Sugg, Ph.D.
 Gerard P. Zegers, M.S.

DISSERTATIONS AND THESES:

- Aquino-Ortiz, A.L. May 1988. Ontogenetic food shifts and their relation to morphological change in the crocodilian, *Caiman yacare*. M.S. Thesis.
- Fitzgerald, L.A. May 1988. Dietary patterns of *Caiman crocodilus* in the Venezuelan Llano. M.S. Thesis.
- Mitchell, S. Aug. 1988. Consequences of non-random mating in *Bufo woodhousei*. Ph.D. Dissertation.

GRANTS:

Proposals Submitted

- Gosz, J.R., R. Anderson, J. Brown, C. Crawford, G. Dahm, D. Duszynski, J. Findley, H. Grover, G. Johnson, T. Keift, D. Marshall, B. Milne, M. Molles, B. Musick, H. Snell, S. Wells, G. Wisdom, and T. Yates. Long-term ecological research on climatic and ecological gradients. National Science Foundation.
- Mabry, W.A. The genetic basis of interpopulational variation of anuran larval dimorphism. Theodore Roosevelt Memorial Fund, Graduate Research Allocations Committee, Student Research Allocations Committee.
- Nieuwolt, M.C. Continuation of the study of social behavior and aggression in Galápagos giant tortoises. Latin American Institute, and Graduate Research Allocations Committee.

- _____. The social behavior of Galápagos tortoises (*Geochelone elephantopus*) continued. Student Research Allocations Committee.
- _____. The social behavior of Galápagos tortoises. Sigma Xi.
- Scott, N.J., Jr.** Sacramento Mountain salamander study. USDA Forest Service.
- _____. Partial survey of White Mountain Wilderness for Sacramento Mountain salamander and analysis of soil characteristics of habitat. USDA Forest Service.
- _____. Studies of thermoregulation, habitat use, foraging, and growth rates of juvenile *Nerodia harteri*. Colorado River Municipal Water District.
- Snell, H.L.,** and D. Duszynski. Desert Biology: A proposal to the Undergraduate Seminar Program, College of Arts and Sciences. Ford Foundation, and Arts and Sciences Participatory Seminar Series.
- Sugg, D.W.** Ontogenetic changes in the thermal and feeding ecology of the Galápagos giant tortoise (*Geochelone elephantopus*). Latin American Institute, Graduate Research Allocations Committee, and Student Research Allocations Committee.
- Yates, T., G. Merckx, H. Snell,** and T. Crevenna. Proposal to establish a Latin American biodiversity program at the University of New Mexico. Tinker Foundation.
- Zegers, G.P.** Thermal equilibrium of burrowing Tarantulas and their burrows. Graduate Research Allocations Committee.
- _____. Field observation to evaluate the possibility of behavioral thermoregulation in the tarantula *Aphonopelma chaleodes*.

In Effect

- Gosz, J.R., R. Anderson, J. Brown, C. Crawford, G. Dahm, D. Duszynski, J. Findley, H. Grover, G. Johnson, T. Keift, D. Marshall, B. Milne, M. Molles, B. Musick, H. Snell, S. Wells, G. Wisdom,** and T. Yates. Long term ecological research on climatic and ecological gradients. National Science Foundation (\$2,500,000.00).
- Fitzgerald, L.A., J. M. Chani,** and O. E. Donidio. The *Tupinambis* Project in Argentina. CITIES, World Wildlife Fund (\$120,000).
- Fitzgerald, L.A.** Study of the biology of *Tupinambis* in Argentina. World Wildlife Fund (\$5,000).
- Mabry, W.A.** The genetic basis of interpopulational variation of anuran larval dimorphism. Graduate Research Allocations Committee (\$150.00), Student Research Allocations Committee (\$225.00).
- Nieuwolt, M.C.** Continuation of the study of social behavior and aggression in Galápagos giant

- ____ tortoises. Latin American Institute (\$1,400.00), and Graduate Research Allocations Committee (\$250.00).
- ____. The social behavior of Galápagos tortoises (*Geochelone elephantopus*) continued. Student Research Allocations Committee (\$100.00).
- Jennings, R.D., and N.J. Scott, Jr.** Studies of the leopard frogs of New Mexico emphasizing the ecology and status of *Rana chiricahuensis* in a variety of environmental situations. New Mexico Dept. of Game and Fish. (\$27,473.00).
- Jennings, R.D.** Phenotypic plasticity in the tadpoles of the Chiricahua leopard frog, *Rana chiricahuensis*. UNM Graduate Student Association (\$150.00).
- Scott, N.J., Jr.** Sacramento Mountain salamander study. USDA Forest Service (\$14,448.00).
- ____. Partial survey of White Mountain Wilderness for Sacramento Mountain salamander and analysis of soil characteristics of habitat. USDA Forest Service (\$18,036.00).
- ____. Studies of thermoregulation; habitat use, foraging, and growth rates of juvenile *Nerodia harteri*. Colorado River Municipal Water District (\$24,500.00).
- Snell, H.L.** Ecology and conservation of endangered Galápagos reptiles. Fulbright Scholar Program (\$30,000.00).
- Snell, H.L., and D. Duszynski.** Desert Biology: A proposal to the Undergraduate Seminar Program, College of Arts and Sciences. Ford Foundation, and Arts and Sciences Participatory Seminar Series (\$2,100.00).
- Snell, H.L., and T.H. Fritts.** The Herpetology of the Galápagos Islands: Research and Conservation. Tinker Foundation, Inc. (\$50,000.00)
- Snell, H.L., and D.W. Sugg.** Ontogenetic changes in the thermal and feeding ecology of the Galápagos giant tortoise (*Geochelone elephantopus*). New York Zoological Society, Nixon-Griffis Foundation (\$3,000.00).
- Sugg, D.W.** Ontogenetic changes in the thermal and feeding ecology of the Galápagos giant tortoise (*Geochelone elephantopus*). Latin American Institute (\$1,400.00); Graduate Research Allocations Committee (\$250.00); Student Research Allocations Committee (\$147.00).
- Sugg, D.W.** Allozyme variation within individuals: Does metamorphosis affect protein expression? Graduate Research Allocations Committee (\$211.65); Student Research Allocations Committee (\$112.50); Sigma Xi Scientific Research Society (\$450.00).
- Zegers, G.P.** Thermal equilibrium of burrowing Tarantulas and their burrows. Graduate Research Allocations Committee (\$213.00).

_____. Field observation to evaluate the possibility of behavioral thermoregulation in the tarantula *Aphonopelma chaleodes* (\$110.00).

AWARDS, SCHOLARSHIPS, AND FELLOWSHIPS:

Fitzgerald, L. World Wildlife Fund Fellowship.

Germano, D.J. U.S. Fish and Wildlife Service Research Fellowship. 1987-1988.

Jennings, R.D. Graduate Tuition Fellowship. Office of Graduate Studies, UNM.

_____. Award for outstanding publication, 1985, from the Denver Wildlife Research Center. U.S. Department of Agriculture.

Scott, N.J., Jr. Award for outstanding publication, 1985, from the Denver Wildlife Research Center. U.S. Department of Agriculture.

Snell, H.L. Fulbright Research Fellowship. 1987-1989.

PAPERS PRESENTED AT MEETINGS:

Campbell, M. L., W. M. Schaedla, S. J. Wood, and C. S. Crawford. Surface active arthropods from three habitats of coastal sonoran desert. Southwestern Association of Naturalists Annual Meetings.

Fitzgerald, L. Prey size selection and dietary shifts in *Caiman crocodilus*. Guild of Rocky Mountain Population Biologists.

Germano, D.J. Longevity of desert tortoises. Guild of Rocky Mountain Population Biologists.

Germano, D.J., and M.A. Joyner. Does high adult mortality equal a crash for desert tortoises in the Piute Valley, Nevada? Desert Tortoise Council Symposium.

_____. Changes in a desert tortoise (*Gopherus agassizi*) population after a period of high mortality. U.S. Forest Service Symposium: Management of Amphibians, Reptiles, and Small Mammals in North America.

Jennings, R.D. Population variation in reproductive cycles of *Rana chiricahuensis*. ASIH/HL/SSAR.

_____. Population variation in the reproductive patterns of the Chiricahua leopard frog, *Rana chiricahuensis*. Guild of Rocky Mountain Population Biologists.

Joyner, M.A., and D.J. Germano. Desert Tortoises of the Piute Valley-1987. Desert Tortoise Council Symposium.

Seely, J.P. Geographic variation in nest architecture of the western harvester ant, *Pogonomyrmex occidentalis*. Guild of Rocky Mountain Population Biologists.

- Scott, N.J., Jr. New Mexico's endemic salamanders: their status and future. ASIH/HL/SSAR.
- _____. Herpetofauna of a tropical white sand rain forest, Cameroon, Africa. ASIH/HL/SSAR.
- Snell, H.L., D.W. Sugg, and E. Amador. Sexual dimorphism in size of Galápagos lava lizards: Trait or consequence? American Society of Zoologists.
- Sugg, D.W., and H.L. Snell. Influence of sex determination mode on population and community dynamics of reptiles. American Society of Zoologists.
- Zegers, G.P. Habitat selection in burrowing wolf spiders: a preliminary analysis. Southwestern Association of Biologists.

POSTERS PRESENTED AT MEETINGS:

- Nieuwolt, M. Aggression and dominance in Pinzon tortoises: clues towards the evolution of saddle-back shape? International Symposium/workshop: The Herpetology of the Galápagos Islands: Research and Conservation.
- Snell, H.L., and D.W. Sugg. Ecosystem processes and populations. Inauguration Ceremony for the Sevilleta Long-term Ecological Research Site.
- Snell, H.L., H.M. Snell, C. Marquez, D.W. Sugg, and P. Heise. Interactive effects of episodic selection and reptilian herbivory on the *Opuntia* of the Galápagos Islands. International Symposium/workshop: The Herpetology of the Galápagos Islands: Research and Conservation.
- Sugg, D.W., and H.L. Snell. A computer simulation of the community-level consequences of temperature-dependent sex determination. International Symposium/workshop: The Herpetology of the Galápagos Islands: Research and Conservation.

INVITED PRESENTATIONS:

- Snell, H.L. Natural selection on body size of Galápagos land iguanas: directional or stabilizing? Departmental Seminar, Brigham Young Univ.
- Snell, H.L. Natural selection in *Opuntia* cactus. Departmental Seminar, Brigham Young Univ.
- Snell, H.L. Variación en el dimorfismo sexual de las lagartijas de Galápagos. Research Seminar Series, Charles Darwin Research Station.
- Snell, H.L. An overlooked determinant of community structure: the abiotic environment and community structure. Los Alamos National Laboratories.
- Snell, H.L. La biología de conservación en las Islas Galápagos. Spanish Seminar Series, University of New Mexico.
- Snell, H.L. Measuring natural selection in the field: a tool for studying adaption. New Graduate

Student Seminar Series, University of New Mexico.

Snell, H.L. The interface of research and management: a review of conservation in the Galápagos. Southwestern Association of Biologists.

Snell, H.L. The conservation of Galápagos land iguanas: the integration of basic and applied research. Servicio Parque Nacional de Galápagos. The Herpetology of the Galápagos Islands: Research and Conservation.

MANUSCRIPTS, ABSTRACTS, AND REPORTS:

Submitted

Fitzgerald, L. A. Tupinambis Project Final Report 1987-88. World Wildlife Fund - U.S. Washington, D. C.

Fritts, T.H. Rediscovery of *Pholidobolus anomalum* (Sauria: Iguanidae) in the Andes of southern Peru. Journal of Herpetology.

Fritts, T.H. N.J. Scott, Jr., and R.D. Jennings. The desert tortoise, *Gopherus agassizi*, in Mexico. J. Herpetology.

Karlin, A.A, G.A. Heidt, and D.W. Sugg. Genetic variation and populations structure in white-tailed deer in southern Arkansas. American Midland Naturalist.

Nieuwolt, M.C. Continuation of the study of Pinzon tortoise social behavior. Project/Technical report: Charles Darwin Research Station.

_____. Continuation of the study of Pinzon tortoise social behavior. Report to the Latin American Institute.

Scott, N.J., Jr., and A.L. Aquino. The effects of freezing on formalin preservation of specimens of frogs and snakes. Collection Forum.

Scott, N.J., Jr., A.L. Aquino, and L.A. Fitzgerald. Distribution, habitats, and conservation of the caimans (Alligatoridae) of Paraguay. Vida Silvestre Neotropical.

Stuart, J.A., and W.G. Degenhardt. Geographic distribution of *Opheodrys vernalis blancardi*. SSAR Herp. Review.

Sugg, D.W. Ontogenetic changes in the thermal ecology of the Galápagos giant tortoise (*Geochelone elephantopus*). Report to the Latin American Institute.

Sugg, D.W., M.L. Kennedy, and G.A. Heidt. Morphological variation in the Texas mouse, *Peromyscus attwateri*. Southwestern Naturalist.

_____. Gene flow and differentiation in a habitat specific mouse. Evolution.

Weckerly, F.W., D.W. Sugg, and R.D. Semlitch. Germination success of acorns (*Quercus*): Insect predation and tannins. Canadian Journal of Forest Research.

In Press

Engbring, J., and T.H. Fritts. Demise of an insular avifauna: the brown tree snake on Guam. Trans. Western Sect. of Wildl. Soc.

Fitzgerald, L. A. An evaluation of stomach flushing techniques for crocodiles. J. Herpetology.

Fitzgerald, L. A., J. M. Chani, and O. E. Donadio. *Tupinambis* lizards in Argentina: implementing management of a traditionally exploited resource. In: J. Robinson and K. Redford (eds), Traditional and Commercial Uses of Wildlife in the Neotropics. University of Chicago Press, Chicago.

Fritts, T.H. Brown tree snakes: A fact sheet for Pacific Island residents and travelers. Brochure.

Fritts, T.H., N.J. Scott, Jr., and B.E. Smith. Trapping *Boiga irregularis* on Guam using bird odors. Journal of Herpetology.

Germano, D.J., and T.H. Fritts. Methods for age determination of the desert tortoise, *Gopherus agassizi*. Proc. of the Desert Tortoise Council Symposium.

Germano, D.J., and M.A. Joyner. Does high adult mortality equal a crash for desert tortoises in the Piute Valley, Nevada? Proceedings of the 1988 Symposium of the Desert Tortoise Council.

_____. Changes in a desert tortoise (*Gopherus agassizi*) population after a period of high mortality. In R. Szaro, K. Severson, and D.R. Patton, eds. Management of amphibians, reptiles, and small mammals in North America. U.S. Forest Service, General Technical Report, Rocky Mountain Forest and Range Experiment Station.

Jennings, R.D., and N.J. Scott, Jr. New Mexico's enigmatic leopard frogs. New Mexico Wildlife.

Joyner, M.A., and D.J. Germano. Desert tortoises of the Piute Valley - 1987. Proceedings of the 1988 Symposium of the Desert Tortoise Council.

Karlin, A.A., G.A. Heidt, and D.W. Sugg. Genetic variation and populations structure in white-tailed deer in southern Arkansas. American Midland Naturalist.

McCoid, M.J., and T.H. Fritts. Growth and fatbody cycles of feral populations of the African clawed frog, *Xenopus laevis* (Pipidae), in California with comments on reproduction. Southwestern Naturalist.

Ramotnik, C.A., and N.J. Scott, Jr. Habitat requirements of New Mexico's state endangered salamanders. In R.C. Szaro, K.E. Severson, and D.R. Patton, eds. Management of amphibians, reptiles, and small mammals in North America. U.S. Forest Service, General Technical Report, Rocky Mountain Forest and Range Experiment Station.

- Scott, N.J., Jr., T.C. Maxwell, O.W. Thornton, Jr., L.A. Fitzgerald, and J.W. Flury. Distribution, habitat, and future of Harter's water snake, *Nerodia harteri*, in Texas. *Journal of Herpetology*.
- Snell, H.L., and D.W. Sugg. Ecosystem processes and populations. Poster session at the Inauguration Ceremony for the Sevillea Long-term Ecological Research Site.
- Snell, H.L., D.W. Sugg, and E. Amador. Sexual dimorphism in size of Galápagos lava lizards: Trait or consequence? Abstract, *American Zoologist*, 28(4):88A.
- Stuart, J.A., and W.G. Degenhardt. Geographic distribution of *Ophiodrys vernalis blancardi*. SSAR Herp. Review.
- Sugg, D.W., and H.L. Snell. Influence of sex determination mode on population and community dynamics of reptiles. Abstract, *American Zoologist*, 28(4):88A.
- Weckerly, F.W., D.W. Sugg, and R.D. Semlitch. Germination success of acorns (*Quercus*): Insect predation and tannins. *Canadian Journal of Forest Research*.

Published

- Fritts, T.H. 1988. The brown tree snake, *Boiga irregularis*, a threat to Pacific Islands. U.S. Fish and Wildl. Serv., Biol. Rep., 88(31). 36 pp.
- _____. 1988. Control and containment of the brown tree snake in military situations on Pacific Islands. Annual report to the U.S. Navy, Naval Facilities Engineering Command and U.S. Air Force, Anderson Air Force Base. 10 pp.
- Fritts, T.H., and G.H. Rodda. 1988. Brown tree snake update. No. 1, March 1988.
- _____. 1988. Brown tree snake update. No. 2, September 1988.
- _____. 1988. Brown tree snakes, *Boiga irregularis*, at the PCON-M223 (ROTHR) construction site on Guam. Report to U.S. Air Force, Anderson Air Force Base. 14 pp.
- Germano, D.J. 1988. Age and growth histories of desert tortoises using scute annuli. *Copeia*, 1988:914-920.
- Plummer, M.V., and H.L. Snell. 1988. Nest site selection and water relations of eggs in the snake, *Ophreodrys aestivus*. *Copeia*, 1988:58-64.
- Scott, N.J., Jr. 1988. Waterfowl and endangered species of the Marismas Nacionales, Sinaloa and Nayarit, Mexico. Pp. 30-31 in G.H. Dalrymple, W.F. Loftus, and F.S. Bernardino, Jr., eds. *Wildlife in the Everglades and Latin American wetlands: abstracts of the proceedings of the First Everglades National Park Symposium*, Miami. Florida International University, The State University of Florida at Miami, and Everglades National Park. 72 pp.

- Snell, H.L. 1988. An overlooked determinant of community structure: the abiotic environment and embryonic development. Report to the Environmental Sciences Group, Los Alamos National Laboratory and the Nevada Test Site, U.S. Department of Energy.
- Snell, H.L., R.D. Jennings, H.M. Snell, and S. Harcourt. 1988. Intrapopulation variation in predator-avoidance performance of Galápagos lava lizards: the interaction of sexual and natural selection. *Evolutionary Ecology*, 2:350-366.
- Snell, H.L., C. Marquez, and S. Rea. 1988. Informe final del experimento de crianza de galapaguitos. Report to the Galápagos National Park Service and the Charles Darwin Research Station.
- Snell, H.L., and D.W. Sugg. 1988. Ecosystem processes and populations. Poster session at the Inauguration Ceremony for the Sevilleta Long-term Ecological Research Site.
- Snell, H.L., D.W. Sugg, and E. Amador. 1988. Sexual dimorphism in size of Galápagos lava lizards: Trait or consequence? Abstract, *American Zoologist*, 28(4):88A.
- Sugg, D.W., A.A. Karlin, C.R. Preston, and D.R. Heath. 1988. Morphological variation in a population of the salamander, *Siren intermedia nettingi*. *Journal of Herpetology*, 22:243-247.
- Sugg, D.W., and H.L. Snell. 1988. Influence of sex determination mode on population and community dynamics of reptiles. Abstract, *American Zoologist*, 28(4):88A.
- Wiles, G.J., G.H. Rodda, and T.H. Fritts. A survey of lizard populations and their habitat use on Rota, Mariana Islands, with respect to a proposed introduction of Guam Rails to the island. Report to Fish and Wildlife Enhancement, Region 1. 28 pp.

SERVICE:

Lee A. Fitzgerald — Reviewer, Vida Silvestre Neotropical.

Thomas H. Fritts — Editor, Noticias de Galápagos.

Councilor, Charles Darwin Foundation.

Consultant, Hawaiian Marine Turtle Recovery Team, National Marine Fisheries Service.

Chair, Committee for Grants-in-Herpetology, Society for the Study of Amphibians and Reptiles.

Member, Tortoise Specialist Group, International Union for Conservation of Nature.

Research Associate, Department of Vertebrate Zoology, Smithsonian Institution.

Randy D. Jennings — Reviewer, *Copeia*

Norman J. Scott, Jr. — Immediate Past President, Society for the Study of Amphibians and Reptiles.

Board of Directors, Society for the Study of Amphibians and Reptiles.

Member, U.S. Fish and Wildlife Service, Region 2 Herpetological Assessment Team.

Research Associate, Los Angeles County Museum of Natural History.

Research Associate, New Mexico Museum of Natural History.

Corresponding Member, IUCN Tortoise Specialists Group.

Howard L. Snell — Councilor, Charles Darwin Foundation.

Assistant Editor, *Noticias de Galápagos*.

Chairperson, International Symposium/workshop: *The Herpetology of the Galápagos Islands: Research and Conservation*.

Co-host & Organizer, Guild of Rocky Mountain Biologists Annual Meetings.

Reviewer, *National Geographic*.

Derrick W. Sugg — Reviewer, *Journal of Wildlife Management*.

Secretary, Population Genetics Group, International Symposium/workshop: *The Herpetology of the Galápagos Islands: Research and Conservation*.

Table 1.—A monthly breakdown of use of the computer in the Herpetology Division.

	HOURS	PAGES
August:		
Word Processing	8.5	57
Other	2.5	2
TOTAL	11.0	59
September:		
Word Processing	62.5	343
Lotus 1-2-3	15.5	17
SAS	6.5	0
DBASE	16.0	42
TOTAL	100.0	402
October:		
Word Processing	45.0	553
Lotus 1-2-3	6.0	11
SAS	12.5	607
Other	0.5	0
TOTAL	64.0	1181
November:		
Word Processing	42.5	278
Lotus 1-2-3	37.5	266
SAS	21.0	137
DBASE	13.5	1
Other	3.0	0
TOTAL	117.5	682
December:		
Word Processing	15.5	141
Lotus 1-2-3	3.0	12
Turbo Pascal	15.5	81
DBASE	6.0	0
Other	3.5	4
TOTAL	43.5	238
SUMMARY:		
Word Processing	174.0	1372
Lotus 1-2-3	52.0	306
SAS	40.0	744
DBASE	35.5	43
Turbo Pascal	15.5	81
Other	9.5	63
GRAND TOTAL	307.5	2609

APPENDIX I

Annual Report, Castetter Laboratory For Ethnobotanical Studies

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CASTETTER LABORATORY FOR ETHNOBOTANICAL STUDIES
ANNUAL REPORT: 1988

Lab Personnel:

Mollie S. Toll, Staff
Glenna Dean, Staff
Sheila Doucette, Lab Technician (On-call status)
Anne C. Cully, Research Affiliate (N.M. Dept of Natural Resources)
Paul J. Knight, Research Affiliate (N.M. Dept of Natural Resources)

Professional Activities of Lab Personnel:

Mollie S. Toll

1. Attended 53rd Annual Meeting of Society for American Archaeology, April 27 - May 1, 1988, Phoenix, Arizona. Paper presented: "Botanical Trash at a 16th Century Spanish Encampment in the Rio Grande Valley, New Mexico".
2. Attended "Current Research on Late Prehistoric and Early Historic New Mexico", a conference sponsored by the New Mexico Archeological Council, November 5 - 6, 1988, at the Department of Anthropology, University of New Mexico. Paper presented: "Patterns of Plant Use from the Late Prehistoric to Spanish Contact in the Rio Grande Valley".
3. Served on Editorial Board, Journal of Ethnobiology.
4. Active field research: La Plata Valley Archeological Project in northwestern New Mexico (Museum of New Mexico; botanical consultant).
5. See Castetter Laboratory for Ethnobotanical Studies, Technical Series, for list of completed research reports.
6. "Flotation Sampling: Problems and Some Solutions, with Examples from the American Southwest", published as Ch. 3, pp. 36-53 in Current Paleoethnobotany: Analytical Methods and Cultural Interpretations of Archaeological Plant Remains, edited by Christine A. Hastorf and Virginia S. Popper (Prehistoric Archeology and Ecology Series, University of Chicago Press, 1988).
7. Proposal and planning stage research for "Long Term Ecological Impact of Human Utilization upon the Sevilleta National Wildlife Refuge", part of the NSF Long Term Ecological Research project at Sevilleta (Dr. Jim Gosz, UNM Biology Department, Principal Investigator).

Glenna Dean

1. Member of Search Committee, to replace Dr. William C. Martin
2. Attended 3rd Phytolith Workshop, University of Missouri at Columbia, January 22-24, 1988.
3. Prepublication reviewer of Chapter 4, "Archaeological Palynology" in Paleoethnobotany, by Deborah Pearsall (Academic Press, 1989).
4. Invited speaker, Radiocarbon Dating Workshop, Office of Contract Archeology, UNM, on "C3-C4 Photosynthetic Pathways in Plants, and the Implications for ^{14}C Dating", February 25, 1988.
5. Active field research: NMERI Survey at Zia Pueblo, Bolack Archaic site excavation, Guadalupe Mountain excavation (Office of Contract Archeology, UNM; botanical consultant and archeological crew member); N-2007 excavation project in Navajo, Arizona (Zuni Archaeological Project; botanical consultant).
6. See Castetter Laboratory for Ethnobotanical Studies, Technical Series, for list of completed research reports.
7. Archeological Investigations at Sites 030-3895 and 030-3900, Doña Ana Fairgrounds, New Mexico, by Timothy Seaman, Peggy Gerow and Glenna Dean, published by Office of Contract Archeology, University of New Mexico, 1988.
8. Community service: instructed docents in techniques of drop-spindle spinning, Albuquerque Museum; demonstrated hand-spinning techniques at the New Mexico State Fair, September 19-24, 1988.

Anne C. Cully

1. Paper presented August 1988, at 3rd Annual Conference of the Society for Conservation Biology, University of California at Davis: "Preliminary Results from Monitoring Two Populations of Sclerocactus mesa-verdae", by Cully, A., P. Knight, P. Olwell and D. House.
2. Paper presented April 1988, at Natural Areas Conference, Syracuse, NY: "Recovery of Pediocactus knowltonii, a Collaborative Effort by Private Enterprise and Government Agencies", by P. Olwell, A. Cully, and P. Knight.
3. Invited speaker: "Understanding the Biology of Two Rare Plant Species: Pediocactus knowltonii and Sclerocactus mesa-verdae". Biology Graduate Student Association, Humboldt State University, Arcata, California.
4. Paper accepted for publication in Southwest Naturalist: "Breeding Bird Assemblages at Guadalupe Mountain, Taos County, New Mexico", by Staehliker, D., P. Kennedy, A. Cully, and B. Kuykendahl.
5. "Status Report on Amsonia fugatei". Ms. on file, U.S. Fish and Wildlife Service, Albuquerque. 21 pp.

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Paul J. Knight

1. Archeobotanical analysis of the Chamisal site, Rio Grande Valley.
2. Analysis of the antique apples of the Rio Grande Valley.
3. Growth and development studies of Indian corns of the Southwest.

Research Projects in Progress:

1. Archeobotanical analyses for the Museum of New Mexico, from archeological sites in the La Plata River Valley, north of Farmington; Gallo Mountain, near Quemado; and Maljamar, in southeastern New Mexico.
2. Archeobotanical analyses for the Office of Contract Archeology, University of New Mexico, at Hawk Battalion, in the Puerco Valley; for Rio Abajo Consultants at the Montaña Bridge site in Albuquerque; for Human Systems Research at a site on White Sands Missile Range; and for Charles Trombold, Washington University in St. Louis, at a site in Zacatecas, Mexico

Castetter Laboratory for Ethnobotanical Studies
Technical Series
1988 Additions (#212-244)

- 1988 #212. Toll, Mollie S. Flotation from HSR 8709-6, an Archaic lithic scatter on Jornada del Muerto, White Sands Missile Range, New Mexico. Ms. on file, Human Systems Research, Tularosa, New Mexico. Don Clifton, Project Director. 4 pp. January 12, 1988.
- #213. Toll, Mollie S. Flotation from LA 457, the Florida Avenue site, near Alamogordo, New Mexico. Ms. on file, Museum of New Mexico, Laboratory of Anthropology, Santa Fe. Yvonne R. Oakes, Project Director. 8 pp. January 13, 1988.
- #214. Dean, Glenna, Archeobotanical analyses of samples from sites 030-3895 and 030-3900, Dona Ana Country Fairgrounds, New Mexico. Ms. on file, Office of Contract Archaeology, University of New Mexico, Albuquerque, New Mexico. Timothy Seaman, Project Director. 20 pp. January 27, 1988.
- #215. Toll, Mollie S. Flotation from three sites in the Rio Puerco valley, west central New Mexico: LA33943, 33945, 33946. Ms. on file, Rio Grande Consultants, Albuquerque and N.M. State Historic Preservation Office, Santa Fe. Matthew Schmader, Project Director. 14 pp. January 20, 1988.
- #216. Toll, Mollie S. Flotation from a late Archaic burial at Fort Cummings, near Deming, New Mexico. Ms. on file, Human Systems Research, Tularosa, New Mexico. Karl Laumbach, Project Director. 5 pp. January 25, 1988.
- #217. Toll, Mollie S. Flotation from LA 33223, the Montano Bridge Project, Albuquerque, NM. Ms. on file, Office of Contract Archeology, UNM, Albuquerque. Randy Harper, Project Director, 6 pp. January 29, 1988.
- #218. Dean, Glenna. Pollen and parasitological analyses of samples from LA 16806, the Romero Cabin Site, Pajarito Plateau, Los Alamos National Laboratory, NM. Ms. on file, LANL, Los Alamos. Ellen McGehee, Project Director, 16 pp., February 1, 1988.
- #219. Toll, Mollie S. An assessment of botanical remains retrievable by flotation from shallow sites on White Sands Missile Range, NM. Jeanne Schutt, Project Director. Ms. on file, Office of Contract Archaeology, UNM, Albuquerque, 4 pp., February 11, 1988.
- #220. Toll, Mollie S. Flotation from La Vega (LA 9075), a large multicomponent site south of Grants, NM. Ms. on file, Laboratory of Anthropology, Museum of New Mexico, Santa Fe. Jeff Boyer, Project Director, 7 pp. February 23, 1988.

- #221. Dean, Glenna. Pollen analysis of archeological samples from LA 51912, Otowi, Santa Fe County, NM. Ms. on file, Laboratory of Anthropology, Museum of New Mexico, Santa Fe. Stephen C. Lent, Project Director, 20 pp. February 15, 1988.
- #222. Toll, Mollie S. Flotation from the SU Site, a Mogollon village in western NM. Ms. on file, UNM Department of Anthropology (Albuquerque) and Gila National Forest (Silver City). Wirt Wills, Project Director, 11 pp., February 23, 1988.
- #223. Toll, Mollie S. Botanical materials found in Yucatecan storage features: Chuncedro, Xkobenjaltun, Kabah and Xculoc. Ms. on file, UNM Department of Anthropology. Michael Smyth, Project Director, 11 pp., March 29, 1988.
- #224. Clary, Karen H. Exploratory pollen studies from contemporary maize (Zea mays L. ssp. mays) processing facilities, the Puuc Region, northwestern Yucatan, Mexico. Ms. on file, UNM Department of Anthropology. Michael Smyth, Project Director, 29 pp., April 27, 1988.
- #225. Toll, Mollie S. Flotation from the Stain Site (IA 58973) West of Corrales, NM. Ms. on file, Laboratory of Anthropology, Museum of New Mexico, Santa Fe. Stephen C. Lent, Project Director, 5 pp., March 1, 1988.
- #226. Toll, Mollie S. Macrobotanical materials from Aztec Ruins, northwestern NM. Ms. on file, Aztec Ruins National Monument, National Park Service, Aztec, NM. Susan Bearden, Project Director, pp., March 18, 1988.
- #227. Toll, Mollie S. Flotation from lithic scatters in southern NM: Carthage (IA 45877 and 45878). Ms. on file, Laboratory of Anthropology, Museum of New Mexico. Yvonne Oakes, Project Director, 6 pp., March 31, 1988.
- #228. Dean, Glenna. Pollen analysis of archeological samples from site LA 9075, La Vega, near Grants, Cibola County, NM. Ms. on file, Laboratory of Anthropology, Museum of New Mexico, Santa Fe. Jeff Boyer, Project Director, 18 pp., March 24, 1988.
- #229. Clary, Karen H. and Richard G. Holloway. Pollen analysis of soils from Basketmaker III to Pueblo III archeological features from the N-63 Project, Apache County, Az. Ms. on file, Zuni Archaeological Program, Zuni, NM. Barbara Hildebrant, Project Director, 68 pp., May 5, 1988.
- #230. Clary, Karen H. Results of pollen analysis of soils from archeological investigations in an eolian environment, the GBFEL-TIE Project, White Sands Missile Range, southeastern NM. Ms. on file, Office of Contract Archeology, UNM. Richard Chapman, Project Director, 19 pp., March 30, 1988.

- #231. Toll, Mollie S. Flotation from an early pit structure (LA 5192, Otowi) in north-central NM. Ms. on file, Laboratory of Anthropology, Museum of New Mexico, Santa Fe. Stephen C. Lent, Project Director, 14 pp., April 25, 1988.
- #232. Dean, Glenna. Pollen analysis of samples from two geomorphic trenches, GBFEL-TIE Project, White Sands Missile Range, NM. Ms. on file, Office of Contract Archeology, UNM, Albuquerque. Richard Chapman, Principal Investigator, 18 pp., April 15, 1988.
- #233. Dean, Glenna. Pollen analysis of archeological samples from two sites near Carthage, Socorro County, NM. Ms on file, Laboratory of Anthropology, Museum of NM, Santa Fe. Steven R. Hoagland, Project Director, 15 pp., May 5, 1988.
- #234. Clary, Karen H. Pollen evidence for agriculturally-based subsistence at LA 53662, a 13th century pithouse settlement on the Middle Rio Grande, Belen, New Mexico. Ms. on file, Laboratory of Anthropology, Museum of NM, Santa Fe. Regge N. Wiseman, Project Director, 55 pp., June 9, 1988.
- #235. Toll, Mollie S. Botanical studies at an extensive 13th century pithouse village in the southern Rio Grande Valley, NM: LA 53662, Belen Bridge. Ms. on file, Laboratory of Anthropology, Museum of NM, Santa Fe. Regge N. Wiseman, Project Director, pp., June 30, 1988.
- #236. Toll, Mollie S. Macrobotanical remains from three sites on the Cox Ranch, in Doña Ana & Otero Counties, southern NM. Ms. on file, OCA, UNM, Albuquerque. Kurt Anshevts, Project Director, 3 pp., August 3, 1988.
- #237. Dean, Glenna. Analysis of Flotation and Other Samples from Five Archeological Sites in the Proposed Hawk Battalian facility Area, Sandoval County, New Mexico. Manuscript on file, Office of Contract Archeology, University of New Mexico, Albuquerque. Mikele Gerow, Project Director, 10 pp., July 29, 1988.
- #238. Dean, Glenna. Pollen Analysis of Samples from Anasazi Site AZ-J-34-10 near Cow Springs, Arizona. Manuscript on file, Navajo Nation Archeology Department, Window Rock, Arizona. Rena Martin, Project Director, 15 pp., 13 September 1988.
- #239. Toll, Mollie S. Botanical materials from the Alexander McSween house, Lincoln County, NM. Ms. on file, Human Systems Research, Tularosa, NM. David Kirkpatrick, Project Director, 12 pp., October 20, 1988.
- #240. Toll, Mollie S. Botanical remains from two historic sites near Abiquiu, New Mexico, La Puente (LA54313) and the Trujillo House (LA59658). Ms. on file, Laboratory of Anthropology, Museum of NM, Santa Fe. Jeff Boyer & Jim Moore, Project Directors, 46 pp. March 2, 1989.

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#241. Dean, Glenna. Pollen Analysis of Samples from Site AZ-1-63-7 near Salina Springs, Apache County, Arizona. Manuscript on file, Navajo Nation Archaeology Department, Window Rock, Arizona. Dennis Gilpin, Project Director, 14 pp., October 7, 1988.

#242. Clary, Karen. (Oak Wash) "Pollen evidence in Oak Wash, Zuni, New Mexico." Report submitted to Roger Anyon, Zuni Archeological Program, Zuni New Mexico. BIA Contract No. MOOC 1420 4325. 120 pp., September 30, 1988.

#243. Clary, Karen. Pollen analysis at Haystack Cave (5GN189), Cure Canti National Recreation Area, Gunnison, Colorado, Ms. on file, David Nash, 1828 Busch Court. Fort Collins, Colorado, 18 pp., January 6, 1989.

#244. Dean, Glenna. Pollen Analysis of samples from LA 1644, Cristo Rey site, Sunland Park Project, Dona Ana County, NM. Ms. on file, Laboratory of Anthropology, Museum of NM, Santa Fe. Dorothy Zamora, Project Director, 11 pp., December 30, 1988.

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APPENDIX J

Annual Report, Electron Microscopy Facility

0373

Annual Report, 1988-89
Electron Microscopy Facility

The Electron Microscopy Facility has continued to provide EM instruction and service within the Department, to other departments in the University and to facilities outside the University. Non-departmental users (especially the Department of Pathology) are the major financial supporters of this lab, having reimbursed the Department of Biology approximately \$10,500.00 for services provided by the lab.

The Department successfully conducted a search to fill the position as Assistant Professor/Director of the EM Facility when they hired Dr. Stephen Stricker in October, 1988. Dr. Stricker will be joining the department in August, 1989. Angela Welford, EMT, who was hired in January, 1987, has continued to perform all EM service work as well as teaching the lab for the SEM course during the Spring semester, '88. She co-ordinated the TEM & SEM courses for the Fall, '88 and Spring, '89 terms.

Teaching Activities

The electron microscopy curriculum consists of two courses, Biol 547 Transmission Electron Microscopy and Biol 548 Scanning Electron Microscopy. Both of the EM courses continue to be filled at least one year in advance. Students take the course for a variety of reasons. Some are graduate students fulfilling their tools requirements and who have a proposed application of the techniques in their graduate work, others have found that they need to learn EM for their job. This is one of very few institutions offering instruction in this field and it is obviously in demand.

In the absence of a faculty person to teach the course, Angela Welford acted as course co-ordinator and lab instructor. For Transmission Microscopy, she arranged for a series of lectures to be given by experts in the field of Electron Microscopy from this region. In addition, she also gave a number of lectures. Dr. Robert Waterman, of the department of Anatomy, very generously helped by giving half of the lectures for the Scanning Microscopy course. Ms. Welford instructed the lab for both courses.

Research Activities

This lab has been collaborating with Suzanne M. Smith, M.D., Research Assistant Professor, Department of Pathology, in the investigation of Mesangiopathic Glomerulonephritis in alcohol abuse among American Indians. The research is supported by grants from the Lovelace Foundation, the Arizona Kidney Foundation and the National Institute of Health. Ms. Welford has performed all the EM and Immunoelectronmicroscopy for the study. A poster presentation entitled "Immunoelectronmicroscopy of Mesangiopathic Glomerulonephritis in Alcohol Abuse Among American Indians" was presented in August, 1988, at the 8th International Congress of Histochemistry and Cytochemistry. Ms. Welford was second author. Two manuscripts have been presented for publication in the journals Modern Pathology and the Journal of Histochemistry.

Service

Through service work, we continue to support research investigations of departmental and non-departmental faculty members, post doctorates and graduate students. We assisted eight biology faculty and three pathology faculty members. We also provided support for three graduate students and one post doc in biology and two graduate students in the department of Chemistry.

In addition, we have collected approximately \$12,000.00 in users' fees which were paid by departmental and extra-departmental users during 1987-88. The major outside user is the Department of Pathology. This lab has been contracted since January, 1988, to perform EM on clinical renal biopsies (80-100/year) obtained through the renal pathology service. The collaborative research efforts are also through the Pathology Department. Other outside users include the Department of Chemistry, the Lovelace Medical Foundation and the Museum of Natural History.

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APPENDIX K

Annual Report, National Ecology Research Center

National Ecology Research Center
 U.S. Fish and Wildlife Service
 Museum of Southwestern Biology

Grants and Projects

"The biology and population dynamics of the brown tree snake in Guam;" \$55,000; Project funded by the U.S. Fish and Wildlife Service; T.H. Fritts, Principal Investigator.

"Studies of the effects of logging on the Sacramento mountain salamander, Aneides hardii;" \$14,000; Project funded by the U.S. Forest Service, Alamogordo; N.J. Scott, Jr., Principal Investigator.

"Partial survey of the White Mountain Wilderness for Sacramento mountain salamanders and analysis of soil characteristics of habitat;" \$18,036; Project funded by the U.S. Forest Service, Albuquerque; N.J. Scott, Jr., Principal Investigator.

"Studies of the leopard frogs of New Mexico emphasizing the ecology and status of Rana chiricahuensis in a variety of environmental situations;" \$27,473; Project funded by the New Mexico Department of Game and Fish, Share with Wildlife Program; R.D. Jennings and N.J. Scott, Jr., Principal Investigators.

"Studies of thermoregulation, habitat use, foraging, and growth rates of juvenile Nerodia harteri;" \$7,500; Project funded by the Texas A&M Foundation and the Colorado River Municipal Water District; N.J. Scott, Jr., Principal Investigator.

"Study of the brown tree snake on Guam to determine methods of reducing snake-caused power outages;" \$42,000; Project funded by the U.S. Department of the Interior, Office of Territorial and International Affairs; T.H. Fritts, Principal Investigator.

Task Orders funded under the Cooperative Agreement, No. 14-16-0009-87-964, between the Department of Biology, University of New Mexico, and the National Ecology Research Center, U.S. Fish and Wildlife Service: Task Order No. 3 "Ecology and biology of endangered salamanders," \$11,228; Task Order No. 4 "Studies of the effects of logging on the Sacramento mountain salamander," \$4,325, submitted (and subsequently funded in July 1989).

Publications

Engbring, J., and T.H. Fritts. 1988. Demise of an insular avifauna: the brown tree snake on Guam. Transactions of the Western Section of the Wildlife Society 24:31-37.

- Fritts, T.H. 1988. The brown tree snake, Boiga irregularis, a threat to Pacific Islands. U.S. Fish and Wildlife Service Biological Report 88(31). 36 pp.
- Fritts, T.H. (ed.). 1989. Noticias de Galapagos. No. 47. 32 pp.
- Fritts, T.H., N.J. Scott, Jr., and B.E. Smith. 1989. Trapping Boiga irregularis on Guam using bird odors. Journal of Herpetology 23:189-192.
- Germano, D.J., and T.H. Fritts. In Press. Methods for age determination of the desert tortoise, Gopherus agassizii. in M. Trotter (ed.) Proceedings of the 1987 Desert Tortoise Council Symposium. Desert Tortoise Council, Long Beach, California.
- McCoid, M.J., and T.H. Fritts. In Press. Growth and fatbody cycles in feral populations of the African clawed frog, Xenopus laevis (Pipidae), in California with comments on reproduction. Southwestern Naturalist.
- Ramotnik, C.A., and N.J. Scott, Jr. "1988" [1989]. Habitat requirements of New Mexico's endangered salamanders. Pp. 54-63 in R.C. Szaro, K.E. Severson, and D.R. Patton (eds.) Management of Amphibians, Reptiles, and Small Mammals in North America. USDA Forest Service, General Technical Report RM-166.
- Scott, N.J., Jr. 1988. Waterfowl and endangered species of the Marismas Nacionales, Sinaloa and Nayarit, Mexico. Pp. 30-31 in G.H. Dalrymple, W.F. Loftus, and F.S. Bernardino, Jr. (eds.) Wildlife in the Everglades and Latin American Wetlands / Abstracts of the Proceedings of the First Everglades National Park Symposium, Miami. Florida International University, the State University of Florida at Miami, and Everglades National Park publishers.
- Scott, N.J., Jr. In Press. Book review - Middle American herpetology: a bibliographic checklist, by J. Villa, L.D. Wilson, and J.D. Johnson. Copeia.
- Scott, N.J., Jr., A.L. Aquino, and L.A. Fitzgerald. In Press. Distribution, habitats, and conservation of the caimans (Alligatoridae) of Paraguay. Vida Silvestre Neotropical.
- Scott, N.J., Jr., and R. D. Jennings 1989. Our enigmatic leopard frogs. New Mexico Wildlife 34:6-9.
- Scott, N.J., Jr., T.C. Maxwell, O.W. Thornton, Jr., L.A. Fitzgerald, and J.W. Flury. In Press. Distribution, habitat, and future of Harter's water snake, Nerodia harteri, in Texas. Journal of Herpetology.

Sullivan, R.M., S.G. Lucas, A.P. Hunt, and T.H. Fritts. 1988. Color pattern on the Selmacryptodiran turtle Neurankylus from the early Paleocene (Puercan) of the San Juan Basin, New Mexico. Natural History Museum of Los Angeles County, Contributions in Science No. 401. 9 pp.

Reports and Non-refereed Publications

Fritts, T.H. 1988. The brown tree snake, a harmful pest species. A fact sheet published by the U.S. Fish and Wildlife Service for Pacific Island residents and travelers.

Fritts, T.H. 1988. Control and containment of the brown tree snake in military situations on Pacific Islands. Annual report submitted to the U.S. Navy, Naval Facilities Engineering Command, Alexandria, Virginia, and to the U.S. Air Force, Andersen Air Force Base, Guam. 10 pp.

Fritts, T.H., and G.H. Rodda. 1988. Brown tree snake update, No. 2. September.

Scott, N.J., Jr. 1988. Growth and thermal ecology of juvenile Nerodia harteri. Annual report submitted to J.R. Dixon, Texas A&M University, College Station. 7 pp.

Scott, N.J., Jr., and C.A. Ramotnik. 1988. Studies on the effects of forest management practices on the Sacramento mountain salamander, Aneides hardii. Progress report submitted to U.S. Forest Service, Alamogordo. 16 pp.

Scott, N.J., Jr., and C.A. Ramotnik. 1989. Studies on the biology and habitat of the Sacramento mountain salamander (Aneides hardii) in the White Mountain Wilderness, Lincoln National Forest, New Mexico. Final report submitted to U.S. Forest Service, Albuquerque. 60 pp.

Wiles, G.J., G.H. Rodda, and T.H. Fritts. 1988. A survey of lizard populations and their habitat use on Rota, Mariana Islands, with reference to a proposed introduction of Guam rails to the island. Report submitted to FWS Fish and Wildlife Enhancement, Region 1, Honolulu. 28 pp.

Manuscripts Submitted

Scott, N.J., Jr., and A.L. Aquino. The effects of freezing on formalin preservation of specimens of frogs and snakes. Submitted to Collection Forum.

Scientific Meetings, Symposiums, and Workshops

Fritts, T.H., and E. Kosaka, "The exclusion of the brown tree snake on Pacific Islands," a series of technical briefings and workshops presented to diverse island governments and transportation personnel, 5-29 August 1988, the Federated States of Micronesia (Pohnpei), the Marshall Islands (Kwajalein, Majuro), American Samoa, and Western Samoa.

Ramotnik, C.A., and N.J. Scott, Jr., "Habitat requirements of New Mexico's endangered salamanders," paper presentation at the symposium on the Management of Amphibians, Reptiles, and Small Mammals in North America, 19-21 July 1988, Flagstaff, Arizona.

Scott, N.J., Jr., and A.L. Aquino, "The effects of freezing on formalin preservation of specimens of frogs and snakes," poster presentation by Scott at the 68th Annual Meeting of the American Society of Ichthyologists and Herpetologists, 17-23 June 1989, San Francisco, California.

Scott, N.J., Jr., Co-coordinator and Instructor, "Evaluacion de Poblaciones de Anfibios Anuros y Estrategias de Manejo y Conservacion," a workshop sponsored by the Secretaria de Desarrollo y Ecologia, Direccion General de Conservacion Ecologica de los Recursos Naturales of Mexico, and the U.S. Fish and Wildlife Service, 23-28 April 1989, Chapala, Jalisco, Mexico.

Completed Dissertations or Theses

Aida Luz Aquino-Ortiz, Ontogenetic food shifts and their relation to morphological changes in the crocodilian Caiman yacare, M.S., University of New Mexico, 1988.

Lee A. Fitzgerald, Dietary patterns of Caiman crocodilus in the Venezuelan llanos, M.S., University of New Mexico, 1988.

David Joseph Germano, Growth and life histories of North American tortoises (Genus: Gopherus) with special emphasis on the desert tortoise (G. agassizii), Ph.D., University of New Mexico, 1989.

Sandra L. Mitchell, Consequences of non-random mating in Bufo, woodhousei, Ph.D., University of New Mexico, 1988.

Maria Caterina Nieuwolt, Saddle-back giant tortoises: interactions of morphology and social behavior, M.S., University of New Mexico, 1989.

Committees, Awards, and Other Significant Activities

Dr. Thomas H. Fritts served as a Member of the Governor of Guam Brown Tree Snake Task Force.

Dr. Norman J. Scott, Jr., served on the Board of Directors as Immediate-past President of the Society for the Study of Amphibians and Reptiles.

Drs. Fritts and Scott served as Research Associates, Department of Vertebrate Zoology, Smithsonian Institution.

Dr. Scott served as a Member of the U.S. Fish and Wildlife Service Region 2 Herpetological Recovery Team, an interagency consortium of renowned herpetologists.

Drs. Fritts and Scott served as Corresponding Members, Turtle and Tortoise Specialist Group, International Union for Conservation of Nature.

Drs. Fritts and Scott served as Members of the University of New Mexico, Department of Biology, Liaison Committee with the Latin American Institute.

Dr. Scott served as a Research Associate of the Natural History Museum of Los Angeles County.

Dr. Fritts served as a Member of the Conservation Committee, Southwestern Association of Naturalists.

Dr. Fritts served as a Herpetological Consultant to the Galapagos National Park Service, Ecuador.

Dr. Scott served as a Member of the New Mexico Salamander Working Group, an interagency team concerned with the management and conservation of New Mexico's endemic salamanders.

Dr. Fritts served as a Consultant, Hawaiian Marine Turtle Recovery Team, National Marine Fisheries Service.

Dr. Scott and Mr. Randy D. Jennings were presented with an Award for Outstanding Publication by the U.S. Department of Agriculture, Denver Wildlife Research Center, for their 1985 paper "The tadpoles of five species of New Mexico leopard frogs," Occasional Papers of the Museum of Southwestern Biology, No. 3.

Ms. Rayann E. Robino received a Fish and Wildlife Service Quality Performance Award for her outstanding level of performance during the period 1 October 1987 to 30 September 1988.

Dr. Scott served as a Visiting Professor with the Organization for Tropical Studies, Costa Rica, and taught a course entitled, "Tropical Biology: An Ecological Approach."

Dr. Scott served as Associate Editor in Herpetology, Southwestern Association of Naturalists.

Dr. Fritts served as Editor, Dr. Howard L. Snell served as Associate Editor, and Ms. Robino served as Editorial Assistant to Noticias de Galapagos, a biannual news publication about science and conservation in Galapagos, the Galapagos National Park Service, and the Charles Darwin Research Station.

Dr. Scott and Ms. Robino served on the Board of Editors for the Museum of Southwestern Biology Publication series.

Ms. Robino served as an Editorial Assistant for the Fish and Wildlife Service Research Information Bulletin, an informal and interim reporting system published by the Office of Information Transfer.

APPENDIX L

Annual Report, Biology Department Grants

BIOLOGY DEPARTMENT GRANTS

FY 1988-1989

Estimated: \$ 37,391
 7,439
 21,274
3,181,282
 \$3,247,386

Revenue Accounts
 Research Allocation Committee Awards
 MBRS
 Grants
 Total Department Generated Revenue

Account	Principal Investigator	Agency	Project Title	Total Award	Current Year	Period of Performance
1-02369	Rice	UNH	RAC Award	\$ 2,200	\$ 2,220	09/01/89
1-02370	Johnson, G.	UNH	RAC Award	1,600	1,600	09/01/89
1-02397	Barton	UNH	RAC Award	2,410	2,410	09/01/89
1-02415	Ligon	UNH	RAC Award	1,669	<u>1,669</u>	09-01-89
				\$	7,439	
1-17035	Vogel	Revenue	SCT12L		\$ 775	06/30/89
1-17101	Yates	Revenue	Museum of Southwestern Biology		3,427	06/30/89
1-17102	Toll	Revenue	Flotation Analysis		-448	06/30/89
1-17103	Clary	Revenue	Ethnobotany		2,868	06/30/89
1-17104	Barton	Revenue	Iron Nutrition		238	06/30/89
1-17105	Root	Revenue	NHOS Mailings		64	06/30/89
1-17106	Altenbach	Revenue	Bat Research		8,216	06/30/89
1-17107	Welford	Revenue	Electronmicroscopy		2,936	06/30/89
1-17108	Yates	Revenue	Electrophoresis		2,126	06/30/89
1-17109	Dean	Revenue	Biology/Ethnology		1,237	06/30/89
1-17110	Milne/Marshall	Revenue	Landscape Ecology Symposium-GRMBP		-454	06/30/89
1-17111	Baca	Revenue	N. Arizona University		354	06/30/89
1-17112	Sugg	Revenue	Galapagos Symposium/LA Studies		412	06/30/89
1-17113	Sommer	Revenue	Idaho State		-18	06/30/89
1-17114	Martin	Revenue	Forest Service		650	06/30/89
1-17115	Yates	Revenue	American Society of Mammalogists		38	06/30/89
1-22820	White/Gosz	Revenue	Atomic Absorption		15,000	06/30/89
0-11397	Dean	Revenue	Ethnobiology Conference		960	06/30/89
0-11410	Vogel	Revenue	S.W. Connective Tissue		<u>-990</u>	06/30/89
				\$	37,391	
3-10201	Milne	DOE	Spatial Scaling: Analysis/Effects Animal Movements Semiarid Landscape	\$ 150,000	\$ 50,000	08/01/88 - 07/31/91
3-10591	Baca	Miles Pharm.	Ciprofloxacin - Controlling <u>Coxiella Burnetti</u> Isolates-Q Fever	9,000	9,000	11/01/88 - 10/31/89
3-10831	Brown	NSF	Ecology for a Changing Earth Symposium	53,266	53,266	03/31/90 - 08/01/88
3-10931	Scott	CO Rv MWD	Biology of Harter's Water Snake	22,500	4,500	08/01/89 - 07/31/90
3-11411	Toolson	NSF	Thermal Physiology of Cicadas	159,000	62,000	02/15/89 - 07/31/90
3-11412	Toolson	NSF	Cicada Physiology - Additional Support	10,100	10,100	03/08/89 - 07/31/90
3-11421	Marshall	NSF	Non-Random Seed Paternity in Wild Radish <u>Raphanus</u> sativus	174,000	62,297	03/01/89 - 08/31/92

Account	Principal Investigator	Agency	Project Title	Total Award	Current Year	Period of Performance
3-11581	Rice	NSF	Evolution of Dimorphic Sex Chromosomes	165,282	74,233	05/01/89 - 10/31/92
3-11661	Thornhill/Zuk	NSF	Sexual Selection: Jungle Fowl	83,258	83,258	03/01/89 - 08/31/90
3-11761	Yates	USF&W	Impact of Environmental Contaminants on NM Fish & Wildlife	8,442	8,442	01/25/89 - 09/30/89
3-11937	Yates	NMGF	Premangement Lab Analysis of NM Vertebrates (yr. 7)		25,000	10/11/88 - 06/30/90
3-12341	Marshall	NSF	Presidential Young Investigator Award	125,000	25,000	06/30/89 - 06/30/94
3-12381	Degenhardt	NMGF	Continuation - MS Prep: Amphibians & Reptiles of NM	10,000	10,000	03/24/89 - 06/30/91
			New - MS Prep: Amphibians & Reptiles of NM	500	500	07/01/88 - 06/30/89
3-13071	Wisdom	US Forest Svs.	Coop. Distribution of Lepidopteran Herbivores/Grazed & Ungrazed Areas	8,675	8,675	08/01/89 - 09/30/89
3-14403	Vogel	NIH	Fibroblast Proteoglycans & Connective Tissue Matrix (yr. 3)	153,105	61,986	12/31/87 - 12/31/88
3-14741	Bednarz	DOE/West	Los Medanos Raptor Research & Management Program	310,613	71,174	09/30/88 - 09/31/89
3-15454	Vogel	NIH	Proteoglycan Structure, Metabolism & Role in Tendon (renewal \$1 million/5 yrs.)	1,000,000	171,818	09/01/88 - 08/31/93
3-15561	Taylor	NSF	Evolution of Diapause Induction in the Indian Meal Moth	134,556	2,578	10/15/85 - 09/30/89
3-15601	Thornhill	NSF	Components of Individual Selection - Red Jungle Fowl	239,997	80,000	02/01/86 - 07/31/89
3-15602	Thornhill/Watson	NSF	Sex/Arachnid	30,000	30,000	06/01/88 - 07/31/89
3-16281	Yates	NMGF	Rio Grande Fishes: Status/Biology of Notropis Simus & N. Orca	179,736	82,402	06/30/86 - 03/01/90
3-16571	Loker	AID	Biological Control of Snail-Borne Parasites in Kenya	138,315	138,315	08/08/86 - 08/07/89
3-16893	Loker	NIH	Trematode Induced Immunosuppression in Snails	59,311	59,311	12/01/88 - 11/30/89
3-16981	Gosz/Dahm/Risser	NSF	Long-Path FTIR Analysis Biophysics/Atmospheric Interactions	586,783	150,955	02/01/87 - 07/31/90
			Supplementary - REU	8,000	8,000	05/01/89 - 04/30/90
3-17031	Marshall	NSF	Maternal Regulation of Mating in Wild Radish	124,003	124,003	01/01/87 - 06/30/90
3-17071	Milne	NSF	Hierarchical Structure & Fractal Geometry of Landscapes in SW U.S.	120,016	29,847	02/15/87 - 07/31/89
3-17301	Dahm/Trotter	NSF	Aerobic Zones in Streams: Nutrient Cycling, Aquatic/Riparian Plant Growth/Comp.	316,000	200,000	03/01/87 - 08/31/90
			Supplementary - REU	8,000	8,000	03/01/87 - 08/31/90
3-17601	Riddle/Yates	MSF	Grasshopper Mice	9,500	9,500	06/01/87 - 11/30/89
3-17631	White	NSF	Temperature/Soil Terpenoids	132,798	132,798	08/01/87 - 01/31/90
3-17791	Molles	NMGF	Gila River Minnows	4,570	4,570	05/27/87 - 08/15/88
3-17821	Gosz	NSF	Plant Nitrogen/Water	88,200	88,200	07/15/87 - 12/31/88
3-17911	Molles	NMGF	Socorro Isopod	1,874	1,874	06/18/87 - 08/01/88
3-17991	Jennings	NMGF	Ecological Studies of Leopard Frogs	24,472	24,472	07/01/87 - 12/31/89
3-18081	Brown	NSF	Studies of Communities in Stochastic Environments	26,512	13,566	07/01/87 - 05/31/89
3-18481	Dahm	Sandia	Microbial Degradation of Toxic Compounds in Soils	40,354	40,354	11/13/87 - 12/31/88
3-18491	Duszynski/Scott	USFW	Brown Tree Snake/Tortoises - Task #1	10,000	10,000	12/31/87 - 12/31/88
3-18492	Duszynski/Germano	USFW	Desert Tortoise - Task #2	10,000	10,000	12/31/87 - 12/31/88
3-18493	Duszynski	USFW	Ecology & Biology of Endangered Salamanders - Task #3	11,228	4,325	08/01/88 - 12/31/92
3-18521	Brown	NSF	Long-Term Monitoring & Manipulation Desert Granivore System	164,012	80,480	01/01/88 - 06/30/90
			Supplementary -	3,375	3,375	01/01/88 - 06/30/90
3-18641	Gosz	M-Marietta	PostDoc Sevilleta - Turner	10,000	10,000	11/01/87 - 10/31/88
3-18691	Thornhill	Guggenheim	Human Rape - Evolutionary Study of Offenders/Victims	13,000	13,000	01/01/89 - 12/31/89
3-18961	Riedesel	U.S. Olympics	Overhydration Runners	8,925	8,925	01/01/88 - 02/29/89
3-19191	Snell	NY Zool. Soc.	Galapagos Giant Tortoise	3,000	3,000	01/01/88 - 06/01/89
3-19231	Gosz/Dahm	LANL	Quantification of Evapotranspiration Across Scales & Gradients	30,140	30,140	04/04/88 - 09/30/88
3-19371	Vogel	NIH	Small Instrument PRG	9,765	9,765	05/01/88 - 06/30/89

Account	Principal Investigator	Agency	Project Title	Total Award	Current Year	Period of Performance
3-19441	Crawford/Wisdom	US Forest	Snakeweed Herbivores	9,950	9,950	05/20/88 - 12/30/88
3-19551	Kodric-Brown	NSF	Pupfish	80,100	80,100	07/01/88 - 12/31/90
3-19661	Brown	NSF	Spatial/Temp. Breeding - Birds	230,000	230,000	11/01/88 - 04/30/92
3-19811	Riedesel	USAF	Extended Hydration	20,000	20,000	07/01/88 - 02/28/89
3-19961	Milne	NSF	Spatial Scaling & Effects of Patch Mosaic Structure in Semiarid Ecosystems	198,076	75,615	08/01/88 - 01/31/91
			Supplementary - REU	7,700	7,700	08/01/88 - 01/31/90
3-19991	Gosz	NSF	LTER-Sevilleta/Addendum - Geographic Information System	2,494,913	494,913	10/15/88 - 10/15/94
3-34661	Snell	Tinker Frnd.	Galapagos Symposium	50,000	50,000	06/22/87 - 06/21/89
3-35761	Thorrhill, N.	NSF	Symposium on Natural History of Inbreeding and Outbreeding	10,000	<u>10,000</u>	06/01/89 - 05/31/90
					\$3,181,282	
4-06478	Vogel	MBRS			4,964	12/31/89
4-06818	Duszynski/Yates	MBRS			5,110	12/31/89
4-06858	Loker	MBRS			5,600	12/31/89
	Werner-Washburne	MBRS			<u>5,600</u>	12/31/89
					\$ 21,274	

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APPENDIX M

Biology Department Employees, FY 1988-89

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APPENDIX M

List of all employees, Department of Biology, UNM, FY 1988-89.

FACULTYProfessors (11)

Baca, Oswald G.	Kogoma, Tokio
Brown, James H.	Ligon, J. David
Crawford, Clifford S.	Martin, William
Duszynski, Donald W. (Chair)	Riedesel, Marvin
Findley, James	Thornhill, Randy
Gosz, James	

Associate Professors (13)

Altenbach, J. Scott	Molles, Manuel
Barton, Larry	Taylor, Fritz
Bourne, Earl	Toolson, Eric
Johnson, Gordon	Trujillo, John
Johnson, William	Vogel, Kathryn
Kerkof, Paul	Yates, Terry
Kodric-Brown, Astrid	

Assistant Professors (9)

Dahm, Clifford L. - code 5	Rice, William R. - code 5
Loker, E. Samuel - code 5	Snell, Howard L. - code 4
Marshall, Diane L. - code 4	Werner-Washburne, Margaret - code 1
Milne, Bruce T. - code 3	Wisdom, Charles, S. - code 3
Natvig, Donald O. - code 6	

Joint Appointments (5)

Kelley, Robert - Professor, Anatomy
 Kogoma, Tokio - Professor, Cell Biology
 Risser, Paul - Vice President for Research
 Trotter, John - Professor, Anatomy
 Waterman, Robert - Professor, Anatomy

Lecturer

Ligon, Sandy

APPENDIX M (Continued)

STAFF

Bargaining Unit (9)

- Arguello, Ernestine (Lab Tech II) responsible for media preparation unit serving Biology faculty and undergraduate courses 239, 350, and 454; responsible for security and control of equipment and supplies; annual order preparation retired June 30, 1989.
- Donahue, Kulkanya (Lab Assist III) assists with media preparation, annual order, and security and control of equipment and supplies; resigned May 1989.
- Farmer, Irene (Cler Spec V) word processor serving entire Biology faculty and associated personnel.
- Jill Rawson, (Cler Spec V) receptionist, public information contact; assist with computerized recordkeeping; replaced Rhonda Germano in May 1989.
- Martindale, Carol (Accounting Clerk) processes #20 and #40 payrolls processes personnel forms; monthly sales invoicing of grants and memo billing for department charges; maintains computerized records.
- McConnell, Desiree (Animal Tech III) cares for animals used in research and teaching, i.e., administers special diets, medication, euthanasia; monitors animal behavior; orders supplies and food.
- Ricci, Roy (Lab Tech IV) overall supervision of animal care facility and employees; responsible for annual order; develops animal care cost analysis for accurate statement of charges.

Nonbargaining Unit (14)

- Curtiss, Peter (Lab Tech III) responsible for storeroom operation, receiving, vehicle fleet operations and computerized recordkeeping.
- Dennis, Beth (Graphics Designer III) scientific and commercial illustrator, artist.
- Feather, Frank (Horticulturist) responsible for greenhouse, atrium area, grounds; botany consultant.
- Gannon, William (Res. Assoc II) collections manager of Mammal Division, Museum of Southwestern Biology.
- Gayheart, Claudia (Accounting Tech) responsible for accounts payable, travel, purchasing, computerized contracts and grants recordkeeping, computer information resource person.
- Kubler, Sharon (Department Administrator) administration of department operations in areas of fiscal management, operational planning, policy formulation, staff supervision.
- Mygatt, Jane (Lab Tech III) supervise media preparation for 121 and 122 classes; responsible for atrium, greenhouse and outside areas.
- Mason, Clarence (Lab Tech V) electrical/electronic repair and maintenance of equipment; shared with Geology.
- Bleakly, David (Lab Tech III) responsible for coordinating maintenance, repairs, and use of space in Biology buildings, and freshman lab supervision; replaced David Opasik in February 1989.
- Richard, Michael (Veterinarian) responsible for health and care of animals used in research and teaching (shared with Psychology).

APPENDIX M (Continued)

STAFF

Nonbargaining Unit

Wright, Barbara (Administrative Assistant) responsible for efficient operation of Biology office; supervise receptionist and word processor; confidential secretary to Department Chair; general oversight of Graduate Student Program; replaced Diane Thomas in April 1989.

Welford, Angela (Lab Tech IV) oversee operation and maintenance of a transmission and a scanning electron microscope and related instruments; performs technical procedures (available campus-wide); teaches laboratory portion of Electron Microscopy courses.

LECTURERS/PART-TIME FACULTY (9)

Collins, A. Cowan - Adj. Asst. Prof.	Ono, Kathryn - Lecturer III
Gannon, William - Research Assoc. II	Scott, Norman - Adj. Assoc. Prof.
Grover, Herbert - Adj. Asst. Prof.	Stacey, Peter - Res. Assoc. Prof.
Heifetz, Steven - Lecturer III	Swan, James - Lecturer II
Ligon, Sandra - Lecturer II	

POSTDOCTORAL RESEARCH ASSOCIATES (11)

Heske, Edward	Turner, Sandra
Horner, John	Watson, Paul
Karron, Jeffrey	Watwood, Mary
Koob, Thomas	White, Carleton
Pierotti, Ray	Zuk, Marlene
Trotter, Eleonora	

RESEARCH PERSONNEL (16)

Barnett, Jenny (Trotter/Dahm) - Laboratory Technician IV
 Bednarz, Jim - Research Associate II
 Bestgen, Kevin (Yates) (Museum of Southwestern Biology/NM Game & Fish) -
 Research Technologist V
 Brown, David (Werner-Washburne) - Laboratory Technician IV
 Brunt, James (Gosz) - Analyst Programmer II
 Clark, Paul (Vogel) - Laboratory Technician IV
 Haagenstad, Todd (Gosz) - Laboratory Technician III
 Hayden, Timothy (Bednarz) - Research Associate I
 Hertel, Lynn (Loker) - Research Associate I
 Kidd, Jane (Bednarz) - Researcher
 Maddux, Troy (Gosz) - Laboratory Technician V
 Moore, Douglas (Gosz/Dahm) - Research Associate II
 Parmenter, Ray (Gosz) - Program Director
 Platania, Steven (Yates) (Museum of Southwestern Biology/NM Game & Fish) -
 Research Technologist V
 Ramsey, MariKay (Gosz) - Laboratory Technician V
 Wyss, Colleen (White) - Laboratory Technician III

APPENDIX M. (Continued)

GRADUATE STUDENTS AND FACULTY ADVISORS

<u>Student</u>	<u>Advisor</u>	<u>Student</u>	<u>Advisor</u>
Adams, K.	Trujillo	Hostert, E.	Rice
Andrews, D.	Martin	Hsu, S.	Trujillo
Arganbright, K.	Altenbach	Jennings, R.	Snell/Scott
Bandoni, S.	Loker	Kilburn, K.	Altenbach
Barlow, P.	Martin	Kim, Y.G.	Natvig
Blanco, C.	Crawford	Kimball, R.	Ligon
Brown, D.	Vogel	Kleyboecker, K.	Yates/Hafner
Calabro, R.	Duszynski/Best	Kucera, S.	Taylor
Carr, D.	Dahm	Kuipers, B.	Thornhill
Carter, C.	Kerkof	Loftin, S.	Gosz
Chary, P.	Natvig	Lyons, T.	Riedesel
Chroni, S.	Barton	Maybry, A.	Rice
Cimino, D.	Loker	Magee, T.	Kogoma
Coleman, R.	Dahm	Malcolm, C.	Yates/Hafner
Cook, J.	Yates	Martin, M.	Yates
Cornett, D.	Johnson, G.	McCallum, A.	Ligon
Couch, L.	Loker	Mitchell, S.	Thornhill/Scott
Cox, E.	Findley/Molles	Nelson, K.	Vogel
Crocker, M.	Dahm	Newberry, T.	Gosz/Dahm
Daly, J.	Ligon	Nicoletto, P.	Kodric-Brown
Davis, F.	Yates	Nieuwolt, M.	Snell/Fritts
De Bruin, E.	Martin	Nislow, K.	Molles
Dennis, G.	Johnson, G.	Northrup, D.	Crawford
Dominguez, C.	Duszynski/Loker	Nusbaum, T.	Taylor
Donaldson, L.	Trujillo	Oliveras, D.	Rice
Dvorachek, W.	Natvig	Price, M.	Barton
Eldredge, H.	Gosz	Riddle, B.	Yates
Ellis, L.	Ligon	Roman, M.	Baca
Ernest, K.	Brown	Sabourin, C.	Natvig
Evanko, S.	Vogel	Schoenly, K.	Crawford
Farley, G.	Ligon	Seely, J.	Snell
Fitzgerald, L.	Findley/Scott	Sheldahl, T.	Gosz/Cates
Flies, K.	Crawford	Shepherd, U.	Brown
Fortner, S.	Johnson, G.	Shuster, C.	Yates
Frey, J.	Yates	Skupski, M.	Findley/Best
Fuller, O.	Marshall/Wisdom	Sommer, S.	Brown
Gannon, W.	Findley	Steece, R.	Altenbach
Gardner, S.	Duszynski	Sugg, D.	Snell
Germano, D.	Snell/Fritts	Sullivan, B.	Yates
Grogan, S.	Milne	Venable, G.	Findley
Hager, B.	Thornhill	Wash, C.	Duszynski
Hartmen, G.	Yates	Wu, C.	Johnson, G.
Hawkins, L.	Brown	Yeaman, M.	Baca
Hofkin, B.	Loker	Zegers, G.	Snell
Hohmann, M.	Kodric-Brown		

APPENDIX N

Biology Department Courses, FY 1988-1989

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APPENDIX N

Course offerings and semester credit hours, Department of Biology, UNM, FY
1988-89.

SUMMER 1988

<u>No.</u>	<u>Course Title</u>	<u>No. of Sections</u>	<u>Total No. Students</u>	<u>Cr.</u>	<u>Total SCH</u>
121	Principles of Biology	1	66	4	264
121L	Prin of Biol Lab	3	64	-	-
122	Principles of Biology	1	27	4	108
122L	Prin of Biol Lab	2	27	-	-
221	Intro Genetics	1	15	3	45
239	Health Sci Micro	1	59	5	251
239L	Health Sci Micro Lab	3	58	-	-
386	Gen Vert Zoo	1	14	4	56
386L	Gen Vert Zoo Lab	1	12	-	-
400	Senior Honors Thesis	1	1	V	3
407	Bosque Biology	1	3	3	9
407L	Bosque Biology Lab	1	1	-	-
499	Undergraduate Problems	5	6	V	15
507	Bosque Biology	2	3	1	3
551	Graduate Problems	5	5	V	11
599	Masters Thesis	7	7	V	12
651	Adv Field Biology	2	3	V	14
699	Dissertation	3	9	V	55
Total, Summer 1988		40	367		846

FALL 1988

<u>No.</u>	<u>Course Title</u>	<u>No. of Sections</u>	<u>Total No. Students</u>	<u>Cr.</u>	<u>Total SCH</u>
110	Biology Non-Majors	1	142	3	426
112L	Biology Lab Non-Majors	4	84	1	84
121	Principles of Biology	2	651	4	2604
121L	Prin of Biol Lab	30	649	-	-
122	Principles of Biology	2	130	4	520
122L	Prin of Biol Lab	7	130	-	-
136	Hum Anat/Phys-Non Majors	1	162	3	486
139L	Hum Anat Lab-Non Majors	6	73	1	73
200	Principles of Ecology	1	14	4	56
200L	Prin of Ecology Lab	2	13	-	-
221	Introductory Genetics	2	115	3	344
222	Intro Genetics Prob	2	41	1	41
223	Intro Genetics Lab	2	28	1	28
224	SW Natural History	1	18	4	72
224L	SW Nat Hist Lab	1	17	-	-
237	Human Anat & Phys I	1	250	3	750
238	Human Anat & Phys II	1	92	3	276

<u>No.</u>	<u>Course Title</u>	<u>No. of Sections</u>	<u>Total No. Students</u>	<u>Gr.</u>	<u>Total SCH</u>
239	Health Sci Micro	1	91	V	398
239L	Health Sci Micro Lab	5	91	-	-
247	Anat & Phys Lab I	12	233	1	233
248	Anat & Phys Lab II	4	75	1	75
260	Intro Botany	1	16	4	64
260L	Intro Botany Lab	1	15	-	-
300	Evolution	1	34	3	102
350	General Micro	1	43	4	172
350L	General Micro Lab	2	43	-	-
363	Flora of New Mexico	1	11	4	44
363L	Flora of NM Lab	1	12	-	-
371	Invertebrate Biology	1	25	5	125
371L	Invert Biol Lab	2	25	-	-
400	Senior Honors Thesis	2	2	V	4
402	T/Human Social Evolution	1	2	3	6
402	T/Biotechnology	1	7	2	14
402	T/Proteoglycans	1	2	1	2
402	T/Plant Phys Ecology	1	1	1	1
402	T/Prosection I/Lab	1	13	V	39
402	T/Ecology	1	1	V	1
402	T/Fleshy Fungi	1	7	2	14
402	T/Evol Biology	1	2	2	4
402	T/Parasitology	1	1	1	1
402	T/Molec Gene/Forenci	1	4	3	12
402	T/Comp Vert Repro	1	2	3	6
402	T/Comp Vert Embry	1	8	2	16
402	T/Pollination Biology	1	4	2	8
402	T/Field Herpetology	1	6	2	12
402	T/Cardiovas/Pulm Phys	1	12	3	36
402	T/Global Ecology	1	11	3	33
404	Marn/Dsrt Invert Lab	1	17	3	34
405	Sci Publ	1	20	2	40
407	Bosque Biology	1	10	3	30
412	Developmental Biology	1	19	3	57
413	Development Biology Lab	1	10	2	20
423	Introductory Biochemistry	1	21	3	63
428	Human Heredity	1	11	3	33
429	Cell Biology I	1	49	4	196
430	Vertebrate Physiology	1	11	4	44
431	Vertebrate Physiology Lab	1	5	1	5
435	Animal Physiology/Lab	3	12	4	48
439	Cell Biology Lab	1	17	3	51
440	Soil Ecosystem	2	8	4	32
451	Microbial Ecology	1	7	3	21
452	Vertebrate Endocrinology	1	16	3	48
455	Ethology-Animal Behavior	1	26	3	78
456	Immunology	1	40	3	120
457	Ethology Lab	1	6	1	6
489	Mammalogy Lab	2	13	4	52
491	Radiobiology/Lab	2	5	4	20
499	Undergraduate Problems	14	20	V	42

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<u>No.</u>	<u>Course Title</u>	<u>No. of Sections</u>	<u>Total No. Students</u>	<u>Cr.</u>	<u>Total SCH</u>
500	New Graduate Stu Seminar	1	12	1	12
502	T/Cell/Molecular Seminar	1	2	1	2
502	T/Human Soc Evolution	1	4	3	12
502	T/Biotechnology	1	5	2	10
502	T/Herpetology	1	6	1	6
502	T/Prosection I/Lab	1	1	V	3
502	T/Topicos Biologia	1	1	1	1
502	T/Evolutionary Biology	1	7	2	14
502	T/Comp Verteb Repro	1	3	3	9
502	T/Fleshy Fungi	1	5	2	10
502	T/Hier Theo Ecosys	2	7	V	19
502	T/Ecology	1	6	V	8
502	T/Plant Phys Ecology	1	3	1	3
502	T/Proteoglycans	1	3	1	3
502	T/Parasitology	2	4	1	4
502	T/Pollination Biology	1	3	2	6
502	T/Cardiovas/Pulm Phy	1	9	3	27
502	T/Global Ecology	1	10	3	30
504	Environmental Physiology	1	3	3	9
507	Bosque Biology	1	2	3	6
512	Population Biology/L	2	15	4	60
547	Trans Electron Micro	1	6	4	24
551	Problems	24	33	V	89
581	Adv Cell & Mol Biology	1	9	4	36
599	Masters Thesis	13	15	V	43
651	Adv Field Biology	3	4	V	20
699	Dissertation	18	28	V	235
Total, Fall 1988		239	3,944		8,887

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<u>No.</u>	<u>Course Title</u>	<u>No. of Sections</u>	<u>Total No. Students</u>	<u>Cr.</u>	<u>Total SCH</u>
110	Biology Non-Majors	1	79	3	237
112	Biology Lab Non-Majors	3	54	1	54
121	Principles of Biology	1	204	4	816
121L	Principles of Biology L	13	198	-	-
122	Principles of Biology	2	335	4	1340
122L	Principles of Biology Lab	17	326	-	-
123	Bio for Hlth Rel Sci	1	105	4	420
123	Hlt Rel Sci Lab	12	105	-	-
136	Hum Anat/Phy-Non Maj	1	158	3	474
139	Hum Anat Lab-Non Maj	7	74	1	74
221	Introductory Genetics	1	95	3	285
222	Intro Genetics Prob	1	19	1	19
223	Intro Genetics Lab	2	26	1	26

<u>No.</u>	<u>Course Title</u>	<u>No. of Sections</u>	<u>Total No. Students</u>	<u>Gr.</u>	<u>Total SCH</u>
237	Human Anat & Phys I	1	133	3	399
238	Human Anat & Phys II	1	171	3	513
239	Health Sci Micro	1	86	V	370
239	Health Sci Micro Lab	4	85	-	-
247	Anat & Phys Lab I	6	109	1	109
248	Anat & Phys Lab II	8	149	1	149
249	Human Anatomy Lab	1	18	1	18
260	Intro Botany	1	21	4	84
260L	Intro Botany Lab	2	21	-	-
350	General Micro	1	43	4	172
350L	General Micro Lab	2	43	-	-
363	Flora of New Mex	1	25	4	100
363L	Flora of New Mex Lab	1	25	-	-
379	Biological Consvravn	1	30	3	90
382	Intro Parasitol	1	10	4	40
382L	Intro Parasitol Lab	1	10	-	-
400	Senior Honor Thesis	3	3	V	7
401	Biometrics/Lab	1	20	4	80
402	T/Avian Biology	1	1	V	2
402	T/Conn Tissue Biol	1	2	3	6
402	T/Top En Biologia-s	1	1	1	1
402	T/Bird Band/Mist Net	1	5	2	10
402	T/Prosec II/A&P Lab	1	13	V	39
402	T/Mol Biol	1	4	3	12
402	T/Mol Bio Endo Horm	1	11	3	33
402	T/Tech Env Chem	1	3	3	9
402	T/Herpetology	1	1	1	1
402	T/Prin of Collect M	1	11	3	33
402	T/Proteoglycans	1	3	1	3
402	T/Parasitology	1	1	V	1
402	T/Spec Topics in Bio	1	1	V	3
402	T/Meth Molec Biology	1	1	V	2
402	T/Meth Molec Biol Lab	1	1	2	2
402	T/Global Ecology	1	9	3	27
403	Ecosystem Ecology	1	26	3	78
407	Bosque Biology	1	17	3	51
414	Insect Biology	1	6	4	24
414L	Insect Biology Lab	1	6	-	-
416	Histology	1	26	5	130
416	Histology Lab	2	26	-	-
423	Introductory Biochem	1	15	3	45
429	Cell Biology I	1	47	4	188
430	Verteb Physiology	1	12	4	48
431	Verteb Physiol Lab	1	6	1	6
435	Animal Physiology	1	25	4	100
435L	Animal Physiol Lab	2	25	-	-
449	Cell Biology II	1	22	3	66
454	Pathogenic Bact/Lab	1	6	3	18
460	Microbial Physiology	1	4	4	16
460L	Micro Physiology Lab	1	4	-	-
465	Sociobiology Ev Ecol	1	13	3	39

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No.	Course Title	No. of Sections	Total No.		Total SCH
			Students	Gr.	
466	Sociobiology Evo Lab	1	2	2	4
467	Evol Plant Ecology	1	6	3	18
469	Plant Herb Interact	1	3	3	9
474	Plant Anatomy/Lab	1	11	4	44
478	Plant Physiology	1	4	4	16
478L	Plant Physiology Lab	1	4	-	-
488	Herpetology/Lab	2	16	4	64
495	Limnology	1	5	3	15
499	Undergraduate Problems	17	27	V	66
502	T/Ecology Seminar	1	2	1	2
502	T/Cell-Molecul Sem	1	1	1	1
502	T/Top En Biologia-S	1	3	1	3
502	T/Avian Biology	1	4	V	5
502	T/Prosec II/A&P Lab	1	2	V	6
502	T/Mol Bio Endo Horm	1	6	3	18
502	T/Adv Behavioral Ecology	1	5	V	15
502	T/Mol Biology	1	4	3	12
502	T/Conn Tissue Biol	1	6	3	18
502	T/Prin of Collet mc	1	2	3	6
502	T/Proteoglycans	1	2	1	2
502	T/Parasitology	1	5	V	5
502	T/Biodiversity	1	16	V	22
502	T/Spatial Stat Anal	1	1	2	2
502	T/Meth Molec Biology	1	5	V	12
502	T/Meth Molec Biol Lab	1	5	2	10
502	T/Global Ecology	1	3	3	9
502	T/Herpetology	1	3	1	3
507	Bosque Biology	1	3	3	9
514	Ecol Comm Ecosys	1	4	4	16
514L	Ecol Comm Ecosys Lab	1	20	-	-
520	Energy & Metabolism	1	17	3	51
548	Scan Elec Microscopy	1	6	3	18
549	Cell Biology II	1	5	3	15
551	Problems	15	29	V	73
557	Adv Population Ecology	1	5	3	15
557	Adv Populaion Ecology Lab	1	4	-	-
569	Plant Herb Interact	1	3	3	9
574	Ecol NA DSRTS/GRSLND	1	1	4	4
582	Adv Cell & Mol Biol	1	1	4	4
599	Masters Thesis	13	17	V	61
651	Adv Field Biology	15	5	V	22
699	Dissertation	15	23	V	190
Total, Spring 1989		505	3,433		7,752
TOTALS, FY 1988-89		784	7,744		17,485

THE REPORT OF THE DEPARTMENT OF CHEMISTRY

July 1, 1988 to June 30, 1989

Richard W. Holder, Chair

General Information

A. Significant Achievements During Academic Year 1988-89

After what has now become its customary annual intensive effort, the Department of Chemistry this year was successful in hiring its two first choices for new faculty beginning at the Assistant Professor level. Dr. Richard Crooks (Ph.D. U. Texas, Austin, Post Doctoral with Mark Wrighton at MIT) and Dr. David Keller (Ph.D. U. of California, Berkeley, Post Doctorals with Harden McConnell at Stanford and with Carlos Bustamante here at UNM) agreed to join our faculty beginning August, 1989. With the generous support of the Dean, and with a very significant commitment of our own overhead return, we were able to make competitive offers of salary and laboratory set-up funds.

These appointments further our interdisciplinary development in the areas of Biophysical chemistry and Materials chemistry. These emphases, begun in 1981, have led to strong and nationally recognized research programs in these areas, enhanced collaboration with the nearby national laboratories, establishment of the Center for Micro-Engineered Ceramics, and cooperation with the Center for High Technology Materials. The research profile of the Department, measured by outside funding,

number of quality publications, and number of post doctoral and visiting professorial colleagues resident, is at an all-time high, and likely to climb further with these two new junior-level appointments.

Assistant Professors Vincent Ortiz and Peter Ogilby, at the recommendation of the tenured members of the faculty, were each awarded tenure and promoted to the rank of Associate Professor this Spring. In addition, Associate Professor Carlos Bustamante was awarded early promotion to Professor of Chemistry. Each of these actions was fully justified by superior performance in the areas of teaching, research and service, and each serves further to underline the positive trajectory of the Department.

A two-year effort to attract an outside senior appointment as Chair of the Department was again unsuccessful this year. The faculty decided against continuing this search, at least for the immediate future. After an internal search, the faculty suggested to the Dean that he appoint Richard Holder as Chair. The Dean agreed to the appointment, and Dr. Holder reduced his involvement as Associate Vice President for Academic Affairs to 50%, with an eventual commitment to return 100% to the Chemistry Department as Chair. The Department is grateful to Bob Paine, who served ably but reluctantly as Acting Chair during the 1987-88 academic year.

The Graduate Recruitment Committee again worked hard to attract a highly qualified group of new graduate students to the Department for the Fall. Our efforts to improve the level of our stipend offer were greatly enhanced this year when an additional \$20,000 was made available by the Dean. We are grateful for the addition, but point out that still more must be done in future years in this area. Appendix A presents a statistical overview of this year's graduate admissions activities. At this writing, it is still uncertain how recent sad events in China will affect the ability of several students who accepted our offers to arrive in time for the Fall 1989 term.

With the assistance of the Dean, and with a significant commitment of our own resources, this year we began a gradual transformation of the undergraduate organic laboratories to micro-scale experiments. The total spent on new glassware kits was \$25,000. When the conversion is complete, we expect to save money on chemicals, and have to deal with significantly smaller amounts of waste materials.

The academic year came to a ceremonial close with our Department's participation in the Centennial graduation ceremonies. In addition to an all-University convocation in the morning to honor the Centennial Class, the Department hosted a luncheon at the Marriott Hotel for its own graduates. The guest speaker was Representative Gary King, himself a Ph.D. chemist, now practicing law in Moriarty. Over 100 graduates and guests

attended, with Drs. Holder and Satterlee presenting certificates to B.S. graduates and this year's awardees, and hooding the Master's and Ph.D. candidates. Dr. Hollstein kindly photographed the event, and Ruth Rue, Department Secretary, expertly assembled the pictures into a volume for all to see. The consensus of those present was that the event was entirely fitting for the Centennial Celebration of the University of New Mexico, and a welcome relief from the previous years when a seemingly endless number of graduates all passed over a common stage.

Our undergraduate program, although rather small, again produced a very high quality group of graduates. Several of these individuals will be attending top graduate schools in chemistry next year. Ten students earned a B.S. degree (six men and four women), one of whom (Eric Parker) stood for Departmental Honors and graduated magna cum laude. Six obtained the B.A. degree (three men and three women). In addition to these sixteen seniors finishing chemistry degrees, twenty-seven men and sixteen women took a minor in chemistry. At the graduate level, nine students earned the M.S. degree (six men and three women), and eight finished with Ph.D. degrees (seven men and one woman). Individuals receiving degrees in Chemistry during the 1988-89 academic year are listed below.

Students receiving the B.S. Degree in Chemistry in 1988-89

Robert Doolen	Ronald L. Meline
Sally C. Peters Douglas	Regina D. Ortiz
Manuel F. Gonzales	Eric P. Parker (<u>magna cum laude</u>)
Valerie King	Kevin D. Shenk
Diana M. Freeark Lindquist	David K. Witherspoon

Students receiving the B.A. Degree in Chemistry in 1988-89

Claudia Apodaca	Constance M. Grimm
Jennifer Dawson, (<u>cum laude</u>)	Erik T. Jessen, (<u>cum laude</u>)
Tracy Gann, (<u>cum laude</u>)	Stephen P. Schum

Students completing the Master's Degree
(With Date of Degree and Advisor)

Indira S. Adhietty, December 1988 (Thomas M. Niemczyk)
 Bruce W. Baldwin, May 1989 (Cary J. Morrow)
 Kelly D. Brown, May 1989 (Thomas Bien)
 Maria R. Builes, May 1989 (Carlos J. Bustamante)
 Carlos A. Castro, May 1989 (Carlos J. Bustamante)
 Chi-Ping Chu, May 1989 (Thomas M. Niemczyk)
 Joseph M. Eridon, May 1989 (Cary J. Morrow)
 Guruparan Paramanathan, July 1988 (Robert T. Paine)
 Rebecca Woodbury, May 1989 (Carlos J. Bustamante)

Students completing the Doctor of Philosophy Degree
(With Date of Degree and Advisor)

David A. Beach, May 1989 (Carlos J. Bustamante)
 Gregory S. Conary, December 1988 (Robert T. Paine)
 Myeong-Hee Kim, December 1988 (Carlos J. Bustamante)
 Fwu-Lin Lii, May 1989 (Cary J. Morrow)
 John H. May, May 1989 (Fritz S. Allen)
 Jan Mintorovitch, December 1988 (James D. Satterlee)
 Rodger D. Scurlock, December 1988 (Peter R. Ogilby)
 Chaojiong Zhang, December 1988 (Su-Moon Park)

Also at its Centennial Convocation, the Chemistry Department presented the following awards for academic excellence to its majors for the 1988-89 academic year:

Diana Freeark Lindquist and Eric P. Parker were awarded the Ann Kahn Memorial Award.

Diana Freeark Lindquist was also awarded the American Institute of Chemists Award

Eric P. Parker was also awarded the Senior Honors Award and the Merck Index Award.

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Robert D. Doolen was awarded the Charles LeRoy Gibson Award. Graduate in Chemistry Award recipient was Rebecca Woodbury Keller.

Added to the graduate awards this year through the generous gifts of Hillard and Mary Smith and the Dow Chemical Company was the Smith/Dow Graduate Fellowship. The Department is grateful to the Smiths and Dow Chemical for their support. The awardees were Patricia Enzel, David Lindquist and Randy Larsen.

The classes offered by the Department this last year are listed in Appendix B.

Although the annual Milton Kahn lecture was not given this year, the Department continued its outstanding lecture series. Appendix C lists seminar speakers who visited the Department between July 1, 1988 and June 30, 1989.

The Department continued its aggressive efforts to add to its experimental research equipment base. The total value of accountable equipment increased from \$3,929,078 to \$4,195,381 at the end of the accounting period in 1989. Major pieces of equipment (> \$10,000 purchase price) acquired during the reporting year were:

184476	Vacuum System	33,563.
184617	Microvax Computer System	31,856.
184751	N2 Laser	17,500.
184947	Analyzer	23,920.
184950	Dye Laser	14,550.
185664	Microscope	51,405.

The personnel of the Chemistry Department, including Faculty, Visiting Faculty, Postdoctoral and Research Fellows, Adjunct Professors, Staff, and Graduate Students are listed in Appendix D. Also included there are brief summaries of staff assignments, and an organizational chart of the Department. Not shown, but active this year, are the several standing Faculty Committees, including the Executive Committee (elected), Graduate Studies, Undergraduate Studies, Awards, Graduate Recruitment, Building and Safety, Computer, Library, and Seminar. In addition, there are several ad hoc committees operating at any given time. A vigorous effort to effect upgrades of most staff positions this year was partially successful; staff appointments, changes in status, and separations are listed below as Sections C and D. Section E is a compilation of current grant activity of faculty, and of proposals submitted during 1988-89.

B. Significant Plans and Recommendations for the Future

The Chemistry Department plans a day-long Faculty Retreat during the week prior to classes this August. At that retreat, we will discuss the governance structure of the Department, revisions of the undergraduate curriculum, new faculty recruitment, research directions of the Department, major instrumentation acquisition priorities, staff augmentation

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priorities, design of a new wing for the Department and other items. Subject to modifications from these intensive discussions, the following future efforts will likely emerge.

1. With our commitment to growth, the support of the Dean, and in anticipation of several retirements and acquisition of new research space, we hope to add 5-7 new, research active faculty in the next five years. The initial efforts will include at least one appointment of an organic chemist, preferably one with research interests consonant with our thrusts in Materials Chemistry or Biophysical Chemistry.

2. There is a perception among the faculty that we need to focus more attention on our undergraduate curriculum and students. Our concentration in recent years on graduate education has been very beneficial, but we need to reestablish a more vigorous and more healthy undergraduate program. We may begin to modify the curriculum, add various activities, etc.

3. The acquisition of new, high-quality research and teaching laboratory space remains critical. Discussions with an outside architect, the UNM Facilities Planning Department, and others are taking place at this writing. We hope during the coming year to convince the central administration and the Board of Regents that safety considerations alone must place new chemistry facilities at the top of the capital expenditure priority list. The recent decision by the National Science

Foundation to proceed with funding soon for its Research Facilities Office gives some hope for outside assistance in this endeavor. Faculty, students and alumni will be recruited to help lobby legislators for this essential addition if we are successful within the University at obtaining the coveted number one priority position.

4. There may become available in the near future considerable funds from the state for endowed chairs at UNM. If that occurs, the Chemistry Department must be ready with suggestions for a senior level search to make a distinguished appointment. During the next year, we will narrow our focus on the research area desired, and begin to identify internationally prominent persons who may be open to an offer.

C. Appointments to Staff

Ms. Erin E. Wymer joined the staff as an Editorial Assistant II on 22 March 1989.

Mr. David R. Campbell joined the staff as the Scientific Glassblower on 6 February 1989.

Mr. Bruce W. Tilford joined the staff as a Storekeeper II on 13 March 1989.

C1. Changes to Staff Personnel

Ms. Lisa Meyer, Storekeeper II, was changed from halftime to fulltime on 1 July 1988.

Ms. Eileen N. Duesler was reclassified from Staff Scientist to Research Scientist I on 1 July 1988.

D. Separations

Ms. Dorothy E. Cunningham, Editorial Assistant II, resigned on 3 February 1989.

Mr. Charles C. Cameron, Storekeeper II, resigned on 24 February 1989.

Mr. Arno P. Roensch, Scientific Glassblower, retired on 31 July 1988 after 14 years service.

Mr. Leonard A. Stensland, Instrument Technician V, resigned effective 31 May 1989.

E. Sponsored Research

The Department continued its aggressive search for outside funds to support faculty research projects. Of the twenty research faculty, 15 (75%) held one or more active grants or contracts during academic year 1988-89. Table 1 below summarizes the growth of grant dollars over the last four years, and also shows the values necessary to keep up with the Research and Development Price Index (i.e., the amount the Department would have had to bring in to maintain level the 1984-85 value, taking inflation into account.

Table 1

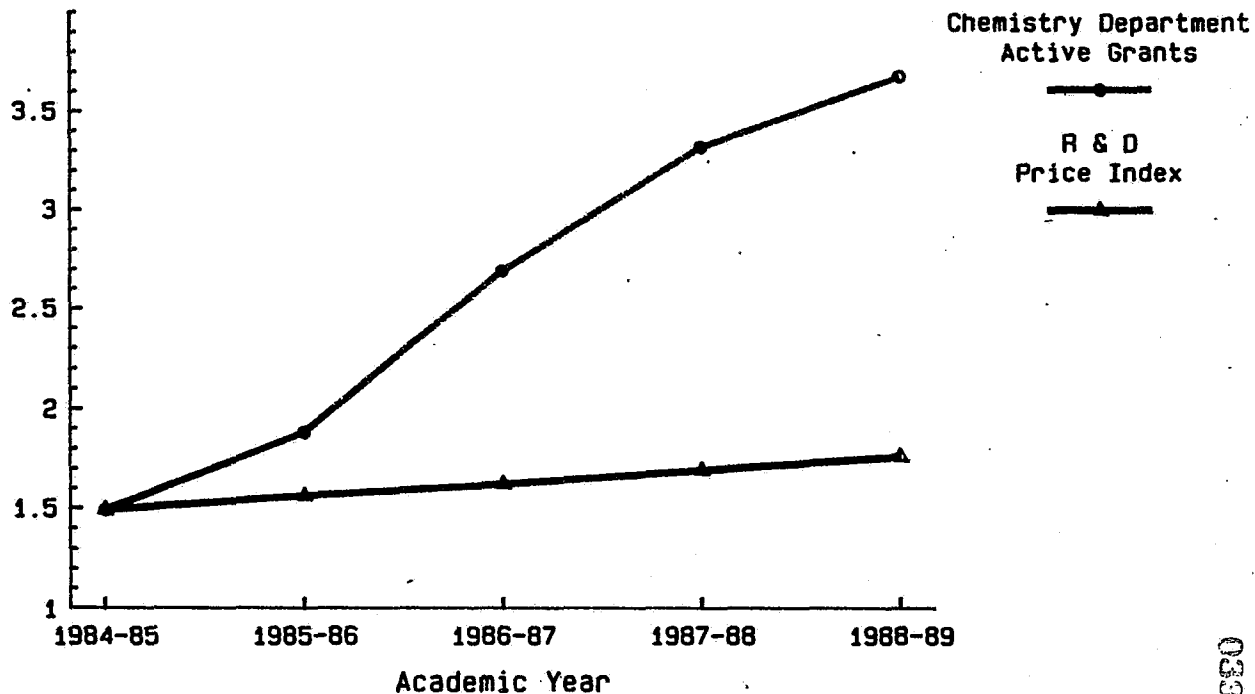
UNM Chemistry Department Research Grant Activity

<u>Academic Year</u>	<u>Grant Dollars</u>	<u>R&D Price Index</u>
1984-85	\$1,489,261	
1985-86	1,875,347	\$1,557,257
1986-87	2,691,001	1,623,921
1987-88	3,321,160	1,693,251
1988-89	3,680,173	1,761,248

The research and Development Price Index has grown 13.7% over the past five years; the Chemistry Faculty at UNM have increased the dollars available for research in the same period by 123%. The Figure following this page illustrates these trends graphically. The compilation below lists the active grants of each faculty member during this academic year. It is followed by data recording the proposals submitted during the 1988-89 academic year; of the 20 research faculty, 13 (65%) submitted proposals this year.

UNM CHEMISTRY DEPARTMENT Recent Grant Activity

Millions of Dollars



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GRANTS ACTIVE DURING THE 1988-89 FISCAL YEAR

<u>INVESTIGATOR</u> <u>AMOUNT</u>	<u>END DATE</u>	<u>SOURCE</u>	
Bein	7/14/89	CMEC*	20,018.
Bein	8/31/89	ACS/PRF	18,000.
Bein	2/28/90	NSF	201,100.
Bein	2/28/88	SANDIA	14,882.
Bein	12/31/88	SURP	30,000.
Bustamante	2/14/90	NSF	100,160.
Bustamante	1/31/90	LBL	45,293.
Bustamante	6/30/89	NIH	111,991.
Bustamante	9/30/88	BRSG	5,600.
Bustamante	4/30/89	NSF	153,826.
Bustamante	12/31/88	MBRS	26,128.
Bustamante	12/31/89	MBRS	20,831.
Bustamante	6/30/89	CC*	11,500.
Hampden-Smith	9/30/89	RAC*	2,500.
Hampden-Smith	9/30/89	CMEC	30,000.
Hampden-Smith	10/30/89	CMEC	20,196.
Holder	8/31/89	ACS	49,000.
Hollstein	8/31/89	MS Assoc	40,126.
Hollstein	Open	Res Corp	5,000.
Hollstein	4/30/89	PNM Award	800.
Morrow	11/30/89	SANDIA	10,000.
Morrow	6/30/89	U of C	25,872.
Morrow	10/31/90	NSF	61,400.
Morrow	12/31/88	MBRS	26,128.
Morrow	12/31/89	MBRS	20,831.
Niemczyk	9/30/89	LANL	60,363.
Ogilby	7/31/88	NSF	42,892.
Ogilby	9/30/89	SANDIA	65,000.
Ogilby	8/31/89	ACS/PRF	20,000.
Ondrias	6/30/89	NIH	83,539.
Ondrias	8/31/88	ACS/PRF	35,000.
Ondrias	2/28/90	NSF	246,379.
Ondrias	3/31/90	SANDIA	99,980.
Ondrias	12/31/88	MBRS	21,776.
Ondrias	12/31/89	MBRS	22,496.
Ondrias	4/30/89	NSF	44,000.
Ortiz	9/30/89	SANDIA	44,400.
Paine	9/30/89	SANDIA	14,800.
Paine	8/31/88	PRF	52,500.
Paine	9/30/89	LANL	55,280.
Paine	12/31/88	NSF	171,800.
Paine	8/31/88	DOE	220,000.
Paine w/Schaeffer	4/29/89	SANDIA	45,051.
Paine	8/31/88	DOE	64,974.
Paine	12/31/88	LANL	40,866.
Paine	5/31/89	DOE (3 yrs.)	84,121.
Paine	11/30/89	NSF/EQUIP	120,000.

<u>INVESTIGATOR</u>	<u>END DATE</u>	<u>SOURCE</u>	<u>0334</u> <u>AMOUNT</u>
Papadopoulos	Open	Amer Cy	14,382.
Park	9/14/89	DOE	151,916.
Satterlee	8/31/88	NIH	100,063.
Satterlee	8/31/89	NIH	108,721.
Satterlee	2/29/88	NSF	225,000.
Satterlee	8/31/90	NSF	150,000.
Satterlee	9/29/88	DHHS	51,840.
Satterlee	9/29/89	DHHS	51,840.
Walters	9/30/89	SANDIA	120,012.
		TOTAL	<u>3,680,173.</u>

- * CMEC = Center for Micro-engineered Ceramics
- * CC = Cancer Center
- * RAC = Research Allocations Committee

PROPOSALS SUBMITTED 1988-89

<u>INVESTIGATOR</u>	<u>END DATE</u>	<u>SOURCE</u>	<u>AMOUNT</u>
Bustamante	6/30/90	PHS-DHHS	128,911
Ondrias	6/30/90	NIH	109,774
Satterlee	2/28/90	NSF	75,000
Satterlee	9/29/89	DHHS-NIH	51,840
Niemczyk	12/31/89	LANL	42,698
Niemczyk	12/31/89	LANL	29,972
Ondrias	9/30/92	NSF	365,297
Hollstein	6/30/89	M. Solomon Assoc.	20,126
Ondrias	3/31/90	SNL	25,000
Bein	2/28/91	NSF	80,600
Walters	9/30/89	SNL	116,421
Morrow	10/31/90	NSF	30,700
Ogilby	9/30/89	SNL	15,000
Ortiz	10/31/90	NSF	40,400
Hollstein	8/31/89	Res. Corp.	5,000
Paine	9/30/89	LANL	20,294
Paine	5/31/90	DOE	98,755
Paine	6/30/89	NSF	20,000
Hollstein	4/30/89	PNM Fdn.	800
Ogilby	2/1/92	NSF	316,137
Ogilby	2/1/92	U.S. Army Res.	248,364
Ogilby	2/1/92	DOE	306,571
Hampden-Smith	3/1/91	ACS	18,000
Morrow	6/30/92	Geo. Wash. Un. Med Sch	109,171
Paine	9/30/89	Sandia	14,800
Paine	12/31/89	SNL	29,600
Ondrias	9/1/92	NSF	370,143
Ondrias	8/1/93	DOE	226,382
Keller	6/30/94	NIH	765,444
Bein	9/30/94	NSF	125,000
Ortiz	5/31/92	DOE	84,220
Ortiz	5/31/92	Air Force Sci. Res.	182,156
Morrow	11/30/89	SNL	10,000
Walters	--	NSF	100,000
Hampden-Smith	10/31/92	NSF	291,387
Bein	8/31/92	ACS-PRF	60,000
Walters	4/30/90	PNM Fdn.	5,000
Morrow	7/31/92	NSF	387,453
Bustamante	1/31/90	Lawrence Berkeley Lab.	45,293
Paine	9/30/89	SNL	10,000
Ortiz	6/30/92	ONR	252,833
Keller	9/30/90	SNL	30,000
Ondrias	8/31/90	Washington State Un.	32,351
Keller	3/31/95	NIH	602,375
Hampden-Smith	9/30/90	Inter. Lead Zinc Org.	40,000
Hampden-Smith	9-30/90	Inter. Lead Zinc Org.	39,152
Morrow	12/31/92	Geo. Wash. Un. Med Sch	35,492
Hampden-Smith	--	ACS-PRF	18,000

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PROPOSALS SUBMITTED, Cont'd

Ondrias	9/30/92	New York Univ.	214,388
Crooks	9/30/90	SNL	30,000
Bustamante	3/31/91	NIH	602,630
Ortiz	9/15/89	NSF-Pittsburgh Supercomputer Center- Req for Advanced Computing Resources	

Total \$6,878,930

APPENDIX A
Applications Received for Graduate Study in Chemistry
1988-1989

APP - Applications Received
APR - Applications Approved
DIS - Applications Disapproved
INC - Applications Incomplete
DEC - Applications Approved but Declined

State	APP	APR	DIS	INC	DEC
Arizona	4	3		1	2
California	2	2			2
Colorado	5	4		1	2
Florida	1			1	
Hawaii	1	1			
Illinois	1	1			
Iowa	1	1			1
Kansas	1	1			
Michigan	2	1		1	1
Nevada	1	1			1
New Mexico	8	3	1	4	1
New York	1			1	
Ohio	1			1	
Oklahoma	1			1	
Oregon	1		1		
Pennsylvania	5	3		2	2
Texas	2	2			2
Utah	1	1			1
Virginia	2	1		1	1
Washington	1		1		

TOTALS:

GRADUATES OF US SCHOOLS: 42 25 3 14 16

ETHNICITY: MALE 34
 FEMALE 8
 WHITE 39
 ASIAN
 BLACK 1
AMERICAN INDIAN
 HISPANIC 2

Applications Received for Graduate Study in Chemistry
1988-1989

Country	International Student Applications				
	APP	APR	DIS	INC	DEC
Bangladesh	1		1		
Canada	2			2	
China	61	8	26	27	2

APPENDIX A (Continued)

0333

FDR Germany	1	1			
Hungary	1			1	
India	10	1	5	4	1
Iraq	1			1	
Korea	2	2			1
Pakistan	1		1		
Peru	1			1	
Sri Lanka	3	1	1	1	1
Taiwan	3	2		1	
Thailand	1	1			

TOTALS:

GRADUATES OF FOREIGN SCHOOLS: 88 16 34 38 7

ETHNICITY:	MALE	63
	FEMALE	25
	WHITE	4
	ASIAN	82
	BLACK	0
	HISPANIC	1
	OTHER	1

GRAND TOTALS: 130 41 37 52 23

PERCENT OF TOTAL

ETHNICITY:	MALE	97	75.00
	FEMALE	33	25.00
	WHITE	43	33.07
AMERICAN INDIAN		0	
	ASIAN	82	63.07
	BLACK	1	0.77
	HISPANIC	3	2.30
	OTHER	1	0.77

CHEMISTRY COURSE OFFERINGS

<u>COURSE NO. & NAME</u>	<u>SEMESTER</u>	<u>SECTIONS</u>	<u>STUDENTS</u>	<u>CR HRS</u>
100 NATURAL SCIENCE	F88			
100 NATURAL SCIENCE	S89			
111 ELEMENTS OF GEN CHEM	SS88	1	37	148
111 ELEMENTS OF GEN CHEM	F88	3	197	788
111 ELEMENTS OF GEN CHEM	S89	2	145	580
121 GENERAL CHEMISTRY	SS88	1	46	184
121 GENERAL CHEMISTRY	F88	3	601	2404
121 GENERAL CHEMISTRY	S89	2	350	1400
122 GENERAL CHEMISTRY	SS88	1	60	240
122 GENERAL CHEMISTRY	F88	2	208	832
122 GENERAL CHEMISTRY	S89	3	330	1320
131 PRINCIPLES OF CHEMISTRY	F88	1	39	156
132 PRINCIPLES OF CHEMISTRY	S89	1	15	75
151 GENERAL CHEMISTRY SPECIAL	SS88	0	0	0
151 GENERAL CHEMISTRY SPECIAL	F88	2	4	12
151 GENERAL CHEMISTRY SPECIAL	S89	2	3	9
151 GEN CHEM SPEC LAB	F88	1	1	1
151 GEN CHEM SPEC LAB	S89	2	3	3
152 GENERAL CHEMISTRY SPECIAL	SS88	1	4	12
152 GENERAL CHEMISTRY SPECIAL	F88	0	0	0
152 GENERAL CHEMISTRY SPECIAL	S89	0	0	0
152 GEN CHEM SPEC LAB	SS88	1	1	1
152 GEN CHEM SPEC LAB	F88	1	1	1
152 GEN CHEM SPEC LAB	S89	1	1	2
212 INTEG ORG CHEM + BIOCHEM	SS88	1	30	120
212 INTEG ORG CHEM + BIOCHEM	F88	1	103	412
212 INTEG ORG CHEM + BIOCHEM	S89	3	125	500
253 QUANTITATIVE ANALYSIS	SS88	1	43	172
253 QUANTITATIVE ANALYSIS	F88	1	48	192
253 QUANTITATIVE ANALYSIS	S89	1	79	316
SUB-TOTAL: UNDERGRADUATE LOWER DIVISION			2464	9840
301 ORGANIC CHEMISTRY	SS88	1	42	126
301 ORGANIC CHEMISTRY	F88	3	207	621
301 ORGANIC CHEMISTRY	S89	2	125	375
302 ORGANIC CHEMISTRY	SS88	1	46	138
302 ORGANIC CHEMISTRY	F88	2	94	282
302 ORGANIC CHEMISTRY	S89	3	155	465
303 ORGANIC CHEM LAB	SS88	1	15	15
303 ORGANIC CHEM LAB	F88	11	164	164
303 ORGANIC CHEM LAB	S89	5	67	67
304 ORGANIC CHEM LAB	SS88	1	21	21
304 ORGANIC CHEM LAB	F88	4	51	51
304 ORGANIC CHEM LAB	S89	9	123	123

APPENDIX B (Continued)

0400

307 ORGANIC CHEMISTRY	F88	1	12	36
308 ORGANIC CHEMISTRY	S89	1	10	30
309 ORGANIC CHEM LAB	F88	1	4	8
310 ORGANIC CHEM LAB	S89	1	6	12
311 PHYSICAL CHEMISTRY	F88	1	49	196
312 PHYSICAL CHEMISTRY	S89	1	38	152
315 PHYSICAL CHEMISTRY	F88	1	26	104
325 SPECIAL TOPICS	F88	1	1	1
326 SPECIAL TOPICS	S89	3	3	6
331 CHEM LAB III	F88	3	13	26
332 CHEM LAB III	S89	2	10	20
391 READINGS IN SELECTED TOPICS	SS88	0	0	0
391 READINGS IN SELECTED TOPICS	F88	4	8	10
392 READINGS IN SELECTED TOPICS	S89	6	13	19
401 SCIENTIFIC GLASSBLOWING	S89	1	7	7
423 INTRO BIOCHEMISTRY	F88	1	66	198
423 INTRO BIOCHEMISTRY	S89	1	57	171
431 ADV INORGANIC CHEMISTRY	F88	1	19	57
433 CHEM APP OF GROUP THEORY	F88	1	8	16
445 INTENSIVE INTRO BIOCHEM	F88	1	15	60
446 INTENSIVE INTRO BIOCHEM	S89	1	3	12
454 INSTRUMENTAL ANALYSIS	S89	1	20	80
462 ENVIRONMENTAL BIOCHEM	S89	0	0	0
466 COMPUTERS IN CHEMISTRY	S89	0	0	0
495 UNDERGRADUATE PROBLEMS	SS88	1	1	3
495 UNDERGRADUATE PROBLEMS	F88	4	4	7
496 UNDERGRADUATE PROBLEMS	S89	4	4	13
497 SENIOR HONORS RESEARCH	SS88	0	0	0
497 SENIOR HONORS RESEARCH	F88	4	4	6
498 SENIOR HONORS RESEARCH	S89	2	2	2
499 CHEM SEMINAR - RESEARCH	F88	1	15	15
SUB-TOTAL: UNDERGRADUATE UPPER DIVISION			1633	3709
SUB-TOTAL: UNDERGRADUATE			4097	13549
501 MOLECULAR STRUCTURE THEORY	F88	1	16	48
504 CHEMICAL DYNAMICS	S89	1	17	51
511 MECHANISMS IN ORGANIC CHEM	F88	1	12	18
512 MECHANISMS IN ORGANIC CHEM	S89	0	0	0
513 MOLECULAR STR DETERMINATION	F88	1	8	24
514 SYNTHESIS IN ORGANIC CHEM	S89	0	0	0
516 TOPICS ORGANIC CHEM	S89	1	5	15
524 XRAY CRYSTALLOGRAPHY	S89	1	7	21
534 PHYSICAL METHODS INORG CHEM	S89	1	13	39
535 ADV COORDIN CHEM	F88	1	10	30
537 TOPICS INORGANIC CHEM	F88	1	10	30
538 T/SOLID STATE CHEM	S89	1	4	12
543 ANALY SPECTROSCOPY	F88	1	5	15

APPENDIX B (Continued)

560 BIOPHYSICAL CHEMISTRY	S89	0	0	0
561 QUANTUM CHEM I	F88	1	7	21
562 QUANTUM CHEM II	S89	1	4	12
565 KINETICS	S89	0	0	0
567 TOPICS BIOPHYSICAL CHEM	F88	1	5	15
568 T/THERMO & STATISTICS	S89	1	6	18
599 MASTER'S THESIS	F88	1	1	1
599 MASTER'S THESIS	S89	2	2	12
625 SEMINAR - ANALYTICAL	F88	1	4	4
625 SEMINAR - ANALYTICAL	S89	1	3	3
625 SEMINAR - INORGANIC	F88	1	3	3
625 SEMINAR - INORGANIC	S89	1	2	2
625 SEMINAR - ORGANIC	F88	1	4	4
625 SEMINAR - ORGANIC	S89	1	5	5
625 SEMINAR - PHYSICAL	F88	1	7	7
625 SEMINAR - PHYSICAL	S89	1	14	14
625 SEMINAR - OTHER	F88	3	24	24
625 SEMINAR - OTHER	S89	3	4	4
650 RESEARCH/READINGS	SS88	1	7	30
650 RESEARCH/READINGS	F88	11	40	209
650 RESEARCH/READINGS	S89	12	51	240
699 DISSERTATION	SS88	1	2	12
699 DISSERTATION	F88	11	31	225
699 DISSERTATION	S89	10	33	229
SUB-TOTAL	GRADUATE STUDENTS		350	1367
GRAND TOTAL	ALL STUDENTS		4447	14916

Chemistry Department
Seminar Speakers, Summer & Fall, 1988

- | | |
|--|--|
| Dr. Fred Wudl
U. of Calif-Santa Barbara
July 19, 1988 | "Organic Metals - Conduction Electrons in Organic Solids" |
| Prof. Dr. Hans Ruedi Bosshard
Univ. of Zurich, Germany
August 19, 1988 | "Cytochrome Oxidase & Cytochrome c. Two Proteins with a Long History" |
| Prof. James E. Mark
Univ. of Cincinnati
August 24, 1988 | "Rigid Rod Polymers" |
| Prof. Lucia Banci
Univ. of Florence, Italy
August 26, 1988 | "Metal Dimers in Biological Systems: NMR Studies" |
| Prof. J. K. Thomas
Univ. of Notre Dame
Sept. 2, 1988 | "Photophysical and Photochemical Processes in Clays, Polymers, and Vesicles" |
| Prof. Peter R. Ogilby
Univ. of New Mexico
Sept. 9, 1988 | "Excited State Interactions Between Molecular Oxygen and Organic Molecules: From Liquid Solutions to Solid Polymers" |
| Prof. S. S. Krishnamurthy
Indian Inst. of Science
Sept. 15, 1988 | "Aspects of the Metal and Polymer Chemistry of Phosphozenes" |
| Prof. J. V. Ortiz
Univ. of New Mexico
Sept. 16, 1988 | "Insights into Chemical Bonding Through Electron Propagator Theory" |
| Dr. David Emin
Sandia Labs & UNM Physics & Ast.
Sept. 23, 1988 | "Formation of a Large Singlet Bipolaron: High-Temperature Bipolaronic Superconductivity" |
| Prof. Charles Spangler
Northern Illinois Univ.
Sept. 23, 1988 | "Polaron and Bipolaron Formation in Model Extended PI-Electron Systems: Potential Nonlinear Optics Applications: |
| Prof. Carlos Bustamante
Univ. of New Mexico
Nov. 4, 1988 | "From Cells to Molecules: Development of New Microcopies at UNM" |
| Prof. Gerald Caple
Northern Arizona State Univ.
Nov. 14, 1989 | "The Ice Water Interface" |

0403

Prof. J. C. Bailar
Univ. of Illinois
Nov. 17, 1988

"Some Problems in the Stereochemistry
of Pt Complexes"

Prof. B. Gaffney
Johns Hopkins Univ.
Nov. 23, 1988

"A Look at the Nonheme Iron Centers in
Lipoxygenase"

Prof. Shi-Qing Wang
Univ. of Calif-Los Angeles
Nov. 29, 1988

"Non-equilibrium Statistical Mechanics
of Flowing Suspensions"

Dr. Richard Crooks
MIT
Nov. 30, 1988

"Physical and Device Characteristics of
Electronically Conducting Polymers Under
Extreme Conditions"

Prof. John R. Cable
Univ. of Chicago
Nov. 30, 1988

"Molecular Beam Spectroscopy of Small
Tryptophan Molecules"

Prof. Stephen Creager
Univ. of Texas
Dec. 2, 1988

"Solid Electrode Modification by Irrevers-
ible Polyelectrolyte Adsorption and by
Molecular Self-assembly"

Prof. William Braunlin
Polytechnic Univ., Brooklyn, NY
Dec 5, 1988

"Multinuclear NMR Studies of Cation-DNA
Interactions"

Dr. David Keller
Univ. of New Mexico
Dec. 6, 1988

"Scanning Tunneling Microscopy of Bio-
logical Materials"

Prof. John L. McCracken
Albert Einstein College of Med.
Dec. 7, 1988

"Pulsed EPR Studies of the Nickel Binding
Site in the D.Gigas Hydrogenase"

Prof. B. E. Eichinger
Univ. of Washington
Dec. 9, 1988

"Network Distribution Function Theory of
Elasticity"

Prof. Daniel Talham
MIT
Dec. 12, 1988

"Micro Electrode Devices: Electrochemistry
in Polymer Electrolytes"

Dr. Harry Dewey
Los Alamos National Lab.
Dec. 13, 1988

"Matrix Isolation Spectroscopy and Photo-
chemistry of PuF_6 and NpF_6 "

Chemistry Department
Seminar Speakers, Spring, 1989

0404

- Prof. Nancy Doherty
Univ. of Washington
Jan. 20, 1989 "Transition Metal μ -Nitrido Compounds:
From Bimetallic to Polymeric Metallonit-
rides"
- Prof. Ralph Wilkins
New Mexico State Univ.
Jan. 27, 1989 "Some Recent Studies of Porphyrin Macro-
cycle Interactions"
- Prof. Jerry Atwood
Univ. of Alabama
Feb. 1, 1989 "Inclusion Chemistry of Flexible Calix-
arene Hosts"
- Prof. Peter Wolczanski
Cornell Univ.
Feb. 3, 1989 "Reactivity of three-Coordinate Early
Metal Complexes"
- Prof. J. Mayer
Univ. of Washington
Feb. 10, 1989 "Recent Advances in the Chemistry of
Metal-oxo Complexes"
- Prof. M. Blades
Univ. of British Columbia
Feb. 17, 1989 "Plasma Sources and Analytical Spectros-
copy: A Continuing Evolution"
- Prof. T. Poulos
Univ. of Maryland
Feb. 24, 1989 "A Structural Perspective on How Peroxi-
dases and Cytochrome P450 Work"
- Prof. S. H. Lin
Arizona State
Mar. 3, 1989 "Multiphoton Ionization of Molecules"
- Dr. C. White
Naval Res. Lab.
Mar. 10, 1989 "Simulations of Chemically Sustained Shock
Waves in Condensed Phases"
- Prof. J. Templeton
Univ. of North Carolina
Mar. 13, 1989 "C₁ and C₇ Ligand Transformations in
Group VI Monomers"
- Prof. D. M. Walba
Univ. of Colorado
Mar. 31, 1989 "A Novel Application of the Host-Guest
Paradigm: Design of Organic Opto-
electronic Materials"
- Prof. Dr. Anton Meller
Univ. of Göttingen, Germany
Apr. 4, 1989 "New Results in the Chemistry of Carbene
Analog: Germylenes and Borylenes"
- Dr. A. R. Siedle
MMM Company
Apr. 5, 1989
9222R 23 "Solid State Chemistry of Molecular Metal
Oxide Clusters"

0405

Prof. M. K. DeArmond
New Mexico State Univ.
Apr. 7, 1989

"The Life and Times of $[Ru(bpy)_3]^{2+}$ "

Prof. Gareth Eaton
Univ. of Denver
Apr. 11, 1989

"EPR Imaging

Prof. C. Johnson
Oregon State
Apr. 14, 1989

"Base Tilt in Nucleic Acid Bases Through
Linear Dichroism Spectroscopy"

Prof. F. Crim
Univ. of Wisconsin
Apr. 28, 1989

"Spectroscopy, Reaction and Photodissociation of Highly Vibrationally Excited Molecules"

Prof. H. Rohrer
Nobel Laureate
IBM Zurich
June 5, 1989

"Perspectives of Experimenting on a Molecular and Atomic Scale"

Prof. A. A. Krasnovsky, Jr.
Moscow State Univ., USSR
June 23, 1989

"Singlet Oxygen Luminescence in Photobiological Systems"

APPENDIX D

FACULTY AND STAFF OF THE DEPARTMENT OF CHEMISTRY
PROFESSORS:

ALLEN, Fritz S., Ph.D., 1969, University of Illinois
CATON, Roy D., Ph.D., 1963, Oregon State University
HOLLSTEIN, Ulrich, Ph.D., 1956, University of Amsterdam
NIEMCZYK, Thomas M., Ph.D., 1972, Michigan State Univ.
PAINE, Robert T., Ph.D., 1970, University of Michigan
PAPADOPOULOS, E. Paul, Ph.D., 1961, University of Kansas
PARK, Su-Moon, Ph.D., 1975, University of Texas, Austin
SCHAEFFER, Riley, Ph.D., 1949, University of Chicago
VANDER JAGT, David, Ph.D., 1967, Purdue University
WALTERS, Edward A., Ph.D., 1966, University of Minnesota

ASSOCIATE PROFESSORS:

BUSTAMANTE, Carlos J., Ph.D., 1981, University of California, Berkeley
HOLDER, Richard W., Ph.D., 1970, Yale University
LITCHMAN, William M., Ph.D., 1965, University of Utah
MCLAUGHLIN, Donald R., Ph.D., 1965, University of Utah
MORROW, Cary J., Ph.D., 1970, Tulane University
ONDRIAS, Mark R., Ph.D., 1979, Michigan State University
SATTERLEE, James D., Ph.D., 1975, University of California, Davis

ASSISTANT PROFESSORS:

BEIN, Thomas, Ph.D., 1984, University of Hamburg
HAMPDEN-SMITH, Mark J., Ph.D., 1984, Univ. of London
OGILBY, Peter R., Ph.D., 1981, University of California-Los Angeles
ORTIZ, Joseph V., Ph.D., 1981, University of Florida

INSTRUCTORS:

DECK, Lorraine, M.S., 1968, University of New Mexico

EMERITUS PROFESSORS:

KAHN, Milton, Ph.D., 1950, Washington University

VISITING FACULTY:

COLEMAN, Curtis B, Ph.D., 1950, Case Western Reserve Univ.
NIMITZ, Jonathan S., Ph.D., 1981, Stanford University
NOWAK, Andrew V, Ph.D., 1972, Massachusetts Inst. of Technology

POSTDOCTORAL and RESEARCH FELLOWS:

ARNEBERG, David L, BA, 1980, Univ. of California-Santa Cruz
BEACH, David A, Ph.D., 1989, Univ. of New Mexico
BUSSE, Scott C, Ph.D., 1986, Montana State University
COURTNEY, Scott H, Ph.D., 1987, University of Chicago
FERON, Beatrice, Ph.D., 1987, Institut de Recherches sur la
Catalyse, Cedex, France
GALVEZ, Jesus, Ph.D., 1973, Universidad de Murcia, Spain
GARAB, Gyözö, Ph.D., 1970, University of Budapest
GARCIA, Ricardo, MS, 1984, Universidad de Valladolid
GURRIERI, Sergio, Liceum, Univ. of Catania, Italy
HOUSEAL, Timothy W, Ph.D., 1987, Texas A&M University
JUANG, Ching-Bo, MS, 1987, Univ. of New Mexico
KARTHIKEYAN, Sakthivel, Ph.D., 1985, Indian Institute of
Science, Bangalore, India
KELLER, David J, Ph.D., 1984, Univ. of California-Berkeley
KIM, Doo-Young, Ph.D., 1982, Chungnam National University
KRISTIANSEN, Marianne, Ph.D., 1988, Aarhus Univ., Denmark
KWON, Soo-Han, Ph.D., 1985, Korea University
LEI, Deqing, Ph.D., 1988, Washington University
MCGUIRE, Joseph, Ph.D., 1988, Oregon State University
MOENCH, Susan J, Ph.D., 1985, Colorado State University
MOLLER, Karin, Ph.D., 1984, Universität Bremen, West Germany
NARULA, Chaitanya Kumar, Ph.D., 1981, Rajasthan University,
India. Alexander-Von-Humboldt Fello, 1983-84, University
of Munich, West Germany
RAPKO, Brian M, Ph.D., 1986, University of Oregon
SHIM, Yoon-Bo, Ph.D., 1985, Pusan National University
SIMONS, Peter C., Ph.D., 1979, University of New Mexico
WESTERHAUSEN, Matthias, Ph.D., 1987, University of Stuttgart

ADJUNCT PROFESSORS:

ALDISSI, Mahmoud, Ph.D., 1981, University of Pennsylvania
BARTON, Larry L, Ph.D., 1969, University of Nebraska
BEAR, David, Ph.D., 1978, Univ. of California-Santa Cruz
BECKEL, Charles L, Ph.D., 1954, Johns Hopkins University
BIENIEWSKI, Thomas M., Ph.D., 1965, California Institute of
Technology
BLAIS, Normand C., Ph.D., 1956, Yale University
BOUSEK, Ronald R., Ph.D., 1976, University of Arizona
BRINKER, C. Jeff, Ph.D., 1978, Rutgers University
BRUECK, S.R.J., Ph.D., 1971, Massachusetts Institute of
Technology
CLOUGH, Roger L, Ph.D., 1971, University of Utah
CREMERS, David A., Ph.D., 1972, Seattle University
DATYE, Abhaya, Ph.D., 1984, University of Michigan

ADJUNCT PROFESSORS: (Continued)

DAVIS, Steven J., Ph.D., 1973, University of New Hampshire
FRIEDMAN, Joel M., M.D., Ph.D. 1975, Univ. of Pennsylvania
GINLEY, David S, Ph.D., 1976, Massachusetts Institute of Technology
GLADNEY, Ernest S, Ph.D., 1974, University of Maryland
GRANT, Patrick M., Ph.D., 1973, Univ. of California-Irvine
GUENTHER, Arthur H., Ph.D., 1957, Pennsylvania State Univ.
HAALAND, David M., Ph.D., 1982, Univ. of Rochester
HADLEY, Steven G., Ph.D., 1966, Univ. of California-Davis
HADLEY, William M., Ph.D., 1972, Purdue University
HAMMOND, Robert B., Ph.D., 1975, California Institute of Technology
HAY, Philip J., Ph.D., 1971, California Inst. of Technology
HILL, Ralph H., Jr, Ph.D., 1979, Texas A&M University
HUGHES, Loris W., Ph.D., 1971, New Mexico State University
HYLARIOES, Mark D., Ph.D., 1979, University of New Mexico
JOHNSTON, Roger, Ph.D., 1983, University of Colorado
JUNGLING, Kenneth C, Ph.D., 1970, University of Illinois
KELLEY, Robert O., Ph.D., 1969, Univ. of California-Berkeley
KLEINSCHMIDT, Phillip D., Ph.D., 1977, Pennsylvania State University
KLEIN, Cornelius, Ph.D., 1965, Harvard University
KNAFF, David B., Ph.D., 1966, Yale University
LAYMAN, Lawrence R., Ph.D., 1974, Indiana University
LIGHT, Ronald W., Ph.D., 1979, University of New Mexico
MACKINNON, Ian D.R., Ph.D., 1978, James Cook University
MAESTRE, Marcos F., Ph.D., 1964, Yale University
MOODY, David C., III, Ph.D., 1975, Indiana University
MOROSIN, Bruno, Ph.D., 1959, University of Washington
OLIVER, Janet M., Ph.D., 1972, London University, England
O'NEILL, William M., M.S., 1937, University of Cincinnati
PALMER, Byron A., Ph.D., 1977, Purdue University
PARKER, Donald R., M.P.H., 1963, University of Michigan
PARSONS, Michael, Ph.D., 1966, University of Florida
PENNEMAN, Robert A., Ph.D., 1947, Univ. of Illinois
PETERSON, Dean E., Ph.D., 1972, University of Kansas
PETERSON, Eugene J, Ph.D., 1976, Arizona State University
PIGG, C. Joanne, Ph.D., 1965, Oregon State University
RASURE, John, Ph.D., 1985, Kansas State University
SALZMAN, Gary C., Ph.D., 1972, University of Oregon
SHELNUTT, John A., Ph.D., 1975, George Inst. of Technology
SINHA, Dipen N, Ph.D., 1980, Portland State University
SMITH, Brian R., Ph.D., 1972, Utah State University
SMITH, Douglas M., Ph.D., 1982, Univ. of New Mexico
SMITH, Wayne H., Ph.D., 1974, University of Texas at Austin
SORENSEN, N. Robert, ScD., 1981, Massachusetts Institute of Technology

ADJUNCT PROFESSORS: (Continued)

STUMP, Robert F., Ph.D., 1984, Univ. of Connecticut
SWENSON, Frank J., Ph.D., 1980, University of New Mexico
TAPSCOTT, Robert E., Ph.D., 1968, Univ. of Illinois-Urbana
THOMAS, Kimberly W., Ph.D., 1978, University of
California-Berkeley
WEISSMAN, Suzanne H., Ph.D., 1975, Univ. of Illinois-Urbana
WERNER-WASHBURNE, Margaret C., 1984, University of Wisconsin-
Madison
WHALEY, Thomas W., Ph.D., 1971, University of New Mexico
WOLF, Paul J., Ph.D., 1985, Air Force Inst. of Technology
WOODRUFF, William H., Ph.D., 1972, Purdue University

STAFF

RESEARCH SCIENTIST:

DUESLER, Eileen, Ph.D., 1973, Univ. of Calif-Berkeley
Determines structures of materials using xray techniques.

CHEMICAL ANALYST:

JU, Ruby K.Y., B.S., 1956, Univ. of Illinois
Does analyses of unknowns for faculty and graduate
students.

SCIENTIFIC GLASSBLOWER (AND PART-TIME LECTURER III)

CAMPBELL, David R.
Manufactures scientific glassware according to oral and
written design requests.

INSTRUMENTATION TECHNICIAN

SHAHVAR, Hoshang, B.S.E.E. 1981, Univ. of New Mexico
Manufactures state of the art electronic equipment as
requested by faculty and graduate students.

OTHER STAFF

GARCIA, Robert C, Storekeeper II
Services the Freshman teaching laboratories.
HARGIS, Barbara J, Accounting Technician
Prepares documents relating to Department and grant
purchases. Maintains spending records.
HILTON, Carl, Supervisor, Chemical Stores
Supervises storerooms and services organic teaching
laboratories.
MEYER, Lisa M, Storekeeper II
Using IBM PC orders chemicals and supplies for teaching
and research labs. Prepares monthly billing.

NORMAN, Kelly, Staff Assistant
Supervises secretarial staff and assists faculty in recruiting faculty and graduate students.

QUESNELL, Eva, Editorial Assistant II
Prepares manuscripts, proposals, course syllabi and exams using the Wang Word Processor.

RUE, Ruth, Departmental Secretary
Receptionist. Secretary to Department Chair.

SCHNOEBELEN, Albert, Administrative Assistant
Schedules classes and instructors.

TILFORD, Bruce W., Storekeeper II
Services the analytical and some Freshman teaching laboratories.

WYMER, Erin E., Editorial Assistant II
Prepares manuscripts, proposals, course syllabi and exams using the Wang Word Processor.

GRADUATE STUDENTS

		<u>Funding Source</u>
ADHIHETTY, Indira	TA/RA	NM
ALDEN, Rhett	RA/TA	NIH
ANGUS, Jill	GA	LANL
BALDWIN, Bruce	TA/RA	NIH
BEACH, David	RA	MBS
BEGAYE, Michael	TA	
BISCARINI, Fabio	TA	
BOREK, Theodore	RA	DOE
BORVORNWATTANANONT, Aticha	TA/RA	PRF
BRADBURN, Bruce	RA	SNL
BRAZWELL, Eugenia	TA	
BROWN, Kelly	TA/RA	Sandia
BUILES, Eduardo	RA	NIH
BUILES, Maria	TA/RA	NIH
CASTRO, Carlos	TA/RA	NSF
CHAVEZ, Mark	RA	MBS
CHU, Chi-Ping	TA	
CID-AGUERO, Pedro	TA	
CLAY, James	GA	
CONARY, Gregory	RA	DOE
CORIA, Jose	RA	SANDIA
CRAWFORD, Beverly	RA	DHHS
DILLON, Maria	RA	SANDIA
DOU, Danan	RA	DOE
ENZEL, Patricia	RA	NSF
ERIDON, Joseph	RA	MBS

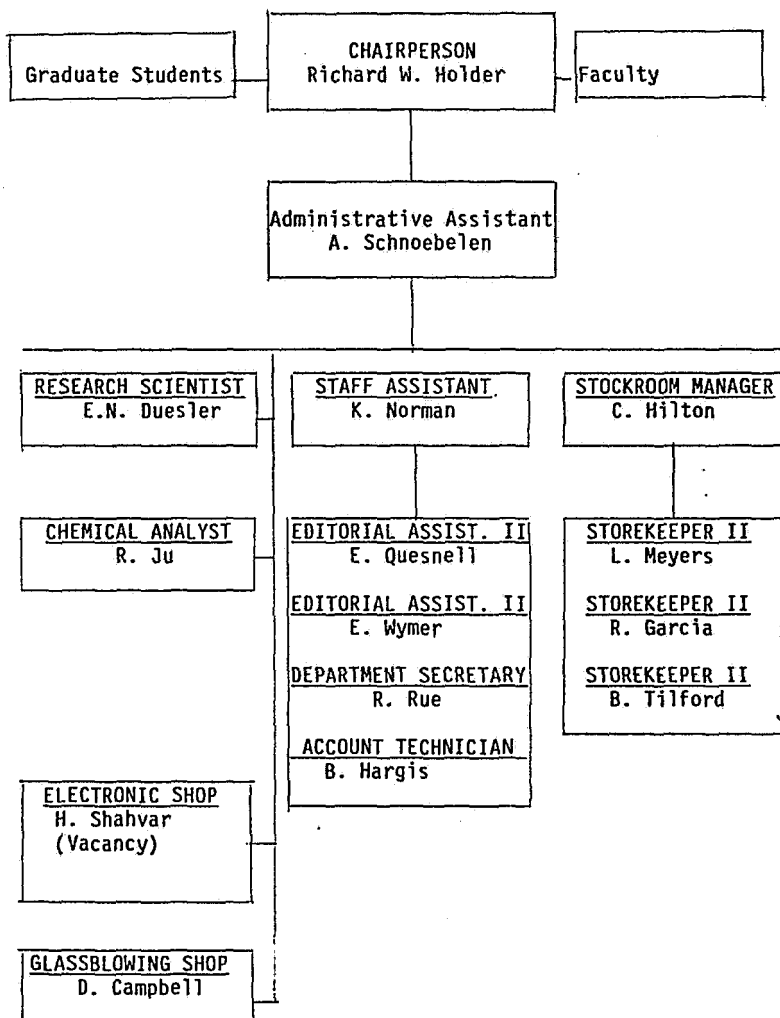
APPENDIX D (Continued)

GRADUATE STUDENTS (Continued)

FAN, Maomian	RA	LANL
FILOS, Dianella	TA	
FINZI, Laura	TA/RA	NIH
FOX, Keith S	TA	
GAO, Yuanping	TA	
GARVEY, John W	TA	
GORDON, Seth A	TA	
HOBBS, David	TA/RA	NIH
HODGE, Evangeline	GA	
HOIER, Sally	GA	
JIANG, Yuqiu	TA	
JOHNSON, Kevin	RA/TA	NIH
KIM, Myeong-Hee	RA	NM
LARSEN, Randy	RA	NIH
LII, Fwu-Lin	RA	NIH
LIN, Hsi-Tsung	TA	
LIN, Jyh-Shing	RA	NSF
LINDQUIST, David	RA	DOE
LOU, Bih-Show	TA	
MAJUMDER, Sabir	TA	
MARTINEZ, David	GA	AFWL
MAY, John Henry	GA	NMERI
MENDOZA, Paul	GA	LANL
MENSI, Mary Ann	TA/RA	SNL
MINTOROVITCH, Jan	RA	NIH
NICKELS, Mary Jane	TA	
PARAMANATHAN, Guruparan	TA/RA	LANL
PAULTER, Nicholas	GA	LANL
QIN, Jun	TA	
RUSSELL, Arthur	RA	DOE
SCURLOCK, Rodger	RA	NIH
SHIN, Hyun-Kooek	TA	
SPARKS, Laurie	TA	
TAGHIOF, Majid	TA	
TJATHA, Vassiliki	TA	
WALLACE, Shield	TA	
WANG, Jianling	TA	
WANGMANEERAT, Boonsri	TA/RA	NM
WOODBURY, Rebecca	RA	NM
WU, Yongqian	TA	
ZHANG, Chaojiang	TA/RA	FOREIGN

APPENDIX D (Continued)

CHEMISTRY DEPARTMENT ORGANIZATION



The Report of the Department of Communication
July 1, 1988 - June 30, 1989
Kenneth D. Frandsen, Chairman

GENERAL DEPARTMENTAL INFORMATION

A. Significant Achievements

The work of faculty, students and staff in this Department provides evidence of several significant achievements during the period covered by this report. Scholarly and professional activities of faculty included service as major officers in professional associations, memberships on editorial boards of scholarly journals, publication of books, chapters and articles, presentation of competitively selected and invited papers at regional, national and international meetings and conventions, and nominations of their research and instructional work for various awards.

Also, graduate students in this Department published instructional materials and research reports, were nominated for and received awards both on and off campus, and were granted admission to outstanding doctoral degree programs at other major universities. Undergraduate majors and minors significantly increased in number and several received special recognition for scholastic achievements:

Final Honors: Donna Fredericks, magna cum laude

Distinction: Cindy L. McKee
Tessa T. Simpson
Kirsten H. Coors
Holly Ropes

Departmental Honors: Joanne D. Dowler

Presidential Scholar: Barbara L. Kamm

Phi Kappa Phi: Cara J. Abeyta
Allen R. Anderson
Sonja B. Frandsen
Carol R. Freeman
Patricia Gaskill
Mary Ogiela
Wardene M. Crowley
Sean C. Ford
Jamie Green

Phi Beta Kappa: Maria Victoria Recalde

Best Student Essays: "Free Speech or Sex
Discrimination:
Pornography and the
Hudnut Decision,"
1 (Spring, 1989), 1-6
Sean C. Ford

The number of Bachelors and Masters degrees granted in this Department, during the period covered by this report, was:

	<u>BA</u>	<u>MA</u>
Summer 1988	5	3
Fall 1988	20	3
Spring 1989	48	3
Totals	73	9

Several undergraduate majors gained admission to the University of New Mexico School of Law, to the Graduate Program of the Department of Communication, or to Graduate Programs elsewhere, and the University's Intercollegiate Cross-Examination Debating Team, coached by a faculty member in this Department, was

one of only nine teams nation-wide to receive an invitation to the National Round-Robin Debate Tournament held in Ogden, Utah.

At the beginning of the 1988-89 academic year several temporary faculty appointments were made. R. Hopkins was appointed as Visiting Professor (.50 FTE). Cara Abeyta, Rick Hudson, Michael Kamins and Tim Singleton were appointed as Lecturers II and Brian Padilla was appointed Assistant Instructor. These appointments enabled the Department to respond, in part, to increased enrollment demands and to maintain its links with KUNM. The appointment of Thomas E. Jewell as Assistant Professor (Code 01) and the appointments of Diane Lamude as Assistant Professor (Code 01) and Kevin Lamude as Assistant Professor (Code 01) returned the departmental faculty to full strength. Nevertheless, the Department's long-range goal, namely a faculty of twelve full-time members with professorial rank, remains unmet and continues to be driven by the Department's need for flexibility in responding to expectations and demands concerning teaching, research and service.

Moreover, the Department's needs for additional graduate teaching assistants, improved physical facilities, adequate instructional equipment and increased budgetary support remains unmet. The

importance of meeting these needs now is crucial to the maintenance and enhancement of this Department's reputation as one of the top ten programs in the country for students seeking the M.A. in Communication and as one of the few leading programs that enable students to emphasize study of Intercultural Communication in their graduate work.

1. Instructional Activities: (Course enrollments, evaluation of instruction, curriculum modification and development, special activities and programs).

a) Course Enrollments: During the past five years enrollment in courses and sections offered at the undergraduate and graduate levels has increased substantially, the number of students declaring their intention or decision to major in Communication has grown exponentially and the number of students completing the requirements for the B.A. degree in Communication has burgeoned. According to data provided by the University's Office of Planning and Policy Studies, compared to Fall 1983, enrollment in upper division courses increased by 90.1% and enrollment in all courses has shown a net increase of 20.9%. In addition, compared to Fall 1983, the number of students majors in Communication increased substantially. During the calendar year 1988, excluding the Summer Session, the Department produced 9,126 student

credit hours compared to 8,527 in the calendar year 1987, excluding the Summer Session. During this period, the average faculty workload in this Department was 16.32 unadjusted units of instruction per semester, computed according to UNM-9. If the Department is to maintain the extent and type of service it has provided to students throughout the University in the past, additional faculty must be appointed to sustain those services.

The growing demands of both nontraditional and traditional students at both undergraduate and graduate levels continue to exceed the Department's capability to offer courses and sections in sufficient quantity. Consequently, "backlogs" of students desiring to enroll in introductory and service courses are growing. Based on enrollment patterns over the past five years, the Department is confident that an increase in the number of faculty and graduate teaching assistants would be accompanied by a proportional increase in student enrollments that would either maintain or increase the current student credit hour/faculty ratio. A tabular summary of courses offered and enrollments (SCH) in those courses, during the period covered, is included in Appendix A of this report.

b) Evaluation of Instruction: Faculty of this Department are sincere in their efforts to obtain and respond to students' evaluation of instruction.

Testing Division reports indicate that 100% of the faculty and teaching assistants in the Department use the ICES. Several faculty have chosen to supplement this form of evaluation with "course specific" methods and instruments. Results of the ICES and other means of evaluation continue to indicate that faculty of this Department are rated at or above the average level of their peers in the College.

c) Curriculum Modification and Development:

During the period covered by this report, faculty approved the addition of new course listings and approved the offering of several courses and seminars on an experimental basis. Deliberations concerning changes in the requirements for the Major in Communication continued and proposed changes were submitted. Plans for the development of cooperative programs of study in the area of Intercultural Communication were modified and elaborated. These deliberations and plans will be carried into the next academic year and will continue to receive study and consideration until faculty reach consensus on these matters.

The Department continues to expand opportunities for students at the undergraduate level to complete "internships" in agencies and organizations off campus. In addition to these "credit-bearing" opportunities available to undergraduate students, the Department continues to obtain support for undergraduate student

stipends provided to interns by sponsoring organizations. During the period covered by this report Jones Intercable provided such stipends to student interns in their Albuquerque and Denver offices. Through these efforts, faculty of this Department are continuing to enhance educational opportunities for students at all levels.

d) Special Activities and Programs: During the academic year, the Department and the UNM Forensic Union hosted various forms of workshops and tournament competition for high school students and their coaches. University forensic team members participated in several national level championship competitions and participated, by invitation, in the National Round-Robin Debate Tournament in Ogden, Utah. The details of these activities and the record of accomplishments of collegiate participants in the UNM Forensics Program are included in the annual report of the Director of Forensics, Thomas E. Jewell, in Appendix B of this report.

A sub-unit of the Department, the Institute for Organizational Communication (IOC) continues to provide training, consulting and research services to a variety of clients. At present these activities must be carried out by faculty in addition to their regular duties. The goal of the IOC is to develop a sufficiently broad base of external support so that

faculty can be assigned to these activities on a rotational basis while graduate teaching and research assistants funded by contributions and contracts to IOC maintain the Department's instructional capability at its present level and beyond.

2. Departmental Operations: (Faculty decision-making, special appointments and sabbatical leaves, affirmative action).

a) Faculty Decision-Making: Faculty of this Department continue to reach decisions regarding policy and action as a Committee-of-the Whole and are satisfied with the results of this method. Decision-making activities were distributed across a wide range of issues during the academic year. One faculty member was recommended for promotion from Associate professor to Professor (Janice Schuetz), and other candidates were recommended for visiting appointments during the 1989-90 academic year. A chart displaying the administrative structure of the Department is included as Appendix D of this report. Persons serving in the various administrative roles during this period were:

Department Chair-----Kenneth D. Frandsen

Staff Assistant-----May Polivka

Graduate Recruitment and
Admissions (GRAC) Chair -----Kevin Lamude

Graduate Student Advisement
Committee (GSAC) Chair -----Robert Barraclough

Course Coordinator,
Public Speaking-----Thomas E. Jewell

Course Coordinator,
Interpersonal Communication-----John C. Condon

Library Liaison-----Thomas E. Jewell

Computer Liaison-----W. Gill Woodall

A & S Graduate Committee -----Kenneth D. Frandsen

Director of Forensics-----Thomas E. Jewell

b) Special Appointments and Leaves: During the 1988-89 academic year Jean Civikly served as Director of the College of Arts and Sciences Undergraduate Seminar Program and was appointed Associate Dean, College of Arts and Sciences, during the Spring Semester.

c) Affirmative Action: This Department subscribes to Affirmative Action Policy Statements issued by the Offices of the President and Vice President for Academic Affairs and appearing in the UNM Affirmative Action Policy Manual. In its recruiting of prospective faculty members, staff and graduate teaching assistants during the period covered by the report, the Department has attempted "acting affirmatively in the selection of faculty and staff in order to move toward an ethnic and sex balance in the university community which is representative of the balance in society overall" (1987-89 UNM Catalog, p. 10). Consequently, all announcements of open positions in this Department contain language reflecting this objective. Moreover, in its appointment of staff and graduate teaching assistants during

this period, the Department attempted to achieve this objective by appointing women candidates for one of two teaching assistant positions, for one of two part-time positions in courses offered both in the Department and through Continuing Education, and for the position of Staff Secretary (.50 FTE) during the 1988-89 academic year. In addition, the Department has established a special scholarship fund and awarded a scholarship to a Native American student emphasizing study of Intercultural Communication.

B. Significant Plans and Recommendations

1. Physical Facilities: What has been described in previous reports as a "critical need" has now become an emergency situation. This Department's need for improved facilities is a matter of record that does not warrant repetition in this report. The indication is clear and present that others (e.g., Communicative Disorders, Journalism, KUNM) face similar needs and that they would welcome assignment to a multi-purpose facility that would bring together all University units that are concerned with the study and practice of communication. We, therefore, very strongly recommend that some form of multi-unit Communication Studies Building be restored to a very high level of priority in the University's overall plans for capital improvements.

2. Instruction/Research Equipment: Like its need for improved physical facilities, the Department's need for suitable and adequate instructional and research equipment has reached emergency status. Virtually all of our equipment is either faulty, non-compatible or out-dated. We have been able only to barely maintain our current inventory of electronic equipment and one faculty member explicitly recommends that specific, equipment-dependent courses "should not be taught again until we have the proper equipment."

3. Degree Programs: Still ranking high among the Department's priorities is the development and enhancement of its contributions to the study and practice of Mass Communication at UNM. Currently, only this Department offers work at the graduate level in this area and the undergraduate curriculum is dispersed among the Departments of Communication, Journalism and Theatre Arts. Because of existing demands on faculty within their respective units, these efforts suffer from lack of coordination and integration. Student interest in the study of Mass Communication (Media) remains strong and the integration of these efforts by the several departments involved must be supported by the allocation of necessary additional resources.

Further, the Department wishes to strengthen its capabilities in the area of Intercultural Communication studies. In order to do so with any effectiveness, especially at the graduate level, additional faculty representing diverse ethnic and cultural background must be identified, targeted for recruitment, and approved for appointment. Additional resources will be necessary to achieve this goal, also.

C. Appointments to Staff

1. Faculty

Cara Abeyta, Lecturer II, Semester I, II
 Richard Hopkins, Visiting Professor (.50 FTE),
 Semester I, II
 Richard Hudson, Lecturer II, Semester I, II
 Michael Kamins, Lecturer II, Semester I, II
 Diane Lamude, Assistant Professor (Code 01)
 Kevin Lamude, Assistant Professor (Code 01)
 Brian Padilla, Assistant Instructor,
 Semester I, II
 Timothy Singleton, Lecturer II, Semester I

Continuing Faculty for 1988-89

Jean Civikly, Professor
 John C. Condon, Professor
 Kenneth D. Frandsen, Professor
 Richard J. Jensen, Professor
 Thomas E. Jewell, Assistant Professor
 Janice E. Schuetz, Associate Professor
 W. Gill Woodall, Associate Professor
 Estelle Zannes, Associate Professor

2. Graduate Teaching Assistants

Sheryl Coe
 Nancy Ellis-Hines (Forensics)
 Stephen King
 Dalana Medici
 Deana Richter
 Tessa Simpson
 Kevin J. Williams

3. Staff

Cindy Rossner, Staff Secretary (7/5/88)
Heather B. Muse, Staff Secretary (2/27/89)

Continuing Staff

Patrick Kiska, Electronic Technician II
May Polivka, Staff Assistant

4. Student Employee

Charlene Garcia, Office Assistant

D. Separations from Staff

Paul Traudt, Assistant Professor, resigned
effective 7/1/88.

Cindy Rossner, Staff Secretary, resigned
effective 1/27/89.

E. Sponsored Research

1. One Faculty member (10%) submitted a
proposal to an outside agency:
W. Gill Woodall to U.S. Dept. of
Education through the UNM Family and
Child Institute.

2. One Faculty member (10%) continued to
receive support:

W. Gill Woodall \$188,500.00 (1988-90)

APPENDIX A

 DEPARTMENT OF COMMUNICATION
 Summary of Course Offerings
 1988 - 1989

<u>Course</u>	<u>Title</u>	<u>Semester</u>	<u>Section</u>	<u>SCH</u>
101	Introduction to Communication	88-3	2	690
		88-5	2	711
110	Mass Media & Society (ADA Journ 110, F/TV110)	88-3	1	303
111	Technical Introduction to TV (ADA Journ 111, F/TV 111)	88-3	1	84
		88-5	1	24*
130	Public Speaking	88-2	2	120
		88-3	1 Lect	435
			5 Labs	435
		88-5	1 Lect	429
		6 Labs	429	
221	Interpersonal Communica- tion	88-2	2	144
		88-3	6	579
		88-5	6	915
225	Small-Group Communication	88-3	1	93
		88-5	1	126
232	Business & Professional Speaking	88-3	1	24
240	Communication In Organizations	88-2	1	42
		88-3	2	240
		88-5	2	378
262	Speaking for Radio/TV	88-3	1	63
		88-5	2	165
268	Intro Mass Communication Effects	88-3	1	72
270	Communication for Teachers	88-2	1	87
		88-5	2	234
275	Forensics	88-3	2	5
		88-5	2	18
293	Topics: Communication & Technology	88-3	1	27
303	English Phonetics (ADA ComDis 303, Ling 303)	88-3	1	156
		88-5	1	24*

 *--not including SCH in cross-listing Departments

<u>Course</u>	<u>Title</u>	<u>Semester</u>	<u>Section</u>	<u>SCH</u>
321	Interpersonal Communication Analysis	88-3	1	99
323	Nonverbal Communication	88-2 88-3 88-5	1 1 1	105 120 150
325	Intercultural Communication	88-5	1	285
327	Persuasive Communication	88-2 88-5	1 1	120 72
328	Theories of Communication	88-3	1	90
331	Argumentation	88-5	1	81
332	Southwest Rhetoric	88-5	1	96
334	Campaigns & Movements	88-3	1	72
336	Rhetoric of Dissent	88-3	1	135
344	Interviewing	88-2 88-3	1 2	108 210
350	Language, Thought & Behavior	88-3	1	159
364	Broadcast & Cable Programming	88-5	1	78
368	Broadcast Criticism	88-5	1	96
375	Advanced Forensics	88-3 88-5	2 2	3 27
423	Advanced Nonverbal Communication	88-5	1	60
425	Theories of Small Group Communication	88-3 88-5	1 1	105 78
431	Rhetorical Theory	88-5	1	33
434	Freedom of Speech	88-3	1	48
436	Famous Speeches	88-3 88-5	1 2	57 129
449	Org Comm.: Training & Development	88-3	1	123

<u>Course</u>	<u>Title</u>	<u>Semester</u>	<u>Section</u>	<u>SCH</u>
463	Current Developments in Mass Communication (Aesthetics of Media)	88-3	1	60
		88-5	1	42
467	Mass Communication Inter- national Perspectives	88-3	1	63
469	Public Relations Campaigns	88-5	1	195
471	Current Developments in Speech Education	88-3	1	51
		88-5	1	84
490	Undergraduate Problems PR/Computer Research Methods PR/Comm. & Aging PR/Culture & Ed.	88-2	5	18
		88-3	8	80
		88-5	10	139
		88-3	1	15
		88-3	1	27
		88-5	1	15
492	Undergraduate Internship	88-2	5	21
		88-3	4	91
		88-5	4	139
493	Reading & Research In Honors	88-2	1	3
		88-3	1	3
		88-5	1	3
494	Senior Thesis	88-5	1	3
500	Foundations of Communica- tion Theory	88-3	1	45
501	Foundations of Communica- tion Research	88-5	1	60
521	Seminar: Interpersonal Communication	88-3	1	60
523	Seminar: Intercultural Communication	88-2	1	63
		88-5	1	54
527	Seminar: Persuasion	88-2	1	12
528	Communication Research Methods	88-3	1	33
531	Seminar: Contemporary Rhetoric	88-5	1	27
534	Seminar: Public Address	88-3	1	12

<u>Course</u>	<u>Title</u>	<u>Semester</u>	<u>Section</u>	<u>SCH</u>
538	Seminar: Rhetorical Criticism	88-5	1	18
544	Seminar: Organizational Communication	88-5	1	21
551	Graduate Problems PR/Culture & Ed. PR/Computer Research Methods	88-2	4	20
		88-3	6	20
		88-5	3	7
		88-5	1	12
		88-3	1	3
552	Graduate Problems	88-3	1	3
561	Seminar: Mass Communication Processes & Effects	88-3	1	6
564	Seminar: Mass Communication Policy/Regulation	88-5	1	15
573	Teaching the Basic Course	88-3	2	29
		88-5	1	13
598	Master's Project	88-3	2	6
		88-5	3	18
599	Master's Thesis	88-2	4	24
		88-3	8	15
		88-5	9	33

APPENDIX B

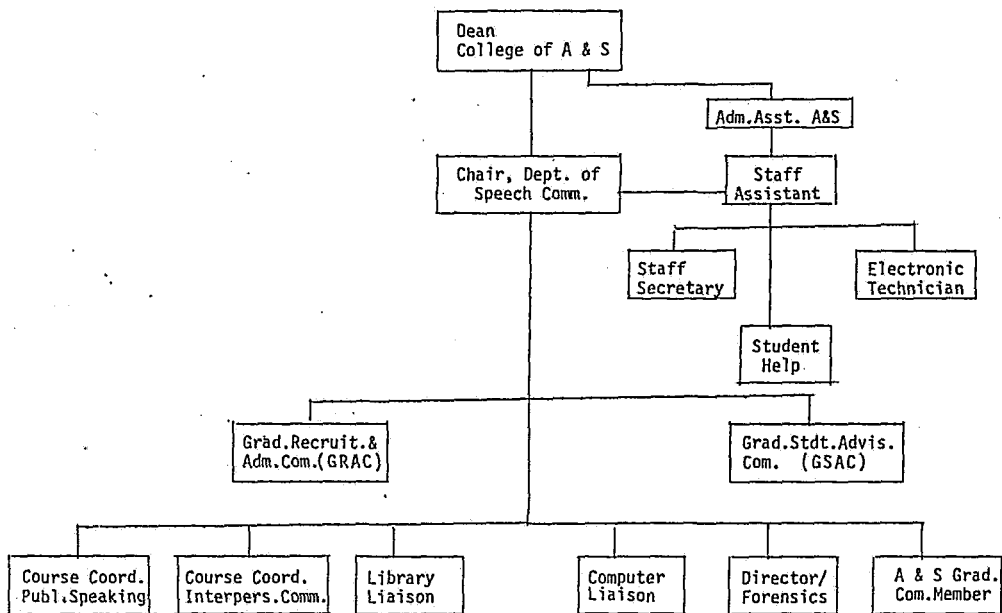
UNM FORENSIC PROGRAM REPORT, 1988-89

The 1988-1989 academic year was a successful one for the UNM Forensics Team. A very young squad, composed of one Junior, two Sophomores and a number of Freshmen, maintained the record of excellence enjoyed by the team over the last decade.

Highlights of team success include second place finishes at the highly competitive University of Utah, San Diego State University, and Arizona State University tournaments. Third place awards were garnered at California Polytechnic University-Pomona and at San Diego State University. Numerous other team and individual speaking awards were also achieved. The UNM team of Sean Ford, a Junior majoring in Communication, and Mandy Whorton, a Sophomore majoring in Political Science, reached the elimination rounds of the National Cross-Examination Debate Tournament with a 6-2 preliminary round record. Thomas E. Jewell, the Director of Forensics, was invited by the National Cross-Examination Debate Association to judge the final round of the national tournament which was held at the University of South Carolina in April.

Recruiting for the 1989-1990 season brings very promising Freshmen to the team: one was the 1989 New Mexico High School State Debate Tournament champion; another was the State Tournament runner-up and a Presidential Scholar. Additionally, two transfer students from California and Washington will add depth to next year's squad.

APPENDIX D. Organizational Chart of the Department of Communication



DEPARTMENT OF COMMUNICATIVE DISORDERS

ANNUAL REPORT

July 1, 1988 - June 30, 1989

by Richard B. Hood, Chair

A. Significant Achievements

1. Community Service in Speech-Language Pathology

Because all graduate students must obtain at least 300 client-contact hours of clinical practicum, clinical services are an important mission of our department. The following two tables contain the numbers of hours by category. The main-campus hours were supervised by UNM faculty members in our facility. The off-campus hours were supervised gratis by professionals not employed by UNM.

On-Campus
Hours of Speech-Language Services

<u>Type of Service</u>	<u>Preschool</u>	<u>School</u>	<u>Adult</u>	<u>Total</u>
Articulation therapy	159	85	57	301
Language therapy	353	173	317	843
Voice therapy	4	43	53	100
Stuttering therapy	35	109	91	235
Hearing-impaired therapy	12	48	60	120
Speech-language evaluations	43	19	148	210
Speech-language screenings	0	0	0	0
Hearing tests	1	0	94	95
Totals	<u>607</u>	<u>477</u>	<u>820</u>	<u>1904</u>

Off-Campus
Hours of Speech-Language Services

<u>Type of Service</u>	<u>Preschool</u>	<u>School</u>	<u>Adult</u>	<u>Total</u>
Articulation therapy	0	92	0	92
Language therapy	97	400	91	588
Voice therapy	0	208	0	208
Stuttering therapy	0	140	0	140
Hearing-impaired therapy	6	56	2	64
Speech-language evaluations	21	191	60	272
Speech-language screenings	177	114	2	293
Hearing tests	26	84	5	115
Totals	<u>327</u>	<u>1285</u>	<u>160</u>	<u>1772</u>

2. Community Service in Audiology

On-campus services are provided in our Audiology Clinic in the UNM Hospital. The following tables contain the number of hours of service provided in our clinic and off campus.

On-Campus (UNMH)
Hours of Audiology Services

<u>Type of Service</u>	<u>Preschool</u>	<u>School</u>	<u>Adult</u>	<u>Total</u>
Audiological evaluations	291	156	539	986
Middle-ear impedance tests only	47	11	10	68
Auditory Brainstem response tests	200	14	12	226
Hearing aid evaluations and dispensing	57	37	145	239
Cochlear implant rehabilitation	0	0	54	54
Earmolds and misc.	15	12	30	57
Totals	<u>610</u>	<u>230</u>	<u>790</u>	<u>1630</u>

Off-Campus (UNMR)
Hours of Audiology Services

<u>Type of Service</u>	<u>Preschool</u>	<u>School</u>	<u>Adult</u>	<u>Total</u>
Audiological evaluations	123	154	224	510
Hearing aid evaluations and dispensing	6	16	210	232
Aural rehabilitation	20	14	84	118
Totals	<u>149</u>	<u>184</u>	<u>518</u>	<u>851</u>

In summary, through our department and off-campus facilities, our students and faculty provided 3676 hours of service in speech-language pathology and 2481 hours in audiology, for a total of 6157 hours.

3. Graduates

MASTER OF SCIENCE

Audiology
 Marianne Cramer
 Michael Flores
 Nancy Napolitano

Speech-Language Pathology
 Jeanette Abeita
 Elizabeth Braught
 Mary DeSautels
 Susan Fitzmaurice
 Elaine George
 Connie Perkins Green
 Karen Lang
 Geraldine Martinez
 Dawn Maxwell
 Linda Merson
 Dabra Ortiz
 Maria Padilla
 Jennie Saavedra
 Ellen Thompson

BACHELOR OF ARTS

Theresa Blog
 Becky Briscoe-Frey
 Thad Brown
 Jennifer Enote
 Carolynn Fincke
 Marsha Franklin
 Kelly Lange
 Alana Mays
 Dessie Montoya
 Christine O'Neill
 Annette Paez
 Suzanne Powell
 Kerry Ryan
 Caroline Sanchez
 Laura Taylor
 Tracey Wood

4. Master's Theses Completed

<u>Student</u>	<u>Director</u>	<u>Title</u>
Pam Palmquist	Dr. Riensche	The effect of sensory integrative therapy on the articulation of a child with developmental apraxia.
Debra Ortiz	Dr. Riensche	The effect of sensory integrative therapy upon the language therapy of two children.
Maria Padilla	Dr. Riensche	A descriptive assessment of the language abilities of learning disabled university students.
Karen Lang	Dr. Riensche	The auditory and listening capabilities of adolescents admitted to an acute care hospital.
Connie Green	Dr. Riensche	The communication abilities of learning disabled university students.
Nancy Napolitano	Dr. Hood	Adaptive signal processing in a variety of listening environments.
Elizabeth Braught	Dr. Shirkey	A survey of pediatricians' attitudes and behaviors concerning stuttering in children.

5. Department Organization and Staffing

The administrative structure of the department is presented two pages hence. Two major changes have occurred since last year. First, the undergraduate major in Sign Language-Interpreting was transferred to the Department of Linguistics. Thus Phyllis Wilcox, Sherman Wilcox and Christine Monikowski are now in that department. Second, the U.S. West service grant, which Dr. Westby had for two and a half years, ended on December 31, 1988.

0436

(The brief descriptions of the duties and responsibilities of the faculty and staff will not be presented because they are essentially the same as they were last year.)

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DEPARTMENT OF COMMUNICATIVE DISORDERS

Richard Hood, Chairperson (50% Administration)

Audiology	<u>% of time</u>	
	<u>Grad.</u>	<u>u.g.</u>
Lloyd Lamb, Ph.D.	90	10
Richard Hood, Ph.D.	40	10
Jan Lewis, M.A.*	75	0
Wendy Gallegos, M.A.,** .50 FTE	50	0
Nancy Broad-McMahon, M.S.,** .50 FTE	50	0

(2-4 unpaid, off-campus professionals who supervise graduate students part-time each semester.)

*Lewis spends 25% providing direct services

**Gallegos and Broad-McMahon are employed by UNMH

Speech-Language Pathology	<u>% of time</u>	
	<u>Grad.</u>	<u>u.g.</u>
Dolores Butt, Ph.D.	78	22
Linda Riensche, Ph.D.	71	29
Bruce Porch, Ph.D. (.4 FTE)	80	20
Ed Shirkey, Ph.D.	67	33
Mary Koppenhaver, M.A.	78	22
Judy Williams, M.A.	95	5
Janet Patterson, M.S.	95	5
Rose Montgomery, M.S., part-time supervisor fall semesters	100	0

(10 to 20 unpaid, off-campus professionals who supervise graduate students part-time each semester.)

Training Grant (U.S.D.E.)

Multicultural Training in Communicative Disorders

Carol Westby, Ph.D., Project Director (.50 FTE)

Pricilla Garcia, M.A., Supervisor (1.0 FTE)

6. Student Credit Hours

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FALL 1988

<u>NO.</u>	<u>NAME</u>	<u>HRS.</u>	<u>SCH</u>
302	Intro to Com Ds	3	174
321	Intro to Audiology	3	117
350	Anat/Physio-Spch/Hrg	3	96
358	Preclinical Training	3	15 (2 sections)
430	Dev. of Spch & Lang	3	108
450	Neuro-Neuropath Spch	4	92
451	Undergrad Problems	1-3	4 (2 sections)
460	Spch Sound Dis/Child	4	72
493	Rdg Research in Honors	3	3
500	Clinical Practice	1-3	86 (8 sections)
506	Rsch & Wrtg Com Ds	3	12
510	S/Multicult Issues	1	7
515	Auditory Pathologies	2	4
525	Voice Disorders	4	72
531	Neuromotor Sp Ds	3	39
533	Lang Analysis Lab	1	4
537	Clinical Aphasiology	3	21
551	Problems	1-3	9 (4 sections)
558	Clin Field Study	6	30
560	Clin Audiology I	3	3
565	Sem. Aural Rehab	3	12
567	Pediatric Audiology	2	8
599	Masters Thesis	1-3	15 (3 sections)
		TOTAL	1003

SPRING 1989

<u>NO.</u>	<u>NAME</u>	<u>HRS.</u>	<u>SCH</u>
302	Intro to Com Ds	3	144
303	English Phonetics	3	87
320	Acoust Percept Spch	3	147
358	Preclinical Training	3	54
360	Speech Disorders	3	117
425	Aural Rehab	3	84
432	Assmnt Interv Lang	3	90
451	Undergrad Problems	1	1
493	Rdg. Research in Honors	3	3
500	Clinical Practice	1-3	87 (8 sections)
507	Aphasia & Relat Ds	3	48
510	S/Multicult Issues	1-3	12
530	Lang Ds in Children	3	36
533	Lang Analysis Lab	1	13
538	Stuttering	4	68
551	Problems	1	1
558	Clin Field Study	6	72 (2 sections)
561	Clin Aud II	3	3
599	Masters Thesis	1-3	15 (4 sections)
		TOTAL	1082

7. Significant Faculty and Staff Achievements

Preface: In the interest of brevity, the following items for each member of the department are only highlights of a few of the service activities that are "above and beyond." Most members have received "excellent" ratings by ICES for teaching or supervision. All contribute hard work on department committees, advising students, research activities, and so forth. The brevity for each person does not do them justice.

- a. Carol Westby is President of the New Mexico Speech-Language-Hearing Association (NMSHA). She continues as one of the two elected Legislative Councilors from New Mexico for the American Speech-Language-Hearing Association (ASHA). In November, 1988 she received the honor of Fellow of ASHA for her numerous contributions to the profession and to ASHA. This is a rare honor. Only two other New Mexicans have received it. One is our Bruce Porch. The other is Edgar Garrett, who just retired from NMSU. Her training grant in Multicultural Training in Communicative Disorders has been renewed for another year. Although Dr. Westby is not an official member of our faculty, she has done the most to enhance our department's national reputation. We are extremely appreciative.

- b. Richard Hood is Chair, UNM Faculty and Staff Benefits Committee, and professional advisor to Albuquerque chapter of Self Help for the Hard of Hearing.
- c. Lloyd Lamb was on sabbatical leave in the spring semester at the Dartmouth-Hitchcock Medical Center, Hanover, N.H., where he studied central auditory processing disorders and tests with Frank Musiek, Ph.D.
- d. Dolores Butt had several publications in the last year, submitted a grant to the U.S. Dept. of Education, continued her many service activities, increased her knowledge of augmentative communication, and was promoted to Professor effective July 1, 1989.
- e. Linda Riensche was on the A&S Promotion Committee and the UNM Student Standards and Grievance Committee. She continues to direct most of the master's theses in the department, and has helped our students and faculty become more involved with students and adults with auditory language and learning disabilities.
- f. Edward Shirkey is an editorial consultant of Speech, Language, and Services in the Schools, is on the UNM Library Committee, the A&S Graduate Committee, and the A&S Curriculum Committee. He started a support group for adult stutterers.

- g. Mary Bolton-Koppenhaver is a Legislative Councilor from N.M. to ASHA, lectured at six conferences on Head Start programs, is on the UNM Ad Hoc Committee on Disabled Students, and has become our expert in myofunctional therapy.
- h. Jan Lewis is a member of the Children's Medical Services Cleft Palate Team and a consultant to the Albuquerque Children's Cochlear Implant Team. On July 1, 1988, she was promoted to Director of Clinical Services in Audiology.
- i. Judy Williams presented many inservices on augmentative communication to school districts and agencies, is the advisor to our chapter of the National Student Speech-Language-Hearing Association, and is on the UNM Ad Hoc Committee on Disabled Students.
- j. Bruce Porch continues as editor of PICA (Porch Index of Communication Ability) newsletter, is on the editorial boards of Journal of Aphasiology and Topics in Language, and received the Honors of the N.M. Speech-Language-Hearing Association in October.
- B. Significant Plans and Recommendations for the Future
1. When Carol Westby's grant, Multicultural Training in Communicative Disorders, expires in July 1990, assuming that she will not receive another grant for the same purpose, the department wants very much to

continue training speech-language pathologists to work with Hispanic and Native American children of bilingual families. This fits into one of the missions of the university. We will request that the A&S budget add .50 of Westby's salary and the 1.0 FTE supervisor's salary. If Westby should obtain another grant, we may request only supplemental funds, or perhaps none.

2. My five-year plan is basically the same as that submitted last year. It is now a three or four year plan.

C. Appointments to Staff

1. Janet Patterson, M.A. (University of New Mexico, 1978) was hired as Speech-Language Pathologist III (supervisor) in August, 1988, to replace Marci Laurel.
2. Rose Montgomery, M.A., was hired as a part-time supervisor for the fall of 1988.

D. Separations from Staff

- 1-3. Phyllis and Sherman Wilcox and Christine Monikowski transferred to the Department of Linguistics in August, 1988.
- 4-5. Janie Gilbert, M.S., Audiologist, and Mary Ellen Ulibarri, M.S., Speech-Language Pathologist, left when the U.S. West grant was terminated in December, 1988.

6. Kerry Ryan, .50 FTE Staff secretary, resigned in June, 1989.

E. Sponsored Research or Other Projects

1. Carol Westby

98,000 third year of grant, Multicultural Training in Communicative Disorders, from U.S. Dept. of Education, Preparation of Personnel for Minority Handicapped Children.

2. Dolores Butt

Applied for a grant, Augmentative Communication Training in Communicative Disorders, in November, 1988, from U.S. Dept. of Education, Division of Preparation of Special Educators (Speech-Language Pathologists). It was approved for funding starting in September, 1989, for \$79,717 per year for three years.

College of Arts and Sciences

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Department of Economics

July 1, 1988 - June 30, 1989

Ronald G. Cummings, Chairman

This report provides a general discussion of some of the major achievements of the UNM Department of Economics during the 1988-1989 academic year. It also identifies the major problems that the department faces at this time and the department's plans for the 1989-90 academic year.

A. Significant Achievements During the Academic Year

The department has achieved results that are worthy of note in several areas of activity.

1. Sponsored Research

As indicated in Table 1, the dollar amount of sponsored research generated by the Department of Economics has remained well below the 1979-80 and 1980-81 levels; however, the considerable efforts of members of this faculty have helped to maintain sponsored research at almost \$250,000 for the 1988-89 academic year. These funds have provided support (through release-time money) for graduate students and thus helped to maintain the viability of our graduate programs.

The lack of support for Economics graduate students was addressed in two department evaluations conducted by outside evaluators during the 1985-86 academic year.

2. Graduate Degrees Awarded

During the 1988-89 academic year the Department of Economics awarded a total of one (1) Ph.D. degree and twelve

(12) Master of Arts degrees. As summarized in Table 2, the Department of Economics has awarded between six and nine graduate degrees in each of the past several years. There is concern that this department will not be able to sustain the level of graduate degrees awarded this year if the level of financial support available is reduced again.

3. The Evening Masters Program

As reported in the 1986-87 Annual Report a new Masters program in Economics was introduced during the 1986-87 academic year. The program has been designed to provide part-time and full-time students with an opportunity to pursue graduate study in Economics in evening courses Monday through Thursday.

The program has resulted in the recruitment of a number of good graduate students and has helped to maintain good enrollment in every graduate offering. The response has been encouraging and with additional promotional efforts is expected to help maintain a quality graduate program in Economics.

B. Significant Plans and Recommendations

The Department of Economics has continued efforts to improve its undergraduate and graduate offerings to better meet the needs of our students and to take advantage of the strengths of our faculty. The comments provided in this section identify some of the areas of concern of the department and the department's response to them.

1. Fall semester, 1989, marks the initiation of the department's

restructuring of a number of undergraduate courses in order to expose students to tenure-line faculty as well as to graduate instructors and to provide small labs for close contact between students and instructors. As of this semester, all principles courses, Economics 200 and 201, and basic upper level courses, Economics 300, 303 and 315, have tenure track faculty as primary instructors and a series of labs taught by graduate students.

2. Also beginning in the fall semester, 1989, the department is offering an array of undergraduate and graduate courses which allows evening students the opportunity to obtain B.A., M.A., and Ph.D. degrees.
3. The department, with the collaboration of the Dean of the College of Arts and Sciences, was successful in amicably resolving the problems with ASM concerning finance courses reported in the 1987-88 Annual Report.

C. Appointments to Staff

Three new faculty members join the faculty of the Department of Economics for the 1989-90 academic year. These new Professors, their academic rank, the institutions from which they received their Ph.D degrees and their primary research and teaching interests are listed below:

Richard Santos, Ph.D., University of Michigan, Associate Professor (joint appointment with the Southwest Hispanic Research Institute), hispanic labor problems.

Alberto Davila, Ph.D., Iowa State University, Assistant Professor, hispanic labor problems.

Philip Ganderton, Ph.D., University of California at Santa Barbara, Assistant Professor, public finance.

D. Separation of Staff

Professor Paul Jonas retired after the academic year following a long and distinguished career at the University of New Mexico. During his tenure at the University of New Mexico Professor Jonas established a strong reputation in the fields of International Economics and Soviet Economics. His work in these fields added significantly to the reputation of this University and attracted quality students into our programs. It will be difficult for this department to fill the void resulting from Professor Jonas retirement.

E. Economics Graduate Program -- A Status Report

Many of the problems in the department's Graduate Program reported in the 1987-88 Annual Report remain at present. With the Dean's increase in the number of teaching assistantships available to the department from 8 to 12, however, the outlook for substantive improvements in the program is good. Given the ability to plan on having support for 12 students, we hope to be able to recruit a number of high quality graduate students to the program for the 1990-91 school term.

F. Long Term Goals For The Unit

The department's long term goals remain as set out in the 1987-88 Annual Report. With the addition of faculty described above, we are most optimistic about our ability to implement these goals.

1. Our evening undergraduate and graduate teaching

programs are in place, and the faculty is currently in the process of reviewing and restructuring course offerings.

2. A Master Plan for the Hispanic Economics Program has been prepared, and efforts for obtaining funding for parts of the program will be initiated during the upcoming year.
3. Grant research is a high priority for the department. We expect to submit between 6 and 10 research proposals to funding organizations by November, 1989.
4. The faculty is in the process of designing its programs in Hispanic Labor, Public Finance and Natural Resources.
5. Steps are currently being initiated to integrate our Emeritus Faculty Committee with our new, young faculty in order to introduce the new faculty to various legislative and other groups within the state for the purpose of structuring a departmental research program which includes topics of interest and relevance to the State.

H. Affirmative Action

This department has made a significant effort over the past decade or more to identify and hire qualified minority economists to fill positions in the department. As a direct result of these efforts, our department currently has on its faculty three female economists--Christine Sauer, Chris Nunn and Lisa Rutstrom. We

have hired two hispanic economists--Richard Santos and Alberto Davila.

We are understandably proud of this record, and expect to continue our efforts to add high quality minority faculty to our staff. In these regards, we are giving high priority to the recruitment of a hispanic labor economist over the next year.

Table 1 -- UNM Department of Economics
Sponsored Research Money Generated
Academic Year

1979-80	\$1,371,552
1980-81	997,210
1981-82	194,826
1982-83	57,591
1983-84	103,533
1984-85	522,298
1985-86	380,662
1986-87	310,667
1987-88	285,000
1988-89	250,000

Table 2 -- Degrees Awarded by the
UNM Department of Economics

Academic Year	Economics Majors	Economics Minors	Masters Degree	Ph.D. Degree
1980-81	45	12	6	3
1981-82	42	13	5	1
1982-83	59	16	4	3
1983-84	32	6	5	1
1984-85	47	1	1	5
1985-86	18	3	4	2
1986-87	37	6	2	6
1987-88	29	4	5	2
1988-89	65	unk	12	1

ANNUAL REPORT

DEPARTMENT OF ENGLISH

July 1, 1988 to June 30, 1989

by David McPherson, Chair

This has been a good year, all things considered, for the Department of English.

A. Significant achievements -- This topic can best be addressed by way of a discussion of the official review of our graduate program.

In many ways this review was the most important single event in the life of the department this year. Mandated and administered by the Senate Graduate Committee, this review brought to campus three professors from other institutions and one from a related UNM department to evaluate the strengths and weaknesses of our program. Guidelines written by the Senate Graduate Committee are phrased in such a way as to require the reviewers to examine not just the graduate program but rather the whole department and all its programs; at least this was the way that both the department Chair and the reviewers interpreted the guidelines.

The reviewers came to campus October 5-7, 1988, and about a month later issued their report. It was a shocker. Ill-informed, appallingly biased, and poorly written, the report nevertheless had a paradoxically beneficial effect upon the department. It shocked us out of our complacency, which (to give the reviewers their due) was certainly one of the main effects which they hoped the report would bring about.

Not only did the report shock the department, it moved us into action. We took a number of positive steps designed to remedy alleged deficiencies identified therein. First, in response to the allegation that morale was low, departmental spirits rose and unity increased because of the manifest unfairness of the bulk of the outside criticism. Second, in response to the allegation that communication among regular faculty was poor, we (1) instituted a monthly faculty colloquium to hear each others' work, and (2) instituted a departmental newsletter to chronicle the professional activities of students and faculty. In response to the allegation that communication with graduate students was poor, the Chair held several "gripe sessions" which increased understanding on both sides. Third, in response to the allegation that most members of the department are not on top of the latest critical trends, we planned a weekly seminar for faculty to be led by Professor Michael Fischer, whose specialty is precisely these latest trends; this seminar will be held every Friday afternoon in fall semester 1989. Fourth, in response to the (obviously accurate) allegation that salaries for Teaching Assistants were shamefully low, we proposed to the Dean--and he approved--a substantial raise for TA's for the 1989-90 year (for more details, see the reports of the Freshman English Director and Graduate Director, below). Fifth, in response to the allegation that graduate students need more formal guidance, we have instituted three new practica, each to carry three hours of graduate credit: one in the practical aspects of teaching Freshman English, another in the editing of scholarly journals (practical experience to be gained by helping edit the

various scholarly journals headquartered in this department), and a third in the teaching of literature (practical experience to be gained by the graduate student helping a professor in an upper-division undergraduate course). Finally, to give advanced graduate students in literature more experience we will from now on make sure that each such student who has completed all requirements for the Ph.D. except the dissertation has the chance to teach at least one 200-level literature course before graduating.

* * * * *

Promoted from Associate Professor to Professor, effective 1989-90 school year, were James Barbour, Lee Bartlett and Peter White.

* * * * *

B. Significant plans and recommendations for the near future -- In fall semester 1988 Professor McPherson announced his intention to step down as Chair at the completion of his three-year term in August 1989. The Dean immediately set in motion the process for choosing the next Chair. The choice finally fell upon Professor Lee Bartlett, who will assume office on August 7, 1989. Professor Bartlett believes that the department must do a better job of informing the Dean, the University community, and the state of its positive achievements. He will devote considerable energy to generating such publicity. He wants to strengthen our programs in American literature and creative writing. He appointed the following people to head programs for next year: Lynn Beene will continue to direct Freshman English; Cheryl

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Fresch, Undergraduate Studies; Michael Fischer, Graduate Studies; Scott Sanders will direct both Creative Writing and Professional Writing. Subsequently Cheryl Fresch resigned as Director of Undergraduate Studies (before ever actually assuming the job), and Barry Gaines was appointed in her stead.

C. Appointments to staff -- Wanda Martin, a specialist in composition, was appointed an Assistant Professor beginning August 15, 1988. Sandra Lynn, a specialist in Professional Writing, was appointed an Assistant Professor beginning August 15, 1988.

D. Separations from staff -- Harvena Richter, the only lecturer with a separate line item in our budget (she was the only Lecturer III), retired effective May 15, 1989. Louis Owens, Associate Professor, resigned effective July 1, 1989, to take a post as Professor of Literature at the University of California, Santa Cruz.

E. Sponsored research or other projects--None

Below is a report from each of the five major program directors in the department: the Director of Freshman English, Director of Undergraduate Studies, Director of Graduate Studies, Director of Creative Writing, and Director of Professional Writing.

FRESHMAN ENGLISH PROGRAM, (by Lee Bartlett, Acting Director, Freshman English)

Director: LynnDianne Beene

Assistant Director: Wanda Martin

Freshman English Committee: LynnDiane Beene (Chair), Lee Bartlett, Wanda Martin, Kathy Brogan, Michelle LeBeau (branch campus rep), Charlotte Hadella, Margaret Davidson, Kathleen Matthews.

I. Enrollment

During the 1988-89 academic year, enrollment figures in the FE Program were as follows:

a. English 101 (Writing w/ Readings in Exposition):

fall: 74 sections; spring: 45 sections.

b. English 102 (Analytical Writing): fall: 68; spring: 80.

Each section enrolled approximately 25 students. A total of seven sections were staffed by senior faculty; the remaining sections were staffed by teaching assistants and part-time lecturers. While TV-I continues to have an impact on our enrollments in the FE Program, our student credit hour production remained approximately the same as 1987-88.

II. Staffing

As with last year, the vast majority of 101 and 102 sections were staffed by teaching assistants and part-time lecturers. While in previous years, senior faculty taught 10-15 sections per year, again this year they accounted for only seven sections; this situation is primarily due to increasing pressures on senior faculty to cover other departmental offerings as various programs

expand. However, once again the department has committed itself to attempt to staff at least 10-12 sections of 101 and 102 with senior faculty for the next academic year.

Following the resignation of Gwen Fitzgerald, Ovella Minssen took over as Freshman English staff assistant. Ovella's obvious talents in dealing with the public have served her and the program well when students, parents, financial sponsors, faculty members, deans, and vice presidents have called to complain, criticize, or question us.

Wanda Martin resigned as assistant FE director late Spring semester; we finished the term without an assistant FE director. Starting this fall, Geraldine McBroom will take over that post. Lynn Beene will continue as FE director.

III. Budget

Traditionally, the FE Program has found itself with sufficient funding at the last minute before each semester began--far too late to secure instructors who meet more than the minimal standards for all its courses. The Dean is aware of this problem, and following meetings with the FE director and the incoming and outgoing chairs has agreed to present us with our full budget far enough in advance to begin to solve this problem. Further, recognizing the importance of attracting top-quality graduate students into our program, the Dean agreed to raise teaching assistant stipends an average of \$1,000 per year. Obviously, part-time instructors' salaries still need to be raised substantially.

UNDERGRADUATE PROGRAM (by Paul Davis, Director)

The Undergraduate Program continued to grow this year. We graduated 20 more majors than last year and more than held our own as the second highest department in the College of Arts and Sciences in terms of the number of majors graduated. We graduated 76 English majors, 13 Creative Writing majors, and 26 minors.

The continued growth has stretched our faculty resources beyond capacity in some areas of the undergraduate curriculum. Both of the writing programs, in particular, have been affected. During the last year the Professional Writing Program established entrance requirements and instituted procedures to limit enrollment to a number that can be handled by the limited faculty in that area. Similar restrictions may need to be considered for the Creative Writing Program.

Although we had significantly more majors, the number of honors graduates fell off from the high numbers we had in the two previous years. The following students were graduated with honors this year:

Moira Cunningham, Cum Laude
Donna Fastle, Summa Cum Laude
Lorna Powers, Cum Laude
James Silver, Magna Cum Laude
John Weston, Magna Cum Laude

It is not clear why there were fewer honors students this year. It may be that the two prior years were anomalous or that this year's group did not include the usual numbers of highly motivated students. If the trend continues, however, we should reevaluate our recruiting procedures to see that appropriate students know

of the program and are encouraged to participate in it.

The experimental year under the NEH grant for the 131-132 course was completed in January. A syllabus and a teaching plan for the course have been developed and three sections, taught by two-person teams, will be offered in the fall. The course still lacks visibility, both with students and with their University College advisors. We will need to continue active publicity efforts to inform students that the course is an appropriate way to meet the humanities requirement of the various colleges. This fall we will offer for the first time an optional one-hour audio-visual lab section to supplement the course in which students can see film versions of many of the works read in the course as well as some additional appropriate works.

Among issues discussed by the Undergraduate Committee (Fleming, Johnson, Smith, Zavadil, Oldham, Davis, Chair), two deserve comment. The committee considered renumbering English 360 to the 400-level to enable both undergraduates and graduates to take these popular individual author courses, but the proposal was rejected for several reasons, primarily because renumbering would be likely to compromise the clear undergraduate focus on primary texts that these classes have. The committee recommended instead that graduate individual author courses be clearly separated from the 360 courses.

The committee also studied the course evaluation program and recommended that the department adopt the ICES form. A report

indicating appropriate questions for the departmental form was forwarded to the P&P Committee for consideration by the whole department in the fall.

GRADUATE PROGRAM

During the summer of 1988, Margaret Davidson was awarded a \$500 graduate scholarship by the American Association of University Women. Because the competition was keen, Margaret has good reason to be as proud of her accomplishment as we are of her. At the same time, Ted Imgrund was hired by the UNM Press as an editorial assistant. Given the scarcity of financial aid and the valuable experience in publishing that the job offers, it behooves us to fill that position with another English graduate student when Ted is ready to give it up.

We did not fare so well with state fellowships for under-represented groups. Elizabeth Baca and Marilyn Barrios were turned down last summer because the Council on Higher Education decreed that 21 fellowships should, in the spirit of the Year 2000 Report, go to the hard sciences, business, and agriculture. Throughout the year, the Council has remained adamant in its position, but we hope that may change through the efforts of the Graduate Dean and the Senate Graduate Committee.

The memorable event of the fall of 1988 was the external review of our graduate program. Although we responded with mixed feelings to the reviewers' report, in the long run the department will have benefitted after implementing some of the reviewers' recommendations.

The spring of 1989 was a busy time for the Graduate Committee whose members included the following: Jim Barbour, Barry Gaines, Gary Harrison, Louis Owens, Scott Sanders, Carolyn Woodward, Student Representative Charlotte Hadella, and Graduate Director Ivan Melada. After February 1, the committee went to work reviewing applications for admission and financial aid. By the end of the semester, each member had evaluated 70 applications. We had 27 new TA positions to fill -- 16 MA's and 11 Ph.D.'s. Many thanks to the committee members for their efforts and to Jane Brill, Student Services Secretary, for having seen these applications through completion along with the two dozen which have followed.

We are very fortunate that next year there will be a raise for TA's. New MA's will rise from \$5400 to \$6500 and new Ph.D.'s from \$6,000 to \$7,000. We are doubly fortunate in having been given our budget in January. A competitive stipend and a known budget have enabled us to make early offers to prospective TA's.

A publishing opportunity passed our way in the spring, and our graduate students rose to the occasion. Salem Press asked for contributions to its forthcoming reference work, The Library of Literary Characters. The assignment consisted of analyses of characters in modern novels at \$50 a novel. Susan Myers is doing six novels; Seth Bovey, one; and Greg McElwain, two. As of this writing another such opportunity has presented itself; we hope that other graduate students will participate.

Congratulations are in order for two winners of end-of-the-year

graduate awards. John Weston, who is entering the MA program in the fall, received a minority fellowship from the Office of Graduate Studies. Katy Marsters, a Ph.D. student, received a \$1000 Graduate Achievement Award. Thanks are in order to Stephen Mathewson and David Hailey, who also competed.

Our significant plans for the near future include implementing some of the recommendations in last fall's external review. We have a faculty seminar on critical theory scheduled for next fall as well as a workshop for new TA's. Also scheduled are several literature courses taught by ABD's.

ANNUAL CREATIVE WRITING PROGRAM (by David Johnson, Acting Director)

I. Blue Mesa Review. The first issue of the Blue Mesa Review was published this Spring, edited by Rudolfo Anaya and sponsored by the Dean of Arts and Sciences. It is a much needed addition to the writing program, and a flagship publication for the literary arts of this region.

II. Writing Contests.

- a) UNM Native American Studies Center sponsored awards:
Evelina Lucero won first place in fiction; Raquel Montoya won first place in poetry.
- b) The American Academy of Poets (\$100) winner was Aleta Lawrence (judge: Jeanne Shannon).
- c) The D. H. Lawrence Fiction Contest (\$100) winner was Henry Rael (judge: Bill Buchanan).
- d) The Lena M. Todd Memorial Contest (\$100) winner for poetry

was Billie Urabazo, and for fiction was Judi Baker. (judge: Carl Mayfield).

- e) Urban Enhancement Cultural Achievement Project. The Creative Writing program administered a fiction contest sponsored by the City of Albuquerque: the winner was B. H. Cole of Albuquerque (\$1250); Jim Harmon of Albuquerque was second (\$500); Alisa Sandlin of Santa Fe was third (\$250). Judges were E. A. Mares and Carolyn Gordon. The winner's story was published in Blue Mesa Review.

III. D. H. Lawrence Fellowship. University of Maryland English Professor Joyce R. Korblatt is this year's winner. She is the author of three books, several stories and book reviews. Judges were David Johnson, Sandra Lynn and Scott Sanders.

IV. Workshops Taught by Recent Graduates. Two years ago it became the practice to assign a beginning poetry workshop and a beginning fiction workshop to recent MA Creative Writing graduates to give them experience for possible positions elsewhere. Leslie Donovan taught the poetry workshop and Arthur Brown taught the fiction workshop. Candidates were selected for next year: David Benedetti and Mary Higgins will teach the poetry workshops and Marc Briggs will teach one of the fiction workshops.

The Creative Writing Committee, along with the Graduate Committee, is exploring the possibility of providing teaching opportunities for second year graduate students in the Program.

V. Creative Writing Fellowships (\$750). The Creative Writing Committee decided that one fellowship should be given to a current

student, Evalina Lucero, and one fellowship to an incoming student, Melinie Malinowski.

VI. Fellowships and Visiting Writers. The Dean has agreed to fund five Creative Writing Program fellowships and a visiting writer's stipend for the Creative Writing Program.

VII. Writing Faculty. All of the Creative Writing Faculty were very active this past year with readings, workshops, and publications. Rudy Anaya is on sabbatical for 1989. Gene Frumkin taught in Hawaii spring semester. Harvena Richter retired; she will be missed.

VIII. Readings. The annual Poets & Writers Series, directed by Lee Bartlett, sponsored readings by such notable writers as Diane Wakowski, Charles Altieri, Shirley Kaufman, Michael Palmer and Barbara Einzig. The English Graduate Association sponsored a number of noon readings by graduate students and other local writers.

IX. Director of Creative Writing. Beginning this fall, Scott Sanders will assume the position of Director of Creative Writing, combining administrative duties with the Professional Writing Program.

PROFESSIONAL WRITING CONCENTRATION (by Scott Sanders, Director)

The professional writing (PW) concentration continues to grow, but not necessarily in enrollment figures. We grew with new faculty, new courses, new procedures, and new activities. Enrollment, however, is down slightly due to several graduations and some organizational changes described below. At this writing we count between 45-50 students majoring in professional writing and about 15 minoring.

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Five majors and two minors graduated in December 1988; more than eight majors and two minors graduated in May of 1989. Two of our 1987-88 majors graduated with departmental honors.

Internship Program

Our relationship with the Isotope/Nuclear Chemistry Division at Los Alamos Laboratory continues. This summer (1989) one professional writing student is in Los Alamos for 12 weeks of writing and editing of technical bulletins (public information documents); a second student will likely take the fall 1989 semester off from her studies to work full time as an intern at the Lab. New off-campus internship relationships for 1988-89 include Lynfield Consulting, General Atomics Computer Services at the Air Force Weapons Laboratory, Reddy Communications, and the New Mexico Natural History Museum; we report only one new internship placement on-campus, with the UNM Health Center.

New Courses and Personnel Matters

Sandra Lynn from Southwest Texas State University began her first year with us as a code-one Assistant Professor. Unfortunately, she had trouble with her back, underwent surgery, and was not able to teach for the first half of the fall semester. Professor Dunaway and part-time instructor Gene Booth filled in for Sandra. Once back in her classroom, Professor Lynn finished the semester ably. In the Spring, Sandra offered a new 320-level course in manual writing, focusing on computer documentation. For this course, several of her students wrote documentation for programs currently developed and

used on campus, earning the students and Professor Lynn letters of appreciation for their work. The success of this course, and her positive student evaluations, promise that Sandra Lynn will continue to make excellent contributions to the PW curriculum with her new courses and good teaching.

Scott Sanders developed a new one-hour desktop publishing workshop that he taught in the fall and the spring semesters. The course was made possible by the Student Publications Office who provided the computer, the software (Ventura Publisher) and a room to use as a lab.

PW students published work in corporate publications, in various newspapers, and in mass-market outlets. Two students gave presentations at the International Technical Communication Conference. In spring 1989, another student, Jonathan Briggs, edited, typeset, and (largely) wrote Connection, a newsletter for PW students and graduates. Connection was mailed to about 400 people and it helped raise the visibility of our program on and off campus. We also received some cash contributions from alumni who wanted to support the new publishing effort. We expect another issue in spring 1990.

Organizational Changes

The numbers of key PW courses were changed: 298 became 290: "Introduction to Professional Writing"; 411 topics courses will now be taught as 420: "Topics in Professional Writing." The older numbers described generic "topics" courses; the new numbers attest to the "arrival" of the PW program: we now have our own course

numbers and titles. In the minor program, the internship was made optional to allow students more flexibility (many PW minors do internships as part of the major work in communication or in business).

The biggest change implemented in 1988-89 is that we now screen students wanting to enter both the major and the minor by asking for portfolios and applications in the twelfth week of the semester. Officially admitted students have first crack at add-cards during the pre-registration period. In this way we hope to keep our upper-division courses open for students in our program.

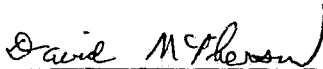
In fall and spring we admitted about 25 new students, rejected only five. However, just the existence of the entrance application is affecting our enrollments. We have fewer students officially in the program. The admission process will be watched closely next year to see whether the focus on quality really does affect the quantity of our enrollment and whether that matters. For now, the faculty is pleased with the admission process, and the prospect of one or two fewer courses to offer is a welcome one.

A bigger change is perhaps on the horizon. Beginning fall 1989, Professor Sanders will direct both Creative Writing (CW) and Professional Writing (PW). One goal will be to combine the two programs into a single Writing Program curriculum with an elective structure that will allow students to take the same courses they do now, if they wish, or to combine CW and PW courses to fulfill requirements in a manner they may not now, under the present system, do.

Discussion, Evaluation, and Conclusion

Concern over staffing continues. Even with the leveling off of enrollment overall, we continue to need part-time instructors to cover our courses and our upper-division classes remain crowded as students who are not PW majors take them for the practical skills they offer. Apart from this continuing concern, things are going well for professional writing, and they promise to go better in the future if the merger with creative writing becomes reality. We are looking forward to 1989-90.

Signed: _____



David McPherson, Chair, English Department

July 1, 1989

Date

ANNUAL REPORT**Department of Geography**

July 1, 1988 to June 30, 1989

Prepared by

Stanley A. Morain, Chairman

A. SIGNIFICANT ACHIEVEMENTS:**1. Department:**(Strategic Planning)

The faculty began implementing the Strategic Plan it developed during the Spring Semester, 1988 by focusing attention on two items: a) faculty recruiting to replace the loss of Drs. Bennett (retired), King and Place (both resigned); and, b) curriculum revisions to modernize course offerings and program requirements.

After deliberating program options in terms of educational needs at UNM, and in context of economic trends in the Southwest, the faculty agreed that its first recruitment priority was for a senior level cartographer (Associate or Full Professor), with a proven record in securing funded research, and a willingness to develop upper division and graduate level courses in computer cartography. An announcement was issued which led to an applicant pool of some ten individuals. An offer was made in April, but was rejected over questions of tenure, and not further pursued. It is the continuing plan of the department to readvertise the position in Fall, 1989, and

to seek recruiting assistance from recognized leaders in the computer cartography/GIS field.

The curriculum has been reviewed in terms of numbers of courses, levels of instruction, and breadth of offerings in order to better scope our dual roles of "service" department and degree granting discipline. Initial revitalization efforts consisted of revamping the undergraduate and graduate degree programs, renumbering courses, and writing new descriptions to focus on specific thrusts in the department. Sufficient progress was made to submit change request forms to appropriate curricula committees, but too late in the semester for their consideration. This work will continue during the Fall 1989 semester and be ready for implementation for the next UNM Catalog. All changes are, of course, subject to further discussion and approval at College and University levels. Full narrative for the proposed changes will be included with the Form Cs and, if approved, incorporated into next year's annual report.

(Southwest Association of American Geographers Meeting)

Plans progressed for the department to host the SWAAG meeting in Albuquerque during the first week of October, 1989. Drs. Cullen and Williams have taken the lead responsibility for logistical arrangements, the Call for Papers, mail-outs and keynote speakers. In addition, Drs. Snead, Williams, and Barrett are conducting field trips for interested participants at the end of the paper presentations. SWAAG is a regional affiliation of Professional Geographers who are

members of the national Association of American Geographers.

The region stretches from Louisiana to New Mexico.

(Departmental History)

As part of the Centennial Celebration at UNM, Professor Emeritus, Dr. Robert Campbell prepared a history of the department. Titled, Geographic Studies at UNM, the report details how the discipline has progressed from a collection of disparate courses offered within existing Arts and Sciences units into a "service" program leading toward a minor degree. In 1961 departmental status was approved and in 1966 the MA program was added. The history is an excellent review of faculty accomplishments and frustrations over the last three decades. Copy of the report will be included in the comprehensive history of UNM.

(Faculty Recognition):

Dr. Elinore Barrett was granted a one-year sabbatical to advance her research on the Cultural Ecology of Protohistorical Pueblos.

Dr. Stanley Morain was given a year of "instructional leave" to conduct studies requested by NASA headquarters on the evolution of America's Earth Observing Industry. He was also one of two Geographers, nationwide, to be elected "Fellow" in the American Association for the Advancement of Science, recognizing his career efforts in remote sensing education and natural resources evaluation.

Dr. Stephen Thompson contributed to a multidisciplinary effort to create an Interdisciplinary Water Curriculum. The department then submitted an unsuccessful proposal to the committee to become the "home" for the curriculum's implementation. In May, Dr. Thompson was further awarded a Faculty Scholarship by the Vice President for Academic Affairs to participate in the development of a Rio Grande Basin environmental research plan.

Dr. David (Toby) McGrath, Visiting Assistant Professor, collaborated with Professor Chris Uhl of Penn State University in proposing a MacArthur Research grant to create a Center for Sustainable Development in the Brazilian Amazon. The grant was awarded in May for \$250,000 over a two year period. Dr. McGrath will spend 1990/91 in Brazil helping to establish the Center, which is expected to be a continuing research function having long term linkages to UNM and other universities. It is the strong desire of the department to continue Dr. McGrath's appointment upon completion of his year in Brazil.

2. College and University:

(Southwest Institute)

Dr. Jerry Williams organized and planned the lecture series and field trips to be offered in the 1989 Southwest Institute. It was to be offered as a summer seminar in geography (Geography 551/552), as well as cross listed in other departments, but had to be cancelled at the last minute.

The Institute is administratively and financially independent from the geography department, even though it carries the same organizational code. There has been some discussion about realigning the Institute with Continuing Education or finding another appropriate "home" on campus. The department desires to keep the Institute, and to promote its growth and development through Dr. Williams' directorship, but desires also to clarify funding, reporting, and operating procedures.

(Interdisciplinary Water Curriculum)

Dr. Thompson has been collaborating with a campus-wide committee of water specialists to design an Interdisciplinary Water Curriculum. Existing courses focused on legal, economic, managerial, engineering, planning, and geologic aspects of water have been arranged into a coherent program by a campus team appointed by VPAA Garcia in June 1987. The efforts of this committee culminated in a proposal to establish a Master's degree in water resources administration. River Basin Survey (Geog. 551) was offered in Spring 1988 as an experimental, team taught, course. Other courses have been offered through participating academic units, but action on the proposal is pending.

(Centennial Convocation)

Along with other units of UNM the Department participated in a special convocation ceremony honoring the University's Centennial graduating class. Geography graduated

four MA degrees and ten undergraduate majors. Of the four MAs Ms. Laura Meszaros is now employed by the United Nations in Nairobi, Mr. Paul Ritzma is a temporary instructor for Geography 101 (Introductory Physical Geography), Ms. Crista Carroll has a career position as a GIS/remote sensing specialist with the Bureau of Land Management Rio Puerco District Management Office, and Ms. Heather Rex is employed by UNM Centennial Library as Map Librarian. Anthropology, American Studies, Geography, and Linguistics combined resources to host their graduates of 1989 and their families to a post convocation presentataion of certificates and refreshments at the Maxwell Museum on May 13. It was generally agreed that such activities were highly beneficial and should become an annual event.

3. Community:

The most significant accomplishment this year was the creation of a Memorandum of Understanding (MOU) between the Geography Department, the U.S. Bureau of Land Management, and UNM's Technology Application Center (copy attached). Through this instrument, the three parties intend to collaborate in the development of their mutual capabilities in Geographic Information System (GIS) and remote sensing technologies. The department's participation will focus on: a) providing scientific and technical inputs; b) offering evening and weekend courses in these technologies to serve as a means for continuing education; and, c) directing qualified students into internships, co-op training programs, other on-

the-job training experiences, and thesis projects. It is the intention of the department to expand the MOU concept to include other State and Federal agencies in a deliberate attempt to promote the utility of these spatial analysis technologies and to increase public awareness of Geography as a discipline.

Aside from the department's on-going activities such as occasionally serving as lunch time speakers at civic functions, faculty and graduate students served with the Albuquerque Public Schools as science fair judges and as judges at the National Geographic Society's First Annual Geography Bee for New Mexico's middle school students.

B. PLANS AND RECOMMENDATIONS

The department plans to finalize its curriculum modernization, recruit a senior level Computer Cartographer, promote the Interdisciplinary Water Curriculum, and create more Memoranda of Understanding between Geography and the resource oriented agencies within New Mexico. We hope to continue our participation in the National Geography Bee to improve geographic literacy and National Geography Week, if the AAG continues its pursuit of that program. Ultimately, we view the discipline's unique contribution to UNM as residing in Geographic Information Technologies applied to resource survey, economic development and planning. Colleagues across many academic and service units at UNM agree that Geography **should be** the home for basic research and technical support in spatial data analysis. We are progressing, on a rising level of commitment, toward greater involvement in

interdisciplinary activities, individual and joint research efforts, and the creation of a cutting edge curriculum.

C. APPOINTMENTS TO STAFF

There were no additions to staff.

D. SEPARATIONS FROM STAFF

There were no separations from staff.

E. SPONSORED RESEARCH AND OTHER PROJECTS

There is no sponsored research underway in the department. Drs. Cullen, Morain (through Technology Application Center), and Thompson have prepared proposals to outside agencies. Drs. Morain and McGrath are currently preparing proposals to NSF for submittal this Fall semester, and Dr. Thompson is actively participating in the Faculty Scholars group on proposals for the Rio Grande Basin. It is the personal goal of Chairman Morain to stimulate more activity in this arena.

Memorandum of Understanding
between
United States Department of Interior
Bureau of Land Management
Albuquerque District
Rio Puerco Resource Area

0475

and

University of New Mexico
Department of Geography

and

Technology Application Center

Whereas:

The Rio Puerco Resource Area, Albuquerque District, Bureau of Land Management, hereafter referred to as "RPRA," has resource management responsibility for both natural and cultural resources in its jurisdiction; and

Whereas:

The RPRA has immediate and long-term management responsibility for the newly established El Malpais National Conservation Area (NCA); and

Whereas:

In order to effectively manage the natural and cultural resources in both the El Malpais NCA and the RPRA overall, on-going needs exist for technical assistance, training, technology demonstrations, occasional student labor, and information exchange; and

Whereas:

The Department of Geography at the University of New Mexico, hereafter referred to as "Geography," has dedicated a major part of its undergraduate and graduate programs to applied research and education in natural resource management questions, as they concern the American Southwest; and

Whereas:

The University of New Mexico, Technology Application Center, hereafter referred to as "TAC," is charged by its mission to demonstrate and transfer information technologies; and

Whereas:

It has been determined by the principals of RPRA, Geography, and TAC that each has capabilities, opportunities, and resources that are best used in tandem to achieve their individual and collective program needs, now

Be It Understood:

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That the three parties intend to cooperate in all matters that are prudent, efficient, warranted, and within the bounds of their individual operating environments, among them regulatory, budgetary, and resource availability; and

Be It Further Understood and Agreed:

That RPRA, Geography, and TAC will be in regular communication to maximize the cooperative use of their capabilities, institutional resources, and knowledge to effectively carry out their program goals.

Narrative

Article 1:

This MOU is the only and complete document describing the working relationships between RPRA, Geography, and TAC.

Article 2:

Principals representing the three organizations will meet within 60 days of the signing of this MOU to outline their specific roles and contributions to the consortium. This listing will be attached to the MOU as Addendum Number 1.

Article 3:

Nothing in this MOU obligates the RPRA (the BLM, the Department of Interior, or the United States Government), Geography (or the University of New Mexico), or TAC (or its base support contracting agency, the National Aeronautics and Space Administration) to an exclusive or sole-source relationship with any of the other parties.

Article 4:

This MOU can be terminated at any time by mutual agreement of the three parties.

Eric Tatum (Acting Area Manager)
Bureau of Land
Management,
Rio Puerco
Resource Area
4/10/89
Date

Stan Morcin
Department of
Geography,
University of
New Mexico
4/12/89
Date

Stan Morcin
Technology
Application Center,
University of
New Mexico
4/12/89
Date

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Department of Geology

Annual Report

July 1, 1988 - June 30, 1989

Klaus Keil, Chairman

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GENERAL DEPARTMENTAL INFORMATION

FACULTY AND STAFF OF THE DEPARTMENT OF GEOLOGY

FULL PROFESSORS:

- Roger A. Anderson, Ph.D., Stanford University, 1960.
- Douglas G. Brookins, Ph.D., Massachusetts Institute of Technology, 1963.
- Wolfgang E. Elston, Ph.D., Columbia University, 1953.
- Rodney C. Ewing, Ph.D., Stanford University, 1974.
- Klaus Keil, Director, Institute of Meteoritics, Ph.D., Mainz University, 1961.
- Cornelis ("Kase") Klein, Ph.D., Harvard University, 1965.
- Albert M. Kudo, Ph.D., University of California, San Diego, 1967.
- Lee. A Woodward, Ph.D., University of Washington, 1962.

ASSOCIATE PROFESSORS:

- John W. Geissman, Ph.D., University of Michigan, 1980.
- Jeffrey A. Grambling, Ph.D., Princeton University, 1979.
- Stephen P. Huestis, Ph.D., University of California, San Diego, 1976.
- Barry S. Kues, Ph.D., Indiana University, 1974.
- Leslie D. McFadden, Ph.D., University of Arizona, 1982.
- Stephen G. Wells, Ph.D., University of Cincinnati, 1976.
- Crayton J. Yapp, Ph.D., California Institute of Technology, 1980.

ASSISTANT PROFESSORS:

- Laura J. Crossey, Ph.D., University of Wyoming, 1985.
- Christopher K. Mawer, Ph.D., Monash University, Australia, 1981.
- Robyn Wright, Ph.D., Rice University, 1984.

PROFESSOR EMERITI:

J. Paul Fitzsimmons, Ph.D., University of Washington, 1949.

Vincent C. Kelley, Ph.D., California Institute of Technology, 1937; Deceased
December 5, 1988.

Stuart A. Northrop, Ph.D., Yale University, 1929.

Sherman A. Wengerd, Ph.D., Harvard University, 1947.

ADJUNCT PROFESSORS:

Adjunct Professor Timothy H. Bell, Ph.D., Adelaide, 1973.

Adjunct Professor Rosemary Buden, Ph.D., Yale University, 1968.

Adjunct Professor Jonathan F. Callender, Ph.D., Harvard University, 1975.

Adjunct Associate Professor William F. Chambers, Ph.D., Duke University, 1967.

Adjunct Professor Ernest S. Gladney, Ph.D., University of Maryland, 1974.

Adjunct Professor Steven J. Lambert, Ph.D., California Institute of
Technology, 1975.

Adjunct Professor Spencer G. Lucas, Ph.D., Yale University, 1983.

Adjunct Professor Harrison "Jack" H. Schmitt, Ph.D., Harvard University, 1964.

Adjunct Professor John Shomaker, M.S., University of New Mexico, 1965.

Adjunct Professor Carol L. Stein, Ph.D., Harvard University, 1977.

RESEARCH ASSOCIATES AND POST-DOCTORAL FELLOWS:

Adrian J. Brearley, Post-Doctoral Fellow, Institute of Meteoritics, Ph.D.,
University of Manchester, Great Britain, 1984.

James Connolly, Research Scientist, Institute of Meteoritics, M.S., University
of New Mexico, 1981.

John Husler, Senior Staff Chemist, M.S., University of New Mexico, 1968.

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Michael J. Jercinovic, Post-Doctoral Fellow, Ph.D., University of New Mexico,
1988.

Rhian H. Jones, Post-Doctoral Fellow, Institute of Meteoritics, Ph.D.,
University of Manchester, Great Britain, 1986.

Gregory R. Lumpkin, Post-Doctoral Fellow, Ph.D., University of New Mexico,
1989.

Horton Newsom, Research Scientist, Institute of Meteoritics, Ph.D., University
of Arizona, 1981.

Frank V. Perry, Research Scientist, Ph.D., University of California at Los
Angeles, 1988.

Harald Poths, Research Scientist, Ph.D., Johannes Gutenberg University, 1981.

Franciscus J.M. Rietmeijer, Research Scientist, Ph.D., Rijksuniversitet-
Utrecht, Netherlands, 1979.

Edward R.D. Scott, Senior Research Scientist, Institute of Meteoritics, Ph.D.,
University of Cambridge (U.K.), 1972.

Terence V. Sowards, Assistant Scientist, Institute of Meteoritics, Ph.D.,
University of New Mexico, 1971.

G. Jeffrey Taylor, Senior Scientist, Institute of Meteoritics, Ph.D., Rice
University, 1970.

David B. Ward, Research Scientist, M.S., University of New Mexico, 1986.

STAFF:

Judith Binder, Editorial Assistant I
George Carnako, Building Systems Mechanic
Mabel T. Chavez, Editorial Assistant II
George H. Conrad, Microprobe Specialist
Sharon M. Fisher, Staff Assistant
Moh'd I. Ghweir, Thin Section Preparator
Gilbert E. Griego, Harding Mine Maintenance Mechanic
Sally E. Hayes, Accounting Technician
Stacy A. Kaser, STEM Laboratory Technician
Dagoberto Lopez, Drafting Technician
Spencer G. Lucas, Curator
Clarence "Leroy" Mason, Electronics Technician
Kenneth M. Nichols, Photographer
Deborah J. Rhue, Clerical Specialist V
Thomas Servilla, Expert Technician II
Anna M. Smetana, Staff Assistant, Institute of Meteoritics
Steven W. Wageman, Academic Support Aide

SIGNIFICANT ACHIEVEMENTS

Introduction

This report summarizes the activities and accomplishments of the faculty, staff and students of the Department of Geology for the academic year 1988-1989. Additional information may be found in the "Annual Report of the Institute of Meteoritics" for academic year 1988-1989. The present report is based on the individual biographical supplements of faculty and research staff and details our accomplishments in the Department's three main areas of effort, namely teaching, research, and public service.

Faculty and Scientific Staff

An extensive international search was carried out to hire a faculty member in hydrogeology. We were very fortunate to attract Dr. Michael E. Campana to this position. Mike will join our faculty in the Fall of 1989 as an Associate Professor. Mike received his Ph.D. from the University of Arizona and has previously been on the faculty of the Water Resources Center, Desert Research Institute, Reno, Nevada. He brings to our Department many years of research and teaching experience in hydrogeology and will fill a void in our Department in this field.

Dr. Gary Smith, who for the past two years served as the Department's Caswell Silver research Professor, has joined our permanent staff as a staff scientist-curator. He will supervise the collections of the Department, carry out independent research, and work with graduate students in the area of volcanoclastic sedimentation.

The code 3 review (formal three-year review) of Laura Crossey was successful and she has been appointed to a second three-year term at the Assistant Professor rank.

We laid the groundwork for a new joint M.S. program in hydrology with the Department of Civil Engineering. The importance of groundwater issues to the State of New Mexico and, thus, the research potential of the hydrology discipline to UNM has prompted the development of this new degree program. Dr. Michael Campana, our new hydrogeologist, will lead our efforts in this area.

Research Activities and Research Funding

The faculty, research staff, and students of the Department continued their dedication to high-quality research and publication, and to incorporation of research in the forefront of the field into instruction and education, particularly of graduate students. We view research, and involvement of students in research, as one of our most important teaching tools at the graduate level. During the report period, faculty, staff and students of the Department published 91 scholarly articles, 115 abstracts, 11 reports, 2 maps, 7 articles in conference proceedings, authored 1 book, edited 3 books, published 8 book chapters and 2 book reviews, and presented 150 scientific talks.

Faculty and research staff continued to attract a large number of research grants and contracts to the Department in support of their research and that of graduate students. During the period, a total of 57 grants and contracts were in effect totalling \$2,925,595.00 (see Appendix I).

Student Enrollments

Student enrollments, as indicated by departmental student credit hours (SCH), remained at last years level during the 1988-1989 academic year. Total SCH for the Fall 1988 semester were 4,129, an increase of 6.4% over the Fall 1987 semester. Enrollment during the Spring 1989 semester, at 3,632 SCH, decreased by 7.3% in comparison to the previous Fall enrollment. The primary

cause of lowered Geology enrollments of the past few years (compared with the late 1970's and early 1980's) is the severe decrease in employment opportunities for geology graduates, mainly owing to the economic slump in the petroleum and mineral industries. This has dissuaded many students from embarking on undergraduate geology degrees, with the result that enrollments in upper-division geology courses remain comparatively depressed and the number of undergraduate majors has remained relatively low (i.e., a constant 60 in both Spring 1988 and Spring 1989).

This decline is a nation-wide trend and is largely beyond our control. However, the Department has continued to respond in several ways. The B.S. and geology minor programs have been modified to allow greater flexibility in coursework while at the same time preserving the traditional rigor of these programs, and a new curriculum at the B.A. level has been initiated. Enrollment in survey and service courses (100-200 level) remains strong. The Department has devoted much attention to these courses. Two new courses, Geology 211 (Dinosaurs and Their World), and Geology 263 (Geology of National Parks) have been developed by the faculty. Our Beginning Field Geology course (Geology 319) was conducted for the third time in the summer (May, 1988) as an intensive three-week field course just after the end of the Spring semester, and Advanced Field Geology (Geology 420) is taught in the second summer session. These field courses continue to provide geology majors more time and training in the field within a context that is more convenient to them.

The Graduate Program remained strong and graduate SCH were 443 in the Fall of 1988 and 403 in the Spring of 1989. The number of M.S. students stood at 55 and Ph.D. students at 12 during the Spring 1989 semester.

Public Service

Faculty, staff and students of the Department continued their dedication

to public service. We continued to maintain and improve our two public museums in the Department, the Geology and Meteoritics museums, which attracted thousands of visitors, including many school children, to UNM. Furthermore, many hundreds of visitors took field trips to the Harding Pegmatite Mine, an area of unusual geological interest in Taos County, which was donated to UNM and is administered by our Department. We also participated in a great many UNM and civic activities, gave many popular talks in Albuquerque and across the state, and identified without charge many rocks, minerals, fossils and suspected meteorites brought to the Department by interested citizens (see "Non-Teaching University Services" and "Public Service").

Alumni Support

Alumni support continues to be a very important aspect of many of our departmental programs. The Caswell Silver Foundation continues its tremendous support of our Department, including the Caswell Silver Research Professor, Dr. Gary Smith, who completed his last year of tenure in this position. Furthermore, a Kelley-Silver Fellow (graduate student), Grant Meyer of Montana State University, Bozeman, Montana, began his studies in the Fall of 1988 under the auspices of the Foundation. The faculty decided to offer a second Kelley-Silver Fellowship to a graduate student already in residence in the Department. The successful candidate is Steve Harlan, who held this fellowship for one year during the 1988-1989 academic year. In addition, the Foundation supported Maya Wheelock who completed her second year as a Kelley-Silver Fellow. The Foundation further continued to support faculty travel to scientific meetings for the purpose of presenting talks, chairing sessions, etc., as well as the Caswell Silver Distinguished Lecture Series, whose purpose is to bring outstanding scholars for short-term visits to the

Department. Furthermore, the members of the Board of the Caswell Silver Foundation, upon the recommendation of the faculty of the Department, have approved to annually award two Caswell Silver Meritorious Staff Awards in the amount of \$500.00 each to two outstanding, non-academic staff members of the Department. These awards are meant to be an expression of the deep appreciation of our faculty for the dedicated and invaluable services that our staff are providing to all of us in the Department. The awards for 1988-1989 were given to Sharon Fisher (Staff Assistant) and Stacy Kaser (Research Technologist).

Energy Exploration Education, Inc., a foundation set up to support our education programs in Petroleum Geology, periodically funds a Chair for the Visiting Distinguished Professor of Petroleum Geology. Dr. Bruce Black (President of Black Oil Company) once again served in this position in the Fall, 1988 semester and taught a course in Petroleum Geology (Geology 442). Our Geology Department Alumni Fellowship Fund, through the generosity of many alumni, friends, and industry has grown in the report period. This fund is used to supplement stipends of outstanding graduate students, in an attempt to attract them to our Department. In view of the generally low stipends for Teaching and Research Assistants, additional stipends from our Alumni Fellowship Fund have been very instrumental in bringing outstanding students to the Department who otherwise would not have come to UNM. Donors to the fund are listed in Appendix X. Furthermore, the Vincent C. Kelley Fellowship Fund was set up in memory of our colleague and friend, Vin Kelley, the proceeds of which will also be used to support graduate students.

The Department realizes the importance of maintaining close contacts with alumni and friends. To this end, we have periodically mailed newsletters and our 1986 Research Report of the Department of Geology and Institute of

Meteoritics to more than 800 individuals. Through the efforts of our alumnus, Pat Gratton, a UNM Geology Department Alumni reception was once again held at the AAPG convention. This year, the meeting was in San Antonio, Texas. A total of 42 alumni and friends attended the event.

SIGNIFICANT PLANS AND RECOMMENDATIONS

1. Faculty, staff and graduate assistant salaries must be increased significantly. Inadequate salaries for staff have already resulted in an extremely high turnover rate in personnel. Low graduate assistant salaries make it very difficult to attract outstanding graduate students to UNM. Faculty salaries continue to remain lower than those of geology faculty at most neighboring state universities. There is real concern that we will lose the best of our faculty, unless the salary situation improves.
2. Our Department has an outstanding reputation not only as a fine teaching, but also as a superb research institution. However, because of ever increasing emphasis on generation of student credit hours, faculty and research staff can spend less and less time in their research laboratories. We can only continue to maintain excellence in research if our staff support increases significantly. Specifically, we need to increase the FTE of our second word processor position from 0.75 to 1.0, and our draftsman from 0.50 to 1.0 FTE. Furthermore, the Stable Isotope Laboratory needs an additional 0.41 FTE to increase the technician position from 0.59 to 1.0 FTE.
3. The Department of Geology and Institute of Meteoritics have outstanding analytical laboratories which are also used for teaching during formal classes and for thesis and dissertation research. Yet, we have no funds available for the purchase of new teaching equipment, and maintenance of existing equipment. We estimate that our present needs are at \$160,000.00 for the purchase of teaching equipment and calculate an annual maintenance cost for equipment used for teaching of about \$80,000.00.

Clearly, we must receive some relief from UNM in this area if we are to maintain the excellence of our teaching programs at the undergraduate and graduate level.

4. The Department of Geology and Institute of Meteoritics have expanded considerably over the past several years, both in terms of personnel as well as sophisticated analytical laboratories. We have now reached a point where office and laboratory space for future expansion is no longer available in Northrop Hall. In the long term (i.e., next five years), we need to add a wing to Northrop Hall to allow expansion of ongoing programs. We will shortly present a detailed long-range plan to UNM authorities to justify expansion of the present Northrop Hall to accommodate new laboratories, teaching facilities, and office for faculty, staff and students.
5. Affirmative action. The Department of Geology adheres with enthusiasm to the University's affirmative action policies. As do most science and, particularly, geology programs in the nation, we also suffer from lack of minority applicants for faculty and staff positions and for our geology undergraduate and graduate programs. However, this has not, and should not, deter us from making strong efforts to attract minorities (and women) to our programs. We have been successful to attract two exceedingly qualified women to our faculty of 18, a relatively high percentage as far as Geology Departments are concerned, but, regrettably, lost one of these individuals to another university. Furthermore, one of our faculty is one half Hispanic American. Faculty members serve on numerous committees designed to attract minority students to geology and science in general. For example, Professor K. Keil was a member of a NASA committee (chaired by the then Associate Administrator, Dr. Hans

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Mark) chartered to increase the number of minorities entering careers in space science and technology. This committee organized the now highly successful NASA Minority Graduate Researchers Program. Professor W. Elston has been active in recruiting and aiding students from minority backgrounds since at least 1972, through the United States Geological Survey Minorities Participation Program, undergraduate minority student internships, and through scholarships for minority graduate students from the American Geological Institute. Professor Elston is active on two committees designed to attract minorities into the Earth Sciences, namely the Geological Society of America ad hoc committee on minorities in the geosciences, and the American Geological Institute Minorities Participation Committee.

APPOINTMENTS TO STAFF

Mabel T. Chavez, Editorial Assistant II; March 6, 1989.

Sharon M. Fisher, Staff Assistant; February 13, 1989.

Moh'd I. Ghweir, Thin Section Preparator; September 1, 1988.

Deborah J. Rhue, Clerical Specialist V; April 5, 1989.

SEPARATIONS FROM STAFF

Ninka E.A. Hainer, Office Manager; January 31, 1989.

Ishmael Hassan, Senior Research Associate II; May 15, 1989.

Kenneth K. Kietzke, Thin Section Preparator; August 15, 1988.

Spencer G. Lucas, Curator; July 31, 1988.

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ACTIVITIES OF THE FACULTY AND RESEARCH SCIENTISTS

TEACHING ACCOMPLISHMENTS, RECOGNITIONS,
AND CURRICULUM DEVELOPMENT

Roger A. Anderson

Courses Taught

Spring 1988: Faculty Scholar
Geology 492-001
Geology 599-001
Fall 1988: Geology 209
Geology 431
Geology 551-001
Geology 599-001

Douglas D. Brookins

Spring 1988: Geology 203 Earth Resources and Man
Geology 509 Environmental Geochemistry
Geology 101 Physical Geology
Summer 1988: Geology 209 Earth Environment
Fall 1988: Geology 545 Hazardous Waste Disposal
Geology 203 Earth Resources and Man* (class cancelled
erroneously by Geology Front Office Personnel)

In addition, I taught problems courses Geology 552 (Spring 1988) and Geology 551 (Fall 1988) to graduate and foreign exchange students.

Supervised M.S. thesis defense for S. Whiteley, Ph.D. Qualifying Examination for D.B. Ward: Committee member for Ph.D. Comprehensive Examination for M. Gonzalez and Ph.D. Qualifying examinations for D. Erskine and C. Bryan.

M.S. Advisor for: S.A. Whiteley and D. Milligan.

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Ph.D. Advisor for: A. Albrecht, P.A. Longmire, and D.B. Ward.

M.S. Committee Member for: E. Calvin, R. Finch, T. McCoy, K. Sims, and C. Williams.

Ph.D. Committee Member for: R. Abitz, C. Bryan, I. Casanova, P. Eberly, D. Erskine, J. Faulds, S. Harlan, J. McKinley, R. Metcalf, and P. Noll.

Short field course for WIPP site and surrounding parts of the Delaware Basin, southeastern New Mexico: Co-leader with S.J. Lambert (SNL).

Laura J. Crossey

Spring 1988: Geology 304 Sedimentary/Stratigraphy
and 314L

Geology 548 Clay Mineralogy

Summer, 1988: Geology 102 Historical Geology

Fall, 1988: Geology 101 Physical Geology

Geology 501 Sedimentary Geochemistry

Wolfgang E. Elston

Spring 1988: Geology 101 Physical Geology - Did not complete the semester due to illness.

Geology 471 Mineral Deposits - Did not complete the semester due to illness.

Geology 599 M.S. Thesis (1 student C. Bryan).

Geology 699 Ph.D. dissertation (3 students: R.J. Abitz, L.D. Nealey, S. Seaman)

Served as principal advisor to one additional Ph.D. candidate: C.W. Criswell.

Fall 1988: Geology 101 Physical Geology

Geology 265 Lunar and Planetary Geology

Geology 401 Seminar

Geology 491 Problems (1 student)

Geology 699 Ph.D. dissertation (3 students: R.J. Abitz, C.W. Criswell, L.D. Nealey).

Served as principal advisor to two additional graduate students: M.S. -

Katherine Verhage. Ph.D. - C. Bryan.

Other

UNM German Summer School; June 18-19, 1988: Guest lecturer, led field trip to Harding Mine.

Rodney C. Ewing

Spring 1988: Geology 101 Physical Geology

Geology 548 Seminar/Solid State Processes

Geology 548 Seminar/Clay Mineralogy

Fall 1988: Geology 301 Mineralogy

Geology 311-001 Mineralogy I Laboratory

Geology 311-002 Mineralogy I Laboratory

Geology 493 Special Problem/Honor's thesis

Geology 551 Special Problem/XRD short course

Geology 599 M.S. thesis hours

Geology 699 Ph.D. dissertation hours

Note: I also participated in a series of seminars in preparation for teaching Geology 101 (Physical Geology, Spring, 1989) as part of the Arts and Sciences Participatory Seminars (funded by the Ford Foundation).

John W. Geissman

Spring 1988: Geology 548 Rock Magnetism

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Summer 1988: Geology 319L Introductory Field Geology (Including
incorporation of new field projects).
Fall 1988: Geology 101 Physical Geology
Geology 490 Presentations

Jeffrey Grambling

Spring 1988: On sabbatical leave
Fall 1988: Geology 303 Igneous and Metamorphic Petrology
Geology 313L Igneous and Metamorphic Laboratory (2 sections)
Geology 514 Precambrian Geology

Note: Attended Geological Society of America Penrose Conference on teaching specialty: "Criteria for establishing the relative timing of pluton emplacement and regional deformation".

Stephen P. Huestis

Spring 1988: Geology 427 Solid Earth Geophysics
Geology 318 Application of mathematics in Earth Sciences
Fall 1988: Geology 318 Application of mathematics in Earth Sciences
Geology 225 Oceanography

Klaus Keil

Spring 1988:
Served as guest lecturer in all Geology 101 classes to advertise my Spring, 1989 Geology 265 class entitled "Lunar and Planetary Geology", as follows: October 21, 31 (3 sections), November 2, 8, 10, and 22, 1988. Together with other members of the Institute of Meteoritics organized and hosted the Institute of Meteoritics Brown Bag Seminar, with the following

speakers (names of student speakers are underlined):

G.J. Taylor (IM): Magmatism and impact on the aubrite parent asteroid:

evidence from the Norton County enstatite achondrite, January 29, 1988.

M. Boslough (Sandia National Laboratories): Shock wave physics and crater

formation continued: Including how to get meteorites from the Moon and Mars. February 12, 1988.

Tammy Dickinson DeNault (IM): Late-stage enrichment of Ge in the magma ocean:

Evidence from lunar basalts. March 4, 1988.

H.E. Newsom (IM): The geochemistry of the impactor in the impact hypothesis

for the origin of the Moon. March 4, 1988.

Kelli McCormick (IM): Sources of clasts in impact melts. March 4, 1988.

G.J. Taylor (IM): Magmatism and impact on the aubrite parent body: evidence

from the Norton County enstatite achondrite. March 4, 1988.

Rhian Jones (IM): The mineralogy of type IA chondrules in Semarkona (LL3.0):

disentangling the igneous and metamorphic histories of type 3 ordinary chondrites. March 4, 1988.

A.J. Brearley (IM): Nature and origin of matrix in the unique chondrite,

Kakangari: a TEM investigation. March 4, 1988.

E.R.D. Scott (IM): A new kind of primitive chondrite: Allan Hills 85085.

March 4, 1988.

E.S. Gladney (IM and Los Alamos National Laboratory): Nuclear and inductively

coupled plasma mass spectrometric methods in environmental analytical chemistry. April 8, 1988.

I. Casanova (IM): Petrology of ordinary chondrite breccias: evidence from a

study of Spanish meteorites. April 12, 1988.

T. McCoy (IM): Models for the "Metamorphism" of the chondrites. April 15,

1988.

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- B. French (NASA Headquarters, Washington, D.C.): Vredefort (South Africa)
bronzite granophyre: chemical evidence for origin as impact melt. April
26, 1988.
- R. Morris (IM): Assimilation/fractional crystallization models and their
applications to planetary sciences. May 6, 1988.
- Maya Wheelock (IM): Heat sources in the early solar system. May 13, 1988.
- K. Keil (IM): Enstatite meteorites and their parent bodies. July 15, 1988.
- T. Stephan (Max Planck Institute for Nuclear Physics, Heidelberg,
West-Germany): Shock-induced disturbance of the K-Ar system. July 25,
1988.
- C. Patterson (Los Alamos National Laboratory, Los Alamos, NM): Accretion of
the asteroid belt. August 5, 1988.
- H.E. Newsom, W. Elston, D. Iseri, and G. Graup (IM): Global catastrophies in
Earth history. October 29, 1988.

Cornelis Klein

Fall 1988: Geology 101 Physical Geology
Geology 486 X-ray mineralogy

Production of teaching materials: Since October, 1987 I have been in the
process of developing 35 exercises (for homework as well as laboratory
assignments) for a course, or course-sequence, in Minerals and Rocks.
This is now being published by John Wiley, New York, entitled "Minerals
and rocks: exercises in crystallography, mineralogy, and hand specimen
petrology", approximately 400 pages, publication date, July, 1989.

Albert M. Kudo

Spring 1988: Geology 225 Oceanography

Geology 302L Optical Mineralogy

Geology 491 Problems

Geology 551 Problems

Fall 1988: Geology 101 Physical Geology

Geology 303 Igneous and Metamorphic Petrology

Geology 313L Petrology Lab

Geology 531L Igneous Petrology

Barry S. Kues

Spring 1988: On sabbatical leave

Fall 1988: Geology 104 Life on Earth

Geology 411 Invertebrate Paleontology

Christopher Mawer

Spring 1988: Geology 417 Advanced Structure

Geology 302 Mineralogy II

Fall 1988: Geology 307 Structure

Geology 420 Advanced Field Geology

Leslie D. McFadden

Spring 1988: Geology 101 Physical Geology

Geology 516 Advanced Topics in Geomorphology and Soils

Geology 484 Soil Genesis

Geology 490 Geological Presentations

Geology 491 Problems in Geomorphology

Geology 551 Problems in Geomorph Research

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Stephen G. Wells

- Spring 1988: Ad Hoc Committee Member and curriculum development for the newly proposed program Water Resources Administration at the University of New Mexico.
- Curriculum and program development for a joint program in hydrogeology between the Departments of Geology and Civil Engineering at the University of New Mexico.
- Developed new laboratory exercises with teaching assistant for Geology 333L, Environmental Geology.

Recognition:

Selected as University of New Mexico Presidential Lecturer 1988-90.

Lee A. Woodward

- Spring 1988: Geology 105L Developed new laboratory manual and materials for Physical Geology.

Robyn Wright

- Spring 1988: Geology 441 Advanced Sedimentology
- Geology 304 Stratigraphy and Sedimentary Petrology
- Geology 263 Geology of National Parks
- Geology 551 Sedimentology Seminar

Crayton Yapp

- Spring 1988: Geology 101 Physical Geology
- Geology 405 Thermodynamic and Physical Foundations of Geochemistry
- Geology 410 Fundamentals of Geochemistry
- Geology 502 High Temperature Geochemistry

PUBLICATIONS

Books Authored

Eh-pH Diagrams for Geochemistry

D.G. Brookins

Springer-Verlag, Heidelberg and New York, 176 p. (1988)

Books Edited

Nuclear Waste Forms for the Future

W. Lutze and R.C. Ewing (eds.)

North-Holland Physics Publishing, Amsterdam, Netherlands, 778 p. (1988)

Cretaceous and Laramide Tectonic Evolution of Southwestern New Mexico

G.H. Mack, T.F. Lawton and S.G. Lucas (eds.)

New Mexico Geological Society, Field Conference Guidebook 39, 216 p. (1988)

Sequence Stratigraphy of Upper Cretaceous Strata of San Juan Basin, New Mexico
D. Nummedal, R. Wright, and D.J.P. Swift (eds.)

Society of Economic Paleontologists and Mineralogists/American Association of
Petroleum Geologists, Field Guidebook, Houston, Texas, 216 p. (1988)

Articles in Refereed Journals

Lacustrine varve formation through time

R.Y. Anderson and W.E. Dean

Paleogeography, Paleoclimatology, Palaeoecology, vol. 62, p. 215-235 (1988)

Vesicle zonation and vertical structure of basalt flows

J.C. Aubele, L.S. Crumpler and W.E. Elston

Journal of Volcanology and Geothermal Research, vol. 35, p. 349-374 (1988)

Seawater $^{87}\text{Sr}/^{86}\text{Sr}$ for the Late Permian Delaware Basin evaporites, New Mexico,
USA

D.G. Brookins

Chemical Geology, vol. 69, p. 209-214 (1988)

The indoor radon problem: Studies in the Albuquerque, New Mexico area

D.G. Brookins

Environmental Geology and Water Science, vol. 12, p. 29-42 (1988)

Chemistry, petrology, and origin of banded-iron lithologies from the 3800 MA
Isua supracrustal belt, west Greenland

R.F. Dymek and C. Klein

Precambrian Research, vol. 39, p. 247-302 (1988)

Metamict minerals: Natural analogues for radiation damage effects in ceramic nuclear waste forms

R.C. Ewing, B.C. Chakoumakos, G.R. Lumpkin*, T. Murakami, R.B. Greegor and F.W. Lytle

Nuclear Instruments and Methods in Physics Research, vol. B32, nos. 1-4, p. 487-497 (1988). (Also published in Nuclear Waste Materials: A Workshop on Radiation Damage Effects in Nuclear Waste Materials, (H. Matzke, ed.) p. 487-497.)

Paleomagnetism and rock magnetism of Quaternary volcanic rocks and Late Paleozoic strata, VC-1 corehole, Valles Caldera, New Mexico, with emphasis on remagnetization of Late Paleozoic strata

J.W. Geissman

Journal of Geophysical Research, vol. 93, p. 6001-6025 (1988)

Paleomagnetic and rock magnetic microanalysis, in combination with STEM techniques, as a functional method of identifying geologically stable RM

J.W. Geissman, S.S. Harlan* and A. Brearley

Geophysical Research Letters, vol. 15, p. 479-482 (1988)

Proterozoic tectonic assembly of New Mexico

J.A. Grambling, M.L. Williams* and C.K. Mawer

Geology, vol. 16, p. 724-727 (1988)

Paleomagnetic and isotopic dating of thrust belt deformation along the eastern edge of the Helena salient, northern Crazy Mountains, Montana

S.S. Harlan*, J.W. Geissman, D.R. Lageson and L.S. Snee

Geological Society of America Bulletin, vol. 100, p. 492-499 (1988)

A HRTEM characterization of scapolite solid solutions

I. Hassan and P.R. Buseck

American Mineralogist, vol. 73, p. 119-134 (1988)

Positive resolving kernals and annihilators in linear inverse theory

S.P. Huestis

Geophysical Journal, vol. 94, p. 571-573 (1988)

Uniform norm minimization for two-signed solutions

S.P. Huestis

Geophysics, vol. 53, p. 721-722 (1988)

Paleomagnetism of Ordovician alkalic intrusives and host rocks from the Pedernal Hills, New Mexico

M. Jackson, R. Van der Voo and J.W. Geissman

Tectonophysics, vol. 147, p. 313-323 (1988)

A large nautiloid specimen from the San Andres Formation (Permian; Leonardian) near Cloudcroft, New Mexico, with a review of nautiloids reported from the San Andres Formation

B.S. Kues

New Mexico Journal of Science, vol. 27, p. 99-110 (1987)

Source rock evaluation of Heath Formation (Mississippian) in Montana thrust belt

M.R. Longden, B.R. Banowsky and L.A. Woodward
Oil and Gas Journal, May 8, 1988, p. 61-63 (1988)

Type section of the Correo Sandstone Bed, Chinle Formation, Cibola County, New Mexico

S.G. Lucas, B.D. Allen* and S.N. Hayden*
New Mexico Journal of Science, vol. 27, p. 87-94 (1987)

Newberry's locality for Cretaceous plant fossils at Whetstone Creek, New Mexico

S.G. Lucas, A.P. Hunt* and K. Martini*
New Mexico Journal of Science, vol. 27, p. 95-98 (1987)

Type and reference sections of the Tucumcari, Mesa Rica and Pajarito formations, Cretaceous of east-central New Mexico

S.G. Lucas and M.J. Kisucky
New Mexico Geology, vol. 10, p. 82-89 (1988)

A Late Triassic cynodont from the American Southwest

S.G. Lucas and W. Oakes*
Palaeontology, vol. 31, p. 455-459 (1988)

Late Pleistocene (Rancholabrean) mammals from the Edith Formation, Albuquerque, New Mexico

S.G. Lucas, T.E. Williamson* and J. Sobus
New Mexico Journal of Science, vol. 28, p. 51-58 (1988)

Preferential leaching and natural annealing of alpha-recoil tracks in metamict betafite and semarskite

G.R. Lumpkin*, R.C. Ewing, and Y. Eyal
Journal of Materials Research, vol. 3 p. 357-368 (1988)

Alpha-decay damage in minerals of the pyrochlore group

G.R. Lumpkin* and R.C. Ewing
Physics and Chemistry of Minerals, vol. 16, p. 2-20 (1988)

Structural study of highly deformed Miguma phyllite and granite, vicinity of White Head Village, S.E. Nova Scotia: A reply to Hill and Raeside

C.K. Mawer and P.F. Williams
Maritime Sediments and Atlantic Geology, vol. 23, p. 115-157 (1988)

The distribution of calcium carbonate in desert soils: A model

L. Mayer, L.D. McFadden and J.W. Hardin
Geology, vol. 16, p. 303-306 (1988)

Lunar composition: A geophysical and petrological synthesis

S. Mueller, G.J. Taylor and R.J. Phillips
Journal of Geophysical Research, vol. 93, p. 6338-6352 (1988)

CEIOS

Igneous history of the aubrite parent asteroid: Evidence from the Norton County enstatite achondrite

A. Okada, K. Keil, G.J. Taylor and H.E. Newsom
Meteoritics, vol. 23, p. 59-74 (1988)

Chemical and isotopic evidence for lithospheric thinning beneath the Rio Grande rift

F. Perry, W.S. Baldrige and D.J. DePaolo
Nature, vol. 332, p. 432-434 (1988)

Enhanced residence of submicron Si-rich volcanic particles in the lower stratosphere

F.J.M. Rietmeijer
Journal of Volcanological and Geothermal Research, vol. 34, p. 173-184 (1988)

Non-stoichiometric feldspars in chondritic interplanetary dust

F.J.M. Rietmeijer
Meteoritics, vol. 23, p. 298-299 (1988)

On graphite in primitive meteorites, chondritic interplanetary dust, and interstellar dust

F.J.M. Rietmeijer
Icarus, vol. 74, p. 446-453 (1988)

On a chemical continuum in early Solar System dust at > 1.8 AU

F.J.M. Rietmeijer
Chemical Geology, vol. 70, p. 33 (1988)

Sulfides and oxides in comets

F.J.M. Rietmeijer
Astrophysical Journal, vol. 331, p. L137-L138 (1988)

Capture of an olivine micrometeorite by spacecraft in low-Earth orbit

F.J.M. Rietmeijer and G.E. Blanford
Journal of Geophysical Research, vol. 93 (B10), p. 11,943-11,948 (1988)

Alpine tussockland communities and vegetation-landform-soil relationships, Wapiti Lake, Fiordland, New Zealand

A.B. Rose, J.B.J. Harrison* and K.H. Platt
New Zealand Journal of Botany, vol. 26, p. 525-540 (1988)

Nature and origin of C-rich ordinary chondrites and chondritic clasts

E.R.D. Scott, A.J. Brearley, K. Keil, M.M. Grady, C.T. Pillinger, T.K. Mayeda, R.N. Clayton, R. Wieler and P. Signer
Proceedings of the 18th Lunar and Planetary Science Conference, p. 513-523 (1988)

An assessment of analytical techniques for the size analysis of fine-grained sediments

J.K. Singer, J.B. Anderson, K.P.N. Jones, L. Ledbetter, I. McCave and R. Wright
Journal of Sedimentary Petrology, vol. 58, p. 534-543 (1988)

Neogene synvolcanic and syntectonic sedimentation in central Washington

G.A. Smith

Geological Society of America Bulletin, vol. 100, p. 1479-1492 (1988)

Sedimentology of proximal to distal volcanoclastics dispersed across an active foldbelt: Ellenburg Formation (late Miocene), central Washington

G.A. Smith

Sedimentology, vol. 35, p. 953-977 (1988)

Eruptive style and location of volcanic centers in the Miocene Washington Cascade Range

G.A. Smith, N.P. Campbell, M.W. Deacon and M. Shafiqullah

Geology, vol. 16, p. 337-340 (1988)

Fossil Squamata from the San Jose Formation, early Eocene, San Juan Basin, New Mexico

R.M. Sullivan and S.G. Lucas

Journal of Paleontology, vol. 62, p. 631-639 (1988)

Color pattern on the selmacryptodiran turtle Neurankylus from the early Paleocene (Puercan) of the San Juan Basin, New Mexico

R.M. Sullivan, S.G. Lucas, A.P. Hunt* and T. Fritts

Natural History Museum of Los Angeles County, Contributions in Science No. 401, p. 1-9 (1988)

Navajosuchus is Allognothosuchus

R.M. Sullivan, S.G. Lucas and C. Tsentas

Journal of Herpetology, vol. 22, p. 121-125 (1988)

Sedimentation and tectonics of lower and middle Eocene Swauk Formation

S.B. Taylor*, S.Y. Johnson, G. Fraser and J. Roberts

Canadian Journal of Earth Science, vol. 25, p. 1020-1036 (1988)

Regional variations in tectonic geomorphology along a segmented boundary, Pacific coast of Costa Rica

S.G. Wells, T.F. Bullard*, C.M. Menges*, P.G. Drake*, P.A. Karas*, K.I.

Nelson*, J.B. Ritter* and J.W. Wesling*

Geomorphology, vol. 1, p. 239-265 (1988)

Dynamic recrystallization and associated exsolution in perthites: Evidence of deep-crustal thrusting

J.C. White and C.K. Mawer

Journal of Geophysical Research, vol. 93, p. 325-337 (1988)

SEDIDAT: A BASIC program for the collection and statistical analysis of particle settling velocity data

R. Wright and S.M. Thornberg

Computers and Geoscience, vol. 14, p. 55-81 (1988)

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Geometry and kinematics of a Miocene "accommodation zone" in the central Black and southern Eldorado Mountains, Arizona and Nevada

J.E. Faulds*, F.L. Hillemeier, and E.I. Smith

This Extended Land: Geological Journeys in the southern Basin and Range (D.L. Weide and M.L. Faber, eds.), Geological Society of America, Cordilleran Section, Field Trip Guidebook, p. 293-310 (1988)

Performance assessment of glass as a long-term barrier to the release of radionuclides into the environment

B. Grambow, W. Lutze, R.C. Ewing and L.O. Werme

Scientific Basis for Nuclear Waste Managements XI, Materials Research Society Proceedings, vol. 112, p. 531-541 (1988)

Electron microprobe analysis of basaltic glasses and associated alteration products

M.J. Jercinovic* and K. Keil

Microbeam Analysis, 1988, p. 495-497 (1988)

Observations on the late Pennsylvanian eurypterids of the Hamilton quarries, Kansas

B.S. Kues

Regional Geology and Paleontology of Upper Paleozoic Hamilton Quarry Area, Southeastern Kansas (G. Mapes and R. Mapes, eds.), Geological Society of America, South-Central Section, p. 95-104 (1988)

Cretaceous stratigraphy and biostratigraphy, Cooke's Range, Luna County, New Mexico

S.G. Lucas, B.S. Kues, S.N. Hayden*, B.D. Allen*, K.K. Kietzke, T.E. Williamson*, P. Sealey and R. Pierce

Southwestern New Mexico (S.G. Mack, T.F. Lawton and S.G. Lucas, eds.), New Mexico Geological Society, Field Conference Guidebook 39, p. 143-167 (1988)

Alpha-decay damage and the aperiodic structure of pyrochlore

G.R. Lumpkin* and R.C. Ewing

Proceedings of the 46th Annual Meeting of the Electron Microscopy Society of America, p. 470-471 (1988)

The clay-size fraction of CI chondrites Alais and Orgueil: An AEM study

I.D.R. MacKinnon and S. Kaser

Lunar and Planetary Science IX, p. 709-710 (1988)

Geochronologic studies of the Florida Mountains, New Mexico

R.K. Matheney, S. Shafiqullah, D.G. Brookins, P.D. Damon and E.T. Wallin

Southwestern New Mexico (G.H. Mack, T.F. Lawton and S.G. Lucas, eds.), New Mexico Geological Society, Field Conference Guidebook 39, p. 99-108 (1988)

Sources of clasts in impact melts

K. McCormick, G.J. Taylor, K. Keil, P.D. Spudis, R.A.F. Grieve and G. Ryder
Lunar and Planetary Science XIX, p. 748-749 (1988)

Obsidian hydration dating - Field, laboratory and modeling results
 B.P. McGrail, L.R. Pederson, D.M. Stockham, R.C. Ewing and L.S. Cordell
 Symposium on Materials Issues in Art and Archeology (P.B. Vandiver, J. Druzik
 and C. Stevenson, eds.), Materials Research Society Proceedings, vol. 123,
 p. 263-269 (1988)

Analytical electron microscopy of leached layers on synthetic basalt glass
 T. Murakami, R.C. Ewing and B.C. Bunker
 Scientific Basis for Nuclear Waste Management XI, Materials Research Society
 Proceedings, vol. 112, p. 737-748 (1988)

Khor Temiki: An enstatite achondrite with evidence of mixing of metal and
 sulfides from different sources
T. Ntaflos, K. Keil and H.E. Newsom
 Lunar and Planetary Science XIX, p. 870-871 (1988)

Nose Rock Point: Cyclicity in the Gallup Sandstone
 D. Nummedal, D.J. P. Swift and R. Wright
 Sequence Stratigraphy of Upper Cretaceous Strata of San Juan Basin, New Mexico
 (D. Nummedal, R. Wright and D.J.P. Swift, eds.), SEPM/AAPG Field Guidebook,
 Houston, Texas, p. 56-72 (1988)

Selenium geochemistry studies in the Bosque del Apache National Wildlife
 Refuge area, New Mexico
J.L. Persico* and D.G. Brookins
 Southwestern New Mexico (G.H. Mack, T.F. Lawton and S.G. Lucas, eds.), New
 Mexico Geological Society, Field Conference Guidebook 39, p. 211-220 (1988)

Titanium carbide and titania phases in particles of probable extraterrestrial
 origin
 A. Pun*, M.E. Zolensky and K.L. Thomas
 Lunar and Planetary Science XIX, p. 957-958 (1988)

Ultra fine-grained mineralogy and matrix chemistry of olivine-rich chondritic
 interplanetary dust particles
F.J.M. Rietmeijer
 Proceedings of the 19th Lunar and Planetary Science Conference, p. 513-521
 (1988)

Preliminary analytical electron microscope (AEM) results of natural "graphite"
 shocked at 20.7, 31.4, 40.4 and 59.1 GPA
F.J.M. Rietmeijer
 Lunar and Planetary Science XIX, p. 978-979 (1988)

A quantitative comparison of fine-grained chondritic interplanetary dust and
 Comet Halley dust
F.J.M. Rietmeijer
 Lunar and Planetary Science XIX, p. 980-981 (1988)

The elemental composition of interplanetary dust
 L.S. Schramm, D.E. Brownlee and M.M. Wheelock*
 Lunar and Planetary Science XIX, p. 1033-1034 (1988)

0510

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Soil development and landform evolution in deserts of the American Southwest

L.D. McFadden and S.G. Wells

Abstracts, Annual Meeting of the Ecological Society of America, vol. 69, p. 226-227 (1988)

Variations in the chemical potential of water between leucosomes and mesosomes in a layered anatectic migmatite

R.V. Metcalf* and J.A. Grambling

Geological Society of America, Abstracts with Programs, vol. 20, p. A161 (1988)

The stability field of stilpnomelane in Precambrian iron-formations

T. Miyano and C. Klein

Japanese Association of Mineralogists, Petrologists and Economic Geologists, Tokyo, p. (1988)

Normal and reverse geomagnetic field polarities in Late Permian red beds from northwest Texas: The end of the Kiaman Superchron

R. Molina-Carza, R. Van der Voo and J.W. Geissman

EOS, vol. 69, p. 340-341 (1988)

Metamictization in zircon--self annealing and aperiodicity

T. Murakami, B.C. Chakoumakos and R.C. Ewing

Annual Meeting of the Mineralogical Society of Japan, p. (1988)

Formation and evolution of alteration layers of borosilicate and basaltic glasses I: Initial stage

T. Murakami, M.J. Jercinovic* and R.C. Ewing

12th International Symposium on the Scientific Basis for Nuclear Waste Management, Materials Research Society, p. A/6 (1988)

Obsidian hydration dating - Field, laboratory and modelling results

L.R. Pederson, D.M. Strachan, R.C. Ewing and L.C. Cordell

Abstracts of Symposium on Materials Issues in Art and Archaeology, Materials Research Society, p. 231 (1988)

Indigenous carbon dioxide in FeOOH

H. Poths and C.J. Yapp

EOS, vol. 69, p. 1481

Geomorphic and pedologic evidence for polygenetic volcanism in Late Quaternary cinder cones: Examples from Cima volcanic field, California and Crater Flat/Lathrop Wells volcanic field, Nevada

C.E. Renault*, S.G. Wells and L.D. McFadden

Geological Society of America, Abstracts with Programs, vol. 20, p. A115 (1988)

The Late Quaternary geology of Cedar Creek alluvial fan, southwestern Montana: Causal mechanisms for fan sedimentation in the northern Rocky Mountains

J. Ritter, Y. Enzel*, J. Miller, S.G. Wells, M. Grubb, K. Hoover, S. Howes, G. Nadon, T. Olson, S. Reneau, D. Sack, D. Summa, I. Taylor, K.

Touyinhthiponexay, E. Yodis, N. Schneider and B. Ritter

Geological Society of America, Abstracts with Programs, vol. 20, p. A361

Kinematics of Neogene and contemporary deformation along the Lake Mead fault system, southern Nevada

H. Ron, J.W. Geissman, A. Nur and J. Faulds*

Geological Society of America, Abstracts with Programs, vol. 20, p. 225 (1988)

Abundances of As, Sb, Mo and W in the crust and mantle: Implications for terrestrial accretion and core formation through geologic time

K.W. Sims*, H.E. Newsom, E.S. Gladney and K. Keil

Abstracts presented to the Conference on the Origin of the Earth, Lunar and Planetary Institute, p. 83-84 (1988)

Intra-arc basins: Structure, stratigraphy, and resource potential

G. Smith

American Association of Petroleum Geologists Bulletin, vol. 72, p. 249 (1988)

Neotectonic influences on deposition of continental basin fill: An example from southeastern Arizona

G. Smith, M.W. Deacon and E.H. Lindsay

Geological Society of America, Abstracts with Programs, vol. 20, p. 316

Eocene to Miocene sedimentation trends within a forearc basin: Quebrada Huaracangana, East Pisco Basin, Peru

C.N. Stock, R.B. Dunbar and R. Wright

Geological Society of America, Abstracts with Programs, vol. 20, p. A80 (1988)

The role of impact in asteroid differentiation

G.J. Taylor

Meteoritics, vol. 23, p. 304-305 (1988)

Correlation of melange terranes, Klamath Mountains, California and Oregon

A. Thompson*, C.G. Barnes, M. Helper and N. Walker

Geological Society of America, Abstracts with Programs, vol. 20, p. 231 (1988)

Late Permian and Triassic paleopoles of North America: Deviations from the
Small-Circle (PEP) Tract

R. Van der Voo, R. Molina-Garza and J.W. Geissman

EOS, vol. 69, p. 338 (1988)

The Permian and Triassic apparent polar wander path of North America:
Implications for the PEP Track

R. Van der Voo, R. Molina-Garza and J.W. Geissman

EOS, vol. 69, p. 1158 (1988)

Geological and analytical error: What is the "real" Rb-Sr age?

D.B. Ward* and D.G. Brookins

EOS, vol. 69, p. 1516 (1988)

Holocene and historic arroyo evolution in the Zuni River Watershed, western
New Mexico

S.G. Wells

Geological Society of America, Abstracts with Programs, vol. 20, p. A361
(1988)

Late Quaternary history of Lake Mojave and surrounding areas, California

S.G. Wells, R.Y. Anderson, Y. Enzel*, W. Brown* and L.D. McFadden

Proceedings, California Academy of Science, vol. , p.

Arroyo cutting and flood events in the American Southwest: Role of historic
climate patterns, atmospheric circulation patterns, and volcanic activity

S.G. Wells, R. Balling and R. Cerverny

Geological Society of America, Abstracts with Programs, vol. 20, p. 242 (1988)

A geomorphic assessment of Quaternary volcanism in the Yucca Mountain area,
Nevada Test Site, southern Nevada

S.G. Wells, L.D. McFadden, C. Renault*, B.D. Turrin and B.H. Crowe

Geological Society of America, Abstracts with Programs, vol. 20, p. 242 (1988)

Generation and preservation of crystal-plastic mylonite-textures along
megathrusts

J.C. White and C.K. Mawer

Geological Society of America, Abstracts with Programs, vol. 20, p. A239
(1988)

Social behavior and population dynamics of the early Eocene "Condylarth"

Meniscotherium

T.E. Williamson*

International Symposium on Vertebrate Behavior as Derived from the Fossil
Record, Abstracts with Program, p. 21 (1988)

Facies, immigration events, and the distribution of the early Eocene mammal
Meniscotherium chamense in the San Juan Basin, New Mexico

T.E. Williamson* and S.G. Lucas

Abstracts, Symposium on Southwestern Geology and Paleontology, Museum of
Northern Arizona, 1988, p. 18

The taphonomy of two Meniscotherium assemblages of the Lower Eocene San Jose
Formation, San Juan Basin, New Mexico

T.E. Williamson* and S. McCarroll

New Mexico Geology, vol. 10, p. 66 (1988)

Sr-isotopic variations in fracture fillings, fluids, and rock of the Long
Valley Caldera, California

H.A. Wollenberg, F. Goff, D.G. Brookins and R. Kistler

EOS, vol. 69, p. 1481 (1988)

Tectonic setting of Au-Ag deposits hosted by Proterozoic strata along the
Lewis and Clark line, west-central Montana, U.S.A.

L.A. Woodward

8th International Conference on Basement Tectonics, Characterization and
Comparison of Precambrian through Mesozoic Continental Margins, Montana
Tech, Butte, Montana, August 8 - 12, 1988, p. 35 (1988)

Geology and precious-metal mineralization at the Lenny mine, Little Belt
Mountains, Montana

L.A. Woodward, J.L. Schutz, M.S. Fulp and B.J. Suchomel

Geological Society of Nevada, Symposium Proceedings, Bulk Mineable Precious
Metal Deposits of the Western United States, p. 747 (1988)

Oxygen isotope geochemistry and paleo temperatures of the Upper Ordovician
Neda Fm. ironstone

C.Y. Yapp

Geological Society of America, Abstracts with Programs, vol. 20, p. 192 (1988)

Oxygen isotopes in iron (III) oxides and a reexamination of some Precambrian
paleotemperature estimates,

C.J. Yapp

EOS, vol. 69, p. 518 (1988)

RESEARCH PROJECTS OR CREATIVE WORK IN PROGRESS

Roger Y. Anderson

Principal Investigator: NSF grant NSF ATM8707462, Climatic change in the ENSO (El Nino-Southern Oscillation) and lower frequency bands, Northeast Pacific Continental Margin: 2 years, \$76,426.00. Co-PI: J.V. Gardner, USGS, Menlo Park, California.

Principal Investigator: U.S. Geological Survey and NMWRI contract: Late Quaternary paleohydrology of the eastern Mojave River Drainage, southern California: Quantitative modeling of the late Quaternary Hydrologic cycle in large, arid watersheds: 2 years, \$142,000. Co-PIs: S.G. Wells and L.D. McFadden.

Principal Investigator: UNM RAC grant: Rapid climatic change in central New Mexico: \$1,543.

Grants and Proposals Submitted

NSF: High-resolution stratigraphy: Application to hydrologic-climatic reconstruction in southwestern United States: 2 years, \$78,674 (in review).

NSF: Climatic changes in the Fen₅O and lower frequency bands, northeast Pacific Continental Margin (Renewal): 3 years, \$28,397.

Douglas G. Brookins

Geochemical studies of the WIPP area, 1987-1988, Sandia National Laboratories, \$40,000.

Review of Culebra hydrogeochemical facies document, 1988, \$5,200.

Additional funding for geochemical studies of WIPP area, 1988, Sandia National Laboratories, \$5,000.

Radon studies in the Albuquerque, New Mexico area: Soil, indoor, air, water,
1988-1989, the Frost Foundation \$18,000.

Geochemical studies of WIPP area rocks and waters, 1988-1989, Sandia National
Laboratories, \$65,000.

National analogs and uranium series disequilibrium studies, southeastern New
Mexico, Sandia National Laboratories, \$65,000.

Radon studies in arid southwestern USA, \$80,000, EPA.

M.S. Thesis Defended

S.A. Whiteley, "Geochemistry and petrography of Tertiary intrusives in the
eastern San Pedro Mountains, Santa Fe County, New Mexico".

Ph.D. Dissertation in Progress

A. Albrecht, "Cenozoic volcanism and crustal evolution of central New Mexico".

P.A. Longmire, "Geochemical studies of iron contamination from gasoline
storage tank spills".

Cooperative Studies

Provenance and diagenesis studies of the Morrison Formation, San Juan Basin,
New Mexico; with C. Turner-Peterson, USGS, R.L. Hay, University of
Illinois.

Geochronologic and stable isotopic studies of the Florida Mountains, New
Mexico with R.K. Matheney, ASU.

Strontium isotopic studies of fracture filling carbonates, Long Valley
Geothermal Field, California with H.A. Wollenberg, LBL, F. Goff, LANL.

Initial Sr (87/86) of Central American Volcanics with A.M. Duo, UNM, C.
Cigolini, Italy.

Petrologic and geochronologic studies in the Sinai Peninsula, Israel, with
A.E. Shimron, Israel Geological Survey.

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Laura J. Crossey

An examination of the stability of water-soluble organic compounds in diagenetic systems, American Chemical Society (Petroleum Research Fund), July, 1987 - August, 1989, \$18,000.

Correlation of organic-inorganic diagenesis in sandstones intercalated with organic-rich sediments: Pliceance Creek Basin, northwestern Colorado, Sandia National Laboratories, October, 1987 - October, 1988, \$30,000.

Mineralogical characterization of geological section at the WIPP site: assessment of organic constituents in the Culebra Dolomite, Sandia National Laboratories, October, 1987 - September, 1989, \$23,447.

Organic/inorganic interactions in sedimentary basins: experimental studies of water-soluble organic compounds, Shell Development Company, September, 1988 - September, 1989, \$10,000.

Diagenetic processes in sandstones intercalated with organic-rich sediments: Pliceance Creek Basin, northwestern Colorado, Sandia National Laboratories, October, 1988 - October, 1989, \$30,000.

Environments of sedimentation and controls on diagenesis of the Creede Formation, Colorado, DOSECC, Division of NSF, October, 1988 - October, 1990, \$68,394. This project was funded by DOSECC initially, but prior to starting, the agency (DOSECC) was unable to meet its financial obligations. The modified proposal has been resubmitted to NSF: Environments of sedimentation and controls on diagenesis of the Creede Formation, Colorado, National Science Foundation, June, 1989 - June, 1991, \$58,721.

Wolfgang E. Elston

Application of volcanology to lunar and planetary geology, NASA grant NGR 32-003-062, January, 1988 to March, 1988, \$5,000.

Application of volcanology to lunar and planetary geology, NASA grant NGR 32-004-062, April, 1988 - March 1989, \$40,000.

Pyroclastic eruptions of Mount St. Helens on May 18, 1980, NSF grant EAR 87-0744, September, 1987 - February, 1990, \$30,000.

Kainozoic intraplate orogenic andesite, North American Basin and Range - Colorado Plateau transition, British National Environmental research Council grant administered by The Open University, U.K. Co-PI: C.J. Hawkesworth, October, 1987 - September 30, 1988, \$8,750.

Application of volcanology to lunar and planetary geology, NASA grant NGR 32-004-062, May, 1989 - April, 1991, \$179,935, in review.

Research on possible impact of the Bushveld Complex, South Africa, with sabbatical leave visitor, Dr. David Twist, University of Pretoria, South Africa. Jointly sponsored by NASA grant and Institute for Geological Research on the Bushveld Complex, University of Pretoria.

Research on geochemistry of volcanic rocks of the Mogollon Mountains and Gila Valley, southwestern New Mexico, with NATO post-doctoral Fellow, Dr. Luane Martens, sponsored by Deutscher Akademischer Austauschdienst.

M.S. Thesis

Bryan, C.R., Geology of geochemistry of mid-Tertiary volcanic rocks in the eastern Chiricahua Mountains, southeastern Arizona, 137 p.

Ph.D. Dissertation

Seaman, S.J., Geology and petrogenesis of ash-flow tuffs and rhyolitic lavas associated with the Gila Cliff Dwellings Basin-Bursum caldera complex, southwestern New Mexico, 170 p.

Ph.D. Dissertations Read as External Examiner

Dadd, K.A., The stratigraphy, volcanic evolution and tectonic setting of the
Comerong Volcanics, southeastern Australia, Macquarie University, Sydney,
New South Wales, Australia.

Buck, M., Source areas and geochemistry of Lower Carboniferous ignimbrites,
southern New England Orogen, N.S.W., Australia, Macquarie University,
Sydney, New South Wales, Australia.

Schweitzer, J.K., The transition from the Dullstroom Basalt Formation to the
Rooiberg Felsite Group, Transvaal Sequence: A volcanological,
geochemical and petrological investigation (revised text), University of
Pretoria, South Africa.

Personal Unsponsored Research

Volcanic and tectonic evolution of southwestern New Mexico.

Association of mineral deposits and volcanic centers.

Extensional tectonics of the Basin and Range province, United States and
Mexico.

Rodney C. EwingSponsored Research

Radiation effects and annealing kinetics in crystalline complex Nb-Ta-Ti
oxides, phosphates and silicates, Office of Basic Energy, DOE, 1987-1990,
\$315,700.

Low temperature alteration of Natural Uraninite, Swedish Nuclear Power and
Waste Company, 1988-1990, \$80,000.

Characterization of alteration layers in nuclear waste glasses in the
MIIT/WIPP tests, Hahn-Meitner Institute, Berlin, Germany, 1988-1989,
\$35,000.

Hydration of high-silica glasses, Battelle Pacific Northwest Laboratories,
1987-1988, \$20,000.

Un-sponsored Research

Pegmatite mineralogy and genesis.

Graduate Students

Ph.D. Candidates: M.J. Jercinovic (with K. Keil) - graduated

G.R. Lumpkin - graduated

M.L. Miller

R. Eby

M.S. Candidate: R. Cowan - graduated

J. Warner

R. Finch

B.S. Honors: P.J. Stout - graduated

C.J. Northrup, Jr.

FRG Diploma: Klaus Giesen

John W. Geissman

Paleomagnetic investigation of banded series units of the Stillwater Complex,
Montana with special emphasis on the lower norite units hosting the
platinum group metal horizon, Anaconda Minerals Company, \$5,000.

Paleomagnetic and structural evaluation of the Early Jurassic Humboldt
Lopolith and associated units, Fencemaker Allochthon, west-central
Nevada, American Chemical Society-Petroleum Research Fund, January, 1985
- August, 1988, \$32,000.

A detailed geometric and kinematic analysis of a major accommodation zone in
highly extended terrane, central Black and southern Eldorado Mountains,
Arizona and Nevada, National Science Foundation, Earth Sciences Crustal

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- Structure and Tectonics, submitted January, 1987 and August, 1987, \$46,458, January 1, 1988 - December, 1989 (with C.K. Mawer and J. Faulds (graduate student), funded completely on January 1, 1988.
- An automated, small-access superconducting rock magnetometer for paleomagnetic and rock magnetic microanalysis, Department of Energy University Research Instrumentation Program, \$115,000, awarded August, 1987.
- Paleomagnetic and rock magnetic investigation of New Mexico rocks, New Mexico Bureau of Mines and Mineral Resources, \$2,700.
- Paleomagnetic and rock magnetic studies of a young magmatic intrusion beneath Inyo Craters, Long Valley Caldera, California, Department of Energy, Basic Energy Sciences, submitted June, 1988, \$34,572, December, 1988 - May, 1989 (accepted for funding to beginning in Spring, 1989).
- Processes of crustal extension in east-central Idaho, National Science Foundation Earth Sciences Crustal Structure and Tectonics, submitted August, 1987, \$94,900 (with Ronald L. Bruhn, University of Utah), funded at approximately 85% on January 1, 1988.
- Construction of a low-induction space to house instrumentation for paleomagnetic and rock magnetic microanalysis, NSF (instrumentation and facilities), June, 1988, \$15,000.
- Paleomagnetic investigation in the northern Nevada Rift area, NSF (Crustal Structure and Tectonics), June, 1988, \$48,000.
- Magnetostratigraphy and $^{40}\text{Ar}/^{39}\text{Ar}$ geochronology of volcanic rocks of late Eocene and Oligocene age, New Mexico, Texas and Colorado, NSF (Crustal Structure and Tectonics), June, 1988, resubmitted December, 1988, \$45,000 (2 years).
- Structural and paleomagnetic investigations bearing on the thermochemical history of the Yellowstone Hotspot, NSF (Crustal Structure and

Tectonics), December, 1988, \$130,000 (with Mark Anders, Columbia University) (2 years).

Paleomagnetic investigations in the northern Nevada Rift area, basin and range province (UNM Research Allocations Committee), March, 1988, awarded, \$1,200.

Magnetostratigraphy and $^{40}\text{Ar}/^{39}\text{Ar}$ geochronology of volcanic rocks of late Eocene and Oligocene age, New Mexico, Texas, and Colorado, American Chemical Society (Petroleum Research Fund), December, 1988, \$40,000 (2 years).

Paleomagnetism and $^{40}\text{Ar}/^{39}\text{Ar}$ thermochronology of Precambrian mafic dikes and other igneous units, central and southern Rocky Mountains, USA, National Science Foundation, Earth Sciences Crustal Structure and Tectonics, submitted June, 1988, \$85,000, January, 1989 - December, 1990 (awarded).

Un-sponsored Research

Generic paleomagnetic/rock magnetic investigations of:

Cenozoic volcanic rocks (Arizona, New Mexico, Idaho, Nevada, California)

Lower Paleozoic plutons (New Mexico, Texas, Colorado)

Precambrian intrusions (New Mexico, Colorado, Wyoming, Montana, Minnesota, Arizona, California)

Mesozoic sedimentary rocks (New Mexico, west Texas, Colorado)

Paleozoic sedimentary rocks (New Mexico, Nevada, Utah)

Meteorite ejecta blankets (West Germany)

Cenozoic intrusives (Utah, Nevada, New Mexico)

Mesozoic intrusives (New Mexico, Nevada, Colorado)

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Jeffrey A. Grambling

Sponsored Research

Infiltration pathways during the regional metamorphism of pelitic schists and quartzites, May 1987 - November, 1989, National Science Foundation, \$86,900.

Geologic mapping in the Cimarron Mountains, New Mexico, May, 1988 - September, 1988, New Mexico Bureau of Mines and Mineral Resources, \$3,692.

Structural, metamorphic, and $^{40}\text{Ar}/^{39}\text{Ar}$ studies of Proterozoic tectonism in New Mexico, National Science Foundation, February, 1989 - July, 1991, \$110,021.

Proposal submitted: Zinc, manganese, and metamorphic phase relations in staurolite-bearing rocks, June, 1989 - December, 1992, National Science Foundation, \$120,261.

Un-sponsored Research

Internally consistent geothermometry and water barometry in rocks with garnet, chlorite and quartz.

Manganese in garnet and its effects on the assemblages and compositions of coexisting minerals.

The use of mineral inclusions to track progressive changes in the composition of the metamorphic fluid phase, Pecos Baldy, New Mexico.

M.S. and Ph.D. Students Supervised

R.S. Smith, Structural and metamorphic evolution of Proterozoic rocks in the northern Taos Range, Taos County, New Mexico, M.S. thesis, 85 p, 1988.

R.V. Metcalf, The genesis of migmatites in the Proterozoic metamorphic rocks of Aspen Basin, New Mexico, Ph.D. thesis, in progress (with C.K. Mawer).

C.A. White, Mineralogic and stable isotopic studies of metamorphic fluid infiltration, Ph.D. thesis, in progress.

A. Thompson, Tectonic assembly of Proterozoic rocks in the Manzano Mountains, central New Mexico, Ph.D. thesis, in progress.

Stephen P. Huestis

Paper in progress: Some comments on the optimization problem for shear stress magnitude.

Klaus Keil

Acquisition of the LaPaz Collection of meteorites, UNM Foundation, July, 1987 - December, 1988, \$35,000.

Partial funding of the acquisition of the LaPaz Collection of meteorites, National Aeronautic and Space Administration, February, 1987 - January, 1989, \$100,000.

Petrologic and geological investigations in support of engineering and design studies, Nevada Test Site, Sandia National Laboratories, October 1, 1987 - September, 1988, \$87,251.

Mineralogic characterization of the geologic section at the WIPP site, Sandia National Laboratories, October, 1987 - September, 1988, \$75,473.

Origin of meteorite parent bodies and the Moon, National Aeronautics and Space Administration, February, 1988 - January, 1989, \$250,000.

Mineralogy, petrology and chemistry of Spanish meteorites: origin and evolution of meteorite parent bodies, National Science Foundation, June, 1986 - May, 1988, \$50,000.

Accretion and core formation in the Earth: evidence from siderophile and chalcophile trace elements, National Science Foundation, June, 1988 - November, 1990, Co-PI, \$88,400.

Mineralogic characterization of the geologic section at the WIPP site, Sandia National Laboratories, October, 1988 - September, 1989, \$80,053.

Petrologic and geological investigations in support of engineering and design studies, Nevada Test Site, Sandia National Laboratories, October, 1988 - September, 1989, \$93,934.

Origin of meteorite parent bodies and the Moon, National Aeronautics and Space Administration, February, 1989 - December, 1989, \$217,135.

Post-doctoral Fellows Supported by my Grants

Dr. A.J. Brearley (Ph.D., University of Manchester, England, 1984).

Dr. Rhian Jones (Ph.D., University of Manchester, England, 1986).

Graduate Students Supported as Research Assistants by my Grants and Contracts

M.G. Bersch, I. Casanova, T. Dickinson, P. Noll, K. McCormick, T. McCoy, R. Morris, M. Wheelock, and K. Sims

Undergraduate Students Supported by my Grants

Sharissa Malik

Cornelis Klein

Sponsored Research

Geochemistry and sedimentology of some essentially unmetamorphosed iron-formation sequences, National Science Foundation grant EAR-8415681, April, 1985 - September, 1988, \$153,000.

Comparative geochemistry and sedimentology of several essentially unmetamorphosed Proterozoic iron-formations, National Science Foundation grant EAR-8617805, September, 1987 - February, 1990, \$100,000.

Collaborative research: Paleobiology of the Proterozoic, National Science Foundation grant EAR-8611685, June, 1986 - November, 1988, \$8,300.

Co-editor with J.W. Schopf of *The Proterozoic Biosphere: a multidisciplinary study*, 2 volumes, Cambridge University Press, publication date 1991.

Ph.D. Dissertation in Progress

A.J. Kaufman, "Isotopic and petrologic studies of Proterozoic iron-formation (South Africa), and late Proterozoic carbonate sequences (East Greenland and the Svalbard)", Indiana University, Bloomington, Indiana (co-advisors: J.M. Hayes, Indiana, and A.M. Knoll, Harvard University).

Albert M. Kudo

NSF-grant proposal written and submitted for \$99,001.

Manuscript on Mexican volcano (Orizaba) written and ready to submit for publication.

Manuscript on Costa Rican volcano (Poas) written and ready to submit for publication.

Research continuing on Mexican volcano (Orizaba), Costa Rican volcanoes, and Japanese volcanoes.

Barry S. Kues

Systematic studies of mid-Pennsylvanian gastropods from the Sangre de Cristo (New Mexico) and Franklin (Texas) Mountains.

Study of Permian invertebrates from the San Andres Formation of west-central New Mexico.

Taxonomy, variability, paleoecology, and evolution of several species of the lower Cretaceous oyster Texigryphaea from Kansas, Oklahoma, Texas, and New Mexico.

Book, "Geology of New Mexico" (with S.G. Lucas).

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Christopher K. Mawer

NASA, with L.D.R. Mackinnon and F.J.M. Rietmeijer, Shock metamorphism of cosmic dust analogs, \$34,550.

NSF, with J.A. Grambling, Structural, metamorphic, and $^{40}\text{Ar}/^{39}\text{Ar}$ studies of Proterozoic tectonism in New Mexico, \$110,021.

Leslie D. McFadden

Sponsored Research

Late Quaternary paleohydrology of the eastern Mojave River Drainage, southern California, Quantitative modelling of the late Quaternary hydrologic cycle in large arid watersheds, New Mexico Water Resources Research Institute, U.S. Geological Survey (Co-PI), September, 1986 - December, 1988, \$143,700.

Evaluation of the late Quaternary tectonics, terrace development and soil formation along the North Branch of the San Andres fault in the Santa Ana Waste area, southern California, U.S. Geological Survey (Co-PI), May, 1987 - September, 1988, \$9,686.

Ecology and biology of endangered salamanders, U.S. Fish and Wildlife Department, \$4,228.

Regional patterns of soil formation are paleoclimatic inferences from remotely sensed images, Land Processes Branch, National Aeronautics and Space Administration (Co-PI), February, 1988 - January, 1991, \$4,450.

Climate and soil development over long and short time spans, U.S. Geological Survey, August - October, 1988, \$3,100.

Research on climatic and temporal effects on soil development in the western United States and emphasis on long term, average rates and shorter term

fluxes of atmospheric dust in response to climatic fluctuation, U.S.

Geological Survey, September, 1987 - September, 1988, \$10,000.

Un-sponsored Research

Soil-geomorphic investigations in volcanic fields of the southwestern United States.

M.S. Thesis Completed

Paul A. Karas, "Quaternary alluvial sequence of the upper Pecos River and a tributary, Glorieta Creek, north central New Mexico."

John R. Wesling, "Glacial chronology and soil development in Winsor Creek Drainage basin, southernmost Sangre de Cristo Mountains, New Mexico."

M.S. Thesis in Progress

Teresa R. Royek, "Soil stratigraphy in eolian deposits mantling late Pleistocene basalt flows, Cima volcanic field, Mojave Desert, California."

Christina Terhune, "Soil-geomorphic relations of alluvial fans and fluvial terraces of the Harquahala Valley and the Gila Bend Mountains in the Sonoran Desert, Arizona."

Ph.D. Dissertation in Progress

Paul O. Eberly, "Mineralogy and chemistry of weathering in a soil chronosequences of the Transverse ranges, southern California."

Bruce, B.J. Harrison, "Spatial and temporal variability of soils on a suite of terraces, Cajon Pass, southern California."

Stephen G. Wells

New Projects

Los Alamos National Laboratory, \$57,722, Petrologic and geochemical studies of volcanic rocks in support of the Nevada Nuclear Waste Storage Investigation, May, 1988 - September, 1988, with F. Perry.

Los Alamos National Laboratory, \$95,000, Petrologic and Geochemical studies of volcanic rocks in support of the Nevada Nuclear Waste Storage investigation, October, 1988 - September, 1988, with F. Perry.

Los Alamos National Laboratory - IGPP, \$11,000, Quaternary evolution of fluvial systems in the northern Rio Grande Rift: Implications for vertical crustal uplift and rift tectonics, October, 1988 - September, 1989.

U.S. Fish and Wildlife, \$8,900, Catalog of hydrologic information for the middle Rio Grande, September, 1988 - May 1989.

Projects Continued

National Science Foundation, \$57,620, Collaborative research on aseismic ridge subduction in Costa Rica: Mechanisms and geomorphic evidence for crustal uplift, January, 1986 - December, 1989.

New Mexico Water Resource Research Institute and U.S. Geological Survey, \$143,696*, Late Quaternary paleohydrology of the eastern Mojave river Drainage, southern California: Quantitative assessment of the late Quaternary hydrologic cycle in large arid watersheds, January, 1986 - December, 1988; * = includes cost sharing.

Un-sponsored Research

Alluvial fan processes in the western United States.

Geomorphology of volcanic landforms in the western United States.

Regional patterns of soil formation and paleoclimatic influences from remotely sensed images.

Geomorphic and neotectonic evolution of fluvial systems in the northern Rio Grande rift area.

Thesis and Dissertation Completed

C.M. Menges, "Late Quaternary fault scarps, mountain front landforms, and Plio-Quaternary rupture segmentation of a range-front fault, Sangre de Cristo Mountains, New Mexico," Ph.D.

Theses/Dissertations in Progress (informal titles)

- Y. Enzel, Historic and Holocene climatic and flood history of the Mojave River, California, Ph.D.
- T. Bullard, Fluvial geomorphic evolution along a convergent plate boundary, Costa Rica, Ph.D.
- M. Gonzalez, Fluvial geomorphology and neotectonics of the Rio Chama, northern Rio Grande rift, Ph.D.
- C. Renault, Geomorphic evolution of volcanic cone slopes, Cima volcanic field, California, M.S.
- P. Drake, Quaternary geology and neotectonics of the coastal piedmont, Quepos area, Costa Rica, M.S.
- T. Skirvin, Late Cenozoic evolution of the eastern Mojave Block boundary area, California, M.S.
- W. Brown, Late Quaternary geology of the pluvial Lake Mojave, California, M.S.
- F. Pazzaglia, Alluvial fan development along a segmented mountain front, northern Rio Grande rift, M.S.

Lee A. Woodward

Research on tectonics of Lewis and Clark line, Montana.

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Robyn Wright

Sponsored Research

Texaco, Inc., Paleogene geology of the Pisco Basin, southwest Peru, May, 1988 - May, 1990, \$35,000.

The University of New Mexico Research Allocations Committee, Marine Gilbert Deltas: Anomalous sedimentologic features along the ancient Peruvian Coast, July, 1987 - June, 1988, \$2,500.

M.S. Thesis Completed

John M. Holbrook, Depositional history of lower Cretaceous Strata in north-eastern New Mexico: Implications for Regional tectonics and sequence stratigraphy.

Ph.D. Dissertation Completed

Lawrence N. Smith, Basin analysis of the lower Eocene San Jose Formation, San Juan Basin, New Mexico and Colorado.

Crayton J. Yapp

Sponsored Research

The stable isotope and minor element geochemistry of iron (III) oxide rocks and minerals, supported by the National Science Foundation, February, 1988 - July, 1990, \$90,158.

A study of selective dissolution as an aid to the determination of isotopic paleotemperatures from finely intergrown minerals, supported by the UNM research Allocations Committee, October, 1987 - June, 1988, \$2,481.

Articles in Review

Oxygen isotope effects associated with the solid state FeOOH to Fe_2O_3 phase transformation, submitted to Geochimica et Cosmochimica Acta (1988).

Bruce Allen (M.S. student)

1. Presented talk, "Triassic stratigraphy near Lamy, Santa Fe County, New Mexico," N.M. Geological Society Spring Meeting, Socorro, New Mexico, April 15.

Roger Y. Anderson (Faculty)

1. Presentation to National Academy of Sciences, Board of Radioactive Waste Management, Albuquerque, New Mexico, February 18.
2. Presented invited talk, "Propagation of ENSO-like variability into strong Pleistocene climatic cycles, northeast Pacific continental margin," American Society of Limnology and Oceanography, Symposium on Paleolimnology-Paleoceanography, Boulder, Colorado, June 12-16.
3. Attended Workshop on Regional Adjustments to Climatic Change, NOAA, Boulder and Aspen, Colorado, August 8-12.
4. Presented invited talk, "Conversion of low-frequency climatic change into cyclic stratification through seasonal forcing: A mechanism applicable to the Cretaceous," International Union of Geological Sciences, Global Sedimentary Geology Program, Workshop on Cretaceous Resources, Events and Rhythms, Perugia, Italy, September 15.
5. Attended Geological Society of America National Meeting, Denver, Colorado, October 31 - November 3.
6. Invited testimony, U.S. House of Representatives, Subcommittee on Energy and Power, Hearing on Legislation Adopted by the Committee on Interior and Insular Affairs for the WIPP Withdrawal Act of 1988, Washington, D.C., September.

Douglas G. Brookins (Faculty)

1. Presented talk, "Oklo and indoor radon," UNM Geology 401 seminar, Albuquerque, New Mexico, January 28.
2. Presented talk, "The WIPP site: A geologist's view", Evening Optimists Club, Albuquerque, New Mexico, March.
3. Presented talk, "Indoor and soil radon in the Albuquerque, New Mexico area," Geological Society of America Cordilleran Section Meeting, Las Vegas, Nevada, March 29-31.
4. Presented talk, "Revised Eh-pH diagrams (25°C, one bar) for uranium and transuranic elements: Application to radwaste studies," Materials Research Society Spring Meeting, Reno, Nevada, April 5-9.
5. Presented talk, "The WIPP Site: A geologist's view," Jewish War Veterans, Albuquerque, New Mexico, April 17.
6. Presented invited talk (as visiting scholar), "Oklo and radioactive waste disposal," Atomic Energy Agency of Canada, Whiteshell Nuclear Research Establishment, Pinawa, Manitoba, May 16, 17.
7. Presented talk, "Uranium deposits in sandstone as analog for spent fuel rod disposal," American Nuclear Society Annual Meeting, San Diego, California, June 2-4.
8. Presented talk, "WIPP site studies," Northwest Albuquerque Kiwanis Club, Albuquerque, New Mexico, June 8.
9. Presented talk, "WIPP: A geologist's view," U.S. District Court Clerks, Albuquerque, New Mexico, June 10.
10. Presented talk, "Geochronologic and geochemical studies of marine evaporites, Delaware Basin, New Mexico," Geological Society of America Penrose Conference, Oxley, Ontario, August 30-September 2.

11. Presented talk, "WIPP studies: An update," Jewish War Veterans, October 16.
12. Presented talk, "Transuranic element Eh-pH diagrams: Application to radioactive waste disposal in rocks," Geological Society of America National Meeting, Denver, Colorado, November 1-3.
13. Presented talk, "Sr-isotopic variations in fracture fillings, fluids and rocks of the Long Valley, California geothermal field," American Geophysical Union Fall Meeting, San Francisco, California, December 5-9.
14. Presented talk, "Eh-pH diagrams applied to problems of chemical waste disposal: Arsenic, cadmium, mercury and antimony," American Geophysical Union Fall Meeting, San Francisco, California, December 5-9.
15. Member, Committee on Natural Analogues for Radioactive Waste Disposal, Commission of European Communities.
16. Member, Committee on Committees, Mineralogical Society of America.
17. Board of Directors, Americans for Rational Energy Alternatives.
18. Editor-in-Chief, Geochemical Society Special Publications.
19. Associate Editor, Applied Geochemistry (journal), International Association of Geochemistry and Cosmochemistry.
20. Editor-in-Chief, Uranium (journal).

Thomas Bullard (Ph.D. student)

1. Presented talk, "Geomorphic and pedogenic evolution of an emergent coastal piedmont, Osa Peninsula, Costa Rica: Implications for latest Quaternary tectonism and fluvial adjustments," Geological Society of America National Meeting, Denver, Colorado, October 31 - November 3.

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James Callian (Ph.D. student)

1. Presented talk, "Paleomagnetism and deformational response to regional extension; Walker Lane Region, western Great Basin," American Geophysical Union Fall Meeting, San Francisco, California, December 12.

Rachel Cowan (M.S. student)

1. Presented talk, "Fresh water alteration of basaltic glass, Hanauma Bay, Oahu, Hawaii: A natural analogue for the alteration of borosilicate glass in fresh water," 12th International Symposium on the Scientific Basis for Nuclear Waste Management, Materials Research Society, Berlin, West Germany, October 7-15.

C. William Criswell (Ph.D. student)

1. Attended West Indies Explosive Volcanism Workshop, French West Indies, March 6-16.

Laura J. Crossey (Faculty)

1. Co-chairperson, Panel on Research Management, Rocky Mountain Technical Forum, Department of Energy, Office of Fossil Energy, Golden Colorado, June.
2. Presented talk, "Clay mineral diagenesis in the Morrison Formation, San Juan Basin, New Mexico," Clay Minerals Society 25th Annual Meeting, Grand Rapids, Michigan, September.
3. Presented invited lecture, "Diagenetic processes in sedimentary basins: Organic-inorganic interactions," Pennsylvania State University, State College, Pennsylvania, November 1.

ACTIVITIES IN LEARNED AND PROFESSIONAL SOCIETIES

Richard Abitz (Ph.D. student)

1. Presented talk, "Geology and petrogenesis of the northern Emory Cauldron," UNM Geology 401 seminar, Albuquerque, New Mexico, April 7.
2. Presented talk, "Rising melt zones: Origin of the volcanic-arc to within plate magmatic transition in ignimbrites during extensional stages of orogenies," Geological Society of America National Meeting, Denver, Colorado, October 31 - November 3.

Achim Albrecht (Ph.D. student)

1. Presented invited talk, "Variaciones geoquimicas a traves de los limites principales entre terrenos del norte de Mexico," (in Spanish), regional meeting of Fresnillo (a Mexican mining company), Chihuahua, Mexico, April 14.
2. Presented invited talk, "Geochemische Tiefensondierung anhand Tertiarer Vulkanite in Nord Mexiko," (in German), University of Trier, West Germany, June 10.
3. Presented talk, "Voyage to mantle-crust boundary in northern Mexico," UNM Geology 401 seminar, Albuquerque, New Mexico, November 17.
4. Chaired session, and presented talk, "Geochemical variations along a major terrane boundary in northern Mexico," American Geophysical Union Fall Meeting, San Francisco, California, December 9.

Bruce Allen (M.S. student)

1. Presented talk, "Triassic stratigraphy near Lamy, Santa Fe County, New

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Mexico," N.M. Geological Society Spring Meeting, Socorro, New Mexico,
April 15.

Roger Y. Anderson (Faculty)

1. Presentation to National Academy of Sciences, Board of Radioactive Waste Management, Albuquerque, New Mexico, February 18.
2. Presented invited talk, "Propagation of ENSO-like variability into strong Pleistocene climatic cycles, northeast Pacific continental margin," American Society of Limnology and Oceanography, Symposium on Paleolimnology-Paleoceanography, Boulder, Colorado, June 12-16.
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Laura J. Crossey (Faculty)

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3. Presented invited lecture, "Diagenetic processes in sedimentary basins: Organic-inorganic interactions," Pennsylvania State University, State College, Pennsylvania, November 1.

Paul Drake (M.S. student)

1. Presented talk, "Spatial variations in Quaternary tectonism and landscape evolution of the coastal piedmont, Puerto Quepos area, Costa Rica," Geological Society of America National Meeting, Denver, Colorado, October 31 - November 3.

Paul Eberly (Ph.D. student)

1. Presented talk, "Pedogenic iron oxyhydroxides and oxides (PIO) in upper argillic horizons of soils of the Cajon Pass area, Transverse Ranges, California," American Geophysical Union Fall Meeting, San Francisco, California, December 4-9.

Wolfgang Elston (Faculty)

1. Field trip leader, 39th Annual N.M. Geological Society Field Conference, southwestern New Mexico, October 5-8.
2. Presented poster session, "Proterozoic Bushveld-Vredefort catastrophe: Possible causes and consequences," Lunar and Planetary Institute/National Academy of Sciences Conference on Global Catastrophes in Earth History, Snowbird, Utah, October 20-23.
3. Presented talk, "Exploration of the Solar System," Downtown Rotary Club, Albuquerque, New Mexico, November 8.
4. Presented talk, "The Bushveld Complex, South Africa, as terrestrial analog of a lunar mare," American Geophysical Union Fall Meeting, San Francisco, California, December 6-11.
5. Member, Steering Committee and Field Trip Coordinator, 1989 General Assembly, International Association for Volcanology and Chemistry of the Earth's Interior.
6. Member, Working Group on Explosive Volcanism and Working Group on Petrological Data Files, International Association for Volcanology and Chemistry of the Earth's Interior.
7. Member, Commission 17 (Moon and Planets), International Astronomical Union.

8. Member, U.S. Geological Society Galilean Satellites Geological Mapping Team.
9. Member, Advisory Committee on Geological map of New Mexico, New Mexico Bureau of Mines and Mineral Resources.
10. Member, American Geological Institute Minorities Participation Advisory Committee.
11. Member, Geological Society of America Committee on Minorities.

Yehouda Enzel (Ph.D. student)

1. Presented talk, "Late Pleistocene - early Holocene lake stand events recorded in cored lake deposits and in shear features, Silver Lake playa, eastern Mojave Desert, southern California," Geological Society of America, Cordilleran Section Meeting, Las Vegas, Nevada, March 27 - April 1.
2. Presented talk, "Large-scale "anomalous" North Pacific storm patterns recorded in the Mojave River hydrologic system," American Geophysical Union Fall Meeting, San Francisco, California, December 4-9.

Daniel Erskine (Ph.D. student)

1. Presented talk, "Geochemistry of rocks with absarokitic and shoshonitic affinities from the Absaroka volcanic field, Wyoming," Geological Society of America Cordilleran Section Meeting, Las Vegas, Nevada, March 29-31.
2. Presented talk, "Geochemistry of rocks with shoshonitic affinities, Absaroka volcanic field, Wyoming," American Geophysical Fall Meeting, San Francisco, California, December 7.

James E. Faulds (Ph.D. student)

1. Presented talk, "Geometry and kinematics of a major accommodation zone in the highly extended upper-plate rocks of the northern Colorado River trough, northwestern Arizona and southern Nevada," Geological Society of America Cordilleran Section Meeting, Las Vegas, Nevada, March 27-31.
2. Presented talk, "Major structural controls on the early Tertiary paleogeography of the Salt River Canyon region in east-central Arizona," Geological Society of America, Cordilleran Section Meeting, Las Vegas, Nevada, March 27-31.
3. Presented talk and poster session, "Geometry and kinematics of accommodation zones," California-Arizona Crustal Transect Interim Synthesis Meeting, U.S. Geological Survey, Flagstaff, Arizona, May.
4. Presented talk, "Implications of the style of deformation along a major accommodation zone on kinematic models of rifted continental crust," Geological Society of America National Meeting, Denver, Colorado, October 30 - November 3.
5. Presented talk, "Paleomagnetic evidence of large-magnitude tilting of crystalline terranes in the northern Colorado River extensional corridor, northwestern Arizona and southern Nevada," American Geophysical Union Fall Meeting, San Francisco, California, December 4-9.

John W. Geissman (Faculty)

1. Presented talk, "Paleomagnetism in the Basin and Range Province," Rice University, January 27.
2. Attended Annual Meeting of Deep Observation and Sampling of the Earth's Crust, Inc., Pasadena, California, February 25-26.

3. Presented talk, "Paleomagnetic investigations at UNM," Albuquerque Geological Society, Albuquerque, New Mexico, February 16.
4. Presented talk, "Kinematics of Neogene and contemporary deformation along the Lake Mead Fault System, southern Nevada," Geological Society of America, Cordilleran Section Meeting, Las Vegas, Nevada, March 29 - April 1.
5. Presented talk, "The Earth's magnetic field and its fossil record," Optimist's Club, Albuquerque, New Mexico, May 6.
6. Presented talk, "Paleomagnetism applied to problems in structural geology," University of Utah, May 9.
7. Presented talk, "Paleomagnetic and rock magnetic microanalysis: Historical background rationale, methodology, and current and future research," UNM Geology 401 seminar, Albuquerque, New Mexico, September 1.
8. Presented talk, "Rock magnetism of silicic intrusive and extrusive rocks, Inyo Domes, California," University of Michigan, October 21.
9. Chaired symposium and presented 2 talks, "Precambrian paleomagnetism of the central and western United States," and "The rock magnetic record of silicic magma emplacement, Inyo Domes, California," Geological Society of America National Meeting, Denver, Colorado, October 30 - November 3.
10. Attended and chaired session, Annual Meeting, American Geophysical Union, San Francisco, California, December 4-9.
11. Attended Katmai CSDP Meeting, San Francisco, California, December 6.
12. Appointed Associate Editor, Geological Society of America Bulletin.

Jeffrey A. Grambling (Faculty)

1. Chaired Spring Meeting of N.M. Geological Society, Socorro, April 15.

2. Presented talk, "Deformation of the 1445 Ma Sandia Granite, New Mexico," Geological Society of America, Penrose Conference, Mariposa, California, September 12.
3. Presented talk, "Metamorphism and the Proterozoic tectonic evolution of New Mexico," Arizona State University, Tempe, Arizona, September 21.
4. Presented talk, "Extensional deformation as the cause of regional metamorphism in New Mexico," Geological Society of America National Meeting, Denver, Colorado, November 1.
5. Presented 2 talks, "The Proterozoic tectonic assembly of New Mexico," and "The infiltration of metamorphic fluids in a complexly deformed metasedimentary sequence," Southern Methodist University, Dallas, Texas, November 18.
6. Associate Editor, Journal of Metamorphic Petrology.

Steven Harlan (Ph.D. student)

1. Presented talk, "Bruhnes Chron geomagnetic excursion recorded during the latest Pleistocene, Albuquerque, New Mexico, U.S.A.," NATO Advanced Studies Institute, University of Newcastle-upon-Tyne, United Kingdom,
2. Presented talk, "Preliminary paleomagnetic data from Proterozoic mafic dikes, southern Tobacco Root Mountains, southwest Montana," American Geophysical Union Fall Meeting, San Francisco, California, December 4-9.

J.B.J. Harrison (Ph.D. student)

1. "Presented talk, "Geomorphic controls on the spatial variability of soils developed on a terrace surface in the Cajon Pass area, southern California," Geological Society of America National Meeting, Denver, Colorado, October 30 - November 3.

New Mexico Geological Society Spring Meeting, Socorro, New Mexico,
April 15.

John Husler (Staff Chemist)

1. Member, Geostandards International Working Group, France.

David A. Iseri (M.S. student)

1. Presented talk, "A re-examination of the paleomagnetism and rock magnetism of the suevite at Ries Meteorite Crater, West Germany," American Geophysical Union Fall Meeting, San Francisco, California, December 4-9.

Michael J. Jercinovic (Ph.D. student)

1. Presented talk, "Electron microprobe analysis of basaltic glasses and associated alteration products," Microbeam Analysis Society Meeting, Milwaukee, Wisconsin, August 7-12.

Klaus Keil (Faculty)

1. Presented talk, "Meteoritic breccias: Implications for asteroid histories," UNM Geology 401 Seminar, Albuquerque, New Mexico, February 4.
2. Chaired session, Lunar and Planetary Science Conference, Houston, Texas, March 14-18.
3. Presented invited talk, "Meteoritic breccias: Implications for asteroid histories," Department of Geology and Astronomy, New Mexico State University, Las Cruces, New Mexico, April 4-5.
4. Presented talk, "Enstatite meteorites and their parent bodies," Hawaii Institute for Geophysics, University of Hawaii, Honolulu, Hawaii, June 14.

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5. Presented invited talk, "Mineralogy and petrology of the Lunar Highlands crust," Hawaii Institute of Geophysics, University of Hawaii, Honolulu, Hawaii, July 7.
6. Presented the Leonard Medal lecture (invited), "Enstatite meteorites and their parent bodies," Meteoritical Society 51st Annual Meeting, Fayetteville, Arkansas, July 18-22.
7. Presented invited talk, "Geochemistry of the Solar System," Albuquerque Geological Society, Albuquerque, New Mexico, August 16.
8. Presented invited talk, "Geology of Mars," Albuquerque Astronomical Society, Albuquerque, New Mexico, August 27.
9. Presented invited talk, "Chaos in the early Solar System: Evidence from Meteorites," Homecoming, 1988, University of New Mexico, Albuquerque, New Mexico, October 7.
10. Presented invited talk, "Geological sciences at the University of New Mexico," Governor's Economic Advisory Committee, University of New Mexico, Albuquerque, New Mexico, October 21.
11. Presented invited talk, "The shallowwater Texas, meteorite: Evidence for chaos in the early solar system," University of Texas, Austin, Texas, October 27.
12. Presented invited talk, "Meteoritic breccias: Implications for asteroid histories," University of Texas, Austin, Texas, October 28.
13. Presented invited talk, "Chaos in the early solar system: Evidence from meteorites," 21 Club, University of New Mexico, Albuquerque, New Mexico, November 21.
14. Member, Advisory Committee, Institute of Geophysics and Planetary Physics, University of California and Los Alamos National Laboratory.

9. U.S. Representative, International Mineralogical Association, Commission on History and Teaching.

Albert M. Kudo (Faculty)

1. Presented talk on geology, volcanology, geophysics and interpretation of landsat imagery of Zunil geothermal project, flanks of Santa Maria volcano, Guatemala City.

Barry S. Kues (Faculty)

1. Presented talk, "Eurypterids from the upper Pennsylvanian limestones near Hamilton, Kansas," Symposium of Geology and Paleontology of Hamilton Quarry area, Geological Society of America, South-central Section Meeting, Lawrence, Kansas, March 14.
2. Attended New Mexico Geological Society Annual Field Conference, Deming, New Mexico, October 5-8.
3. Editor, New Mexico Journal of Science and Member of Executive Committee, New Mexico Academy of Science.
4. Editor, UNM Press series of books on New Mexico Natural History.

Daniel Larsen (Ph.D. student)

1. Presented talk, "Lower to Middle Jurassic volcanoclastic rocks in the Beardmore Glacier area, Transantarctic Mountain, Antarctica," Geological Society of America National Meeting, Denver, Colorado, October 30 - November 3.

Patrick Longmire (Ph.D. student)

1. Presented talk, "Hydrogeochemical interactions and evolution of acidic

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solutions in soils and groundwater," UNM Geology 401 seminar,
Albuquerque, New Mexico, September 15.

Spencer G. Lucas (Research Scientist/Curator)

1. Presented talk, "The hot-blooded dinosaurs," New Mexico Museum of Natural History, Albuquerque, New Mexico, February 23.
2. Presented talk, "Triassic strata in the Hubbell Springs fault zone, Valencia county, New Mexico," New Mexico Geological Society Spring Meeting, Socorro, New Mexico, April 15.
3. Presented talk, "The Bisti Badlands," New Mexico Museum of Natural History, Albuquerque, New Mexico, May 14.
4. Presented talk, "Principles of Biochronology," New Mexico Museum of Natural History, Albuquerque, New Mexico, May 18.
5. Presented talk, "Paleontology of the San Juan Basin," Southwest Institute, UNM, June 8.
6. Presented talk, "Paleontology of early Cenozoic Coryphodon (Mammalia, Pantodonta)," International Symposium on Vertebrate Behavior as Derived from the Fossil Record, Bozeman, Montana, September 6-12.
7. Presented talk, "Late Triassic lake in central New Mexico," Symposium on Southwestern Geology and Paleontology, Museum of Northern Arizona, Flagstaff, Arizona, September 23-25.
8. Presented talk, "Geology of El Malpais," Sandia Laboratories, Albuquerque, New Mexico, October 18.
9. Member, Executive Committee, New Mexico Geological Society and Managing Editor of New Mexico Geological Society Annual Guidebooks.
10. Elected Vice-President, Albuquerque Geological Society.

Gregory Lumpkin (Ph.D. student)

1. Presented talk, "Alpha-decay damage and annealing effects in natural pyrochlores: Analogues for long-term radiation damage in actinide, pyrochlore, structure-types," 12th International Symposium on the Scientific Basis for Nuclear Waste Management, Materials Research Society, Berlin, West Germany, October 7-15.

Ian Mackinnon (Research Scientist)

1. Presented talk, "The clay-sized fraction of CI chondrites Alais and Orgueil: An AEM study," 19th Lunar and Planetary Science Conference, Houston, Texas, March 14-18.
2. Member, NASA Cosmic Dust Subcommittee for Sample Allocations.
3. Member, NASA Steering Committee for Cosmic Dust Collection Facility.

Kim Martini (Undergraduate student)

1. Presented talk, "Fossil vertebrates from the Menefee Formation (Cretaceous) Sandoval County, New Mexico," New Mexico Geological Society Spring Meeting, Socorro, New Mexico, April 15.

Christopher K. Mawer (Faculty)

1. Presented invited talk, "Modern concepts in structural geology: Practical Aspects," FMC Corporation, Denver, Colorado, January 14.
2. Presented invited talk, "Proterozoic intracratonic orogeny, central Australia," University of Missouri, Columbia, Missouri, April 20.
3. Presented talk, "Paleomagnetic and STEM results from the 1400 Ma Laramie Anorthosite and Sherman Granite, Laramie Range, Wyoming," American Geophysical Union Spring Meeting, Baltimore, Maryland, May.

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4. Presented invited talk, "Mechanics of gold-quartz vein formation," University of Queensland, Brisbane, Australia, June 10.
5. Presented invited talk, "Kinematic analysis of a major accommodation zone, northern Colorado extensional corridor, USA," Bureau of Mineral Resources, Canberra, Australia, June 27.
6. Presented invited talk, "Kinematic indicators in shear zones," Eighth International Conference on Basement Tectonics, Butte, Missouri, August 8-12.
7. Presented Poster, "Deformation of the 1445 Ma Sandia pluton, New Mexico," Penrose Conference on Criteria for Establishing the Relative Timing of Pluton Emplacement and Regional Deformation, Mariposa, California, September 10-15.
8. Presented poster, "Deep crustal shear zones," NATO A S I Course on Exposed Cross-sections of the continental crust, Killarney, Ontario, September 16-27.
9. Presented invited talk, "Tectonic evolution of the Greenville Province, Ontario, Canada," Southern Methodist University, Dallas, Texas, November 11.
10. Presented talk, "A model for rapid melting in crustal shear zones: Implications for mechanisms of melt migration," American Geophysical Union Fall Meeting, San Francisco, California, December 4-9.

Leslie D. McFadden (Faculty)

1. Presented talk, "The use of pedological data as a Quaternary dating method," and co-led conference fieldtrip, Geological Society of America, Cordilleran Section Meeting, Las Vegas, Nevada, March 27 - April 1.

2. Presented invited talk, "Soil development and land form evolution in deserts of the American Southwest," 73rd Annual Meeting of the Ecological Society of America, Davis, California, August 17.
3. Presented talk, "Soil development and landscape evolution in deserts," UNM Department of Biology Colloquium, October 5.
4. Attended Geological Society of America National Meeting, Denver, Colorado, October 31 - November 3.
5. Presented invited talk, "Critical factors controlling calcic soil formation in arid regions," American Society of Agronomy Annual Meeting, Anaheim, California, November 29.
6. Editorial Board of Catena (journal).

Rodney Metcalf (Ph.D. student)

1. Presented talk, "Variations in the chemical potential of water between leucosomes and mesosomes in a layered anatectic migmatite," Geological Society of America National Meeting, Denver, Colorado, November 1.

Frank Perry (Research Scientist)

1. Attended Cordilleran Section, Geological Society of America Meeting, Las Vegas, Nevada, March 28-30.
2. Presented talk, "Evolution of the magmatic system at Mount Taylor, New Mexico," UNM Geology 401 seminar, Albuquerque, New Mexico, November 3.
3. Attended American Geophysical Union Fall Meeting, San Francisco, California, December 5-9.

Harald Poths (Research Staff)

1. Presented talk, "Indigenous carbon dioxide in FeOOH," American

Geophysical Union Fall Meeting, San Francisco, California, December 4-9.

Claire Renault (M.S. student)

1. Presented talk, "Geomorphic and pedologic evidence for polygenetic volcanism in late Quaternary cinder cones: Examples from Cima volcanic field, California and Crater Flat/Lathrop Wells volcanic field, Nevada," Geological Society of America National meeting, Denver, Colorado, October 31 - November 3.

Frans J.M. Rietmeijer (Research Scientist)

1. Presented talk, "A quantitative comparison of fine-grained chondritic interplanetary dust and comet Halley dust," 19th Lunar and Planetary Science Conference, Houston, Texas, March 14-17.
2. Presented talk, "Non-stoichiometric feldspars in interplanetary dust," 51st Annual Meeting of Meteoritical Society, Fayetteville, Arkansas, June 16-21.
3. Presented talk, "On a chemical continuum in early Solar System dust at > 1.8 Au," International Congress of Geochemistry and Cosmochemistry, Paris, France, August 17 - September 2.
4. Presented talk, "Two major types of cosmic dust," Space Research Institute, Academy of Sciences, Moscow, USSR, November 22.
5. Presented talk, "Mineralogy of cosmic dust particles," Vernadsky Institute, Academy of Sciences, Moscow, USSR, November 24.
6. Member Cosmic Dust Working Group Panel, Lunar and Planetary Institute.

W.K. Sims (M.S. student)

1. Presented talk, "Abundances of As, Sb, Mo, and W in the crust and mantle:

Implications for terrestrial accretion and core formation through geologic time," Conference on the Origin of the Earth, Berkeley, California, December 1-3.

Gary Smith (Caswell Silver Research Scientist)

1. Presented talk, "The role of sedimentation, volcanism and tectonism in the stratigraphic development of terrestrial arc-adjacent basins," Louisiana State University, Baton Range, Louisiana, January 19.
2. Presented talk, "The role of sedimentation, volcanism and tectonism in the stratigraphic development of terrestrial arc-adjacent basins," University of Texas, Arlington, Texas, January.
3. Attended Houston Geological Society short-course, "Sequence stratigraphic interpretation of seismic, well, and outcrop data," Houston, Texas, March 19.
4. Presented invited talk, "Intra-arc basins: Structure, stratigraphy, and resource potential," Symposium on Structural and Stratigraphic Evolution of Convergent Basins, American Association of Petroleum Geologists, Annual Convention, Houston, Texas, March 20-23.
5. Attended American Association of Petroleum Geologists, Field Trip, Upper Cretaceous Sequence Stratigraphy of the San Juan Basin, New Mexico, March 24-26.
6. Convened Geological Society of America Penrose Conference, Volcanic Influences on Terrestrial Sedimentation, Vancouver, Washington, August 29 - September 2.
7. Attended Friends of the Pleistocene, Rocky Mountain Cell, field conference in Tonto Basin, Arizona, October 13-15.

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8. Attended Geological Society of America field trip "Pennsylvanian - Permian Depositional System and Cycles, Eagle Basin, Colorado," October 29-30.
9. Presented talk, "Nontectonic influences on deposition of continental basin fill: An example from southeastern Arizona," Geological Society of America National Meeting, Denver, Colorado, October 31 - November 3.
10. Presented talk on research activities in southeastern Arizona, U.S. Geological Survey, Denver, Colorado, November 4.
11. Presented talk, "Evaluating volcanic influences on sedimentation and the sedimentary record of volcanism," Department of Geology, New Mexico Tech, Socorro, New Mexico, November 10.
12. Presented invited talk, "An isostatic model for basin development in and adjacent to the central Oregon High Cascade Range," Workshop on Geological, Geophysical, and Tectonic Setting of the Cascade Range, U.S. Geological Survey, Monterey, California, December 1-4.

Amy Thompson (Ph.D. student)

1. Presented poster session, "Correlation of melange terranes, Klamath Mountains, California and Oregon," Geological Society of America National Meeting, Denver, Colorado, October 31 - November 3.

David B. Ward (Ph.D. student)

1. Presented talk, "Geological and analytical error: What is the "real" Rb-Sr age?", American Geophysical Union Fall Meeting, San Francisco, California, December 5-9.

Stephen G. Wells (Faculty)

1. Presented talk, "A geomorphic assessment of Quaternary volcanism in the Yucca Mountain area, Nevada test site, southern Nevada," Geological Society of America Cordilleran Section Meeting, Las Vegas, Nevada, March 27 - April 1.
2. Presented talk, "Arroyo cutting and flood events in the American Southwest: Role of historic climatic patterns, atmospheric circulation patterns and volcanic activity," Geological Society of America Cordilleran Section Meeting, Las Vegas, Nevada, March 27 - April 1.
3. Presented invited talk, "Late Quaternary history of Lake Mojave and surrounding areas," Second Biennial Desert Conference, Southern California Academy of Science, Northridge, California, May 15.
4. Presented talk, "Holocene and historic arroyo evolution in the Zuni River watershed, western New Mexico," Geological Society of America National Meeting, Denver, Colorado, October 31 - November 3.
5. Member, National Park Service, Post-fire Ecological Assessment Committee (to advise on ecological impacts of 1988 Yellowstone Park fires).
6. Member, Editorial Board, Geology (journal).
7. Member, Editorial Board, Geomorphology (journal).

Thomas E. Williamson (M.S. student)

1. Presented talk, "The taphonomy of two Meniscotherium assemblages of the Lower Eocene San Jose Formation, San Juan Basin," New Mexico Geological Society Spring Meeting, Socorro, April 15.
2. Presented talk, "Social behavior and population dynamics of the early Eocene "condylarth" Meniscotherium," International Symposium on

Vertebrate Behavior as Derived from the Fossil Record, Bozeman, Montana, September 6-12.

3. Presented talk, "Facies immigration events and the distribution of the early Eocene mammal Meniscotherium chamense in the San Juan Basin, New Mexico," Symposium on Southwestern Geology and Paleontology, Museum of Northern Arizona, Flagstaff, Arizona, September 23-25.

Lee A. Woodward (Faculty)

1. Presented talk on tectonics and ore deposits to Hecla Mining Company, Reno, Nevada, April.
2. Presented talk, "Tectonics of the Montana thrust belt," UNM Geology 401 seminar, Albuquerque, New Mexico, April 28.
3. Attended Tobacco Root Geological Society Annual Meeting, Missoula, Montana, July 13-16.
4. Presented talk, "Tectonic setting of Au-Ag deposits hosted by Proterozoic strata along the Lewis and Clark line, west-central Montana, U.S.A.," Eighth International Symposium on Basement Tectonics, Butte, Montana, August 8-12.

Robyn Wright (Faculty)

1. Presented talk, "Paleogene geology of East Pisco Basin, Peru," Texaco, Inc., Latin American Research Group, Coral Gables, Florida, January 24-25.
2. Field trip co-leader, Society of Economic Paleontologists and Mineralogists Field Trip, Sequence Stratigraphy of Upper Cretaceous strata of San Juan Basin, New Mexico, March 23-26.

3. Attended New Mexico Geological Society Spring Meeting, Socorro, New Mexico, April 15.
4. Attended International Global Correlation Program 156 Field Workshop, Pisco Basin, Peru, May 16-25; presented talk, "Cenozoic nearshore clastic deposits of the Pisco Basin," May 16.
5. Attended New Mexico Geological Society Fall Field Conference, Deming, New Mexico, October 5-8.
6. Attended Geological Society of America National Meeting, Denver, Colorado, October 28 - November 4.
7. Presented talk, "Cyclicality in marine shoreface deposits: Examples from the Cretaceous Western Interior, U.S.", Victoria University Research School of Earth Sciences, Wellington, New Zealand, December 22.
8. Treasurer, New Mexico Geological Society.

Crayton J. Yapp (Faculty)

1. Presented invited talk, "Isotopic paleoclimatic indicators in rust," Rubey Colloquium, University of California, Los Angeles, March 18.
2. Presented talk, "Oxygen isotopes in iron (III) oxides and a reexamination of some Precambrian BIF paleotemperature estimates," American Geophysical Union Spring Meeting, Baltimore, Maryland, May 16-19.
3. Presented talk, "Oxygen isotope geochemistry and paleotemperatures of the Upper Ordovician Neda Formation ironstone," Geological Society of America National Meeting, Denver, Colorado, October 31 - November 3.

OTHER PROFESSIONAL ACTIVITIES

Roger Y. Anderson

U.S. Geological Survey, Paleoclimate Research Program: Eastern Pacific Continental Margin (EEZ) Project, Menlo Park, California: Summer research at USGS Branch of Pacific Marine Geology, Palo Alto, California. Elk Lake, Minnesota Paleoclimate Reconstruction Project, Denver Colorado: Investigations at USGS Federal Center, Denver, Colorado.

University of Rhode Island, Graduate School of Oceanography: U.S. EPA, A study of the sediments of Narragansett Bay. Development and deployment of directional vector sediment traps in Pettaquamskett and Narragansett estuaries.

NOAA Center for Ocean Analysis and Prediction, Monterey, California: Workshop on "Regional Adjustment to Climatic Change", Boulder and Aspen, Colorado, August 8 - 12, 1988. Development of a pole to pole "paleobarometer", remote-sensing, observation, and sampling program for the eastern Pacific; Meeting at NCAR, Boulder, Colorado, August.

Monterey Bay Aquarium Research Institute, Monterey, California: Preparations for deployment of sediment traps in Monterey Canyon, California, Summer, 1988.

Review of numerous scientific articles and proposals for journals and National Science Foundation.

Douglas G. Brookins

Editor-in-chief for Uranium, international journal (Elsevier Science Publishers).

Associate Editor, Journal of Applied Geochemistry, international journal
(Pergamon Press, official journal for International Association Geochem.
Cosmochem.).

Editor-in-chief, Special Publication Series, Geochemical et Cosmochemica Acta.

Reviewed papers for the Materials Research Society (3), Journal of Applied
Geochemistry (5), Geophysical Review Letters (1), Economic Geology (2),
Geochim. Acta (1), American Mineral (1).

Reviewed proposals to NSF (3).

Off Campus Talks

The WIPP Site: A geologist's view (Evening Optimist Club, March, 1988).

The WIPP Site: A geologist's view (Jewish War Veterans, April, 1988).

WIPP Site Studies (Northwest Albuquerque Kiwanis Club, June, 1988).

WIPP: A geologist's view (U.S. District Court Clerks, June, 1988).

ABCs of radioactive wastes and their disposal (Los Compadres Sunday School
Class, September, 1988).

WIPP studies: An update (Jewish War Veterans, October, 1988).

Oklo and radioactive waste disposal (Atomic Energy Agency of Canada,
Whiteshell Nuclear Research Establishment, May 1988, invited lecture).

Penrose Conference: Geochronologic and geochemical studies of marine
evaporites, Delaware Basin, New Mexico (100th Penrose Conference on Origin of
Marine Evaporites; Oxley, Ontario, Canada, August 30 - September 2, 1988).

Reviewer of selected superfund sites in New Mexico.

Field work in Colorado (two trips), New Mexico (several field trips), Arizona
(one trip), California (one trip).

Continued assistance for preparation of video on indoor radon problem (with D.
Mose, George Mason University).

The indoor radon problem in Albuquerque (Impact, TV Channel 13, October, 1988).

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Consultant/reviewer for Southwest Research Institute, Office of Nuclear Waste Management, San Antonio, Texas.

Laura J. Crossey

Invited lecture at Pennsylvania State University, State College, Pennsylvania, November, 1988.

Journal review for Journal of Sedimentary Petrology.

Proposal reviews for the Department of Energy (2).

Wolfgang E. Elston

American Geological Institute Minorities Participation Advisory Committee.

Geological Society of America ad hoc committee on minorities.

Speaker for UNM Speaker Bureau. Gave talk on "Exploration of the solar system" for downtown rotary Club, November 8.

Reviewed research proposals for:

National Aeronautics and Space Administration

National Science Foundation, Institute for Geophysics and Planetary Physics (University of California), Department of Energy.

Reviewed manuscripts for Bulletin, Geological Society of America, Earth and Planetary Science Letters, Journal of Geophysical Research.

Rodney C. Ewing

Reviewed manuscripts, texts and proposals for Journal of Materials Research, Canadian Mineralogist, Applied Geochemistry, Isotope Geoscience, National Science Foundation, Australian Research Council, Office of Basic Energy Sciences (Department of Energy), World Book, Inc.

Served as a Panel or Committee Member

National Academy of Sciences and National Research Council Panel on the Waste Isolation Pilot Plant (Professor K.B. Krauskopf, chairman).

Advisory committee for the International Clay Conference, Strasbourg (Dr. Roland Pusch, chairman).

John W. GeissmanOff Campus Lectures

Rice University (Paleomagnetism in the basin and range province).

University of Utah (Paleomagnetism applied to problems in structural geology).

University of Michigan (Rock magnetism of silicic intrusive and extrusive rocks, Inyo Domes, California).

Elks Club, Albuquerque (The Earth's magnetic field and its fossil record).

Albuquerque Geological Society (Paleomagnetic investigations at UNM).

Jeffrey A. GramblingField Trips Led

Proterozoic rocks of the northern Sangre de Cristo Mountains in New Mexico, for the Department of Geological and Geophysical Sciences, Princeton University, May 4 - 5, 1988.

Deformation and metamorphism in the greenschist facies rocks of Trigo Canyon, New Mexico, for Geology 514 class, University of New Mexico, October 9, 1988.

Ductile shear zones and the Precambrian tectonic assembly of the Cimarron Mountains, New Mexico, for Geology 514 class, University of New Mexico, October 21 - 23, 1988.

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Structure and metamorphism of the central Manzano Mountains, New Mexico, for combined Geology 303/Geology 514 classes, University of New Mexico, December 12, 1988.

Structural, metamorphic, and $^{40}\text{Ar}/^{39}\text{Ar}$ studies in the Sandia and Manzano Mountains, New Mexico, for R.D. Dallmeyer, University of Georgia, Department of Geology, December 8 - 12, 1988.

External Ph.D. and M.S. Reader

Metamorphic and structural evolution of the Proterozoic Corella Formation in the Rosebud Syncline, north-west Queensland, Jurgen Reinhardt, Ph.D. thesis, James Cook University, North Queensland, Australia.

Estimating non-ideal thermodynamic mixing parameters by means of thermal conductivity date, F. Nimick, Department of Mechanical Engineering, University of New Mexico.

Host to Departmental Invited Speakers

Dr. W. Carlson, University of Texas, Austin, September 29 - 30, 1988.

Dr. T. Armbruster, University of Bern-Switzerland, October 6 - 7, 1988.

Dr. R.D. Dallmeyer, University of Georgia, December 8 - 12, 1988.

Manuscripts Reviewed

Geology (2), Journal of Metamorphic Geology (2), Journal of Petrology, New Mexico Bureau of Mines, Contributions to Mineralogy and Petrology (2).
Reviewed proposals for National Science Foundation (Earth Science Division), Petrogenesis and Mineral Resources (6), Crustal Structure and Tectonics (3).

Stephen P. Huestis

Reviewed papers for: Geophysical Research Letters, Geophysical Journal, Journal of Geophysical Research, Pure and Applied Geophysics, Materials Research Society (Scientific Basis for Nuclear Waste Management symposium).

Klaus Keil

Associate Editor, Journal Chemie der Erde.

Associate Editor, Journal Meteoritics.

Interview with Byron Spice, Albuquerque Journal, regarding chaos in the early solar system.

Reviewed some 40 proposals submitted to NASA and NSF for funding.

Reviewed scientific papers submitted for publication in Geochimica et Cosmochimica Acta, Science, Nature, and Chemie der Erde.

Reviewed 22 proposals for Institute of Geophysics and Planetary Physics, University of California and Los Alamos National Laboratory, Los Alamos, New Mexico.

Member, Advisory Committee of the Institute of Geophysics and Planetary Physics, University of California, Los Alamos National Laboratory, Los Alamos, New Mexico.

Several interviews with UNM Public Information Office and Lobo regarding activities of the Institute of Meteoritics and Department of Geology.

Served on Lunar and Planetary Geosciences Review Panel, Lunar and Planetary Institute, Houston, Texas, and reviewed 5 proposals as part of the NASA panel.

Chaired session on "Non-carbonaceous Chondrites - ALH85085", Lunar and Planetary Science Conference, Houston, Texas, March 16, 1988.

Visiting planetary scientist, Planetary Geoscience Division, Hawaii Institute of Geophysics, Honolulu, Hawaii, June 6 - July 8, 1988.

Cornelis Klein

Visiting Research Scientist, UCLA, as part of the Precambrian Paleobiology Research Group (PPRG), January, 1988 through August, 1988.

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Associate Editor, Precambrian Research, a journal of Elsevier Science Publishers, Amsterdam.

Associate Editor, The Canadian Mineralogist, a journal of the Mineralogical Association of Canada.

Reviewed journal manuscript for Economic Geology, The American Mineralogist, and Precambrian Research.

Reviewed book manuscripts for McMillan and John Wiley, publishers.

Reviewed research proposals for the National Science Foundation.

Appointed Adjunct Curator of Mineralogy, New Mexico Museum of Natural History.

Completed the permanent exhibit "Origins" (with J.C. Callender) at the New Mexico Museum of Natural History.

Served on the nominating committee of the Coelophysics Society (New Mexico Museum of Natural History) for the Coelophysics Society Research Award.

Did television interview for Channel 7 on "New age and the healing power of crystals", April 19, 1988.

Albert M. Kudo

Reviewed NSF grant proposal, reviewed several books and manuscripts for publishers.

Gave presentation on geology, volcanology, geophysics, and interpretations of handsat imagery of Zunil geothermal project on flanks of Santa Maria volcano, Guatemala to international review panel in Guatemala City.

Grant received from Sandia National Laboratories for UNM/Sandia Colloquium, \$11,000.

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Barry S. Kues

Reviewed manuscripts for Journal of Paleontology and Cretaceous Research.

Reviewed proposal for NSF.

Advised U.S. Customs officials on importance, provenance and value of a
confiscated shipment of fossils.

Advised a New Mexico highway department lawyer on Yeso-San Andres
stratigraphy/lithology relative to a pending lawsuit.

Quoted in an Albuquerque Journal (November 4) article on Wolfgang Elston.

Editor, UNM Press series of books on New Mexico Natural History.

Christopher K. Mawer

Invited lecture, FMC Corporation, Denver, Colorado, January 14.

Invited lecture, University of Missouri at Columbia, Missouri, April 20.

Invited lecture, University of Queensland, Brisbane, Australia, June 10.

Invited lecture, Bureau of Mineral Resources, Canberra, Australia, June 27.

Invited lecture, Southern Methodist University, Dallas, Texas, November 11.

Reviewed 11 manuscripts for international journals and 4 research grant
proposals for United States National granting agencies. Reviewing major
new textbook on structural geology (29 chapters) for W.H. Freeman and
Company.

Leslie D. McFadden

Held office for Editorial Board of Catena.

Reviewed professional papers in Quaternary Research, Decade of North American
Geology, New Mexico Geology, Soil Science Society of America Journal.

Reviewed proposal for National Science Foundation.

MEMBERSHIPS
Memberships in Professional Societies

Geological Society of America, American, Quaternary Association, International Union for Quaternary Research, Soil Science Society of America, Friends of the Pleistocene.

Service

Soil development and landscape evolution in deserts, Department of Biology Colloquium, University of New Mexico, Albuquerque, New Mexico, October 5. Guest lecturer in the geology courses, Clay Mineralogy, March 4 and Geology of National Parks, October 5, Department of Geology and in Department of Anthropology course, Methods of dating, March 23, University of New Mexico.

Informal review of article by Dr. Giles Marion for publication in the Soil Science Society of America Journal.

Consulting activity: Los Alamos National Laboratories, Woodward-Clyde Consultants, Gary Rasmussen and Associates, United States Army Corps of Engineers.

Chairman of the Geology Department Scholarship Committee. Wrote or endorsed nominations for undergraduate and graduate students for the following institutions/societies/organizations:

Albuquerque Gem and Mineral Club, Albuquerque Petroleum Association, New Mexico Geological Society, University of New Mexico Student Research Allocation Committee, University of New Mexico - Office of Dean of Students, American Geological Institute, Sigma Xi, Geological Society of America.

Wrote proposal to initiate Patricia Harris Minority Fellowship in the Department of Geology. Collaboration with Office of Contract Archeology in Research in the San Juan Basin.

Co-director, Quaternary Geology Studies Laboratory.

Member, University Standing Committee, Scholarships, Prizes and Loans

Thesis Committee member/reader: M.S. - 9; Ph.D. - 9

Hosted departmental visit by Dr. Jennefer Harden of the U.S. Geological Survey.

Volunteer participate in Dr. Vonda Long's class in Counseling Education.

Stephen G. Wells

Selected by the National Park Service as a member of the "Post-Fire Ecological Assessment Committee" to advise the National Park Service on the ecologic impacts of the Summer 1988 Yellowstone fires.

Reviewed professional papers and proposals for Geological Society of America GEOLOGY, National Science Foundation, Department of Energy.

Membership in professional societies: Geological Society of America, American Geophysical Union, International Association of Sedimentologists, New Mexico Geological Society, British Geomorphological Research Group, Cave Research Foundation.

Lee A. Woodward

Talk on tectonics and ore deposits to staff of Hecla Mining Company, Reno, Nevada, April, 1988.

Robyn Wright

Reviewed papers and proposals for National Science Foundation, Natural Sciences and Engineering Research Council of Canada, Journal of Sedimentary Petrology and New Mexico Geological Society.

Prepared examination units for American College Testing Program.

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Crayton J. Yapp

Reviewed proposals and manuscripts for National Science Foundation, Nature, Science, Applied Geochemistry, Geochimica et Cosmochimica Acta, Earth and Planetary Science Letters, Geology.

Presented an invited paper at the Rubey Colloquium, University of California - Los Angeles, California, March 18 - 19, 1988.

Ran isotopic analyses for New Mexico Tech and the U.S. Geological Survey.

NON-TEACHING UNIVERSITY SERVICE

Roger Y. Anderson

Chair, UNM Quaternary Studies Program.

Douglas G. Brookins

Geology Department: Rb-Sr laboratory use committee chair, INAA laboratory use committee, licensed radioactive materials handler for Geology, undergraduate committee, search committee for hydrogeologist position.

Applicant for Associate Dean of Arts and Sciences.

Promotion Advisory Committee for Natural Sciences and Mathematics.

Radon survey of Albuquerque, New Mexico area (soils, indoor, air, waters).

Geology 401 Seminar "Oklo and Indoor Radon", January 1988.

Honors Seminar "Radioactive Wastes and Their Disposal: From Oklo to WIPP",

"Nuclear Issues and Politics" honors course, C. Chandler, instructor.

Hosted Dr. Christine Mosser, University of Strasbourg, July 1988.

Wolfgang E. Elston

Committees

Member - Graduate Committee, College of Arts and Sciences.

Member - Advisory Committee on Tenure, College of Arts Sciences, 1987-1988.

Member - Department Graduate Committee.

Overseas Student Exchanges

Arranged exchange agreement between UNM and Technische Hochschule Aachen, West Germany, funded by Deutscher Akademischer Austauschdienst (German Academic Exchange Service). In residence at UNM, 1987-88: R. Bufler, A.

Dobbelstein, M.A. Enders; 1988-89: K. Giesen, B. Hewel, D. Lentzin, R. Padberg.

Speakers Hosted

Arrangements for speakers as part of departmental seminar, Fall, 1988.

September 1 - John Geissman, UNM - Paleomagnetic and rock magnetic micro analysis: Historical background, rationale, methodology, and current and future research.

September 8 - Mark Ander, Los Alamos National Laboratory - Geophysical search for the fifth force of nature.

September 15 - Patrick Longmire, UNM and Roy F. Weston Company - Hydrogeochemical interactions and evolution of acidic solutions in soils and groundwater.

September 22 - William C. Kelly, University of Michigan, Sandia Colloquium Distinguished Lecturer - Panasqueira, Portugal: A most peculiar case of hydrothermal tin-tungsten mineralization. Also, 8:00 p.m., Ancient fluids in crystals: Fossil magmas, oils, and hydrothermal fluids.

September 29 - William D. Carlson, University of Texas, Austin - The significance of intergranular diffusion to mechanics and kinetics of porphyroblast crystallization.

October 20 - William C. McIntosh, New Mexico Institute of Mining and Technology - Stratigraphic framework of the Mogollon-Datil volcanic field based on paleomagnetism and argon-40/argon-39 dating.

October 27 - Jeffrey Lloyd, University of Leeds, U.K. - New techniques in scanning electron microscopy.

November 3 - Frank Perry, UNM - Evolution of magmatic system at Mount Taylor, New Mexico.

December 10 - John Lorenz, Sandia National Laboratory - The origin and character of regional fracture systems: Evidence from the Multiwell Experiment.

December 1 - Paul E. Damon, University of Arizona, Caswell Silver Distinguished Lecturer-Continental uplift of western North America in late Cretaceous and Cenozoic time. Also, 8:00 p.m., The Shroud of Turin: Nature, history and carbon-14 dating.

Other Visitors Hosted

Hansgeorg Foerster, Technische Hochschule, Aachen, West Germany, March 10.

Jean-Jacque Cocheme and Alain Demant, University of Marseilles, France, March 27-29.

Robert Stuart, Freeport Minerals, March 29-30.

Bevan French, NASA Headquarters, Washington, D.C., April 25-27.

Sabbatical-Leave Visitor Hosted

David Twist, Institute for Geological Studies of the Bushveld Complex, University of Pretoria, South Africa, January - July.

Post-doctoral Fellow Supervised

Luane Martens, West Germany, October 1987 - November 1988.

Rodney C. Ewing

Department

Undergraduate Advisement Committee and Advisor.

Scheduling Committee.

Supervision of:

Harding Pegmatite Property

X-ray Diffraction Laboratory

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Analytical Electron Microscopy Laboratory

Mineralogy Collections

University

Arts and Sciences Participatory Seminary Program (sponsored by the Ford Foundation).

Planning and participation in the Center for Micro-Engineered Ceramics.

John W. Geissman

UNM Research Policy Committee.

Graduate Committee, Geology Department.

Computer-Use Committee, Geology Department.

Jeffrey Grambling

Supervisor, thin section laboratory: One full-time and one work-study employee. In 1988, included selecting and training new full-time lab preparator, M. Gheir.

Chair, Geology Microscope Committee: In 1988, included direct supervision of massive repairs and renovations to teaching microscopes in Geology 115, 105, and 103.

Member, Graduate Committee.

Oral Examiner, comprehensive/qualifying/defense exams, 1988:

Roger F. Smith, M.S. (thesis defense)

Christine A. White (Ph.D. qualifying and comprehensive exams)

Brad Linsley (Ph.D. comprehensive exam)

Amy Thompson (Ph.D. qualifying exam)

Stephen P. HuestisPh.D. Student Co-advised:

Ismail Sabbah (Physics Dept) - Applications of inverse theory techniques to
cosmic ray spectra.

Department Committees:

Computer Use

Library Liason

Reading Room

Klaus Keil

Chairman, Department of Geology.

Director, Institute of Meteoritics and Meteorite Collection.

Chairman and member of several thesis and dissertation committees in the
Department of Geology.

Served as Director and Secretary-Treasurer of the Caswell Silver Foundation,
Department of Geology, UNM.

Served on several M.S. and Ph.D. comprehensive and qualification examination
committees.

Hosted the visits of several prospective geology graduate students to UNM.

Served on Space Day Committee, in preparation for University of New Mexico
Centennial Celebration.

Attended meeting of the Space 88 Centennial Celebration committee.

Co-sponsored a talk by Dr. Harrison Schmitt on "Apollo 17", with "Students for
the Exploration and Development of Space", University of New Mexico.
April 27, 1988.

Hosted Board Meeting of the Caswell Silver Foundation, University of New
Mexico, Albuquerque, New Mexico. May 7, 1988.

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Hosted visit of Mr. Hiram Jackson, nominee for a Kelly-Silver fellowship.
Member, President's Committee "UNM 2000".

Member, Subcommittee on Research, President's Committee "UNM 2000".

Member, Committee on "UNM Properties for Teaching and Research".

Member, Nominations and Membership Committee, 21 Club, UNM.

Gave guided tour of analytical facilities in the Department of Geology and
Institute of Meteoritics to "Governor's Economic Advisory Council".
October 21, 1988.

Hosted the visit of the following scientists to UNM:

W. Quellmalz, State Museum of Mineralogy and Geology, Dresden, German
Democratic Republic. February 16-20, 1988.

G. Forster, Department of Mineralogy, Technical University, Aachen, West
Germany, March 10-11, 1988.

Cornelis Klein

Member, Undergraduate Committee in Geology.

Member, Search Committee for staff scientist/Curator.

Member of Graduate Examination Committees:

M.S. comprehensive and qualifying - 5

Ph.D. qualifying and comprehensive - 4

Ph.D. dissertations: Gregory Lumpkin and Alan Jay Kaufman (Indiana
University)

M.S. thesis: Julie Warner

Alberto M. Kudo

Chairman, UNM-Sandia Colloquium Committee, Chairman of Undergraduate
Committee.

Chairman, UNM-Science Colloquium Committee.

Chairman of 3 M.S. and Ph.D. Thesis Committees and members of 7 M.S. and 11 Ph.D. Thesis Committees.

Member of NW Regional Science Fair Steering Committee.

Faculty Representative of Leisure Services Advisory Council.

Served as outside member of Ph.D. dissertation committee, N.M. Institute of Mining and Metallurgy. Read and edited dissertation and attended defense.

Barry S. Kues

Chairman, Geology Department Curator Search Committee.

Editor, Geology Department Publications.

Chairman, 1 M.S. (Williamson, completed degree) and 1 Ph.D. (Hunt) Committee.

Reader on 1 M.S. Thesis Committee (Holbrook).

Ph.D. Qualifying Exam Committees (Bryan, Thompson).

Chris Mawer

Undergraduate Honors Program Advisor.

Member of Undergraduate Committee.

Chair of Vehicle Committee.

Member of Microscope Committee.

Supervised Microscope Laboratory.

Supervised 2 Ph.D. students.

On thesis, comprehensive or qualifying exam committees for 9 M.Sc. and 11 Ph.D. students.

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Stephen G. Wells

Administrative

Assistant Chairman, Geology Department.

Chairman, Graduate Committee, Geology Department.

Chairman, Hydrogeology Search Committee, Geology Department.

University Committee Work

Water Resources Administration Curriculum Committee.

Ad Hoc Committee for Joint Geology/Civil Engineering Hydrogeology Program.

Lee A. Woodward

Chairman of 2 Thesis Committees.

Robyn Wright

Department Service

Graduate Committee (1984 - present).

AAFG Lecture Series Chair (1984 - present).

Undergraduate Geology Club Sponsor (1986 - present).

University Service

Popejoy Thesis Award Committee (1988).

College Service

Search Committee, Associate Deans College of A&S (1988).

Arts and Sciences Curriculum Committee (1987 - 1988).

Crayton Yapp

Department Committees:

Graduate Committee.

Scholarship Committee.

Ad Hoc committee to review applicants for the hydrogeology faculty position.

Responsible for the operation of the Geology Department's stable isotope laboratory and supervision of a research associate.

Departmental representative at the dedication of the Long-Term Ecological Research site at the Sevilleta National Wildlife Refuge, October 11, 1988.

Served on several M.S. and Ph.D. comprehensive and qualifying exam committees.

Served on three M.S. and one Ph.D. thesis committee.

Conducted tour of stable isotope laboratory for T. Stafford's anthropology class on March 12, 1988.

NEW SCHOLASTIC HONORS AND FELLOWSHIPS

Roger Y. Anderson

Faculty Scholar, Spring 1988: Project Title: "Resonance as a tool for understanding nature".

Seminar Presentation: "Limits of Science" Co-presenter, Jane Caputi.

Invited Guest: Tony Rothman, "The Anthropoc Principle".

Douglas G. Brookins

Visting Scholar, Atomic Energy Agency of Canada, Whiteshell Nuclear Research Establishment, Pinawa, Manitoba, Canada.

Commission of the European Communities, committee on natural analogues for radioactive waste disposal.

Who's Who in America, 45 Edition.

Who's Who in the World, 9th Edition.

Twenty-five year Service Recognition Award, American Geophysical Union.

Advanced, intensive mine safety training course, October, 1988, DOE-SNL-Westinghouse course for WIPP.

Wolfgang E. Elston

Elected Honorary Member, New Mexico Geological Society. Honored at annual meeting of the Society, Deming, New Mexico, October 7.

Honored with dedication of Guidebook, Southwestern New Mexico, 39th Annual Field Conference, New Mexico Geological Society.

Listed in Who's Who in the West, 22nd Edition.

Awarded Silver Anniversary Certificate, American Institute of Professional Geologists.

Rodney C. Ewing

Nominated to Who's Who in Technology, 6th Edition.

Jeffrey A. Grambling

Attended Penrose Conference, "Criteria for establishing the relative timing of pluton emplacement and regional deformation," Mariposa, California, September 10 - 15, 1988.

Who's Who in the West, 22nd Edition.

Who's Who of Emerging Leaders in America, 2nd Edition.

Stephen P. Huestis

Who's Who in the West, 21st Edition.

Who's Who of Emerging Leaders in America, 2nd Edition.

Klaus Keil

Recipient of the Leonard Medal, Meteoritical Society.

Recipient of the James F. Zimmerman Award, University of New Mexico Alumni Association.

Albert M. Kudo

Elected as Fellow of Mineralogical Society of America.

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Barry S. Kues

Appointed Adjunct Curator of Paleontology, New Mexico Museum of Natural
History.

Robyn Wright

Advanced Study Short Course: Quantitative Sedimentary Basin Modeling, Denver,
Colorado, October 29 - 30, 1988.

Crayton J. Yapp

UNM Presidential Lecturer, 1987-1988.

SABBATICALS, LEAVES OF ABSENCE, AND TRAVEL

Wolfgang E. Elston

Arranged and partly led field trip for undergraduate students and faculty,
Princeton University, southwestern New Mexico, May 2-12.

Led field trip for Princeton University students and faculty, southwestern New
Mexico, May 2-4.

UNM German Summer School, Taos Ski Valley, New Mexico Lecture and field trip,
June 8 - 19, 1988.

U.S. Geological Survey, Flagstaff, Arizona, June 30 - July 1, 1988.

Conference on Global Catastrophes in Earth History, Snowbird, Utah, October 20
- 23, 1988.

New Mexico Geological Society Field Conference, Deming area, New Mexico,
October 5 - 8, 1988.

American Geophysical Union, Fall meeting. Meeting of Steering Committee, 1989
Assembly, International Association for Volcanology and Chemistry of the
Earth's Interior, San Francisco, California, December 6 - 11, 1988.

Non-professional travel to Mexico, Arizona, and California.

Served as External Examiner for two Ph.D. candidates from Macquarie
University, Australia; one Ph.D. candidate from the University of
Pretoria, South Africa.

Co-advisor (with C.J. Hawkesworth) of one Ph.D. candidate from The Open
University, U.K. (Jonathan Davis).

Rodney C. Ewing

NAS/WIPP Panel Meeting, Irvine, California, March 16 - 18, 1988.

MRS Spring Council Meeting, Reno, Nevada, April 7 - 8, 1988.

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JSS Final Meeting, Stockholm, Sweden, May 1 - 6, 1988.

University of Tennessee, Knoxville, Tennessee, May 16 - 17, 1988.

ETH, Zurich, Switzerland, May 19 - 23, 1988.

Berlin-MRS program committee meeting, Interlachen, Switzerland, May 24 - 28,
1988.

E-MRS meeting, Strasbourg, France, June 1 - 4, 1988.

Transuranium Institute, Karlsruhe, Germany, June 5 - 8, 1988.

NAS/WIPP Panel Meeting, Irvine, California, June 28 - 29, 1988.

Hahn-Meitner Institute, Berlin, Germany, July 1 - 30, 1988.

California Academy of Sciences, San Francisco, California, August 14 - 15,
1988.

Arizona State University, Tempe, Arizona, September 28, 1988.

MRS meeting, Berlin, Germany, October 7 - 15, 1988.

CEA/DOE meeting on high level waste, Cadariche, France, October 16 - 23, 1988.

Caswell Silver Memorial Service, Denver, Colorado, November 17, 1988.

MRS Fall Council Meeting, Boston, Massachusetts, November 30 - December 4,
1988.

NAS/WIPP Panel Meeting, Irvine, California, December 5 - 7, 1988.

John W. Geissman

Summer teaching, University of Michigan Field Geology Course.

Field Geological Investigations: Southern Nevada (NSF), January; New Mexico,
March; Southern Nevada, NSF, April; Northern Nevada, UNM, RAC, May;
Northwest Wyoming, NPS, July; East-Central Idaho, NSF, July; Montana,
Wyoming, Colorado, NSF, July; Northern New Mexico, August; Central New
Mexico, NM, BMMR, November; Florida Mountains, NM, BMMR, December.

Jeffrey A. Grambling

Socorro, New Mexico, to chair spring meeting of New Mexico Geological Society,
April 15, 1988.

Sandia Mountains, New Mexico, for field research, April 24, 1988.

Taos and Questa, New Mexico, to lead field trip for undergraduate students
from Princeton University, May 4 - 5, 1988.

Cimarron Mountains and Pecos Wilderness, New Mexico, for field research, May
20 - August 12, 1988.

Sandia Mountains, New Mexico, for field research, September 1, 1988.

Trusas Mountains, New Mexico, for field research, September 3 - 5, 1988.

Mariposa, California, to attend Penrose Conference, Geological Society of
America.

Tempe, Arizona, to present talk at Arizona State University, September 21,
1988.

Trigo Canyon, Manzano Mountains, New Mexico, for Geology 514 field trip,
October 9, 1988.

Cimarron Mountains, New Mexico, for Geology 514 field trip, October 21 - 23,
1988.

Denver, Colorado, to attend Annual Meeting of Geological Society of America,
October 30 - November 3, 1988.

Dallas, Texas, to present two talks at Southern Methodist University, November
17 - 18, 1988.

Tijeras Canyon, New Mexico, for field research, December 9, 1988.

Placitas and Juan Tabo, New Mexico, for field research, December 11, 1988.

Manzano Mountains, New Mexico, for field research, December 12, 1988.

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Klaus Keil

Participated in Lunar and Planetary Science Conference, L.B. Johnson Space Center, Houston, Texas. Chaired one session and co-authored two talks, March 14 - 18, 1988.

Gave talk before Department of Geology and Astronomy, New Mexico State University, Las Cruces, New Mexico, April 4 - 5, 1988.

Participated in meeting of Institute of Geophysics and Planetary Advisory Board, Los Alamos National Laboratory, May 24 - 25, 1988.

Carried out research in Planetary Geosciences Division, Hawaii Institute of Geophysics, University of Hawaii, Honolulu, Hawaii, June 6 - July 8, 1988.

Participated in 51st Meteoritical Society Meeting, chaired session, presented the Leonard Medal Address (invited), and co-authored one talk, Fayetteville, Arkansas, July 18 - 22, 1988.

Attended Lunar and Planetary Geoscience Review Panel, Lunar and Planetary Institute, Houston, Texas, September 24 - 30, 1988.

Presented two invited lectures in the Department of Geology, University of Texas, Austin, Texas, October 27 - 29, 1988.

Attended meeting of the Advisory Board, Institute of Geophysics and Planetary Physics, Los Alamos National Laboratory, Los Alamos, New Mexico, November 17 - 18, 1988.

Discussions with colleagues at the Division of Planetary Geosciences, Hawaii Institute of Geophysics, University of Hawaii, Honolulu, Hawaii, regarding joint research, December 28, 1988.

Cornelis Klein

Participation in Precambrian Paleobiology Research Group (PPRG) activities, ULCA, January 5 - 7, 1988.

Participation in PPRG at UCLA, quarterly research meetings. Chaired several subgroups, among them Executive Committee, and Committee on Proterozoic Environmental Evolution, March 24 - 28, 1988.

Presentation of lecture, "Iron-formations in Precambrian time" at the GSA north-central meetings, Akron, Ohio, April 20 - 22, 1988.

Participation in PPRG research activities, UCLA, May 16 - 19, 1988.

Participation in PPRG research activities, UCLA, June 6 - 14, 1988.

Participation in PPRG research activities, UCLA and presentation of lecture, "Some major Precambrian Iron-formations I have known", July 25 - 26, 1988.

Participation in the Symposium, "The Proterozoic biosphere: a multi-disciplinary study", at UCLA, August 19 - 22, 1988.

Participation in PPRG Proterozoic Ecology Workshop at UCLA, December 9 - 11, 1988.

Albert M. Kudo

Travel to Guatemala twice for work on geothermal project.

Travel to San Francisco, California, to present a paper.

Travel to Boise, Idaho, to Morrison/Knudsen Engineers for geothermal project.

Barry S. Kues

Grants area, fieldwork, January 17, 1988.

El Paso area, fieldwork, February 24 - 26, 1988.

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Geological Society of America meeting, Lawrence, Kansas, and fieldwork in southern Kansas, March 11 - 17, 1988.

Pueblo, Colorado area, fieldwork, May 12 - 13, 1988.

Sacramento Mountains, fieldwork, May 26 - 27, 1988.

Reserve, New Mexico area, fieldwork, July 13 - 13, 1988.

Zuni Mountains, New Mexico, fieldwork, July 27, 1988.

Deming, New Mexico area, Geological Society Field Conference, October 5 - 8, 1988.

Christopher K. Mawer

Sixty-one days in fieldwork, 43 of which were for my own research.

Leslie D. McFadden

Transverse Ranges, California, fieldwork related to soil-geomorphic studies, January 13 - 17, 1988.

Lathrop Wells, Nevada, fieldwork related to soil-geomorphic studies of volcanic centers, February 19 - 21, 1988.

Mojave Desert, fieldwork related to soil-geomorphic research, overview of graduate student's research, March 12 - 14, 1988.

Great Basin, Nevada, fieldwork related to soil-geomorphic studies of volcanic centers, March 16 - April 1, 1988.

Las Vegas, Nevada, co-leader to Conference fieldtrip. Presented one paper, poster session at Geological Society of America meeting, March 27 - April 1, 1988.

Jemez Mountains, New Mexico, fieldtrip with Geology students to observe soils on volcanic materials, May 6, 1988.

Mojave Desert, California, and Great Basin, Nevada, fieldwork related to soils studies, overview of graduate students thesis areas, May 26 - June 3, 1988.

Transverse Ranges, California, fieldwork related to soil-geomorphic studies, July 18 - 21, 1988.

Sacramento Mountains, New Mexico, fieldwork related to soil-geomorphic studies, July 27 - 28, 1988.

Mojave Desert, California, fieldwork related to soil-geomorphic studies and remote sensing analysis of landscapes, August 10 - 15, 1988.

Davis, California, presented invited paper for symposium at annual meetings of the Ecological Society of America, University of California, August 17, 1988.

Capulin Volcano, New Mexico, fieldwork in collaboration with the National Park Service related to studies of young volcanism, September 15 - 16, 1988.

Great Basin, Nevada, fieldwork related to studies of volcanic hazards in the area of the National Test Site, September 22 - 24, 1988.

Great Basin, Nevada, fieldwork related to studies of volcanic hazard studies, October 11 - 15, 1988.

Farmington, New Mexico, fieldwork related to studies of soils and eolian activity, October 18, 1988.

Denver, Colorado, attended annual meetings of the Geological Society of America, co-author on two papers, October 31 - November 3, 1988.

Anaheim, California, presented invited paper in symposium at annual meeting of the American Society of Agronomy, November 31, 1988.

Las Vegas, Nevada, and Lathrop Wells, Nevada, fieldtrip to observe evidence for recent volcanism, December 15 - 16, 1988.

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Stephen G. Wells

- Geologic fieldwork in Costa Rica, NSF sponsored research, January.
- Geologic fieldwork in Mojave Desert, California and in Nevada Test Site area -
WRII/USGS and LANL Sponsored Research, respectively - March, May, June,
August.
- Geologic fieldwork in Yellowstone National Park in cooperation with Grant
Meyer and in southern Montana in cooperation with the Indiana Geological
Field Station, July.
- Geologic fieldwork at Capulin Volcanic National Monument, New Mexico in
cooperation with the National Park Service, September.
- Geologic fieldwork in southern Nevada and California in cooperation with LANL
- October, December.

Lee A. Woodward

Professional travel to Colorado, Nevada, Utah, Wyoming, and Montana.

Robyn Wright

- New Mexico Geological Society Executive Committee Meeting, Socorro, New
Mexico, January 22, 1988.
- Field trip to San Juan Basin with Geology 441 class, March 5 - 6, 1988.
- Field trip to San Juan Basin with Geology 548 class and Dr. Donald Owen (Lamar
University), April 2 - 3, 1988.
- New Mexico Geological Society Executive Committee Meeting, Socorro, New
Mexico, April 14, 1988.
- Field trip to San Juan Basin with Geology 441 class, April 23 - 24, 1988.
- Field trip to San Juan Basin with Geology 304 class, April 30 - May 1, 1988.

Field research, Durango, Colorado, with R.S. Zech (U.S. Geological Survey),
October 20 - 23, 1988.

Field Research, Durango, Colorado, with R.S. Zech (U.S. Geological Survey),
November 17 - 22, 1988.

Field Research, Durango, Colorado, with R.S. Zech (U.S. Geological Survey),
December 3 - 6, 1988.

Crayton Yapp

Presented invited talk at Rubey Colloquium, Los Angeles, California, March 18
- 19, 1988.

Presented paper at the Spring, 1988, American Geophysical Union Meeting,
Baltimore, Maryland, May 15 - 19, 1988.

Collection of samples for isotopic research, Iowa and Wisconsin, July, 1988.

Research in G. Rossman's infrared laboratory, California Institute of
Technology, Pasadena, California, August 15 - 17, 1988.

Attended dedication of long-term ecological research site, Sevilleta National
Wildlife Refuge, October 11, 1988.

Presented paper at the National Meeting of the Geological Society of America,
Denver, Colorado, October 30 - November 3, 1988.

PUBLIC SERVICE

Roger A. Anderson

WIPP-related Activities:

Presentation to National Academy of Sciences, Board on Radioactive Waste Management, Albuquerque, New Mexico, February 18, 1988.

Presentation interview, McNeal-Lehrer News Hour, August, 1988.

Invited testimony, U.S. House of Representatives, subcommittee on Energy and Power, hearing on Legislation adopted by the committee on Interior and Insular Affairs for the Waste Isolation Pilot Plant Land Withdrawal Act of 1988 and submission of report: "Evaluation of Proposed Substitute Legislation for the Waste Isolation Pilot Plant Land Withdrawal Act of 1988 as Related to Remaining Geotechnical Problems at WIPP", 6 p. plus enclosures.

Invited report to U.S. General Accounting Office: "Status of Scientific Review and Geotechnical Issues Related to the Waste Isolation Pilot Plant (WIPP)", 8 p. plus enclosures.

Formal and informal invited interviews and presentations and submission of requested technical information and evaluation to U.S. Congressional representatives and aides, Presidential candidate J. Jackson, Governor of Colorado, League of Women Voters, Sierra Club, and various educational programs and private individuals.

Other Activities:

Presentation to Highland High School Geography class: "Geologic exploration and environment of Antarctica".

Identifying fossils for the public.

Douglas G. Brookins

Immediate Past President and member of Board of Trustees, Congregation Albert (540 families), 1987-1989. Chair of Youth Room and Plaque committees. Free information on radon problems testing, consumer protection, and mitigation to the public.

Laura J. Crossey

Regional Science Fair Judge (Junior Division).

Wolfgang E. Elston

Answered 29 requests for information on geology, mineral resources, etc., by government agencies, mining and oil companies, universities, and members of the public.

Rodney C. Ewing

Rotary International and Ammesty International.

Jeffrey A. Grambling

Identified rocks and minerals for the public.

Supervised preparation of thin sections for use by New Mexico Museum of Natural History; New Mexico Bureau of Mines and Mineral Resources; University of New Mexico Department of Anthropology; and others not connected with the State of New Mexico.

Prepared rock exhibit for Serendipity Day School, Albuquerque, New Mexico.

Prepared rock exhibit for A Child's Garden preschool, Albuquerque, New Mexico.

Led field trip for undergraduate geology majors from Princeton, New Jersey, to northern New Mexico.

Stephen P. Huestis

Project Share Volunteer (temporary coordinator)

Active in Sangre de Cristo Animal Protection, Inc.

Participant - Endangered Species Fair, New Mexico Museum of Natural History,
May 21, 1988.

Megaband Czar: New Mexico Folk Music and Dance Society.

Klaus Keil

Many private showings of Moon rocks to interested citizens, school classes,
civic groups, etc., many of which were after working hours and on
weekends.

Investigated, without charge, numerous specimens of suspected meteorites
brought to the Institute of Meteoritics by citizens.

Hosted visit of "Young Astronaut Club", gave talk and slide show, April 7,
1988.

The outstanding electron microprobe and scanning electron microscope
facilities in the Institute of Meteoritics and Department of Geology were
made available for use to the following individuals and institutions
outside our own department and our personnel instructed these users in
the operation of the equipment:

Dr. A.J. Ehlmann, Department of Geology, Texas Christian University, Fort
Worth, Texas.

Institute for Explosive Research, New Mexico Institute of Mining and
Technology, Socorro, New Mexico.

Drs. P. Kyle, Kent Condie, and students, Department of Geology, New
Mexico Institute of Mining and Technology, Socorro, New Mexico.

Sperry Corporation, Albuquerque, New Mexico.

Signetics Corporation, Albuquerque, New Mexico.

Dr. Charles Stein, Air Force Weapons Laboratory, Albuquerque, New Mexico.

Dr. Judy Ballantyne, University of Utah Research Institute, Earth Science
Laboratory, Salt Lake City, Utah.

Dr. A.Y. Wu, Center for High Technology Materials, University of New
Mexico.

P. Enzel, Department of Chemistry, University of New Mexico.

K. Brown, Department of Chemistry, University of New Mexico.

D. Twist, University of Pretoria, South Africa.

Cornelis Klein

Assisted the Director and Curatorial Staff at the New Mexico Museum of Natural
History in various aspects of the "Origins" exhibit, and in aspects of
the mineralogical collections.

Albert M. Kudo

Master Chairman of Judges, NW Regional Science Fair.

Assisted several high school science fair exhibitors.

Identified rocks and minerals for public.

Barry S. Kues

Gave two talks on dinosaurs to Monte Vista School classes (April 6, 1988).

Led field trips for about 15 members of Friends of Paleontology (June 25,
1988).

Christopher K. Mawer

Appointed Adjunct Curator of Geology, New Mexico Museum of Natural History.

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Leslie D. McFadden

Presented talk to Vista Ranchitos Neighborhood Association on the "Geology of Albuquerque". Participated in Vista High School Alumni Return Program to talk to Vista High School students about careers in Science.

Participation in United States Volleyball Association. Answered questions from members of public concerning geology and soils.

Stephen G. Wells

Provided information to local residents on groundwater quality and quantity.

Provided information to National Park Service on the geomorphology of volcanoes and the response of rivers and hillslopes to forest fire devegetation.

Lee A. Woodward

Prepared roadlogs for American Association of Petroleum Geologists meeting in Albuquerque, October, 1989.

Robyn Wright

Resource volunteer: Chaparral Girl Scout Council.

Crayton J. Yapp

Identification of rocks and minerals for the public.

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GRADUATE PROGRAM

Summary

The Department of Geology regards the education and training of graduate students as an important teaching and research function. It is through this educational experience that graduate students acquire the mentoring, expertise, and skills to become successful professional geologists. Graduate student education involves not only classroom experiences but individualized teaching opportunities during field and laboratory research programs. During the Fall 1988 semester, 73 students were working toward M.S. and Ph.D. degrees in the Department. Of this population, 60 were M.S. students and 13 were Ph.D. students. The number of full-time students was 53; the number of part-time students (course work finished and in final stages of completing theses or dissertations) was 10. The male/female ratio of M.S. students was 43/17 and 12/1 for Ph.D. students, or a total ratio of 55/18. There were no significant changes in the total graduate student enrollment during Spring 1989 semester. A total of 11 M.S. degrees and 5 Ph.D. degrees were awarded by the Department in the 1988-1989 academic year. During the Fall of 1988, 8 M.S. and 2 Ph.D. degrees were awarded, and during the Spring 1989 semester, 3 M.S. and 3 Ph.D. degrees were awarded.

Approximately 92% percent of the Ph.D. students in residence during the Spring 1989 semester were supported financially through the Department. Twelve were supported by full-time and half-time teaching assistantships, 5 were supported by research assistantships, and two were supported by Kelley-Silver Fellowships. Approximately 46% percent of the M.S. students in residence during the Spring 1989 semester were supported financially. Ten were supported by full- and half-time teaching assistantships, 14 were supported by research assistantships, and one was supported by Kelley-Silver Fellowship. Maya Wheelock, Steve Harlan, and Grant Meyer were supported by

Kelley-Silver fellowships during the 1988-1989 academic year. Steve Harlan was selected from 13 enrolled graduate student applicants to receive an "internal" one-year Kelley-Silver Fellowship for the academic year 1988-1989. A list of all graduate students supported by assistantships or major fellowships is presented in Appendix VIII. Many graduate students also received scholarships and fellowships from funds (1) donated by alumni and other individuals; (2) professional organizations such as the New Mexico Geological Society, the Albuquerque Gem and Mineral Club, and American Geological Institute; and (3) from private companies such as Shell Oil Company Foundation and Ford Motor Company. Travel by some students to scientific meetings, such as the American Geophysical Union and Geological Society of America meetings, was also supported by the Department and research grants.

Graduate students continue to excel by receiving special recognition and grants from professional organizations and major funding institutions. Numerous Ph.D. and M.S. students were awarded external funding in excess of several thousands of dollars. These approbations attest to the professional growth and national recognition of our graduate students. Some highlights of student recognition include a grant in the amount of \$22,000 from JOI/USSAC awarded to Brad Linsley; David Simpson for his participation in a Classroom Teaching Skills workshop series that was offered by the Teaching Assistant Resource Center; and Aurora Pun awarded a State-funded Graduate Fellowship for Under-represented Groups, which carried a yearly award of \$7,200, and she was also awarded an American Geological Institute Minority Participation Scholarship for the 1988-1989 academic year. Mark Gonzalez, Paul Drake, Ken Simms, and Bill Criswell obtained support, summer Graduate Research positions, at Los Alamos National Laboratory. Several of our graduate students were recipients of the University of New Mexico Student Research Allocation

Committee funds from New Mexico. All these data attest to the high level of professional activity within our graduate program.

Several graduate students were active in presenting papers at professional meetings based upon their research activities, and some students carried their research to publication in professional journals and guidebooks. Over 46 professional presentations were made by M.S. and Ph.D. students in the academic year 1988-1989. In addition, graduate students authored or coauthored approximately 116 papers during the Fall 1988 and Spring 1989 semesters. These data in combination with the nationally competitive student awards indicate the high level of professional activity within our graduate program. These types of activities require individualized training by faculty members supervising the students and their research and provide skills to our graduate students, enabling them to become competitive, successful geologists. Those students receiving their degrees either successfully gained employment with consulting firms, state and federal agencies, or petroleum companies; other students continued their graduate studies at UNM.

Admissions

A summary of the applicants and admissions statistics for the Fall 1988 and Spring 1989 semesters is given in Tables 1 and 2, respectively. The total number of completed applications to the graduate program declined from 98 in 1986-1987 academic year and 91 in the 1987-1988 academic year to 65 during the 1988-1989 academic year. This decline continues to reflect the economic slump in the mineral and petroleum industries which historically employed the largest number of geologists. Coupled with the dwindling number of potential applications are the relatively low salaries offered to teaching assistants by UNM as compared to competing institutions. In response, the Department continues its aggressive recruitment program which involves (1) offers of

\$1,000 scholarships to supplement the UNM assistantships and (2) travel support to top candidates for a visit to the Department during the Spring semester. The results of the program are encouraging. The total number of new students enrolling in our program has risen from 14 in 1986-1987 to 20 in 1987-1988 and 19 in 1988-1989. Although the total number of students applying to the program has dramatically decreased over the past few years, the Department has increased its enrollment and maintained a graduate student population of approximately 70 for the past three years. In addition, we have successfully attracted a greater percentage of the top candidates during the past three years.

The high standards in admitting applicants to our graduate program continues despite the reduction in completed applications. Applicants for the 1988-1989 academic year had an average undergraduate GPA of 3.13 and an average M.S. GPA of 3.6. The average undergraduate GPA is approximately the same for the past three years; however, the graduate GPA for students applying to the Ph.D. program has increased significantly. Average scores for the Graduate Record Exam remain as high as those in previous years.

During the past three academic years, the percentage of completed applications by females has risen from 18% in 1986-1987 to 24% in 1987-1988 and 31% in 1988-1989. These growing populations may reflect the potential for mentoring and guidance by two female professionals within our Department. In addition, the amount of aid offered female applicants has increased from 4 to 6 over the past three years, and the aid acceptance of female applicants has doubled in the past three years. In general, the percentage of male and female students accepting aid has risen from 50% and 0% for the Fall 1986 and Spring 1987 semesters to 60% and 100% for the Fall 1988 and Spring 1989

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semesters. The total number of minorities accepted in our graduate program has increased from one in the 1986-1987 academic year to three in the 1988-1989 academic year.

Table 1: DEPARTMENT OF GEOLOGY - SUMMARY OF GRADUATE APPLICANT DATA FOR: FALL, 1988

	Male	Female	TOTAL	Minority	Foreign	PhD	MS	Applicants Accepted GPA
A. Applicants to Graduate Program								
Accepted	26	14	40	2	2	15	25	BS=3.06
Not Accepted	13	5	18	1	3	6	12	BS=3.59
TOTALS	39	19	58	3	5	21	37	
Additional Incomplete Applications		28						
TOTAL APPLICANTS		86						
B. Financial Aid Data (Assistantships and Fellowships)								
Aid Offered	15	5	20					
Aid Accepted	9	3	12					
% Accepting our offer			60%					

Table 2: DEPARTMENT OF GEOLOGY - SUMMARY OF GRADUATE APPLICANT DATA FOR: SPRING 1989

	Male	Female	TOTAL	Minority	Foreign	PhD	MS	Applicants Accepted GPA
A. Applicants to Graduate Program								
Accepted	3	2	5	1	0	2	3	BS=3.19
Not Accepted	2	0	2	0	0	1	1	BS=3.62
TOTALS	5	2	7	1	0	3	4	
Additional Incomplete Applications		23						
TOTAL APPLICANTS		30						
B. Financial Aid Data (Assistantships and Fellowships)								
Aid Offered	3	1	4					
Aid Accepted	3	1	4					
% Accepting our offer			100%					

0
1
2
3
4

I. RESEARCH GRANTS AND CONTRACTS

Awards Beginning in 1988

Rapid climatic change in central New Mexico

R.Y. Anderson

UNM RAC

\$1,543; 1988

Additional funding for geochemical studies of WIPP area

D.G. Brookins

Sandia National Laboratories

\$5,000; 1988

Review of Culebra hydrogeochemical facies document

D.G. Brookins

Sandia National Laboratories

\$5,232; 1988

Radon studies in the Albuquerque, New Mexico, area: Soil, indoor, air, water

D.G. Brookins

The Frost Foundation

\$17,914; 1988-1989

Geochemical studies of WIPP area rocks and waters

D.G. Brookins

Sandia National Laboratories

\$65,000; 1988-1989

Organic/inorganic interactions in sedimentary basins: Experimental studies of water-soluble organic compounds

L.J. Crossey

Shell Development Company

\$10,000; September, 1988 to September, 1989

Diagenetic processes in sandstones interbedded with organic-rich sediments:

Piceance Creek Basin, northwestern Colorado

L.J. Crossey

Sandia National Laboratories

\$30,000; October, 1988 to October, 1989

Application of volcanology to lunar and planetary geology

W.E. Elston

NASA

\$5,000; January 1, 1988 to March, 31, 1988

Application of volcanology to lunar and planetary geology

W.E. Elston

NASA

\$40,000; April 1, 1988 to March 31, 1989

Origin and evolution of meteorite parent bodies and the Moon

K. Keil (IOM)

NASA

\$250,000; February 1, 1988 to January 31, 1989

Petrologic and geological investigations in support of engineering and design studies, Nevada Test Site

K. Keil (IOM)

Sandia National Laboratories

\$93,934; October 1, 1988 to September 30, 1989

Mineralogic characterization of the geologic section at the WIPP site

K. Keil (IOM)

Sandia National Laboratories

\$80,053; October 1, 1988 to September 30, 1988

UNM/Sandia Colloquium Series

A.M. Kudo

Sandia National Laboratories

\$11,000; August, 1988 to May, 1989

A detailed geometric and kinematic analysis of a major accommodation zone in highly extended terrain: central Black and southern Eldorado Mountains, Arizona and Nevada

C.K. Mawer, J.W. Geissman and J. Faulds

NSF

\$46,458; January 1, 1988 to June 30, 1990

Ecology and biology of endangered salamanders

L.D. McFadden

U.S. Fish and Wildlife Department

\$4,228; July 1988 to June, 1989

Regional patterns of soil formation and paleoclimatic inferences from remotely sensed images

L.D. McFadden

Land Processes Branch, NASA

\$4,450; February 1, 1988 to January 31, 1991

Climate and soil development over long and short time spans

L.D. McFadden

U.S. Geological Society

\$3,100; August 30, 1988 to October 30, 1988

Mineralogy of fine-grained phases in primitive interplanetary dust particles and carbonaceous chondrites

F.J.M. Rietmeijer

NASA

\$81,000; April, 1988 to April, 1989

Shock metamorphism of cosmic dust analogs
 F.J.M. Rietmeijer
 NASA
 \$20,000; April 1988 to April 1989

Volcaniclastic sedimentation related to intracontinental volcanic fields and
 rift basins
 G.A. Smith
 American Chemical Society (Petroleum Research Fund)
 \$18,000; February 1, 1988 to August 31, 1990

Quaternary evolution of fluvial systems in the northern Rio Grande Rift:
 Implications for vertical crustal uplift and rift tectonics
 S.G. Wells
 Los Alamos National Laboratory
 \$11,000; October 1, 1988 to September 30, 1989

Petrologic and geochemical studies of volcanic rocks in support of the Nevada
 Nuclear Waste Storage investigations
 S.G. Wells and F. Perry
 Los Alamos National Laboratory
 \$57,722; May 1, 1988 to September 30, 1988

Petrologic and geochemical studies of volcanic rocks in support of the Nevada
 Nuclear Waste Storage investigations
 S.G. Wells and F. Perry
 Los Alamos National Laboratory
 \$95,000; October 1, 1988 to September 30, 1989

Catalog of hydrologic information for the middle Rio Grande
 S.G. Wells
 U.S. Fish and Wildlife Service
 \$8,900; September, 1988 to May, 1989

Paleogene geology of the Pisco Basin, southwest Peru
 R. Wright
 Texaco, Inc.
 \$35,000; May 1, 1988 to May 1, 1990

The stable isotope and minor element geochemistry of iron (III) oxide rocks
 and minerals
 C.J. Yapp
 NSF
 \$90,158; February 1, 1988 to July 31, 1990

Awards Continuing from Previous Years

Climatic change in the ENSO and lower frequency bands, northeast Pacific
 continental margin
 R.Y. Anderson and J.V. Gardner
 \$76,426; June 1, 1987 to November 30, 1989

Geochemical studies near the WIPP sites
D.G. Brookins
Sandia National Laboratories
\$50,000; January 7, 1987 to June 30, 1988

An examination of the stability of water-soluble organic compounds in
diagenetic systems
L.J. Crossey
American Chemical Society (Petroleum Research Fund)
\$18,000; July 1, 1987 to August 31, 1989

Correlation of organic-inorganic diagenesis in sandstones intercalated with
organic-rich sediments: Piceance Creek Basin, northwestern Colorado
L.J. Crossey
Sandia National Laboratories
\$30,000; October 1, 1987 to September 30, 1988

Mineralogical characterization of geological section at the WIPP site:
Assessment of organic constituents in the Culebra Dolomite
L.J. Crossey
Sandia National Laboratories
\$23,447; October, 1987 to September, 1989

Application of volcanology to lunar and planetary geology
W.E. Elston
NASA
\$24,996; November 1, 1987 to October 31, 1988

Pyroclastic eruptions of Mount St. Helens, May 18, 1990
W.E. Elston
NSF
\$30,000; September 1, 1987 to February 28, 1990

Kainozoic interplate orogenic andesite, North American Basin and Range -
Colorado Plateau transition
W.E. Elston and C.J. Hawkesworth
British National Environmental Research Council
\$8,750; October 31, 1987 to September 30, 1989

Radiation effects and annealing kinetics in crystalline complex Nb-Ta-Ti
oxides, phosphates and silicates
R.C. Ewing
Office of Basic Energy Sciences, DOE
\$102,700; August 1, 1987 to July 31, 1988

An automated, small access superconducting rock magnetometer for paleomagnetic
and rock magnetic microanalysis
J.W. Geissman
DOE, University Research Instrumentation Program
\$115,000; September 15, 1987 to September 14, 1988

Comparative geochemistry and sedimentology of several essentially unmetamorphosed Proterozoic iron-formations

C. Klein

NSF

\$100,000; September 1, 1987 to February 28, 1990

Collaborative research: Paleobiology of the Proterozoic

C. Klein

NSF

\$8,300; June, 1986 to November, 1988

Analytical electron microscopy of fine-grained phases in primitive interplanetary dust particles and carbonaceous chondrites

I.D.R. Mackinnon

NASA

\$82,000; April, 1987 to March, 1988

The formation and evolution of deformation microstructures

C.K. Mawer

Sandia National Laboratories

\$30,000; October 1, 1987 to September 30, 1988

Evaluation of the Late Quaternary tectonics, terrace development and soil formation along the north branch of the San Andreas Fault in the Santa Ana Waste Area, southern California

L.D. McFadden and R.J. Weldon

U.S. Geological Survey

\$9,686; May, 1987 to September 30, 1988

Research on climatic and temporal effects on soil development in the western U.S. and emphasis on long-term, average rates and shorter term fluxes of atmospheric dust in response to climatic fluctuations

L.D. McFadden

U.S. Geological Survey

\$10,000; September 30, 1987 to September 30, 1988

Late Quaternary paleohydrology of the eastern Mojave River Drainage, southern California: Quantitative modelling of the Late Quaternary hydrologic cycle in large arid watersheds

S.G. Wells, R.Y. Anderson and L.D. McFadden

N.M. Water Resources Research Institute, U.S. Geological Survey

\$143,696; September 1, 1986 to December 31, 1988

Collaborative research on aseismic ridge subduction in Costa Rica: Mechanisms and geomorphic evidence for crustal uplift

S.G. Wells

NSF

\$57,620; January 1, 1986 to December 31, 1989

Marine Gilbert deltas: Anomalous sedimentologic features along the ancient Peruvian Coast

R. Wright

UNM RAC

\$2,500; July 1, 1987 to June 30, 1988

II. PROFESSIONAL LECTURES TO THE DEPARTMENT OF GEOLOGY AND
INSTITUTE OF METEORITICS, FALL, 1988 - SPRING, 1989

- Dr. Thomas Stephen (Max Planck Institute, West Germany) - "Shock-induced disturbance of the K-Ar system" (July 25, 1988)
- Dr. Chris Patterson (Los Alamos National Laboratory, Los Alamos, New Mexico) - "Accretion of the asteroid belt" (August 5, 1988)
- Dr. John W. Geissman (Department of Geology, University of New Mexico, Albuquerque, New Mexico) - "Paleomagnetic and rock magnetic microanalysis: Historical background, rationale, methodology, and current and future research" (September 1, 1988)
- Dr. Mark Ander (Los Alamos National Laboratory, Los Alamos, New Mexico) - "Geophysical search for the fifth force of nature" (September 8, 1988)
- Patrick Longmire (Roy F. Weston Company) - "Hydrogeochemical interactions and evolution of acidic solutions in soils and groundwater (September 15, 1988)
- Dr. William C. Kelly (Department of Geological Sciences, University of Michigan, Ann Arbor, Michigan, Sandia Colloquium Distinguished Lecturer) - "Panasqueira, Portugal - A most peculiar case of hydrothermal tin-tungsten mineralization" (September 22, 1988)
- Dr. William C. Kelly (Department of Geological Sciences, University of Michigan, Ann Arbor, Michigan, Sandia Colloquium Distinguished Lecturer) - "Ancient fluids in crystals: Fossil magmas, oils, and hydrothermal fluids" (September 22, 1988)
- Dr. William D. Carlson (Department of Geological Sciences, University of Texas, Austin, Texas) - "The significance of intergranular diffusion to mechanics and kinetics of porphyroblast crystallization" (September 29, 1988)

- Dr. Thomas Armbruster (University of Bern, Switzerland) - "Crystal chemistry of double-ring silicates and related compounds" (October 6, 1988)
- Dr. William C. McIntosh (New Mexico Institute of Mining and Technology, Socorro, New Mexico) - "Stratigraphic framework of the Mogollon-Datil volcanic field based on paleomagnetism and Argon-40/Argon-39 dating" (October 20, 1988)
- Dr. Jeffrey Lloyd (University of Leeds, United Kingdom) - "New techniques in scanning electron microscopy" (October 27, 1988)
- Mr. Frank Perry (Department of Geology, University of New Mexico, Albuquerque, New Mexico) - "Evolution of magmatic system at Mount Taylor, New Mexico" (November 3, 1988)
- Dr. Tom Lorenz (Sandia National Laboratories, Albuquerque, New Mexico) - "The origin and character of regional fracture systems: Evidence from the multiwell experiment" (November 10, 1988)
- Mr. Achim Albrecht (Department of Geology, University of New Mexico, Albuquerque, New Mexico) - "Voyage to mantle-crust boundary in northern Mexico" (November 17, 1988)
- Dr. Paul E. Damon (Caswell Silver Distinguished Lecturer, Department of Geosciences, University of Arizona, Tucson, Arizona) - "Continental uplift of western North America in late Cretaceous and Cenozoic time" (December 1, 1988)
- Dr. Paul E. Damon (Caswell Silver Distinguished Lecturer, Department of Geosciences, University of Arizona, Tucson, Arizona) - "The Shroud of Turin: Nature, History and Carbon-14 Dating" (December 1, 1988)
- Steven M. Cather (New Mexico Bureau of Mines and Mineral Resources, Socorro, New Mexico) - "Paleogene history of west-central New Mexico: Sedimentation, tectonism, and volcanism" (December 8, 1988)

- 0382
- Dr. R.D. Dallmeyer (Department of Geology, University of Georgia, Athens, Georgia) - "⁴⁰Ar/³⁹Ar dating: Principles, methods, and applications in polymetamorphosed terranes" (December 8, 1988)
- Dr. M.E. Campana (Department of Geological Sciences, University of Nevada, Reno, Nevada) - "Heat transfer and fluid flow at Leach Hot Springs, Pershing County, Nevada" (January 19, 1989)
- Dr. E. Stolper (Division of Geological Science, California Institute of Technology, Pasadena, California) - "Volatiles in melts and magmas" (January 26, 1989)
- David Kreamer (Department of Geology, Arizona State University, Tempe, Arizona) - "Subsurface contaminant transport" (February 2, 1989)
- Steve Forman (University of Colorado) - "Thermoluminescence dating of Quaternary sediments: A new tool for deciphering tectonic and climate records" (February 9, 1989)
- Dr. Claudia Mora (Department of Geological Sciences, University of Texas at El Paso, El Paso, Texas) - "Metamorphic fluid-rock interaction, Idaho" (February 16, 1989)
- Steve Cather (New Mexico Bureau of Mines and Mineral Resources) - "Paleogene history of west-central New Mexico: Sedimentation, tectonism and volcanism" (February 23, 1989)
- Dr. Ken Jackson (Earth Sciences Department, Lawrence-Livermore National Laboratories, Livermore, California) - "Geochemical modeling calculations in high-level nuclear waste disposal" (March 2, 1989)
- Dr. Eugene Smith (Department of Geosciences, University of Nevada, Las Vegas, Nevada) - "Evolution of calc-alkaline igneous rocks during mid-Miocene extension: An example for Lake Mead area, Nevada and Arizona (March 9, 1989)

- R. Holt (IT Corporation, Albuquerque, New Mexico) - "Facies variability and post-depositional alteration within the Rustler Formation, southeastern New Mexico" (March 23, 1989)
- Dr. Bernard Potty (Centre de Pecherches sur la Geologie de l'Uranium, Vandoeuvre-les-Nancy, France) - "Sedimentary uranium deposits (unconformity related and sandstone hosted) in the thermal history of sedimentary basins" (March 28, 1989)
- Dr. Bernard Potty (Centre de Pecherches sur la Geologie de l'Uranium, Vandoeuvre-les-Nancy, France) - "Geochemical fluids in the system C-O-H-N-S: Chemical equilibrium and disequilibrium and metallogenic consequences" (March 30, 1989)
- R. Reynolds (U.S. Geological Survey, Denver, Colorado) - "Hydrocarbon-related diagenesis of iron oxides and iron sulfides and the possibility for magnetic detection of oil fields" (April 6, 1989)
- Dr. L. Snee (U.S. Geological Survey, Denver, Colorado) - "Tectonic and thermochronologic history of southeast People's Republic of China" (April 12, 1989)
- Dr. L. Snee (U.S. Geological Survey, Denver, Colorado) - " $^{40}\text{Ar}/^{39}\text{Ar}$ age spectrum technique and applications (April 13, 1989)
- Dr. James Steidtmann (Department of Geology and Geophysics, University of Wyoming, Laramie, Wyoming) "Laramide basin subsidence and basement uplift in Rocky Mountain foreland of Wyoming" (April 14, 1989)
- Dr. Christopher Schmidt (Department of Geology, Western Michigan University, Kalamazoo, Michigan) - "Interaction of Rocky Mountain foreland and Cordilleran thrust belt" (April 19, 1989)

III. UNDERGRADUATE DEGREES AWARDED

The following students completed degrees during the report period:

B.A.

House, Ethel O'Dale (Fall, 1988)
Rembelski, Ken (Summer, 1988)
Sandoval, Ruby A. (Spring, 1989)
Torneby, Mike (Fall, 1988)

B.S.

Baron, Gregg D. (Spring, 1989)
Collier, Cecilia M. (Fall, 1988)
DeLong, Harry (Summer, 1988)
Flores, Dale (Summer, 1988)
Fritz, Teresa Lee (Fall, 1988)
Hayden, Steven N. (Fall, 1988)
McMillian, Michael (Fall, 1988)
Mohorcich, Mark (Fall, 1988)
Northrup, Clyde (Spring, 1989)
Read, Adam (Spring, 1988)
Volkman, Jay (Fall, 1988)
Young, Sharissa G. (Spring, 1989)

IV. MASTERS STUDENTS

Shirley J. Adams	Darin J. Milligan
Bruce D. Allen	Robert W. Morris
William J. Brown	Sallyann Paschal
Charles R. Bryan*	Frank J. Pazzaglia
Edward Calvin	John L. Persico*
Rachel Cowan*	Aurora Pun
Lon A. Davidek	Steven I. Recca*
Paul G. Drake	Claire E. Renault
Bruce A. Epling	Teresa M. Royek
Daniel W. Erskine*	John L. Saxton
Robert J. Finch	David T. Simpson
Michael J. Gay	Kenneth W. Sims
Patricia M. Hester*	Thomas M. Skirvin
John Holbrook*	Roger F. Smith*
Qing Huang	Paula J. Stout
David A. Iseri	Christine L. Terhune
Paul A. Karas*	Kathleen M. Verhage
Danny Katzman	James S. Walker
John C. Kelly*	Julie K. Warner
Tim Kraner	John R. Wesling*
Franz Lauffer	Maya M. Wheelock
David Lusby	Stephen J. Whiteley
Kelli McCormick*	Cecelia V. Williams
Timothy J. McCoy	Thomas E. Williamson
Barbara Menne	

(* = completed degree in 1988)

V. DOCTORAL STUDENTS

Richard J. Abitz	Julia B. Knight
Achim Albrecht	Daniel Larsen
James Bearzi	Braddock K. Linsley
Michael G. Bersch	Patrick A. Longmire
Charles R. Bryan	Gregory R. Lumpkin*
Thomas F. Bullard	James P. McKinley
James T. Callian	Christopher M. Menges*
Ignacio Casanova	Roy D. Merritt
Jeffrey B. Clark	Rodney V. Metcalf
Charles W. Criswell	Grant Meyer
Tamara Dickinson Denault*	Mark L. Miller
Paul O. Eberly	Lorenzo D. Nealey
Raymond K. Eby	Phillip D. Noll
Yehouda Enzel	Sheila J. Seaman*
Daniel W. Erskine	Terrence V. Sowards
James F. Faulds	Lawrence N. Smith*
Mark A. Gonzalez	Stephen B. Taylor
Stephen S. Harlan	Amy G. Thompson
James B. Harrison	David B. Ward
Adrian P. Hunt	Christine A. White
Michael J. Jercinovic*	

(* = completed degree in 1988)

VI. POST-DOCTORAL FELLOWS

Adrian Brearley

Rhian Jones

VII. GRADUATE DEGREES AWARDED

The following students listed below received M.S. or Ph.D. degrees in Geology in 1988.

Master's Degrees

Charles R. Bryan

Thesis title: Geology and geochemistry of mid-Tertiary volcanic rocks in the eastern Chiricahua Mountains, southwestern Arizona, 137 p.

Advisor: W.E. Elston

Degree awarded: May 15, 1988

Rachel Cowan

Thesis title: Characterization and genesis of Palagonite authigenic mineralization, Hanauma Bay and Koho Craters, Oahu, Hawaii

Advisor: R.C. Ewing

Degree awarded: May 15, 1988

Daniel W. Erskine

Thesis title: Geochemistry and petrogenesis of rocks with shoshonitic affinities, Crandall-Sunlight Region, Absaroka Volcanic field, Wyoming

Advisor: A.M. Kudo

Degree awarded: December 16, 1988

Patricia M. Hester

Thesis title: Depositional environments in an Upper Triassic Lake, east-central New Mexico

Advisor: R.Y. Anderson

Degree awarded: July 29, 1988

John M. Holbrook

Thesis title: Depositional history of Lower Cretaceous strata in northeastern New Mexico: Implications for regional tectonics and sequence stratigraphy

Advisor: R. Wright

Degree awarded: December 16, 1988

Paul A. Karas

Thesis title: Quaternary alluvial sequence of the upper Pecos River and a tributary, Glorieta Creek, north-central New Mexico

Advisor: L.D. McFadden

Degree awarded: December 16, 1988

John C. Kelley

Thesis title: Petrology and petrogenesis of alkali basalt and their associated inclusions from Elephant Butte area, Sierra County, New Mexico

Advisor: A.M. Kudo

Degree awarded: May 15, 1988

0123

Kelli A. McCormick

Thesis title: Sources of clasts in terrestrial and lunar impact melts
Advisor: K. Keil
Degree awarded: December 16, 1988

John L. Persico

Thesis title: Behavior, speciation, and environmental impact of selenium
at Bosque del Apache National Wildlife Refuge and Poison Canyon, New
Mexico
Advisor: D.G. Brookins
Degree awarded: May 15, 1988

Steven I. Recca

Thesis title: Fine-grained, millimeter-sized objects in ordinary
chondrites and their relation to chondrules and matrix
Advisor: K. Keil
Degree awarded: May 15, 1988

Roger F. Smith

Thesis title: Structural and metamorphic evolution of Proterozoic rocks in
the northern Taos Range, Taos County, New Mexico, 85 p.
Advisor: J.A. Grambling
Degree awarded: May 15, 1988

John R. Wesling

Thesis title: Glacial chronology and soil development in Winsor Creek
drainage Basin, southernmost Sangre de Cristo Mountains, New Mexico
Advisor: L. D. McFadden
Degree awarded: December 16, 1988

Doctoral Degrees

Tamara Dickinson Denault

Dissertation title: Germanium abundances in lunar basalts: Evidence of
Mantle Metasomatism

Advisor: K. Keil

Degree awarded: December 16, 1988

Michael J. Jercinovic

Dissertation title: Alteration of basaltic glasses from British Columbia,
Iceland, and the Deep Sea

Advisors: R.C. Ewing and K. Keil

Degree awarded: May 15, 1988

Gregory R. Lumpkin

Dissertation title: Alpha decay damage, geochemical alteration and crystal
chemistry of natural pyrochlores

Advisor: R.C. Ewing

Degree awarded: July 29, 1988

Christopher M. Menges

Dissertation title: The tectonics and geomorphology of mountain-front
landforms in the Northern Rio Grande rift near Taos, New Mexico

Advisor: S.G. Wells

Degree awarded: December 16, 1988

Sheila J. Seaman

Dissertation title: Geology and petrogenesis of ash flow tuffs and
rhyolitic lavas associated with the Gila Cliff dwellings Basin - Bursum
Caldera Complex, southwestern New Mexico

Advisor: W.E. Elston

Degree awarded: May 15, 1988

Lawrence N. Smith

Dissertation title: Basin analysis of the lower Eocene San Jose Formation,
San Juan Basin, New Mexico and Colorado

Advisor: R. Wright

Degree awarded: May 15, 1988

VIII. TEACHING AND RESEARCH ASSISTANTSHIPS
1988-1989

<u>Name</u>	<u>TA/RA</u>	<u>Project Director</u>	<u>Funding</u>
Abitz, R.	TA	Wells	Department
Albrecht, A.	TA/RA	Wells/Brookins/Rietmeijer	Dept/NASA
Allen, B.	RA	Anderson	NSF
Bersch, M.	RA	Keil	NASA
Brown, W.	TA/RA	Wells	Dept/USGS
Bryan, C.	RA	Brookins	Sandia
Bullard, T.	TA/RA	Wells	Dept/USFWS
Casanova, I.	RA	Keil	NSF
Crandall, G.	TA	Wells	Department
Criswell, W.	RA	Elston	NSF
Davidek, L.	TA	Wells	Department
Drake, P.	TA/RA	Wells	Dept/NSF
Eberly, P.	RA	Crossey	Sandia
Enzel, Y.	TA/RA	Wells, McFadden	Department
Erskine, D.	TA	Wells	Department
Faulds, J.	TA/RA	Wells/Mawer	Dept/NSF
Finch, R.	TA	Wells	Department
Harlan, S.	Fellowship	Geissman	Silver Fdn.
Harrison, B.	RA	McFadden	USA Eng.
Hayden, S.	TA	Wells	Department
Huang, Q.	TA/RA	Wells/Geissman	Department
Iseri, D.	RA	Crossey	
Katzman, D.	TA	Wells	Department
Larsen, D.	RA	Crossey	ACS
Linsley, B.	RA	Anderson/Linsley	NSF/USSAC
McCormick, K.	RA	Keil	IOM
McCoy, T.	RA	Keil	NSF
Merritt, R.	TA	Wells	Department
Metcalf, R.	TA	Wells	Department
Meyer, G.	Fellowship	Wells	Silver Fdn.
Miller, M.	RA	Ewing	BES
Milligan, D.	RA	Brookins	Sandia
Morris, R.	RA	Keil	NASA
Noll, P.	RA	Newsom	NSF
Paschal, S.	RA	Non-Department	NASA
Pazzaglia, F.	TA	Wells	Department
Pun, A.	RA	Keil	NASA
Renault, C.	RA	Wells	LANL
Royek, T.	TA	Wells	Department
Sadow, J.	RA	Elston	NASA
Sasahara, A.	RA	McFadden	Department
Simpson, D.	TA/RA	Wells/McFadden	Department
Sims, K.	RA	Keil	NASA
Skirvin, T.	RA	Wells	USGS WRRI
Taylor, S.	RA	Wright	Texaco
Terhune, C.	RA	McFadden	Department

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Thompson, A.
Verhage, K.
Wheelock, M.
White, C.
Williamson, T.

TA/RA
TA
Fellowship
RA
TA

Wells/Mawer
Wells
Keil
Gambling
Wells

Dept/NSF
Department
Silver Fdn.
NSF
Department

 IX. STUDENT SCHOLARSHIP AND RESEARCH AWARDS
 1988-1989

GEOLOGY ALUMNI FELLOWSHIP FUND

Albrecht, Achim	\$ 750.00
Allen, Bruce D.	500.00
Brown, William J.	250.00
Enzel, Yehouda	500.00
Harrison, J. Bruce	400.00
Katzman, Danny	300.00
Larsen, Daniel	250.00
Pazzaglia, Frank J.	250.00
Stout, Paula J.	250.00
Ward, David B.	800.00
Williamson, Thomas	300.00

HARRY AND MABEL LEONARD SCHOLARSHIP FUND

Battuello, Peter A.	\$1,750.00
Doubrava, Matthew R.	100.00
Krause, Birgit	1,400.00
Moore, Audrey J.	500.00
Romero, David J.	500.00
Sandoval, Ruby A.	500.00
Shain, Matthew W.	100.00
Wawrzyniec, Timothy F.	1,400.00
Weissbarth, Rochelle C.	750.00

GENERAL THOMAS D. CAMPBELL MEMORIAL SCHOLARSHIP

Doubrava, Matthew R.	\$ 900.00
Shain, Matthew W.	900.00

JAMES DREW PFIEFFER MEMORIAL AWARD

Northrup, Clyde J.	\$ 174.00
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RODNEY C. RHODES MEMORIAL SCHOLARSHIP

Albrecht, Achim	\$ 174.00
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AMERICAN GEOLOGICAL INSTITUTE AWARD

Krause, Birgit	
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ESTWING OUTSTANDING FIELD GEOLOGIST

Read, Adam S.

VINCENT C. KELLEY OUTSTANDING FIELD GEOLOGIST AWARD

Battuello, Peter A.

J. PAUL FITZSIMMONS OUTSTANDING SOPHOMORE AWARD

Krause, Birgit

SHERMAN A. WENGERD OUTSTANDING JUNIOR AWARD

Wawrzyniec, Timothy F.

STUART A. NORTHRUP OUTSTANDING SENIOR AWARD

Northrup, Clyde J.

NEW MEXICO GEOLOGICAL SOCIETY OUTSTANDING SENIOR AWARD

Northrup, Clyde J.

X. GEOLOGY ALUMNI FELLOWSHIP FUND CONTRIBUTORS
1988-1989

Mrs. Julia Berger
Mr. Harry C.D. Bergquist
Dr. Saleh M. Billo
R.L. Boder
Mr. Sidney Brandwein
Mr. Mark Cameron
Mr. William L. Chenoweth
Mr. David B. Givens
Mr. Harry J. Graff
Mr. Patrick J. Gratton
Dr. Bill P. Lovejoy
Dr. James Lee Martin
Mr. Robert R. Merker
Dr. and Mrs. Stuart A. Northrop
Mr. Alexander A. Wanek

CORPORATE MATCHING CONTRIBUTIONS TO THE FELLOWSHIP FUND

Shell Oil Company Foundation
Ford Motor Company

The Report of The Department of History

July 1, 1988 - June 30, 1989

Jonathan Porter, Chair

GENERAL DEPARTMENTAL INFORMATION

A. Significant Achievements

1. Graduates

	Summer 1988	Fall 1988	Spring 1989
B.A.'s	2	12	20
M.A.'s	1	2	1
Ph.D's		1	
Schackel, Sandra (Adv. Slaughter)		Fall 1988	

2. Course Offerings

Summer 1988

Course No.	Course Name	No. of Sections	SCH
101	Western Civilization	1	165
102	Western Civilization	2	216
162	History of the U.S.	1	276
282	Mod Latin Amer Hist	1	36
309	Historiography	1	39
320	U.S./Mexican Relations	5	15
333	Fr Rev-Nap-1789-1815	1	87

0235

360	Hist of New Mexico	1	288
369	American Indian Hist	1	222
491	Internship	1	3
496	Undergrad Rdgs-Hist	6	75
504	Ibero-Am Studies Sem	1	18
551	Prblems	6	57
599	Masters Thesis	3	9
699	Dissertation	2	6

Fall 1988

Course No.	Course Name	No. of Selections	SCH
101	Western Civilization	7	2529
102	Western Civilization	2	402
161	History of the U.S.	8	2181
162	History of the U.S.	2	537
220	Studies in History	1	3
251	Trad Eastern Civ	1	102
270	Amer West: A Survey	1	57
281	Hist-Colonial Lat Am	1	81
282	Mod Latin Amer Hist	1	78
305	Christianity to 1517	1	99
309	Historiography	1	48
311	Ancient Near East	1	204
313	Greece	1	393
316	Women in Mod World	1	111
318	Hist Sci 1543-1800	1	75

320	Studies in History	5	441
323	Renaiss Era 1300-1520	1	108
326	Hist Occult Irratnal	1	135
327	History of Technology	1	36
331	Europe in 17th Cent	1	54
335	Modern Eur 1890-1939	1	63
343	Hist of Engl to 1688	1	156
347	Old Russia 9th-17th C	1	117
349	Russ-1855 to Present	1	168
356	Islamic Middle East	1	81
360	Hist of New Mexico	1	315
363	The Old South	1	159
364	Political Hist-U.S.	1	129
369	American Indian Hist	1	147
375	Military Hist of U.S.	1	228
380	Hist of SW-Span Per	1	306
383	Soc & Devmt Lat Am	1	90
395	Spain & Port to 1700	1	42
442	Germany 1871-1971	1	30
443	Modern East Europe	1	24
456	Islam	1	63
467	Gilded Age 1865-1900	1	45
468	20th C Amer 1898-1932	1	117
475	Am Cul/Soc 1607-1860	1	75
484	Cuban Rev 1959-Pres	1	45
489	Brazil 1500 to Pres	1	27

0133

493	Rdg-Resrch in Honors	1	3
495	Undergrad Hnrs Coll	1	15
496	Undergrad Rdgs-Hist	7	24
504	S/Historical Novel	1	12
510	St/Mexican Revolution	1	30
542	Rg Sem & Stu Mod Eur Hist	1	15
545	Rg Sem & Stu British Hist	1	15
551	Re Problems	9	33
562	Rg Sem & Stu Early Am Hist	1	30
573	Rg Sem Amer Western Hist	1	30
579	Rg Sem Southwest Hist	1	27
582	Rg Sem Recent Lat Am Hist	1	36
599	Re Masters Thesis	5	21
699	EC Dissertation	12	66

Spring 1989

Course No.	Course Name	No. of Sections	SCH
101	Western Civilization	2	774
102	Western Civilization	8	1908
161	History of the U.S.	3	747
162	History of the U.S.	7	2052
230	USSR People-Pol-Cult	1	357
252	Mod Eastm Civilizations	1	93
282	Mod Latin Amer Hist	1	120
303	Hist World Communism	1	144
306	Christian 1517-Pres	1	108

309	Historiography	2	120
314	Rome	1	452
319	Hist Sci 1800-Pres	1	129
320	Studies in History	9	936
321	Early M Age 300-1050	1	75
328	Mod France Since 1815	1	36
333	Fr Rev-Nap-1789-1815	1	87
336	Europe Since 1939	1	111
344	England Since 1688	1	135
348	Romanov Russ to 1855	1	99
351	Early Modern China	1	72
358	Mod Mid East Fr 1800	1	114
360	History of New Mexico	2	831
362	Am Urb Hist From 1870	1	36
384	Inter Amer Relations	1	111
385	Amer West in 20th C	1	189
390	Latin Amer Phil	1	72
397	Mexico to 1821	1	66
398	Mexico Since 1821	1	93
462	Amer Rev 1763-1789	1	66
466	The Civil War Era	1	183
469	20th C Amer 1932-Pres	1	195
470	Philos of History	1	48
476	Am Cul/Soc Since 1860	1	84
491	Intemship	1	3
493	Rdg-Resrch in Honors	2	6

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494	Senior Thesis	2	6
495	Undergrad Hnrs Coll	1	18
496	Undergrad Rdgs-Hist	7	27
500	Sem Hist Resrch Meth	1	38
521	Sem & Stu in Med Hist	1	12
547	Sem & Stu Mod Russ Hist	1	21
552	Problems	5	15
565	Sem Southern History	1	27
574	Sem Amer Indian Hist	1	39
581	Sem Col Lat Am Hist	1	15
584	Sem Procb Mod Latin Am	1	42
599	Masters Thesis	5	18
699	Dissertation	13	60

3. Personnel & Administration

a. Employees

Permanent:

Bakewell, Peter J.	Professor: Latin America, Colonial (separation 5/89)
Berthold, Richard M.	Associate Professor: Ancient History
Connell-Szasz, Margaret	Associate Professor: American Indian History
Conniff, Michael	Professor: Latin America, Brazil

Devejian, Patsy E.	Clerical Specialist V: Office Secretary and typist
Etulain, Richard W.	Professor: Western America, Literature of the American West
Feller, Daniel M.	Assistant Professor: Jacksonian Era, Civil War, Reconstruction
Gutierrez, Terry	Clerical Specialist V: Receptionist, Secretary, Typist (appointment and separation 8/88)
Hall, Linda B.	Associate professor: Modern Latin America, Modern Mexico
Hutton, Paul A.	Associate Professor: Military History, Western America
Kern, Robert W.	Professor: Iberian History, Modern Europe
Kessell, John L.	Associate Professor: Spanish Southwest, Borderlands
Kramer, Steven P.	Associate Professor: Contemporary Europe, France
Maciel, David	Professor: Chicano History, Modern Southwest and Mexico

Martinez, Yolanda	Administrative Assistant: Department Executive Secretary and Manager
McClelland, Charles E.	Professor: Modern Germany, European Intellectual History
Nash, Gerald D.	Professor: 20th Century U.S., U.S. Economic History
Neal, Alexis	Clerical Specialist V: Receptionist, Secretary, Typist (separation 7/88)
Porter, Jonathan	Professor and Chairman: Modern China, East Asia
Pugach, Noel H.	Associate Professor: U.S. Diplomatic History
Rabinowitz, Howard N.	Professor: American Urban History, The South
Risso, Patricia	Assistant Professor: Middle East Islam, South Asia
Roebuck, Janet	Professor: English History, Urban History
Silva, Lillian	Clerical Specialist V: Receptionist, Secretary, Typist (appointment 9/88)

Skabelund, Donald E.	Associate Professor: History of Science and Technology
Slaughter, M. Jane	Associate Professor: Women's History, Sexuality, Modern Europe
Spidle, Jake W.	Associate Professor: German History, Africa, History of Medicine
Steen, Charlie R.	Associate Professor: Early Modern Europe, France
Sullivan, Donald D.	Associate Professor: Medieval and Renaissance Europe
Szasz, Ferenc M.	Professor: American Social and Intellectual History
Yazawa, Melvin	Associate Professor and Assistant Chair: Colonial and Revolutionary America
<u>Temporary:</u>	
Arieno, Marlene	Visiting Lecturer: Western Civilization
Barbour, Bart	Graduate Assistant
Baumgartel, Tom	Graduate Assistant
Beninato, Stefanie	Reader (Fall & Spring)

Broughton, William	Graduate Assistant
Brunk, Samuel	Graduate Assistant
Bryan, Terri	Reader (Fall & Spring)
Castillo, Nancy	Graduate Assistant
Chavez, Jolane	Graduate Assistant
Cocron, Fritz	Visiting Professor
Femlund, Kevin	Graduate Assistant
Euler, Cat	Reader (Fall & Spring)
Emerson, Mark	Reader (Spring)
Formes, Malia	Reader (Fall & Spring)
Ghattas, Monika	Visiting Lecturer: Western Civilization
Gutierrez, Christine	Reader (Fall & Spring)
Himmerich y Valencia, Robert	Adjunct Lecturer: Latin America & Military History
Lopez, Alfred	Graduate Assistant
Luo, Zhitian	Graduate Assistant
Martinez, Fred	Reader (Fall)
McNeal, Robin	Reader (Fall)
Medeiros, John	Graduate Assistant
Minchow, Gaynel	Reader (Spring)
Norwood, Kyle	Reader (Fall & Spring)
Parker, Dorothy	Lecturer III
Parman, Donald	Visiting Professor: Western History
Pasztor, Suzanne	Graduate Assistant

Schwelm, Karen	Graduate Assistant
Sinclair, Shelley	Visiting Lecturer: Western Civilization
Stanfield, Michael	Graduate Assistant
Sullivan, Noelle	Graduate Assistant
Sundwick, Karen	Visiting Lecturer: U.S. History
Sykes, Bonnie	Reader (Fall & Spring)
Walter, Terry	Clerical Specialist V: Receptionist, Typist (separation 6/89)
Vazquez, Maria	Reader (Spring)
Welsh, Michael	Visiting Lecturer: NM History
Zhu, Li-ping	Graduate Assistant

b. Administration

The History Department administration is directed by the Chair and the Administrative Assistant. The Chair is assisted by the Assistant Chair, and the Administrative Assistant is assisted by one full time and one three-quarter time secretary. The graduate program is supervised by the Graduate Coordinator, who advises the Chair, and the Administrative Assistant. The undergraduate program is administered by the Undergraduate Advisor. The Chair, Administrative Assistant, Assistant Chair,

Graduate Coordinator, and Undergraduate Advisor constitute the Executive Committee, which advised the Chair on the formulation of policy and major administrative matters.

Administration and formulation of policy in specific areas is delegated to six standing committees and four individual assignments. Two of the committees (Graduate Entrance Committee and Undergraduate Program Committee) are elected by the faculty: the other committees and the individual assignments are appointed by the Chair. A Salary Committee is appointed annually by the Chair, with an additional member elected. The faculty are divided into five Sections reflecting geographical divisions specializations: America, American West, Europe, Latin America, and Asia. The senior faculty member of each section is usually designated by the Chair as Section Head, and advises the Chair on matters concerning the Section. The Sections meet to decide matters of curriculum planning, scheduling, and staffing priorities.

Persons serving in responsible administrative positions in the department in 1989-90 were:

Chair:	Jonathan Porter
Administrative Assistant:	Yolanda Martinez
Assistant Chair:	Melvin Yazawa
Graduate Coordinator:	Jane Slaughter
Undergraduate Advisor:	Charlie Steen

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American Section:

Gerald Nash

America West:

Richard Etulain

Europe:

Janet Roebuck

Latin America:

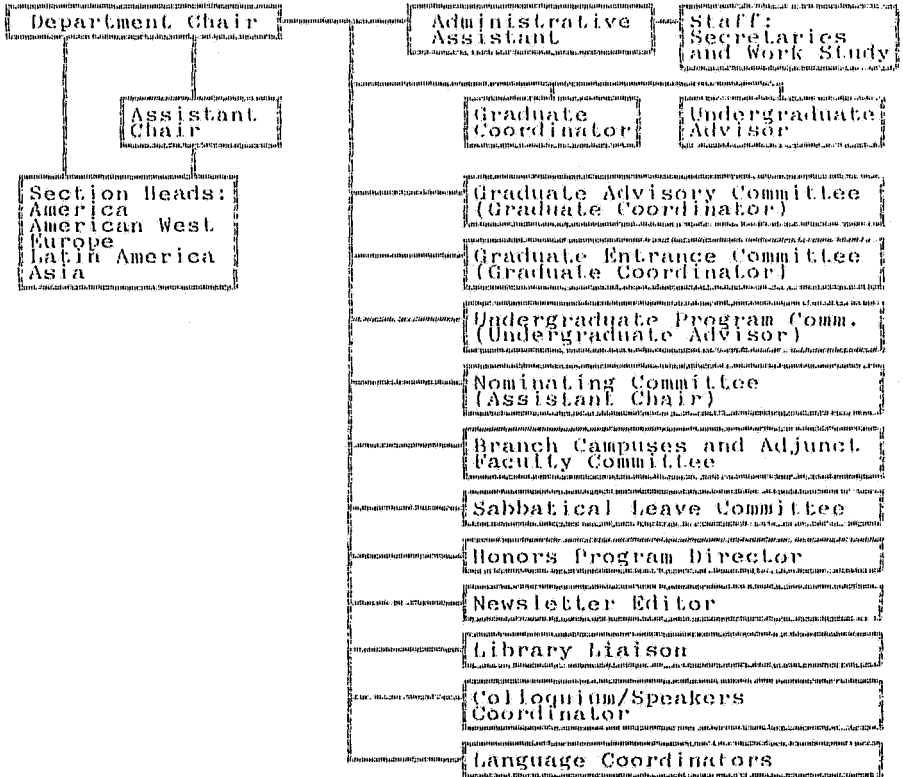
Peter Bakewell

Asia;

Patricia Risso

The following chart illustrates the department organization:

HISTORY DEPARTMENT ORGANIZATION



4. Activities Beyond the Formal Curriculum

- a. The Fourth Annual Calvin Horn Lecture Series was held in November. This year's guest lecturer was Professor Rennard Strickland from the Department of History at Southern Illinois University.
- b. Durwood Ball, History Ph.D. student and the 1988-89 recipient of the Dorothy Woodward Memorial Fellowship delivered a lecture in March on his dissertation research entitled " Vigilantes, Filibusters, and Regular Troops: The United States Army and Civil Disorder in San Francisco, California 1851-1856."
- c. The Department held a reception honoring its Authors for 1987-88 on November 15, 1988. The faculty members honored were: Peter Bakewell, Margaret Connell-Szasz, Richard Etulain, Linda Hall, Paul Hutton, Robert Kern, John Kessell, Gerald D. Nash, Noel Pugach, Richard Robbins, Jake Spidle, Ferenc Szasz.
- d. The Department held an Open House for all students on August 18 (Fall) and January 12 (Spring), all day in the Cannon Room. Most of the faculty attended to advise, offer guidance or simply to socialize. The Department plans to make this a semi-annual event.
- e. The topic (continued from Spring 1988) of the History Department Colloquium was "History: The State of the Art". Under the leadership of Linda Hall, Professors Jane Slaughter and Robert Kern gave a joint lecture entitled: "Mediterranean Historiography: Gender and Politics in Italy and Spain".

- f. The Departments of History and Anthropology presented a Quincentenary Colloquium on "Native American and European Contact in the Americas, 1492-1800". The two day event featured presentations by graduate students and faculty from both Departments.
- g. Dr. Liu Dayong, Chair and Professor of the History Department at Sichuan Normal University, Chengdu, Sichuan, Peoples Republic of China, joined the Department as Visiting Scholar to work on a study of Franklin Roosevelt and the New Deal.
- h. Dr. Peter Kolchin, University of Delaware, delivered a lecture on "American Slavery in Comparative Perspective".
- i. Dr. Estelle Freedman, Stanford University, lectured on "Intimate Matters: The History of American Sexuality".
- j. Dr. Charles Joyner, University of Alabama, lectured on "Cultural Change on the Slave Plantation: Towards an Historical Ethnography of the Peculiar Institution".
- k. Dr. William G. Robbins, Oregon State University, lectured on "Seeking Truth in Western History: Toward a New Paradigm".
- l. Dr. John C. Burnham, Ohio State University, lectured on "Sin, Sex, Drugs, and Alcohol".
- m. Dr. Richard C. Wade, City University of New York delivered a lecture on "The Withering Away of the Political Parties".
- n. Dr. Earl Foneroy, Emeritus Professor, University of Oregon lectured on "The Hazards and Opportunities in Studying Recent American and Western History".

- o. Dr. Martin Marty, University of Chicago lectured on "American Religion in the Year 2000".
- p. Dr. Stanley G. Payne, Hilldale Professor delivered a lecturer on "The Franco Regime".

5. Awards

- a. Anne Blue and Thomas Cleary were the recipients of the Grunsfeld Award.
- b. Melita Swain received the Charles Coan Award.
- c. Charles Rankin received the Dorothy Woodward Memorial Fellowship
- d. Office of Graduate Studies, Graduate Achievement Award was given to Sam Brunk , History Ph.D. Student in Latin American History.

B. Significant Plans and Recommendations

In the Fall of the 1989-90 academic year, the History Department will begin a program of planning for changing annual (or biannual) themes of broad intellectual scope and contemporary relevance, around which department courses, colloquia, and other events will be organized. Suggested themes will be major historical problems, institutions, eras, or trends, such as Decline and Renewal, Discovery (possibly to coincide with the Quincentenary in 1992), Ethnicity, Democracy, the Frontier,

and Military and Society. The core of the program will be a jointly taught course relating to the chosen theme. This undergraduate course might be paralleled by a corresponding graduate level seminar or course, taught by the same faculty. A faculty member will be assigned to plan and direct the program, and to develop and lead the core course(s). The department curriculum will be adjusted each year so that existing courses relating to the theme will be offered that year, and faculty may be encouraged to emphasize the respective theme in their other regular courses as appropriate. Other departments would be invited to participate in particular themes. Public lectures, seminars, and colloquia will be organized around the theme. It is anticipated that this program will foster greater dialog among History faculty and students, between History and other departments at UTM, and with the community at large.

In the next two or three years we hope to refine and elaborate the History Graduate Program with a view to improving the quality and diversity of training, opportunities available to graduate students, and support for graduate study. Specifically, we have already acted to revise our admissions procedures in order to gain a better control over the quality, number, and profile of students admitted to the program. In connection with this goal, we intend to engage in more aggressive recruitment of new students. Second, we propose to implement a program that will provide opportunities for selected graduate students to gain experience in teaching which will make them more marketable upon graduation. Third, we would like to increase the variety as well as the amount of support received by graduate students.

Enrollments in history have continued to rise at a significant rate for the past three years. If this trend continues, an increase in teaching staff will be warranted. At the same time the formal establishment of a Western History Program continues to be the highest priority of the Department for the future. A proposal for such a program, engendered in discussions and planning over the last two years (see previous annual reports) has been submitted to the College and the University administration. If new faculty positions are forthcoming, the diversification of the faculty through Affirmative Action appointments remains an important goal of the Department. We are particularly looking forward to finding targets of opportunity that play to our strengths by augmenting our existing programs.

C. Affirmative Action

The present ethnic and gender composition of the History Department regular faculty and graduate students is shown in the following tables:

Faculty (tenure stream):		total = 27
Male:	22	(81.5%)
Female:	5	(18.5%)
Minority:	2	(7.4%)

Graduate Students:		total = 65
Male:	35	(53.8%)
Female:	30	(46.1%)
Minority:	6	(9.2%)
Hispanic:	5	(7.6%)
American Indian:	1	(1.5%)

D. Appointments to Staff

1. Visiting or Part-Time Appointments:
 - a. Marlene Arieno, Visiting Lecturer, European History, Academic Year.
 - b. Monika Ghattas, Visiting Lecturer, European History, Spring 1989
 - c. Robert Himmerich y Valencia, Adjunct Lecturer, Latin America/Naval History, Spring 1989.
 - d. Dorothy Parker, Visiting Lecturer, U.S./Western History, Academic Year.
 - e. Donald Parnen, Visiting Professor, Western History, Summer 1988
 - f. Shelley Sinclair, Visiting Lecturer, European History, Academic Year.
 - g. Karen Sundwick, Visiting Lecturer, American History, Academic Year.
2. Office Staff Appointment
 - a. Lillian Silva joined the department as Department Secretary.

E. Separation From Staff

1. Faculty Separations:

- a. Peter Bakewell, a long time faculty member and central figure in Latin American History resigned from the department in May to accept a position at Emory University in Atlanta.

2. Office Staff Separations:

- a. Alexis Neal was terminated from the Department.
- b. Terry Gutierrez left the Department for a new job in a Law Office.

F. Sponsored Research

1. Ten professors submitted 24 proposals (37% of current faculty).
2. Of these submitting proposals, 6 obtained awards (60%).

JOURNALISM DEPARTMENT

Prepared by: Fred Bales

A. Significant Achievements

To help keep pace with advancing technology, a new course, Microcomputers in Journalism, was added officially to the department's offerings. Another new course, Desktop Publishing was planned and proposed to the A&S Curriculum Committee.

B. Significant Plans and Recommendations

During the year, talks continued with the Departments of Communication and Theatre Arts about a joint communication curriculum. Despite some interference, which appears to have abated, these talks should lead to a comprehensive program of communication at the university in the not-too-distant future.

C. Appointments to Staff

Dianne Lamb, assistant professor at Metropolitan State University in Denver, was appointed to the faculty as an associate professor beginning in the fall of 1989.

Henry Trewhitt, foreign affairs editor of U.S. News & World Report, was appointed an associate professor, beginning in the fall of 1989.

D. Separations from Staff

Ivan Innerst, fulltime lecturer, retired effective after the

fall 1988 semester.

Clark Edwards, associate professor, resigned at the end of the spring 1989 semester to take a position at Duquesne University.

E. Research and Other Projects

Professor Edwards was part of a project funded by the Corporation for Public Broadcasting to study viewership of public television. He was associated with former UNM professor Paul Traudt, the principal investigator.

The department sponsored the annual New Mexico Scholastic Press Association writing competition and seminar at UNM in March. With the New Mexico Press Association, the department co-sponsored the annual High School Journalism Workshop at UNM from June 10 to June 17, 1989.

With the Daily Lobo, the department co-sponsored a January 29 talk on "Secrecy and the U.S. Government" by investigative reporter Angus MacKenzie of San Francisco.

A department fund-raiser was sponsored in March by the Albuquerque Chapter of the New Mexico Press Women. Actress Jean Jordan performed her one-woman show, "Nellie Bly" for about 100 persons in the Union Building. A reception followed. This was the second such fund-raiser for the department by the press women within the past two years.

In accordance with a newly adopted format for graduation, the department had a reception for graduating journalism majors following the main commencement exercises on May 14. The reception

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took place at the Albuquerque Hilton and 21 students and their families attended.

Department of Linguistics

College of Arts and Sciences

July 1, 1988 - June 30, 1989

ANNUAL REPORT

Alan Hudson-Edwards, Department Chair

A. Significant achievements during 1988-1989.

Following on the heels of an extremely active year of planning and reorganization in 1987-1988, the past academic year was relatively quiescent. The only major event of the year in the area of curriculum and instruction was the approval on April 28, 1989, of a dual undergraduate major in Linguistics and Communicative Disorders by the Faculty Senate Curricula Committee. This innovative program will permit undergraduates to obtain a dual major in the two fields in question upon completion of 54 hours of coursework, 27 in each field. The proposal has now reached the Office of the Secretary of the University and is awaiting presentation to the full Faculty Senate in September 1989.

B. Significant plans for the near future.

The major planning event of the academic year was the convening of a week-long departmental faculty retreat during the week of March 27 to April 1, 1989. In addition to plenary sessions of the faculty dealing with the development of a PhD program in the Department of Linguistics, initiatives in other graduate and undergraduate programs within the department, and faculty development, numerous special interest sessions were held on such topics as applied linguistics at UNM, the development of a Center for Southwest Languages and Linguistics, the participation

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of the Department of Linguistics in an interdisciplinary cognitive science program at UNM, the development of a Native American linguistics curriculum and program at UNM, the development of additional graduate and undergraduate program options within the Signed Language Interpreting Program, and student affairs and faculty-student interaction. The retreat concluded with a full morning session at La Posada de Albuquerque, at which time specific goals were highlighted for the years immediately ahead.

The major departmental goals identified and endorsed by the faculty during the Spring 1989 retreat were:

(1) The development of a PhD in linguistics to be offered through the Department of Linguistics. It was decided that work on the preparation of a PhD program proposal would commence in Fall 1989. The hope was expressed that the proposal could receive the approval of the University faculty and administration, and of the Commission on Higher Education, within a period of two years at the most, and that a target date of Fall 1991 for the admission of students could be met. As discussed at the retreat, the proposed PhD program would work closely with existing degree programs in the College of Education, the Department of Anthropology, the Department of English, and the Department of Modern and Classical Languages, so as to avoid duplication in course and program offerings. Also, by taking particular advantage of developing faculty strengths in the areas of Southwest Spanish linguistics, Native American linguistics, and signed language linguistics, the PhD in Linguistics would acquire a character quite distinct from other linguistics and language-related degree programs currently on offer at the University of New Mexico, and, indeed, would be unique among doctoral programs in linguistics offered at other universities in the region and across the nation.

(2) Establishment of a Center for Southwest Languages and Linguistics. The faculty agreed to establish a Center for Southwest Languages and

Linguistics, the four main functions of which would be (a) to act as a clearinghouse for scholarly information pertaining to the languages of the southwestern United States, with particular emphasis on Southwest Spanish and on the Native American languages of the Southwest, (b) to initiate a sustained program of research in the areas of grammatical description, language acquisition and loss, language maintenance and shift, and language policy and planning pertaining to the languages of the Southwest, (c) to train graduate students and junior faculty in the conduct of research on the languages of the Southwest, and (d) to act as a resource for individuals and agencies concerned with public policy and planning, as these bear upon linguistic issues in the Southwest.

(3) Expansion of course and program options in Navajo and Native American linguistics. The faculty agreed to commence an aggressive effort to expand course offerings and program options in Navajo and Native American linguistics, beginning in Fall 1989. This expansion will take advantage of the expertise of existing Navajo faculty as well as that of Professor MaryAnn Willie, who will become a member of the faculty in August 1989. Other non-Navajo faculty will also be called upon to make new course offerings available in Native American linguistics. The Department of Linguistics will work closely with the Department of CIMTE and with the faculty and staff of Navajo Community College to develop an academically sound Navajo language endorsement program for teachers of Navajo in grades K through 12, and to create an undergraduate minor in Navajo and Native American linguistics in the near future.

(4) Expansion of course and program options in sign language interpreting. The faculty voted unanimously to assign a high priority to the further development and restructuring of the Signed Language Interpreting Program along the following lines: (a) creation of an undergraduate minor in signed language designed to complement undergraduate majors in such areas as linguistics, communicative disorders, special education, and other

fields, (b) restructuring of the existing baccalaureate degree program in Signed Language Interpreting as a general liberal arts major in signed language studies, and (c) creation of a master's degree program in signed language interpreting to be established as the appropriate professional credential for signed language interpreters. The faculty voted unanimously to recommend to the Dean of the College of Arts and Sciences as a matter of priority that one additional member be added to the signed language faculty of the Department of Linguistics, at the level of lecturer or assistant professor.

C. Appointments to faculty and staff.

The following appointments to the faculty and staff of the Department of Linguistics were made, or commenced, during the 1988-1989 academic year:

Eduardo Hernandez-Chavez, PhD, University of California, Berkeley, commenced August 15, 1988.

Sherman Wilcox, PhD, University of New Mexico, temporary appointment changed to permanent appointment, August 15, 1988.

Roseann Willink, MA, University of New Mexico, transferred from Department of Modern and Classical Languages, August 15, 1988.

Joan L. Bybee, PhD, University of California, Los Angeles, to commence August 14, 1989.

MaryAnn Willie, MA, Stanford University, to commence August 14, 1989.

Barbara Curran, Department Secretary, Department of Linguistics, promoted to Office Manager, January 1, 1989.

Glenda Baxter, Staff Secretary, Departments of Linguistics and Philosophy, commenced February 13, 1989.

D. Scholarly presentations.

Vladimir Oriel, "Origins of language: A Soviet view," 16 November, 1988.

Joan Bybee, "The sound pattern of grammaticization," 18 November, 1988.

Csaba Pleh, "Recent developments in Hungarian psycholinguistics and sociolinguistics," 30 June, 1989.

E. Research proposals.

Garland D. Bills, and Neddy Vigil, Principal investigators, "Linguistic Atlas and Archive of the Spanish of New Mexico and Southern Colorado", \$288,705, resubmitted to the National Endowment for the Humanities, not funded.

F. Students graduated.

Clay Slate, PhD, "Navajo verb theme categories and a Navajo lexicon database," 9 December, 1988.

Chun-Chung Lin, PhD, "The structures of English and Chinese narratives written by college students in Taiwan, 31 January, 1989.

Steven Nichols, MA, "The Official English movement in the United States," 10 March, 1989. Awarded fellowship to doctoral program in linguistics at Ohio State University.

Jan Adamczyk, MA, by examination. Awarded teaching assistantship in doctoral program in Slavic linguistics at University of Illinois.

Jaclyn Davis, MA, by examination.

In addition, one BA degree in linguistics was awarded at Spring 1989 graduation as well as four BS degrees in Sign Language Interpreting. This year, for the first time, the Department of Linguistics joined with the Departments of American Studies, Anthropology, and Geography in hosting a special commencement ceremony at Maxwell Museum, on 13 May, 1989.

G. Other significant events.

The students and faculty of the Signed Language Interpreting Program hosted the eleventh annual Sign Fest program at Del Norte High School 28 and 29 April, 1989. All three performances of the program were sold out, and the program grossed a total of \$3,741 for the support of the program and its students.

H. Student enrollments.

Overall registration in courses bearing the LINGUISTICS prefix continues to rise. The total enrollment in all linguistics classes for Spring 1989 was 489 students, representing an increase of 7.7% over the previous spring semester, and an increase of 9.6% over the Spring 1987 semester. Enrollments for Fall 1988 stood at 490, representing an increase of 8.4% over the previous fall semester, and an increase of 12.1% over the Fall 1986 semester.

ANNUAL REPORT 1988-1989
DEPARTMENT OF MATHEMATICS AND STATISTICS
COLLEGE OF ARTS AND SCIENCES
Frank Gilfeather, Chairman

The Department of Mathematics and Statistics had an exciting and productive Centennial year. This past year, the Department was led by its new Chairman, Frank Gilfeather. The Department had conducted a vigorous national search in 1987-1988 for its chairperson and had a strong sense of new beginnings this past year. In addition, the Department began operating under a new governance document, which included the election of a faculty Executive Committee to assist in setting policies.

Many changes in various Department programs were begun this year as well as additions and expansions of ongoing and recently developed initiatives. These include:

- expansion of the graduate program to meet local and national needs;
- major revisions in instructional programs continued, including the way we teach calculus;
- major expansions of outreach programs in working with high school teachers and students; and
- major expansion of research support programs aimed at enhancing our profile in the research mathematics community.

The Department of Mathematics and Statistics plays a vital role at UNM through its teaching, research, and scholarly activity. These roles are outlined in a mission statement which is an appendix to this report. Among the 250 Ph.D. granting mathematics departments nationally, we are among a handful which have a fully comprehensive mission of support for the mathematical infrastructure in the university, the state, and the region. Within the university, we are the department with the broadest range of critical responsibilities. Our goal is to carry out each responsibility at the highest level of accomplishment given the constraints inherent in our system, personnel and financial state. We seek to balance our

missions, and feel that success and accomplishment in each mission is reflected in the other missions.

A. Significant Achievements. Each faculty member has produced individual accomplishments as documented in their annual biographical supplements. Their records include recognition for research, teaching, and service. As a department and collective faculty, our special achievements and programs for 1988 and 1989 include:

- placement of regular faculty in calculus courses, thereby replacing part-time instructors and teaching assistants;
- revision of our graduate exam procedures;
- expansion of the number of teaching assistants and graduate students;
- expansion of the *JUMP* program (see appendix for description);
- strong placement by our Putnam team of undergraduates (see appendix for description);
- expansion of the computational program for research through installation of four SUN workstations and a SUN server;
- regular publication of a Department newsletter with expanded circulation; and
- inauguration of a Department graduation ceremony, in which Dr. Abraham Frank of Minneapolis (UNM Centennial Distinguished Alumni) gave a stimulating commencement address.

These highlighted accomplishments are in addition to the ongoing excellence and tremendous effort the faculty brings to our various missions. This year, the faculty has published over sixty scholarly articles and several books. They have attended many national and international meetings to report on their work, and in doing so, they have greatly enhanced the reputation of UNM.

UNM is the largest producer of secondary mathematics teachers in the State of New Mexico and we provide a mathematics background for our State's elementary school teachers which is among

the nation's strongest. Our efforts in support of the school mathematics infrastructure in New Mexico is a primary and expanding mission.

This year we had a particularly fruitful visitor program with four visiting professors for the year. A number of collaborative efforts resulted from this beneficial activity. In addition, we organized a full range of short-term visits from over fifty distinguished visitors, including bright young Ph.D.'s and a Fields Medalist, William Thurston, who gave a special talk to the second round participants in our High School Mathematics Contest. Our visitor program has significantly benefited from the strong ties our faculty has to universities and institutions in Mexico and Central America.

B. Significant Plans. Over the next few years, the Department will continue efforts to raise the level of excellence in all of its missions.

- A strong program of support is being developed for our undergraduate majors, including enhanced advisory and career information, and strengthening our honors offerings. This effort is especially aimed at under-represented groups in mathematics, science, and engineering fields.
- The Department plans further expansion of its graduate programs through increasing the number of graduate teaching assistants, consolidating course offerings, and upgrading our core programs. We will recruit under-represented groups as part of a national effort to enlarge the future human resource pool in science.
- Instruction will be upgraded at the pre-calculus and calculus levels through revision of courses, streamlining testing procedures, and replacement of all non-regular faculty with professors and full-time lecturers in calculus and higher level courses.
- A Far West Regional American Mathematics Society (AMS) meeting and a meeting of the Society for Applied and Industrial Mathematics (SIAM) is being organized by the Department. The meeting will take place in April of 1990. This is the first joint AMS and SIAM meeting held, and we hope it will foster closer ties in the research community. UNM, with its strong

applied and pure research groups in mathematics, is a natural host for such a significant meeting.

- The Department is submitting a major proposal for an NSF Teacher Enhancement Program over the next two years. In addition, numerous in-service and workshop programs are being sponsored by the Department for New Mexico mathematics teachers.
- The JUMP program will be expanded to statewide implementation.
- A mathematics and statistics computer laboratory in the Department is being developed. Grant applications will be submitted to support this needed activity.
- Additional external support for research and other missions is being sought from a variety of sources.

C. Appointments. This year, we have made several important appointments, including one which has not been finalized. The new appointments include:

Benn Mann. Associate Professor Mann is a leading researcher in the area of algebraic topology. His recent work involves utilizing powerful topological ideas in research, which interfaces with physics and separate work in engineering. Mann is a collaborator of Professor Boyer in the Department.

Yisong Yang. Visiting Assistant Professor Yang is a brilliant young mathematician. Technically, he is a visiting assistant faculty professor because of his visa, but we consider his position to be a full-time faculty appointment. His profusion of good work in differential equations leads him to be considered one of the best young mathematicians in his area.

Alejandro Aceves. Visiting Assistant Professor Aceves is also considered to be a regular faculty member, but he is on a visiting position pending disposition of visa restrictions. Professor Aceves is a strong young researcher in non-linear analysis. He has been working in collaboration with researchers at Kirtland AFB on problems in optics.

D. Separations. The Department loses several important faculty to other institutions. A very productive research mathematician, Wojciech Kucharz, is moving to the University of Hawaii. He will receive a 50% increase in salary and a promotion to full professor. He will technically be on leave next year from UNM. Professor Richard Grassl is taking a chair in mathematics at Muhlenberg College in Pennsylvania, also at a salary increase of 50% and numerous additional benefits. In addition to his active research work in graph theory, he has been a leader in our outreach mission and in working with our undergraduate program. He is also taking a leave from UNM. In addition, one of our full-time instructors, Glenn Pfeifer, took a new job at East Texas State University as an associate professor.

E. Sponsored Research. The Department had over 14 separate proposals submitted last year for external support, involving over 20 faculty in essential roles. About one-third of these were funded this year while several grants are continuing, including funding for four faculty members through NSF. The Department has research grants, in addition to NSF, through DOE, AFOSR and Associated Western Universities. Two junior faculty will be on federal agency funded postdocs next year. They are Pedro Embid at Princeton and Michael Frazier at Washington University. The Department and its faculty aggressively pursues external funding to support its various missions. The number of sources and amount of external funding is becoming stronger. Enhancement in this area is the Department's top priority.

**THE FIVE-FOLD MISSION OF THE
MATHEMATICS AND STATISTICS DEPARTMENT
UNIVERSITY OF NEW MEXICO**

I Research and Graduate Education.

Research, and the training of graduate students to carry out research, generates a steady stream of new knowledge which becomes the foundation of future progress. Mathematics and Statistics are in turn the "foundation disciplines" for scientific and technological development. This research and graduate education mission is shared by about 200 institutions nationally. UNM ranks in the upper third of these institutions. At UNM, we have strong research programs in both the applied and the pure areas of mathematics and statistics. There is considerable cross-disciplinary activity in our research program both with other departments at UNM and outside institutions and labs.

II Undergraduate Mathematics and Statistics Education.

It is from the pool of mathematics majors and minors that future mathematical talent will come. They are essential to this country's future prosperity and will become leaders in science, education, business and other professional areas. UNM has nurtured substantial mathematical talent. Many of our graduates have had distinguished careers in mathematics, statistics, science and engineering. In the very difficult Putnam competition, our team of undergraduates is extremely competitive each year. The Department also plays a critical role in training future school teachers both in primary and secondary service. A major portion of mathematics teachers in New Mexico received their education at UNM.

III Upper Division Service.

Mathematics and Statistics has many advanced courses which are essential for study in other fields. We provide the critical advanced preparation necessary for successful graduate study in most science and engineering fields. In fact, many of our junior and senior level courses are primarily taken by non majors. Providing considerable advanced course work to non-majors is unique

to Mathematics and Statistics. This mission is extremely important in creating the technical work force of the future and particularly so in New Mexico.

IV Lower Division Service.

Mathematics and Statistics, as well as English, have similar roles in their massive service to other disciplines at the entrance level. Virtually every major in physical sciences, engineering and life sciences, as well as business and most of the social sciences has some mathematics courses as a precondition for entering the core courses in their field. At the University of New Mexico every semester about one-third of all students are engaged in taking a mathematics and statistics course and over half the freshmen are trying to satisfy a mathematics or statistics requirement or prerequisite. **Our goal is to make mathematics and statistics a gateway to a student's future and not a barrier to success.**

V Outreach.

There are only two school subjects of which substantial knowledge is required for university study: English and mathematics. This gives the Mathematics and Statistics Department the mission of helping the schools with curriculum development, teacher training, and providing intellectual resources, stimulation and moral support in areas of mathematics and quantitative studies. In New Mexico this mission has led to the administration of a high school mathematics contest and the new junior testing program, JUMP. We work cooperatively with high school teachers through our JMAC committee and over the years have provided faculty expertise and leadership for summer teacher institutes. **It is important that the mathematics and university communities nurture school mathematics education, because it is central to the critical problem of providing our nation with a work force able to compete with those of the advanced industrial nations.**

THE NEW MEXICO JUMP PROJECT
Nancy Gonzales, Director

JUMP is an acronym for Junior Mathematics Prognosis, which is a testing program for high school juniors. The tests are designed to measure the students' readiness for college-level mathematics courses. The primary objective is to inform the students of any mathematical deficiencies while they still have an opportunity to correct them by taking the appropriate mathematics courses during their senior year of high school.

A successful project will have many long-range benefits that extend beyond the individual student. For the parents, it will save them money since high school courses cost them less than remedial courses at college, both in tuition and taxes. The high schools will benefit from increasing enrollments in senior year math classes and from stronger motivation of the students in those classes. New Mexico's colleges and universities will benefit by being able to put resources into truly college-level instruction instead of remedial instruction which is rarely successful. The State of New Mexico will benefit by increasing the technical ability of the state's work force by removing the barrier of remedial college math courses.

The idea of testing high school juniors started in Ohio about ten years ago and has since been adopted by many other states. In recent years, over 60,000 Ohio high school juniors have participated in the program. The percentage of entering freshmen at Ohio State University needing remedial mathematics courses has dropped from 42% in 1977 to 25% in 1984. This statistic is very impressive since weak mathematics preparation is one of the leading causes of failure at the college level and it also precludes more than half of the majors -- including all of the technical ones.

Here in New Mexico, the UNM Department of Mathematics and Statistics has just completed a pilot project which was conducted in twenty high schools. Two levels of tests were developed by a committee of university and high school mathematics faculty. The testing took place at the individual high schools during the month of February, and all answer sheets were returned to the UNM Testing Center. At the Testing Center, each answer sheet was machine-graded and a personalized letter was generated for the individual student. This letter was used as a means of conveying the student's score in a more personal manner, and it also provided an opportunity to list the college math courses that the student seemed qualified to take. An extensive assessment of the JUMP project is presently under way. It is expected that the knowledge and experience gained as a result of this pilot project will determine the course of the JUMP program in years to come.

UNM MATHEMATICS TEAM RANKED 34TH

The University of New Mexico 3-person team of Sarang Gupta, Alexis Humphreys and Glenn Stark ranked 34th out of 257 teams in the U.S. and Canada on the 1988 Putnam Intercollegiate Mathematics Competition. The top five teams came from Harvard, Princeton, Rice, Waterloo, and Cal. Tech.

Seven New Mexico residents achieved ranks in the top 500 of this prestigious competition; four of these were from UNM. Those ranked in the top 500 are considered worthy of consideration for graduate assistantships and fellowships at top institutions.

In addition to having the team finish in the top 35 nationally twice in the past three years (UNM was 20th in 1986), UNM is enjoying another distinction. This year, twelve UNM students correctly completed two or more problems.

Sarang Gupta and Alexis Humphreys have made the top 500 list two years in a row. Humphreys ranked 150th in 1987. Glenn Stark was a member of the 1986 20th ranked team. Gupta and Stark were top finishers on the University of New Mexico Statewide Mathematics Contest while in high school.

A total of 2,096 undergraduates from 360 colleges and universities participated in the 6-hour written examination consisting of highly challenging problems prepared by a committee of the Mathematical Association of America.

The following is a listing of some of our neighboring universities, along with the number of their students making the top 500:

Arizona State Univ.	1	Texas A&M	1
University of Arizona	2	U.T. Austin	6
B.Y.U.	1	UNLU	0
Air Force Academy	1	University of Nebraska	0
University of Colorado	0	University of Idaho	0
Colorado State Univ.	0	Idaho State University	0
New Mexico State Univ.	1	Boise State University	1
Univ. of New Mexico	4	University of Kansas	3
Oklahoma State Univ.	1	Kansas State University	0
University of Oklahoma	1	U.S.C.	1
University of Utah	1	U.C.L.A.	1
Utah State	0	Cal. Tech.	22
University of Wyoming	0	San Diego State Univ.	0
Rice University	7	U. Calif. San Diego	0
U.T.E.P.	0	U.C. Santa Barbara	1
Texas Tech.	0	Cal. State Fullerton	1
		Harvey Mudd College	5

DEPARTMENT OF MODERN & CLASSICAL LANGUAGES

CHAIR: Dick Gerdes
 ASSISTANT CHAIR: Natasha Kolchevska
 ADMINISTRATIVE ASSISTANT: Rosario Johnson

ANNUAL REPORT
 July 1, 1988 - June 30, 1989

I. TEACHING FACULTY AND STAFFA. Permanent Faculty*Spanish:*

Bills, Garland	Professor
Fernández, Pelayo	Professor
Gerdes, Dick	Professor
González, Angel	Professor
Rodríguez, Alfred	Professor
Sainz, Gustavo	Professor
Ulibarri, Sabine	Professor
Bergen, John	Associate Professor
Gonzales-Berry, Erlinda	Associate Professor
Rebolledo, Tey Diana	Associate Professor
Rivera, Rowena	Associate Professor
Fernández, Rosa	Assistant Professor
Lamadrid, Enrique	Assistant Professor

French:

Senninger, Claude-Marie	Professor
White, Julian	Professor
Lynch, Lawrence	Associate Professor
Martin, James	Assistant Professor
Putnam, Walter	Assistant Professor
Hanson, Suzanne	Lecturer II

German:

Hanneman, Bruno	Professor
Pabisch, Peter	Professor
Peters, George	Professor
Jespersen, Robert	Associate Professor

Portuguese:

Tolman, Jon	Professor
De Sá Rego, Enylton	Assistant Professor

<i>Russian:</i> Kolchevska, Natasha Lindsey, Byron	Associate Professor Assistant Professor
<i>Greek/Latin:</i> Smith, Warren Robin, Diana	Professor Associate Professor

B. Permanent Part-time Instructors

<i>Chinese:</i> Wu, Pearl	Lecturer II
<i>Navajo:</i> Willink, Roseann	Lecturer II

C. Part-time Instructors

<i>Italian:</i> Salimbeni, Elizabeth	
<i>Japanese:</i> Santistevan, Grace	

D. Emeritus Professors

<i>Spanish:</i> Duncan, Robert McCurdy, Raymond Nason, Marshall Holzapfel, Tamara	
<i>German:</i> Holzapfel, Robert	

E. Visiting Scholars

<i>Spanish:</i> Araujo, Diego	Fulbright Scholar
<i>Russian:</i> Robinson, Judith	

F. Language Laboratory

Vigil, Neddy Nadertabar, Mohammed	Director Lab Tech II
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G. Teaching Assistants

0176

Spanish: Ph.D.

Ahmed, Esther
Barbarich, Jasen
Buck, Lucy
Chuquin, María E.
Contreras, José Vitelio
Crosby, Margaret
De la Puente, Elsa
García-Alonso, Rocio
Kailing, Barbara
Kobylas, José
Lefkoff, Joan
Lettieri, Mónica
Riker, Kathleen
Rosas, Patricia
Ruzicka, James
Sprackling, Soledad
Sullivan, Brian
Velásquez, María D.
Villa, Daniel

Spanish: M.A.

Aguilar-Reddick, Kathleen
Cates, Ivelisse
Estala, Luis
Gustin, Kelsey
Izaguirre, Montserrat
Kalland, Keith
Laplaza, Luis
Oliva, Tony
Orellana-Rojas, Cecilia
Pérez, Gilberto
Pérez, José
Tyroler, Deborah
Zamanian, Mohammad

French: Ph.D.

Monchal, Maité
Schense, Mary
Smeloff, Mary Michal

French: M.A.

Aguilar, Claudie
Bramante, Paula
Casaus, Marie Hélène
Clark, Susan
Johnson, Julie
Satet, Hélène
Schense, Mary Michal
Selving, Kim
Wallace, Sarah

German Studies: M.A.
 Chávez, Monika
 Harris, Steve

Portuguese: Ph.D.
 Diehl, Lori
Portuguese: M.A.
 Franco, Helenita

Linguistics/Russian Studies: M.A.
 Adamczyk, Ian

Linguistics/Japanese: M.A.
 Greenberg, Lisa

H. Office Staff

Cerna, Ivana, Staff Assistant
 Montalvo, Margarita B., Department Secretary
 Gallegos, Eva, Lower Division Spanish Secretary
 Johnson, Julie, French Summer School Secretary
 Williams, Wilma, German Summer School Secretary
 Turpen, Elizabeth, Part-time Secretary, German

I. Work Study Help

Gómez, Jennifer
 Guillén, Yvette
 Maldonado, Angel
 To, Dung

II. DEPARTMENT ORGANIZATION

A. Separation from Faculty

Professor George Peters, German Division (6/89)

B. Retirements

Professor Robert Holzapfel, German (12/88)
 Professor Sabine Ulibarri, Spanish (May/89)

III. DEGREES AWARDED

A. B.A.

43 Majors: Spanish, French, German, Russian Studies, and Languages.

B. M.A.

Spanish:
 Aguilar-Reddick Kathleen
 Bátrez, María Yolanda

Lettieri, Mónica
 Quintana, Inez
 Ruzicka, James
 Téllez, Rosalina
 Usner, Carole
 Villa, Daniel
 Zambrano de Fraser, Wa-ki

French:

Aguilar, Claudie
 Attleson, Mimi
 Malyster, Wilfrida
 Ménard, Chantal
 Monchal, Maité
 Moore, John
 Rennick, Anne Cathy
 Schense, Mary Elizabeth
 Smeloff, Mary-Michal
 Wong, Phyllis Toy

German:

Chavez, Monika
 Smith, Jennifer

C. Ph.D.

Spanish:

Candia, Rubén Araiza, "El Teatro de Maruxa Villalta,
 1969-1978. Un Teatro Socio-Político" (Director:
 Alfred Rodríguez)

Abella, Encarnación, "Sátira y Parodia Ocampo-Borgescas
 en *El túnel* de Ernesto Sábato" (Director: Tamara
 Holzapfel)

Leavitt, Joyce Carlson, "Gilka Machado and Adelia Prado,
 Two Brazilian Poets' Vision of the Female Experience"
 (Director: John Tolman)

IV. COURSES OFFERED

<u>Language</u>	<u>Course Name</u>	<u>Number</u>		<u>Number of</u>
		<u>Sections</u>		<u>Credit Hours</u>
A. <u>Summer 1988</u>				
French	Elem. French	101	1	63
	Elem. French	102	1	27
Greek	New Testament Greek	104	1	18
Latin	Undergrad. Problems	497	1	6

0070

Modern Lang.	Oral Lang. Prof. Test	457	1	18
	Undergrad. Problems	497	1	3
	Graduate Problems	551	1	3
Portuguese	Sem. in Ibero Studies	504	1	18
	Graduate Problems	551	1	3
	Dissertation	699	1	18
Russian	Undergrad. Problems	497	1	3
Spanish	Elem. Spanish	101	1	378
	Elem. Spanish	102	3	129
	Intermd. Spanish	201	1	72
	Intermd. Spanish	202	1	75
	Spanish Convers.	203	1	30
	Theme/Writing Spanish	301	1	42
	Adv. Comp./Convers.	302	1	36
	Intro. Hist. Lit.	307	1	51
	T/Lat. Am. Women Writ.	439	1	57
	Undergrad. Problems	497	3	12
	Sem. in Ibero Studies	504	1	18
	Sem-Picaresque Novel	520	1	24
	Graduate Problems	551	1	9
	Dissertation	699	2	12

B. Fall 1988

Navajo	Elem. Navajo	101	2	111
	Elem. Navajo	102	2	12
	Intermd. Navajo	201	1	33
Chinese	Elem. Chinese	101	1	75
	Intermd. Chinese	201	1	24
	Adv. Chinese	301	1	33
French	Elem. French	101	7	489
	Elem. French	102	5	240
	Elem. French Convers.	103	1	39
	Elem. French reading	107	1	24
	Intermd. French I	201	3	207
	Intermd. French II	202	2	81
	Intermd. French Convers	203	1	39
	Begn. French-Accelerated	275	1	60
	Adv. Comp. & Convers.	301	2	69
	Begn Stylistics & Tran	302	1	30
	French Civilization	345	1	33
	Survey of French Lit.	351	1	42
	French Read. for Grad.	365	1	33
	Survey French Poetry	461	1	21
	Teaching Practicum	500	1	3
	Fr. Drama Lit.-Clas. Pr.	522	1	9
	Graduate Problems	551	1	3
Seminar in French Lit.	560	1	6	

	Dissertation	699	1	3
German	Basic German	101	5	372
	Basic German	102	2	102
	Intermd. German	201	1	90
	Intermd. German	202	1	63
	Advanced German	301	1	57
	Intro. German Cult.	308	1	57
	German Read. for Grads.	365	1	12
	Adv. Grammar/Phonology	405	1	18.
	Teaching of German	445	1	3
	20th Cent. German Lit.	453	1	21
Greek	Elem. Greek	101	1	54
	New Testament Greek	104	1	18
	Greek Mythology	107	1	45
Italian	Begn. Ital.-Accelerated	275	2	141
	Begn. Ital.-Accelerated	276	1	51
	Intro. Read. in Prose	307	1	42
	Undergrad. Problems	497	1	9
Japanese	Basic Japanese	101	1	90
	Intermd. Japanese	201	1	45
Latin	Elem. Latin	101	3	222
	Intermd. Latin	201	1	57
	Reading in Latin Lit.	303	1	9
	Graduate Problems	551	1	3
Modern Lang.	T/Elem. Arabic I	101	1	33
	T/Conv. Japanese	101	1	3
	T/Begn. Persian	101	1	6
	Sem. Internatl. Studies	478	1	15
	Lang. Pedagogy	480	1	30
	Undergrad. Problems	497	1	3
Portuguese	Begn. Portuguese	101	2	63
	Intro. to Brazil Cult.	200	1	15
	Intermd. Portuguese	201	1	27
	Intensive Accel Port.	250	1	57
	T/Nat Amer./Braz. Cult.	401	1	18
	Hist. Novel	504	1	27
Dissertation	699	1	6	
Russian	Elem. Russian	101	3	255
	Elem. Russian convers.	103	2	42
	Intermd. Russian	201	1	66
	Russian Convers.	203	2	42
	Adv. Russian	301	1	33
	Russian Today	401	1	30
Spanish	Elem. Spanish	101	26	1956
	Elem. Span. Bilinguals	101	2	48
	Elem. Spanish	102	9	672

Elem. Span. Bilinguals	102	2	138	
Elem. Span. Convers	103	2	117	
Elem. Span. Convers	104	1	45	
Intermd. Spanish	201	11	663	
Intermd. Span. Biling.	201	2	117	
Intermd. Spanish	202	6	297	
Intermd. Span. Biling.	202	2	111	
Spanish Convers.	203	4	186	
Accel. Bgn. Spanish	275	1	66	
NM Culture	301	1	60	
Translation	301	1	60	
Spanish Civ.	301	1	60	
JS St/Theme	301	1	48	
Commercial Spanish	301	1	39	
Translation	301	1	39	
Lat. Amer. Cult.	301	1	63	
Lat. Women Writers	301	1	51	
Them. Adv. Comp./Conv.	301	1	36	
Adv. Comp and Convers	302	4	204	
Intro. Hispanic Lit.	307	1	81	
SW Hispanic Folklore	315	1	81	
Spanish Phonology	340	1	66	
Advanced Grammar	342	1	54	
Great Wrks. Span. Amer.	357	1	57	
Spanish Read. for Grad.	365	1	21	
Literary Genres	405	2	72	
Poetry since Civil War	419	1	9	
Cervantes Quijote	423	1	24	
T/Cuatro Figuras	429	1	27	
Mod. Span. Amer. Fict.	435	1	45	
T/Lat. Amer. Essay	439	1	39	
Undergrad. Problems	497	1	3	
Historical Novel	504	1	27	
Galdós	529	1	27	
Mod. Movt. Sp./Am. Poet	531	1	33	
Lat. Amer. Dialectology	540	1	36	
Rsch. Methods-Tchers.	541	1	30	
History of Span. Lang.	542	1	45	
Graduate Problems	551	1	6	
Dissertation	699	3	12	
Ibero-American				
Studies	Historical Novel	504	1	27
	Dissertation	699	1	9

C. Spring 1989

Navajo	Elem. Navajo	101	2	90
	Elem. Navajo	102	1	27
	Intermd. Navajo	202	1	30
	Undergrad Prob.	495	1	40
Chinese	Elem. Chinese	102	1	51

	Intermd. Chinese	202	1	18
	Adv. Chinese	302	1	27
French	Elem. French	101	7	495
	Elem. French	102	5	261
	Elem. Convers.	104	1	18
	Elem. Reading	108	1	12
	Intermd. French I	201	2	111
	Intermd. French II	202	3	141
	Intermd. Convers.	203	1	33
	Accel. French Convers.	276	1	42
	Adv. Comp./Conv.	301	1	57
	Begn. Stylstcs/Trans.	302	1	39
	French Phonology	302	1	48
	French Civilization	346	1	45
	Surv. French Lit.	352	1	36
	French Read. for Grads.	366	1	39
	Early Renaiss.	411	1	15
	Fr. Lit. for 10th Cent.	431	1	30
	French Non-dram. Lit.	523	1	18
	Graduate Problems	551	1	3
	Dissertation	699	1	9
German	Basic German	101	4	400
	Basic German	102	3	207
	Elem. Convers.	104	1	26
	Elem. Reading	108	1	11
	Intermd. German	201	1	54
	Intermd. German	202	1	78
	Intermd. Germ. Conv.	204	1	30
	Adv. German	302	1	48
	Intro. Germ. Lit.	307	1	33
	Cont. Germ. Lit	401	1	45
	Teaching German	445	1	3
	T/Germ./1910-1960	450	1	21
	Undergrad. Prob.	497	2	23
	Reading Research Hon.	498	1	1
	T/Germany/1910-1960	550	1	6
	Graduate Problems	551	1	5
	Masters Thesis	559	1	6
Greek	Elem. Greek	102	1	15
	New Test. Greek	104	1	9
	Class. Greek	302	1	9
Italian	Beg. Ital. Accel.	275	1	78
	Beg. Ital. Accel.	276	2	99
	Intro. Reading Poetry	308	1	45
	Undergrad. Prob.	497	1	6
	Graduate Problems	551	1	6
Japanese	Basic Japanese	102	1	63
	Elem. Japan Conv.	104	1	1
	Intermd. Japan	297	1	21

Latin	Elem. Latin	102	2	93
	Intermd. Latin	202	1	33
	Reading Lat. Lit.	304	1	9
	Accel. Latin	352	1	18
Modern Lang.	T/RD Conv. Japan	101	1	5
	T/Persian II	102	1	9
	Elem. Arabic II	205	1	33
	Sem. Intnatl. Stud.	478	1	6
Portuguese	Begn. Portuguese	102	1	48
	Portuguese Drill	104	1	6
	Adv. Comp/Conv	307	2	66
	Braz. Pop. Cul.	335	1	27
	Undergd. Prob.	551	2	4
	Sem. in Braz. Lit.	570	1	21
	Literary Theory	601	1	1
	Dissertation	699	1	33
Russian	Elem. Russian	101	1	63
	Elem. Russian	102	2	129
	Elem. Russian Conv.	104	2	27
	Intermd. Russ.	202	1	60
	Russian Conv.	203	2	15
	USSR People-Pol-Cult.	230	1	42
	Adv. Russ	302	1	27
	Russ. Civil.	345	1	36
	Russian Today	402	1	30
	Undergrad. Prob.	497	2	6
	Reading Rsrch Honors	498	1	3
	Spanish	Elem. Spanish	101	21
Elem. Spanish		102	19	1155
Elem. Span. Conv.		103	1	19
Elem. Span. Conv.		104	3	49
Workshop Conv. Span.		120	1	42
Interm. Span.		201	7	474
Interm. Span.		202	9	509
Span. Conv.		203	3	171
Accel. Begin. Span.		276	1	42
T/Cultura De Mex.		301	6	414
Adv. Comp./Conv.		302	4	177
Intro. Hisp. Lit.		307	1	93
Span. of SW		311	1	114
Span. Phonology		340	1	60
Span. Ling. for Teach.		341	1	27
Adv. Grammar		342	1	75
Span. Reading For Grad.		366	1	24
Lit. Genres		406	2	69
19th Cent. Span. Lit.		416	1	66
Drama of Golden Age		421	1	27
Span. Amer. Short story		430	1	45
Mod. Amer. Span. Poetry		431	1	36

Chicano Lit./Thought	437	1	69
Undergrad Prob.	497	6	27
S/20th Cent. Poetry	522	1	18
Renaiss. Poetry	523	1	33
Latin Amer. Women Wrt.	532	1	57
Contemp. Ecuador Fict.	539	1	21
Graduate Problems	551	6	53

D. Courses Approved or Changed:

Italian 498, Reading and Research for Honors (3). Open for juniors and seniors approved by Honors Committee. Prerequisite: permission of supervising instructor.

Italian 499, Honors Essay (3). Open only to seniors enrolled for departmental honors. Prerequisite: Permission of instructor.

French 365 and 366, French Reading for Graduates. Addition to description: Does not carry graduate credit for French Language students.

Japanese 103-104, Elementary Japanese Conversation (1). Supplementary course to Japanese 101-102 for students interested in additional practice in speaking.

German 256, German Folksongs, deleted.

Greek 101-102, Introduction to Classical Greek. Readings from simple prose.

Greek 107, Introduction to Mythology. Primary readings in stories about the gods and heroes, usually including Homer, Hesiod, and Ovid. All texts will be read in English.

Greek 301-302, Classical Greek. Prerequisite: Greek 101-102 or their equivalent. Readings in Homer, Sophocles, Euripides, Plato, and the New Testament, depending on the level and interests of the class. The course may be repeated for credit.

Latin 101-102, Elementary Latin. Introduction to the Latin language; grammar, syntax, and readings in Roman authors.

Latin 201-202, Intermediate Latin. Systematic review of Latin grammar and syntax; readings in simple prose authors such as Cicero and Ceasar; introduction to Latin poetry and scansion.

Latin 303-304, Readings in Latin Literature. Prerequisite: Latin 201-202 or the equivalent. Readings: Plautus, Catullus, Vergil, Horace, and Ovid. Occasional compositions in Latin. The course may be repeated for credit.

Latin 351, Accelerated Latin. Taught by Professor Julian White, not Professor Diana Robin.

Modern Languages 498, Reading and Reasearch, Honors (3) .
Course to be part of current interdisciplinary languages

major. Open to juniors and seniors approved by the Honors Committee.

Modern Languages 499, Honors Essay (3). Open only to seniors enrolled for departmental honors. Honors research in any of the languages comprising the interdisciplinary languages major.

Spanish 102, Elementary Spanish (3). Beginning Spanish for students who have completed 101 or equivalent. Development of all four skills.

Spanish 202, Spanish Conversation (3). For students who have completed or are currently enrolled in Spanish 201.

Spanish 203 Spanish Conversation (3) For students who have completed or are currently enrolled in Spanish 201, 202, or 276. Small classes designed to increase skills in speaking Spanish. Not for native speakers.

Spanish 302, Advanced Composition and Conversation (3). Taught in Spanish. Emphasis on oral and written expression based on a language-related theme (translation, commercial, writing Spanish, etc.)

Spanish 311, Spanish of the Southwest (3). Attention to its formal aspects (phonology, analysis of Spanish of U.S. South-

west, especially New Mexico's syntax, lexicon, morphology) as well as to historical and social factors affecting its status. Prerequisite: Spanish 302 or equivalent.

Spanish 316, Southwest Hispanic Folktales (3). Theory, analysis, and collection of traditional oral narratives, including cuentos, casos, and leyendas.

Spanish 317, Southwest Hispanic Folk Ballads and Songs (3). Narrative and lyric musical traditions from the Romancero Nuevomexicano to the contemporary corrido and nueva canción.

Spanish 340, Spanish Phonology (3). A study of the Spanish sound system and an identification of the pronunciation problems of non-native speakers. Pre- or co-requisite: 302 (Fall, Spring).

Spanish 342, Advanced Grammar (3). Required for Spanish majors, taught in Spanish. Analysis of syntactic structure. Prerequisite: Spanish 302.

Spanish 357, Great Works of Spanish America (3). Introduction to Spanish American Literature. Reading and analysis of the major genres of contemporary Latin American literature.

Spanish 416, Nineteenth Century Spanish Literature (3). Neo-Classicism, Romanticism, Realism, Naturalism.

Spanish 431, Modern Spanish American Poetry (3). Main trends from Modernism to the present.

Spanish 438, Mexican Literature (3). A survey of Mexican literature from the colonial period to the present.

Spanish 443, Spanish Morphology (3). Word structure, the gender system, and the verb system from the viewpoint of modern linguistic theory.

Spanish 542, History of the Spanish Language (3). The phonological, grammatical, and lexical development from Latin to Spanish. Required of all candidates for graduate degrees.

Spanish 543, Spanish Syntax (3). Grammatical analysis from the structuralist, generative, and sociolinguistic points of view.

Spanish 548, Old Spanish (3). The phonological, grammatical, and lexical properties of Mozarabic, Old Castillian, and Judes' Spanish, as well as the historical events explaining their origins and subsequent fate.

V. DEPARTMENT NEWS

A. Department Highlights:

Photography Exhibition, Fifty Photographs by Juan Rulfo, and film on Juan Rulfo. Co-sponsored by the Mexican Consulate of

El Paso, Texas, City of Albuquerque, and the Latin American Institute (9/19-30/88).

Lecture by Professor Warren Smith, Classics Division, M&CL: "Reading as a Subversive Activity." Sponsored by Aquinas Newman Center, Lutheran Campus Ministry, and St. Thomas of Canterbury United Campus Ministry (9/21/88).

Lecture by Dr. Michel Delon, Université de Paris X, Nanterre: "Le Roman Sous la Révolution." Co-sponsored by the French Cultural Services and the European Studies Committee (9/26/88).

Lecture by Rafael Humberto Moreno Durán, Colombian novelist: "Capítulo Catalán: Los Escritores Latino-americanos en Barcelona, 1970-1985." Co-sponsored by the Latin American Institute (10/18/88).

Lecture by Devon-Miller-Duggan, poet, translator, and professor at the University of Delaware: "Early Twentieth Century Russian Poetry." Sponsored by Russian and Eastern European Studies Committee (10/19/88).

Lecture by José Agustín: "La Novela de la Revolución Mexicana." Co-sponsored by the City of Albuquerque, and the Mexican Consulate (11/8/88).

Lecture by Professor Vladimir Orel, Institute of Slavistics and Balkanistics, Moscow: "The Origins of Language: A Soviet

View." Co-sponsored by Russian and Eastern European Studies, Linguistics, and A&S Visiting Lecturer's Committee (11/16/88).

Lecture by Professor Dick Gerdes, Chair, M&CL: "Contemporary Ecuador." Sponsored by the Latin American Institute (11/18/88).

German Lunch. Co-sponsored by the German Club and the International Center (11/21/88).

Lecture by Carlos Monsiváis; Mexican writer: "La Historia Cultural de México en la Primera Mitad del Siglo XX." Co-sponsored by the Latin American Institute, the Division of Cultural Affairs of the City of Albuquerque and the Mexican Consulates of El Paso, Texas, and Albuquerque, New Mexico (11/22/88).

Lecture by Professor Daniel Lewers, Université de Tours: "Le Cas Rimbaud." Co-sponsored by European Studies (12/5/88).

Lecture by Professor Diego Araujo, Fulbright Scholar, Pontificia Universidad, Quito, Ecuador: "Enter César y César: La Poesía de Vallejo y Dávila Andrade." Co-sponsored by the Latin American Institute and the College of Arts and Sciences (12/6/88).

Reception in honor of Prof. Diego Araujo at the home of Professor Dick Gerdes (12/6/88).

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Lecture by Elena Poniatowska, Mexican writer, critic and essayist: "Mexican Women Writers." Co-sponsored by the Department of History, The Latin American Institute and the Mexican Consulate of Albuquerque (1/17/88).

Lecture by Emilio Carballido, writer and leading Mexican dramatist: "La Evolución del Teatro en México." Co-sponsored by the Latin American Institute and the Mexican Consulate of Albuquerque (2/14/89).

Economic Seminar, "Democracy in the Soviet Bloc?, featuring Professor Natasha Kolchevska as a discussant, UNM (2/17/89).

Conference on Hispanic/Chicano Colonial Literature of the Southwest: Tey Diana Rebolledo, keynote speaker and Enrique Lamadrid, panelist. Co-sponsored by the Dean of Humanities, Terence Parsons; Chicano Latino Colloquium, Campus Lectures, and Women's Studies (2/24/89).

Lecture by Professor Angel González and Prof. Alfred Rodríguez: "Visión de Granada: Imagen en el arte de una de las ciudades más bellas del mundo". Co-sponsored by UNM International Programs (3/6/89).

Lecture by José Carlos Sebe, University of Sao Paulo and Fulbright professor of history at the University of Florida:

"Class and Race Relations in the Rio Carnival." Co-sponsored by the committee on Brazilian Studies and the Latin American Institute (3/8/89).

Language Expo: ALTA (Albuquerque Language Teachers Association): M&CL faculty and teaching assistants participated as judges in essay contests and other activities, Manzano High School, Albuquerque, New Mexico (3/11/89).

Lecture by Professor Jean Sgard, Université de Grenoble "L'Ecrivain au Service de la Nation." Co-sponsored by European Studies Committee and French Cultural Services (3/20/89).

Medieval Lecture Series with Drs. Donald K. Fry, George Hardin Brown, and Rosemary Cramp: "Caedmon and Abess Hild: Inventors of English Poetry," "The Venerable Bede: Scholar of the Medieval Frontier," "Bede and Aldhelm: Writing Styles Express Life Styles," "Stone Sculpture in Anglo-Saxon England," "Bede's Legacy: Excavations at Jarrow." Co-sponsored by the Center for Advanced Studies, Religious Studies, Women Studies, Graduate Student Association, Office of Graduate Studies, the Departments of Anthropology, Art, and Art History, English, History, Journalism, and the College of Arts and Sciences (3/27-30/89).

Lecture by María Luisa Mendoza, Mexican social critic, politician and writer: "Las Doñas de las Letras." Co-

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sponsored by the Latin American Institute and the Mexican Consulate of Albuquerque (4/4/89).

Lectures on Hispanic Women Writers and Mini Book Fair, featuring writers Lucha Corpi and Mary Helen Ponce. Co-sponsored by Arte Público Press, Women Studies, and the National Endowment for the Arts (4/5/89).

UNM Centennial International Experience (Mexico, Central and South America): Art exhibit by the Instituto Tecnológico de Chihuahua, Mexico; performance of "Danza Folklórica" by the Instituto Tecnológico de Chihuahua; video film "The Africans;" Glasnost Film Festival (4/6/89)

Lecture by Professor Roberto Cantú, University of California/Los Angeles: "Theory and ideology in Chicano Literary Criticism." Co-sponsored by English Department (4/6/89).

Lecture by José Emilio Pacheco, Mexican writer: "Transformaciones del Cuento en México." Co-sponsored by the Latin American Institute and the Mexican Consulate of Albuquerque (4/18/89).

Guitar Concert by Pedro Avila, Spanish composer, singer and guitarist singing classical and contemporary Spanish songs, and his own compositions based on works from Hispanic Litera-

ture. Co-sponsored by the Graduate Studies Association and the Latin American Institute (4/25/89).

Lecture by Francisco Carrasquer, Spanish scholar, and veteran of the Spanish Civil War: "The Spanish Civil War and the Spanish Revolution." Co-sponsored by the Latin American Institute, the College of Arts and Sciences, and European Studies (4/26/89).

Lecture by Alejandro Hernández, Mexican novelist on his novel Nos Imputaron la Muerte del Perro de Enfrente and characteristics and challenges of the new rural Mexican literature. Co-sponsored by the Mexican Student Association (4/27/89).

Sandra Cisneros (Chicana writer) Reading Her Own Works. Co-sponsored by the Department of English, Women Studies, UNM General Library, and the Southwest Hispanic Research Institute (4/28/89).

Symposium "Society and Culture in Contemporary Ecuador" :
Exhibition of Arts and Crafts, Book Fair, and presentations by Jamil Mahuad: "El Ultimo Proceso Electoral Ecuatoriano: Análisis y Perspectivas;" Patricio Rubianes: "Perspectivas Económicas;" Diego Iturralde: "Perspectivas Antropológicas: "Las Culturas Populares como Espacio de Resistencia;" Laura Hidalgo, "Perspectivas Folkloricas: La Mujer en la Poesía de

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Tradición Oral;" Jorge Dávila Vásquez: "Perspectivas Cinematográficas;" Vladimiro Rivas, "Perspectiva Literarias: Novela y Sociedad;" Abdón Ubidia, "Perspectivas Literarias: El Cuento Ecuatoriano" (5/2-5/89).

Retirement Feast for Sabine Ulibarri, dinner and entertainment (5/7/89).

1989 Department Graduation Celebration: Keynote Speaker: Sabine Ulibarri, poetry program, and brunch, Ortega Hall (5/13/89).

Third Annual Conference of the Intermountain Chapter of the American Translators Association; participants: Sabine Ulibarri, keynote speaker; Lawrence Lynch, "Problems in Translating French Art criticism; John Tolman, "Calis-Computer Assisted Language Instruction" (5-19-29/89).

B. Professional Public Activities

1. Papers Read at Professional Meetings

Bills, Garland

"Variation in New Mexican Spanish," American Association of Teachers of Spanish & Portuguese, Denver, Colorado (August 1988). [With N. Vigil]

"On Linguistic Atlases," Northeast Regional Meeting of American Association of Teachers of Spanish & Portuguese, New York (September 1988).

"Methodology for a Study of Variation in New Mexican Spanish," 9th El Español en Los Estados Unidos Conference, Miami (October 1988). [With N. Vigil]

Fernández, Rosa

"The Use of Telenovelas for Teaching Language in Context," Linguistic Association of the Southwest, Albuquerque, New Mexico (October 1988).

"Soaps: use of authentic videos in the language laboratory," Conference on Cross-Cultural Communication, Trinity University, San Antonio, Texas. (March 1989).

"Issues on Teacher Education," American Commission on the Teaching of Foreign Languages, Greeley, Colorado (April 1988).

Gerdes, Dick

"Orality and Writing in Ecuadorian Fiction," Symposium on the Marxist Interpretation of Culture, Arizona State University, Tempe, Arizona (October 1988).

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Sociedad ecuatoriana en pugna: oralidad versus escritura,"
38th Annual Mountain Interstate Foreign Language Con-
ference, University of Tennessee, Knoxville (October 1988).

"Recent Ecuadorian Fiction," 1988 American Association of
Teachers of Spanish and Portuguese, Denver, Colorado
(August 1988).

González, Angel

"Lectura de poemas," Encuentro de poetas del Mundo Latino,
Zacatecas, Mexico (Octobre 1988).

"A los cien años de Azul," Mid-America Conference on
Hispanic Literature, Washington University, St. Louis
(October 1988).

"El Quijote y la poesía," II Coloquio Internaciona Cer-
vantino, Guanajuato, Mexico (October 1988).

Gonzales-Berry, Erlinda.

"English Language Amendment for New Mexico: It Can't Hap-
pen Here," 9th El Español en los Estados Unidos Conference,
Miami, Florida (October 1988).

Kolchevska, Natasha

"Russian Literary Relations with China: 1918-1924,"
American Association for the Advancement of Slavic Studies,
Honolulu, Hawaii (November 1988).

Lamadrid, Enrique

"Creative Curricula: Authors' Perspectives on the Last Three Decades of Foreign Language Teaching," American Council on the Teaching of Foreign Languages, Monterey, California (November 1988).

Lindsey, Byron

"Znamia, 1987-1988--an Update," American Teachers of Russian and Eastern European Language and Literatures, Washington, D.C. (December 1988).

Lynch, Lawrence

"Sade: Ideas and Experiences of Revolution," Western Society for Eighteen-Century Studies, University of California, Berkeley (February 1989).

Peters, George

"Die Unterrichtspraxis: The Next Twenty Years," American Assoc. of Teachers of German/American Council for the Teaching of Foreign Language Annual Meeting, Monterey, California (November 1988).

Putnam, Walter

"Representations of Africa: Conrad and Céline," Rocky Mountain Modern Language Association, Las Cruces, NM (October 1988).

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"La Voie Royale: Espace de la'Aventure," Conseil International d'Etudes Francophones, New Orleans, Louisiana (April 1989).

Rebolledo, Diana

"Ethnicity and Literature," American Studies Association, Miami Beach, Florida (October 1988).

"Crossing Frontiers: Border Spaces in Chicano Literature," and "The Quality of Our Lives: An Minority Response," The Modern Language Association, New Orleans, La. (December 1988).

Rivera, Rowena

"The Marginalized Aesthetics of Lourdes Espinola, Paraguayan Poet," Rocky Mountain Modern Language Association, Las Cruces, NM (October 1988).

Robin, Diana

"Obscenity and Poems of Protest in the Fifteenth Century courts," The Rocky Mountain Modern Language Association, Las Cruces, NM (October 1988).

"Filelfo Vergilian Games," American Philological Association, Baltimore, MD (December 1988).

Smith, Warren

"Juvenal and Satire," Rocky Mountain Modern Language Association, Las Cruces, NM (October 1988).

Tolman, Jon

"Video-based Programs for the Teaching of Foreign Languages," American Association of Teachers of Spanish and Portuguese, Denver, Colorado (August 1988).

"Travessia, a Video-based Approach to the Teaching of Portuguese," Rocky Mountain Modern Language Association, Las Cruces, NM (October 1988).

Vigil, Neddy

"Variation in New Mexican Spanish," American Association of Teachers of Spanish & Portuguese, Denver, Colorado (August 1988) [With Garland Bills].

"Methodology for a Study of Variation in New Mexican Spanish," 9th El Español en Los Estados Unidos Conference, Miami, Florida (October 1988) [With Garland Bills].

2. Contributions to other Meetings, Workshops, Seminars,
Poetry Readings Etc.:

Bills, Garland

Local Arrangements Coordinator, Linguistic Association of
Southwest, Albuquerque, NM (October 1988).

General Coordinator, Collaborative Research Project on
Southwest Spanish, involving 5 Southwest universities,
designed at workshop in Mexico City (November 1988).

Gerdes, Dick

Lecture, "Contemporary Ecuador," Student Organization of
Latin American Studies meeting, Latin American Institute,
UNM (November 1988).

Gonzales-Berry, Erlinda

Lecture, "Searching for Self: Two Decades of Chicano Liter-
ature," Digital Corporation, Albuquerque (November 1988).

Kolchevska, Natasha

Participant, Oral Proficiency Techniques Workshop, Washing-
ton, D.C., (December 1988).

Chair, "Russian Drama: Past and Present," American Associa-
tion of Teachers of Slavic and East European Languages,
Washington, D.C. (December 1988)

Lamadrid, Enrique

Panelist, "Mentorship Models," Marketing Hispanic Arts II Conference," Hispanic Culture Foundation, Albuquerque, New Mexico (December 1988).

Reader, "En Breve: Minimalism in Mexican Poetry: 1900-1985," Salt of the Earth Bookstore, Albuquerque, New Mexico; Burnt Horses Bookstore, Santa Fe, New Mexico (December 1988).

Co-Producer, "Familia y Fe (Two-hour bilingual sound track on the folk ways, music, and lore of New Mexico)," Permanent Exhibit of the Hispanic Heritage Wing, Museum of International Folk Art, Santa Fe, New Mexico (February-December 1988).

Organizer, "Sueños Norteños Cultural Program (public series on the culture of New Mexico: lectures, concerts, plays and art exhibitions)," Partners of the Americas, Morelia, Michoacán, México (1988).

Lindsey, Byron

Coordinator, Workshop on Russian Literary Journals, Slavic Summer Research Laboratory, University of Illinois, Champaign-Urbana (July 1988).

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Lynch, Lawrence

Participant, "Imagery in Tierra Amarilla," Symposium on Creative Works of Sabine Ulibarri, UNM (1988).

Pabisch, Peter

"Crossroads of the World: Vienna around 1900." Department of Foreign Languages, Arizona State University, Tempe (October 1988).

"Germany in the Southwest: The German Summer School in Taos Ski Valley" Arizona State University, Tempe (October 1988).

"Karl Kraus--His Care for Language," KUNM Radio (June 1988). [with Robert C. Lloyd]

"i bi i dr Schwyz gsi," German Club--Los Alamos/Santa Fe (October 1988).

Rebolledo, Diana

Panelist, "The Criticism of Chicano Literature," The National Association of Chicano Studies, University of Colorado (April 1988).

Rivera, Rowena

Lecturer, "New Mexican Folk Music: The Synthesis of all of its Folk Arts," College Music Society, New Mexico (October 1988).

Robin, Diana

Panelist, NEH Summer Stipends in History, Washington, D.C.
(December 1988).

Sainz, Gustavo

"Temas predominantes en la literatura mexicana contemporánea," Middlebury College Summer Spanish School, Vermont (July 1988).

Smith, Warren

"Reading as a Subversive Activity," UNM Last Lecture Series
(September 1988).

3. Service as Editor of Scholarly Journal, Reader, Referee, etc.

Bills, Garland

R e f e r e e , Anthropological Linguistics, Journal of Anthropological Research, Modern Language Journal, Southwest Journal of Linguistics (1988).

Fernandez, Rosa

Reader: Houghton Mifflin, Prentice Hall, D.C. Heath, and Harper and Row (1988).

Gerdes, Dick

Book Review Editor, Discurso literario (1988).

Gonzales-Berry, Erlinda

Member, Editorial Board, El Norte Publications, Albuquerque, NM (1988); Referee, The Modern Language Journal (October 1988); Referee, Holt, Rinehart and Winston (July 1988); Referee, University of New Mexico Press (March 1988).

Jespersen, Robert

Book Review Editor, Die Unterrichtspraxis (1988).

Pabisch, Peter

Special Editor, Die Deutsche Literatur Encyclopedia, P. Lang: Berne, Switzerland (on-going); Special Editor, RAH-MENTHEMA 24: DEUTSCHE MUNDARTLITERATUR, Jahrbuch für Internationale Germanistik, Frei Universität, Berlin (1988).

Peters, George

Editor-in-Chief, Unterrichtspraxis (1988).

Rivera, Rowena

Co-editor, Southwest Hispanic Research Institute Working Papers Series, UNM (1988)

Robin, Diana

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Member, Editorial Board, Renaissance Quarterly (1988).

4. Service as Officer of Professional Organizations:

Gonzales-Berry, Erlinda

Presiding Officer, "Class, Gender, and Ethnicity in Chicana Literature," The Rocky Mountain Modern Language Association, Las Cruces, New Mexico (October 1988).

Gerdes, Dick

Presiding Officer, Latin American Literature Section, Rocky Mountain Modern Language Association, Las Cruces, New Mexico (October 1988)

Kolchevska, Natasha

Vice-President, American Association of Teachers of Slavic and East European Languages, New Mexico/El Paso Region (1988).

Lynch, Lawrence

Organizer and chair, "Pre-1800 French Literature, Rocky Mountain Modern Language Association, Las Cruces, New Mexico (October 1988)

Pabisch, Peter

Director, 3rd Taos German Studies Workshop (July 1988).

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Peters, George

Chairperson, NM-OLE' LIFT-UP conference, Clovis, New Mexico
(November 1988).

Putnam, Walter

Secretary, Société des Professeurs Français et Francophones
en Amérique, Rocky Mountain Modern Language Association,
Las Cruces, New Mexico (October 1988).

Robin, Diana

Vice-President, Classical Association of the Middle West
and South, New Mexico (1988).

Rodríguez Alfred

Treasurer, American Association Teachers of Spanish and
Portuguese, Local Chapter, Albuquerque, New Mexico (1988)

VII. GRANTS AND CONTRACTS, EXTRAMURAL AND OTHERWISE

A. Awarded with 1988 Initial Start Date

Gerdes, Dick (Spanish & Portuguese)

Investigator: Dick Gerdes

Title: "Recent Ecuadorian Fiction"

Sponsor: Fulbright Research Award, Ecuador

Funding: \$15,000

Dates: Spring 1988

Investigator: Dick Gerdes
Title: "Cuzco Art and Colonial Life in the Land
of Peru"
Sponsor: Humanities Scholar Consultant, Texas
Resource Center/NEH
Funding: \$2,500
Dates: Fall 1988

Lamadrid, Enrique (Southwest Studies)

Investigator: Enrique Lamadrid
Title: "The Urban Ballad in Mexico from
Corridos to Guacarock"
Sponsor: Mellon Foundation, Latin American
Institute
Funding: \$610
Dates: December 1988

Pabisch, Peter (German Division)

Investigator: Peter Pabisch
Title: 3rd German Studies Workshop
Sponsor: Federal Republic of Germany
Funding: \$22,000
Dates: Summer 1988

Investigator: Peter Pabisch and George Peters
Title: Grants for 1988 German Summer School
Sponsor: Various

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Funding: \$101,000
Dates: Summer 1988

Peters, George (German Division)

Investigator: George Peters and Peter Pabisch
Title: Grants for 1988 German Summer School
Sponsor: Various
Funding: \$101,000
Dates: Summer 1988

Robin, Diana (Classics Division)

Investigator: Diana Robin
Title: Fellowship
Sponsor: Andrew W. Mellon Fellow in Medieval and
Renaissance Studies
Funding: \$18,000
Dates: Spring 1988

Investigator: Diana Robin
Title: Fellowship
Sponsor: Gladys Kricble Delmas Foundation
Fellowship for Research in Venice
Funding: \$8,000 (granted but declined)
Dates: Spring 1988

Smith, Warren (Classics Division)

Investigator: Warren Smith (with Robin & Harrison)

Title: "Classical Civilization: Cradle of the
West"
Sponsor: NEH
Funding: \$85,446
Dates: 8/88 (funding to be implemented 5/89)

Investigator: Warren Smith
Title: To Research Erasmus at Yale and Harvard
Sponsor: UNM RAC
Funding: \$1,070
Date: Summer 1988

B. In Force from Previous Years:

Tolman, Jon (Portuguese)

Investigator: Jon M. Tolman
Title: "Development of a Brazilian Studies
Concentration"
Agency: U.S. DOE
Total Funding: \$70,000
Dates: 1987-1988

Investigator: Jon M. Tolman
Title: "University Affiliation Program,
UNM/University of São Paulo"
Agency: USIA
Total Funding: \$47,010
Dates: 1985-1988

VII. FUTURE PLANSA. In-House Study

The Spanish and Portuguese faculty conducted a lengthy, detailed, in-house study of its graduate programs with an eye to create a long-range plan for the needs of the division. While its faculty size has been cut back over the last decade, it was determined that mainly two positions of recent retirements should be replaced for next year. In addition, the study recommended that M&CL be reorganized along the lines of two departments, one composed of Spanish and Portuguese and the other made up of the other languages. Implementation depends upon authorization of the university administration.

B. Translation Studies Program

Two years ago, the department proposed to initiate a translation studies program (and, at some point, leading to a minor), with funds from the Southwest Hispanic Research Institute/M&CL joint appointment (see 1986-1987 M&CL Annual Report). While the proposal was not funded, the department faculty still supports the future development of this program. It is not only entirely feasible with limited funds, but important for providing a connection between academic programs (language learning) and professional careers (translation and interpreting) for students. By

not becoming involved in this area, UNM is missing out on an important and growing national and international trend.

C. Recuperation of Ortega Hall Office and Classroom

Space:

When the Political Science department moved to its new building in 1987, M&CL provided a master plan to the Space Allocation Committee for occupying the space vacated by the Political Science department. It was decided, however, to move America Studies into Ortega Hall and, while M&CL did acquire some additional space, M&CL's needs have not been satisfied. Twelve to fifteen teaching assistants, with as many desks, continue to be housed in one large room, known as the "corral," on the fourth floor, and other teaching assistants are housed in a room that was originally designated as a storage room. Plans to redistribute space will be studied.

VII. AFFIRMATIVE ACTION

The department, following the rules and procedures of Affirmative Action, has tried to set goals to comply with its directives by giving employment opportunities to qualified personnel and making an effort to attract affected groups. During the year, the department employed a total of fifty Teaching Assistants, 19 of whom were Hispanic. Of those, 13 were women. One teaching assistant was physically handicapped. The work study team was composed of four students (three Hispanic and one Asian).

Report of the Department of Philosophy
July 1, 1988 - June 30, 1989
Fred Gillette Sturm, Chair

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AND SCIENCES

A. Significant achievements during the academic year

1. Brian O'Neil Memorial Lectureship in the History of
Philosophy

Professor Ernan McMullin, O'Hara Professor of Philosophy and Director of the Program in History and Philosophy of Science at the University of Notre Dame, was the first O'Neil Memorial Lecturer. He presented two lectures on October 20 and 21, 1988, entitled "Conceptions of Science in the 17th Century". The lectureship has been established as a permanent memorial to UNM Philosophy Professor Brian O'Neil who died in November 1985 after a long and courageous struggle with cancer. Funds to establish the lectureship have been contributed by former students, colleagues, and friends. Additional funding was provided by the UNM Centennial Center, the UNM Foundation, and the UNM Department of Philosophy. The lectureship is under the direction of Professor G. Fred Schueler.

2. Modifications in the Ph.D. program of studies

In an on-going effort to respond to the report of the Graduate Program Evaluation Team the department instituted two major modifications in the Ph.D. program;

a) the requirement that Ph.D. students satisfactorily complete three doctoral level seminars (Epistemology, Metaphysics, Value Theory) was re-instated;

b) the number of doctoral comprehensive examinations was reduced from five to three (History of Philosophy, Metaphysics/Epistemology, Value Theory).

3. Modifications in the M.A. program of studies

a) a two-track program leading to the M.A. degree was instituted, one track for students desiring only the Master's degree, the other for students planning to proceed to the Ph.D.

b) the concentration in Buddhist Philosophy was changed to Asian and Comparative Philosophy.

4. Interdepartmental/Interdisciplinary Programs of Study

The Department of Philosophy was actively involved in establishing two new programs of study which are interdisciplinary in subject matter and interdepartmental in structure.

a) Classical Civilizations

Professor John Bussanich is the member of the Department of Philosophy who participated in the drafting of this new major within the College of Arts and Sciences which has been funded partially by an NEH grant. He continues to be a member of the committee which administers the program.

b) Science, Technology, and Society

Professor Rose-Mary Sargent of this department served as Executive Secretary of the committee which drafted this new minor within the College of Arts and Sciences, and was appointed chair of the committee to administer the program. The department chair was a member of the development committee and is a member of the administrative committee.

The Department continues to provide courses and personnel for six other interdisciplinary/interdepartmental programs: Asian Studies, Cognitive Science, European Studies, Mediaeval Studies, Peace Studies, and Religious Studies.

5. Interdisciplinary Conferences

The Philosophy Department was involved in the planning of three interdisciplinary conferences held at UNM during the Centennial celebration.

a) Uses and Abuses of Space (August 1988)

Professor Rose-Mary Sargent and the department chair met with representatives from American Studies, General Honours, Mechanical Engineering, and Physics to plan the Symposium.

b) Pueblo Style and Regional Architecture (October 1988)

The department chair served on the program committee of this Symposium with representatives from the School of Architecture and Planning.

6. Philosophy Colloquia: Visiting Lecturers

Four visiting lecturers were invited to make presentations at the weekly Philosophy Colloquia sponsored by the UNM chapter of Phi Sigma Tau, National Philosophy Student Honorary Society:

- Jeffrey Barnouw - (University of Texas, Austin)
- William Desmond - (Loyola College, Baltimore)
- Justin Lieber - (University of Houston)
- David Pears - (Oxford University and University of California at Los Angeles)

B. Significant Plans and Recommendations for the Future

1. Selective recruitment of graduate students

An extremely tight Supply and Expense budget in recent years has prevented the department from printing and distributing announcements of graduate programs. The limitation of financial aid opportunities to five Teaching Assistantships and one Graduate Tuition waiver has made any aggressive program of graduate student recruitment very difficult. Despite these restrictions it has

become evident that the department needs to take initiative in recruiting students with the background and interests to take full advantage of the resources which the faculty offers. Plans have been laid to initiate a recruitment program in the 1989 fall semester beginning with the areas of special concentration within the M.A. program, focusing primarily on Asian and Comparative Philosophy, and Philosophy of Literature, but also including Religious Studies, and History and Philosophy of Science.

2. Recruitment of undergraduate majors and minors

The academic discipline of philosophy provides an excellent core for an undergraduate liberal arts degree and provides a good preparation for graduate work in many fields. In the past the department has attracted only a token number of majors and minors each year. The first steps were taken during the 1989 spring semester to embark upon a more aggressive program to interest undergraduate students in majoring or minoring in philosophy.

3. Advisement of undergraduate majors and graduate students
in Philosophy

An adequate structure for advisement of undergraduate majors and graduate students has been in place, but depends largely upon student initiative to take advantage of it. That there are students each year who express a desire for better advisement indicates that more effective communication between faculty advisors and students need to be established, with more initiative taken by faculty advisors.

4. Placement of Ph.D. Graduates

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The dissertation committee chair, Graduate Student Advisor, and department chair individually attempt to put each recent Ph.D. graduate in touch with appropriate job openings, sending nomination letters to the institutions, encouraging the graduate to apply, and providing advice on materials to send with the application. This has not been a coordinated effort, however, and a formal placement procedure needs to be put into place as part of the department's response to recommendations made by the graduate program evaluation team.

5. O'Neil Memorial Lectureship Endowment Fund

The first Brian O'Neil Memorial Lectureship on the History of Philosophy was made possible through contributions from many individuals and special appropriations from the Centennial office, the UNM Foundation, and the Department. It is evident, however, that in order to sustain such a lectureship over a long period a permanent endowment fund needs to be established. The UNM Foundation has allocated up to \$5000 as a matching fund to inaugurate the endowment fund. It is important that the department raise \$5000 within the coming year to meet the match.

6. Philosophy in New Mexico High Schools Program

Considerable interest continues among teachers in the high schools and professors in the colleges and universities who cooperated with members of the department in the earlier pilot project of Philosophy in the High Schools. Sources of funding need to be found to permit the reactivation of the program.

7. Philosophy and the Professions

The department has endorsed the establishment of a cooperative program sponsored by the professional schools and colleges of the university to introduce the discussion of philosophical issues concerning professional education and practice within the separate curricula and programs. During the coming academic year a departmental committee will meet with the deans and their representatives in articulating the program.

8. Aftermath of charges of discrimination

At this writing it appears that no evidence can be found to substantiate charges of ethnic and racial discrimination which were brought against the department's graduate program. It will be necessary, nonetheless, to dispel any lingering suspicions within the university that there is bias on the part of the department or members of its faculty.

C. Appointments to Staff

1. Glenda Baxter, Staff Secretary, 13 February 1989
2. Sandy Robbins, Office Manager, 16 January 1989

D. Separations from Staff

1. Anita Kelly, Office Manager, 13 January 1989
2. Sandy Robbins, Staff Secretary, 13 January 1989
3. Paul F. Schmidt, Professor, 30 June 1989

E. Sponsored Research and other projects

1. Five faculty (42%) submitted proposals.
2. Three faculty (25%) obtained awards.

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THE REPORT OF
THE DEPARTMENT OF PHYSICS AND ASTRONOMY
JULY 1, 1988 - JUNE 30, 1989
Daniel Finley - Chairman

THE REPORT OF
THE DEPARTMENT OF PHYSICS AND ASTRONOMY

July 1, 1988 -- June 30, 1989

Daniel Finley -- Chairman

A. Significant Achievements during the Academic Year 1988-89

Appropriately for the university's Centennial year, the most interesting happenings during this year were the department's individual commencement ceremonies, and, even more interesting, its reunion of graduate and undergraduate students and former and retired faculty, which was scheduled to coincide with the most illustrious of the speakers in the very successful Physics and Astronomy Centennial Lecture Series. The commencement ceremony, in May, was extremely well attended (100% attendance of B.S. degree recipients, and 80% attendance for graduate degrees) by both students and parents and friends, with very good comments being made by all. As well, in attendance were Dr. Robert Holzer, former P&A faculty member from 1935-46 and recipient that day of an honorary degree from UNM, and Drs. Crawford MacCallum and Stephen Dalich, recognized by the department and the university as distinguished alumni.

Supported by the UNM Centennial Program, the CAS, the CHTM, the College of A&S, as well as by P&A, the department's Centennial Speakers series, involving 5 very distinguished outside speakers, and 3 local, very distinguished speakers, was an extremely appropriate way for a department that relies so heavily on direct interaction with the rest of the scientific world to celebrate the Centennial Year. Each

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speaker gave both a well-attended public talk and a separate, more technical lecture on his research. (In addition, each public talk had animated receptions continuing discussions of science well into the night.) Associated with the centennial visit of Nobel Laureate Murray Gell-Mann, the department invited all of its former students to come from around the world for the first ever departmental reunion. This resulted in almost a hundred people at a banquet--an occasion for much lively conversation about the course of lives since leaving the university--and many more visiting departmental facilities, with 200 visitors at the talk on the current status of research into information theory, given by Dr. Gell-Mann, and almost 400 people at his very-well-received explanation of the superstring version of the "theory of everything." The original invitation was issued via another first, an official departmental newsletter, making an attempt at maintaining rather closer contact with departmental alumni than has ever been done before. An additional Centennial event relevant to the department was "Space Exploration '89," hosted jointly by this department and a few others on campus, with high school students and others attending from throughout the state. As well, our campus observatory was spruced up for the centennial, with many new posters and photographs, through a grant from the Slipper Fund, matched by the UNM Centennial Fund. The Centennial Fund also supported the work of a graduate student who created an excellent pictorial display of the history of the department since the very early days; this semester she is continuing her endeavors with hands-on physics displays in Regener Hall.

On the level of excellent happenings is the creation this year of new research laboratory space in our building's basement. This space was previously used mostly for storage. Having been in Albuquerque at Sandia National Laboratory for many years, Professor John Panitz has now been convinced to move his rather formidable

experimental setup to this new basement area and has been hired this year as a (full) Professor. His research and instructional activities have been an extra feature in the department hallways this year, very much appreciated by everyone. As well, Dan McGraw was hired this year as a beginning faculty member. He is working very hard to bring his very new laboratory into a form to match his vision. His allotted (basement) space will not long be sufficient.

Changes in the form of new faculty are always appreciated. The two just mentioned were on hand for the first time this year, while Dr. David Dunlap will be arriving this fall, having been hired during this year, for his expertise and interest in theoretical condensed matter physics as well as the instruction of budding physicists. Additionally, Professor John McInerney, although a wanderer among the hallways of this building for several years (and active committee member), has now been officially confirmed as having (joint) faculty status in this department, as well as his longer-standing appointment in EECE. His status change seems to be extremely good for the department at the moment, since he is taking it very seriously--as anticipated--and volunteering for several important service jobs that truly need doing, and which I feel he will do extremely well. Another person that seems new is Professor Harjit Ahluwalia, who has only returned this year from almost three years of being a program officer at NASA, bringing with him considerable re-infected enthusiasm and several sorts of computers systems. The last mention should be of Professor Seymour Alpert who, although he never left the area for any significant length of time, nonetheless spent the fall semester on sabbatical, while continuing to carry out experiments on nutrition and metabolism using rats, in his laboratory here.

A different sort of additional faculty member has been Dr. David Campbell, from Los Alamos National Laboratory, where he is the director of the Center for Nonli-

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near Studies. He spent every Monday during the spring semester here on campus, being the instructor for a creatively-organized new course on "Solitons, Chaos, and Complex Systems," which met for 2 hours each (Mon.) afternoon and then re-solidified itself in various computer "pods" around campus during the evening hours for several more hours of explicit demonstrations and examples of the systems under scrutiny earlier that day. It is hoped that Dr. Campbell's presence on campus will continue in as formal and sure a way as possible; he is being proposed as the first member of a new class of joint faculty appointments--UNM-NL appointments.

An especially important event for the department's Institute for Astrophysics was the signing of a 5-year agreement between the institute and the Department of Astronomy at New Mexico State University to collaborate on observations using their new optical telescope, located at Apache Point in southern New Mexico. This telescope, which is almost finished, will have a mirror 3.5 meters in diameter, making it the third largest observatory in the United States. As a special member of this collaboration, observers at UNM will have special priorities for time on this new, very large telescope.

As well, the Institute's own telescope at Capilla Peak, is becoming more widely known as a telescope with unique capabilities for wide-field imaging. We have requests for telescope time from 5 other universities including New Mexico State, Georgia State and the University of Minnesota, the latter paying half of the Resident Observer's salary for a multi-year observation project.

Awards and Recognition: Very well deserved recognition was received by Professor Marlan Scully, and an important honor bestowed on the department, when the Commission on Higher Education and Governor Carruthers selected Marlan as an Eminent Scholar. The 73 other eminent scholars surely provide an appropriate mil-

ieu for someone as distinguished as Dr. Scully, himself one of an extremely small number of Distinguished Professors within this university, as well as being the Director of the Center for Advanced Studies. An extra distinction for him, and the department, is the selection in late 1988 of Leno Pedrotti and Julio Gea-Banacloche as winners of the Award for the Most Outstanding Paper Presented at the Lasers '88 Conference, the leading (international) conference on laser physics. Both Julio and Leno were (very distinguished) former students of Professor Scully here at UNM.

Among other faculty recipients of awards was Professor Charles Beckel, and his co-workers at Sandia National Laboratory and the Jet Propulsion Laboratories in Pasadena, Calif., who were selected for the quality of their work on boron and boron carbide compounds, being named as performing the best DoE-funded research that year in materials sciences with significant implication for energy-related technologies. An additional honor was the selection of Professor Steven Gregory as a Presidential Lecturer.

As additional recognition, I want to especially recognize the departmental staff **for their work with the public, in a public relations role.** For a 3 month period last year, at my request, they gave records of the various telephone calls, from the public, that come into the department, but having nothing to do with the direct mission of the department. One hundred and one calls were recorded during this period, all but 9 of which were actually answered by the staff, although 30 of those required that they first inquire, for an answer, of someone else in the building--usually a faculty member or a graduate student known to have that sort of knowledge. The calls mostly have to do with astronomy and were separated as follows: 27 calls about our campus observatory (or the Albuquerque Public Schools planetarium), 25 general questions about special phenomena in the sky, 5 questions concerning the VLA in

Socorro, and 5 about other miscellaneous subjects were all answered directly by the staff; 30 more (as mentioned above) were answered by the staff after consultation, with these questions being about 60% astronomical; 9 more were given directly to faculty as being too complicated for the staff to answer. As an indication of the sort of questions, and the detail involved, a copy of (just) two of the record-keeping sheets is attached as an appendix to this report.

Other Colloquia and Seminars: The department's various colloquia and seminar series were enhanced this year by the Physics and Astronomy Centennial Lecture Series, as already described above. Nonetheless, many other distinguished visitors were received by the department. Including the centennial ones, there were 65 colloquia throughout the year and, as well, 51 seminars. (Colloquia are conceived as for an educated but not necessarily specialized audience, while the seminars are fairly specialized and often in a short series.) Nobel Laureates Roy Glauber, Julian Schwinger, Murray Gell-Mann, and David Pines gave talks, sponsored generally with the help of the Center for Advanced Studies. The range of talks went as far afield as James Randi's wonderful talk ("Science and the Chimera") on the history of pseudoscience masquerading as science and his own explicit involvement in the unmasking involved. Stuart Kauffman, a researcher with novel new and important ideas on the origins of life and the need for the 'theory of complexity' to understand them, was lured away from the Santa Fe Institute long enough to explain some of his ideas here. R. P. Kirshner came from Harvard long enough to make even the general public believe that they understand what science knows today about supernova and how the (long-awaited) supernova last year helped to increase that knowledge. As a recipient of several important awards in theoretical physics, Frank Wilczek made us understand some directions in modern theoretical physics, but also talked about

"The Gauge Theory of Swimming." To mention only one more, I note the talk of Rodolfo Bonifacio, who is now the director of the Italian government effort to understand free electron lasers. Lists of all the speakers, their home locations, and their topics are appended to this report.

Academic Matters: Enrollment in undergraduate service courses, undergraduate major courses, and graduate courses went through some oscillations throughout the year, with small decreases from last year, although they are still higher than two years ago; i.e., last year's increases were especially large and the system is oscillating a bit after that. This year (1988/89) showed 7411 SCH for the fall semester, as compared with 7700 SCH in 1987/88 and 7061 SCH in 1986/87--down 3.75% from last year, but still a 4.95% increase from 2 years ago--while the spring semester went by with 7223 SCH for 1988/89, as compared with 7259 SCH for 1987/88 and only 6757 SCH for 1986/87--a 0.5% decrease over the one year, but a 7.4% increase over the two years. Similar small oscillations can be seen if one divides the data into lower-division, upper-division, and graduate SCH. One aspect of the graduate enrollment is that the department's Ph.D. program in Optical Sciences is jointly administered and taught by the Department of Electrical and Computer Engineering. It was this last year that they picked up several courses as their part of the joint teaching effort. A complete list by course is appended to this report.

An especially good happening during this year was the permission granted to increase the number of approved Graduate Assistant positions. This boon plus extra help from CHTM allowed us to admit 39 new graduate students for the upcoming year. Even though a record number of degrees was granted, as shown below, this increase caused the total graduate enrollment for the upcoming year to continue to increase, relative to preceding years.

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During the academic year 1988/89, 38 students earned degrees in Physics or Astrophysics. Twelve of these received B.S. degrees in Physics or Astrophysics (*), while one other student minored in Physics for his bachelor's degree with another major. Sixteen students received M.S. degrees in Physics and nine received the Ph.D. degree. Of the Ph.D.'s awarded, two were in Optical Sciences (*). The following tables list the names of the students involved:

Students receiving a B.S. degree in 1988/89

Physics and Astrophysics (*) Major

Petras Avizonis, Jr.	Robert Guild Copeland
Stephen Andrew DeWalt	Kristen Kartchner*
Walen Joe Mickey	Aaron J. Miscenich
Thanaluck Jup Polanams	John David Saicawalo
Arthur Shanks, Jr.	Heidi Terrill-Stolper
Jeff L. Weiler*	Christopher Paul Woody

William McGuinness (Chemistry) Physics Minor (Major)

Students receiving an M.S. degree in 1988/89 (thesis advisor, when the Plan I option was followed)

Olympia Lilly Bakalis	Harry Edward Baumgarten, III
Stephen Carlton Bayliss (Howard Bryant)	Donald Charles Beckert
Parminder Singh Bhatia	Pamela King Benicewicz
Greg Allen Finney	Mark Dee Confer
Roy M. Goeller (Seymour Alpert)	Victor Lorenzo Gamiz
Gerhard Mauckner	Harold J. Iuzzolino
Joachim Ludwig Stuehler	David Everette Lake
Laura Jean Ulibarri	Michael Dennis Rhodes (Michael Zeilik)

Students receiving the Ph.D. degree in 1988/89 in Physics or Optical Sciences (*) (dissertation advisor)

*Ki-Hyun Chung

David Alan Clarke

(John McInerney)
 Craig Allen Denman
 (John McIver)
 *Michael Andrew Kelly
 (John McIver)
 Muhammad Yasin Raja
 (Stephen Brueck)
 Saleem Hussain Zaidi
 (Stephen Brueck)

(Jack Burns)
 Kyle James Hendricks
 (Harjit S. Ahluwalia)
 Raymond William Lemke
 (Colston Chandler)
 Nackchin Sung
 (Howard Bryant)

B. Significant Plans and Recommendations for the Near Future

Space and Building Needs: Well founded ideas about departmental growth, in a state which has such a very large number of physicists in its population--the per capita number of physicists in New Mexico is exceeded only by Israel, when compared with the countries of the world--continue to cause the departments most serious need, the need for more space. The department is still requesting that a new wing be added onto the existing building, space which is vitally needed for laboratory and office space. A minimum of 15,000 net assignable square feet has already had extensive justification, with positive responses at the college level--so far only at that level. The central university has, of course, supplied the funding during the previous year to create the 4500 net square feet in our previous basement area, now being very much enjoyed by the 4 different faculty using laboratory space there. Plans, for instance, that one of them has for the university to receive free, a scanning electron microscope, and an STM facility, must, however, stand somewhat in abeyance until still more space is found or created.

Areas of future growth: The department is still consistent in needing a new person in experimental, nonlinear optics. However, some new opportunities are arising that seem to offer themselves well to a physics department in New Mexico and near the Los Alamos National Laboratory. The largest is that represented by the beginning

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of the building of the Superconducting SuperCollider (SSC) in Waxahachie, Texas (near Ft. Worth). The nearby location of this machine, to be built over the next 10-12, years provides ample reason for wanting to expand the department's interests and capabilities in that direction. The possible provision of funding by the State of Texas, provides ample possibility for doing so. The possible expansion of our research interests in the direction of high-energy, experimental particle physics, as represented by the SSC, in collaboration with related efforts at LANL, are under serious consideration at the moment. A similar opportunity is represented by the Sudbury Neutrino Observatory, a project that will occur physically in northern Canada (somewhat south of Hudson Bay). The impetus for UNM's involvement is the desire of researchers at LANL to be involved and the desire of a critical member of the research team (funded by DoE and the Canadian counterpart) to come to UNM. This opportunity is also under serious consideration.

Staff needs: The department still has pressing staff needs. The addition to the state-funded staff of a technical position for the Capilla Peak Observatory is greatly appreciated. The addition of a graduate secretary, who would handle all aspects of our still burgeoning graduate program, is also a critical must-do item. (By the time this document is actually being written, this person has finally been hired.) The next most critical person on the list of necessary staff positions is an additional person in our departmental machine shop. As the number of faculty rises, and the number of researchers rises even faster, the number of positions in our machine shop has actually decreased over the last 5 years, from 2.5 down to the current two. It is essential that we now plan how to allocate money so that we can increase the number of machinists available to the research staff and faculty. Ideally this person would also be somewhat knowledgeable in some aspects of design, optical machining, and elec-

tronics.

Undergraduate Program: After the last couple of years, with very small numbers of undergraduate degrees awarded, the department is very pleased to be able to report the 12 B.S. recipients listed above. It is believed that at least some of the earlier decrease was simply statistical fluctuation. None the less, the department has made active efforts to recruit undergraduate majors and to retain them in the program. The junior-level majors classes have more than 30 students this year and we are putting together stronger efforts to maintain this. In addition, the department has agreed on a planned Assessment Program for the future, where we will track all departmental graduates and ask them, 2 and 3 years after they have left, how well prepared our education made them for the position in which they now find themselves.

C. Appointments to Staff

There were several faculty appointments during the year in addition to Drs. Panitz and McGraw coming on board at the beginning of the year. After a rather lengthy search, Dr. David Dunlap has been chosen as Assistant Professor (Code 1) in theoretical condensed matter physics. Also, as mentioned before, Dr. John McInerney was appointed Assistant Professor of Physics and Astronomy jointly with his regular appointment in Electrical and Computer Engineering. Joseph Mather was added as an Adjunct Professor of Physics; he has long been a research collaborator in plasma physics with Dr. Harjit Ahluwalia.

Although not appointments to faculty, the following list of scholars contributed to the departmental teaching efforts during the year. David Campbell, Director of the Nonlinear Optics program at LANL taught an Advanced Seminar for the Spring Semester. Brendan Godfrey, recently selected Chief of Research at AFWL, taught

graduate students Classical Mechanics (P. 503) in the Fall Semester. Visiting professors and their teaching assignments were Zeki Kuruoglu, Methods of Theoretical Physics (P. 466); Paolo Grigolini, Quantum Mechanics I (P. 521) and Miguel Orszag, Laser Physics II (P. 564).

In the technical staff, Charles Porter was added as an Instrumentation Technician to service our remote sites. Jon Dolby was brought on board by the Institute for Astrophysics as the Resident Observer at Capilla Peak.

The office staff is being ably assisted by the addition of our new Editorial Assistant, Dianne Edwards.

D. Separations from Staff

Gloria Lopez, a Staff Assistant in the Center for Advanced Studies, accepted a promotion to another department in the university. During the year, Lab Technician II, Gary Sealey departed, as did Editorial Assistant Sue Strickland.

Adjunct Associate Professor David Steinhaus retired at the end of the school year. Dr. Steinhaus has, for a number of years, assisted in supervising and teaching our freshman and sophomore laboratories five afternoons a week. His knowledge and experience in the labs will be sorely missed. To say that Dr. Steinhaus is irreplaceable is not, in a real sense, misstating the truth as he has volunteered this time for all the years he has been at the University.

Research Personnel at Physics and Astronomy During the Year

NAME	TITLE
Janos Bergou	Senior Research Scientist I
Claus Benkert	Research Associate I
Ahmet Elci	Research Associate Professor
Jerry Hall	Senior Research Associate III
Nooshin Jamasbi	Research Associate II
Benoit Jean-Jean	Research Associate I

Chongmoon Lee	Research Associate I
Ning Lu	Research Associate II
Mehrdad Mohebi	Research Associate III
Michael Newberry	Research Associate II
Miguel Orszag	Senior Research Associate II
Mary Raymond	Research Technologist V
Randolph Reeder	Senior Research Associate II
Hassan Sharifian	Research Associate I
Mohinder Paul Sharma	Research Associate II
Augustine Syn	Research Associate I
Hossein Toutounchi	Research Associate I
Mohammed Yousaf	Research Associate II
Chi-Yao Zhu	Research Associate II
M. Suhail Zubairy	Senior Research Associate III

E. Sponsored Research or Other Projects

a. During the year, there were 35 new proposals submitted to outside funding agencies by 13 faculty members representing 48% of our total faculty.

b. Altogether 24 faculty members (84%) and three research associates were actively involved in research on 60 separately funded grants or contracts. These research projects are performed out of the Department of Physics and Astronomy and come either directly under our jurisdiction or under the aegis of several other organizations such as the Center for Advanced Studies, the Center for High Technology Materials, the Center for Micro-Engineered Ceramics and the Institute for Astrophysics.

c. Approximately \$1,998,000 were expended on research projects supported by external grants and contracts that were filed through the College of Arts and Sciences or the other centers mentioned above.



Department of Physics and Astronomy
Schedules of Classes and Seminars
Fall 1988

COURSE #	COURSE NAME	ENROLL	SCH
101-001	Intro to Astronomy	318	954
101-002	Intro to Astronomy	180	540
101-003	Intro to Astronomy	58	174
111L-001	Astronomy Lab	26	26
111L-002	Astronomy Lab	30	30
111L-003	Astronomy Lab	19	19
111L-004	Astronomy Lab	22	22
111L-005	Astronomy Lab	33	33
111L-006	Astronomy Lab	23	23
270-001	General Astronomy	36	108
272L-001	General Astronomy Lab	15	15
423-001	Radio Astronomy	8	24
426-001	Observational Astronomy	6	18
455-all	Problems	5	10
534-001	Plasma Physics I	14	42
102-001	Intro to Physics	49	147
102-002	Intro to Physics	151	453
106-001	Light and Color	85	255
112-001	Physics Laboratory	13	13
112-002	Physics Laboratory	16	16
112-003	Physics Laboratory	13	13
116-001	Light and Color Lab	17	17
116-002	Light and Color Lab	12	12
116-003	Light and Color Lab	13	13
151-001	General Physics	200	600
152-001	General Physics	92	276
157-001	Problems in General Phys	68	68
157-002	Problems in General Phys	22	22
158-001	Problems in General Phys	15	15
158-002	Problems in General Phys	5	5
160-001	General Physics	198	594
160-002	General Physics	70	210
161-001	General Physics	171	513
161-002	General Physics	33	99
167-001	Problems in General Phys	83	83
167-002	Problems in General Phys	28	28
167-003	Problems in General Phys	14	14
168-001	Problems in General Phys	33	33
168-002	Problems in General Phys	15	15
262-001	General Physics	130	390
262-002	General Physics	34	102
267-001	Problems in General Phys	19	19
301-001	Heat and Thermodynamics	29	87
303-001	Analytical Mechanics	30	90
305-001	Electricity -Magnetism	26	78
307-001	Junior Laboratory	14	42
307L-002	Junior Laboratory	9	27
307L-003	Junior Laboratory	6	18
400-001	Seminar	9	9
400-002	Seminar	11	11
400-003	Seminar	16	16
466-001	Methods/Theoretical Phys	29	87
471-001	Advanced Optics I	17	51
472-001	Laser Physics I	36	108
476L-001	Exper. Techniques/Optics	12	36
491-001	Contemporary Physics	14	42
493L-001	Cont.Physics Lab	10	30
495-001	Special Relativity	7	21
500-001	Advanced Seminar	7	7
500-002	Advanced Seminar	5	5
503-001	Mechanics	19	57
506-001	Statistical Mechanics II	8	24
522-001	Quantum Mechanics II	24	72
530-001	Solid State Physics	7	21
532-001	Molecular Structure	7	21
551-all	Problems	8	20
552-all	Problems	8	22
566-001	Sel Tpcs/Quantum Optics	6	18
599-all	Master's Thesis	2	8
650-all	Research	12	47
699-all	Dissertation	36	273
TOTALS		2816	7411

Department of Physics and Astronomy
Schedules of Classes and Seminars
Spring 1989

COURSE NO	COURSE NAME	ENROLL	SCH
101-001	Intro to Astronomy	332	996
101-002	Intro to Astronomy	198	594
101-003	Intro to Astronomy	69	207
109-001	Sel Topics in Astronomy	23	69
111L-001	Astronomy Lab	31	31
111L-002	Astronomy Lab	17	17
111L-003	Astronomy Lab	23	23
111L-004	Astronomy Lab	19	19
111L-005	Astronomy Lab	14	14
111L-006	Astronomy Lab	15	15
271-001	General Astronomy	43	129
273L-001	General Astronomy Lab	15	15
421-002	Concepts of Astrophysics	11	33
455-001	Problems	6	11
455-003	Selected Topics	9	9
102-001	Intro to Physics	58	174
102-002	Intro to Physics	117	351
105-002	Physics and Society	30	90
108-001	Musical Acoustics	73	219
112-001	Physics Laboratory	10	10
112-002	Physics Laboratory	10	10
112-003	Physics Laboratory	8	8
118-001	Musical Acoustics Lab	19	19
151-001	General Physics	149	447
152-001	General Physics	137	411
157-001	Problems in General Phys	35	35
157-002	Problems in General Phys	12	12
158-001	Problems in General Phys	26	26
158-002	Problems in General Phys	9	9
160-001	General Physics	168	504
160-002	General Physics	47	141
161-001	General Physics	167	501
161-002	General Physics	46	138
167-001	Problems in General Phys	39	39
167-002	Problems in General Phys	13	13
167-003	Problems in General Phys	12	12
168-001	Problems in General Phys	54	54
168-002	Problems in General Phys	20	20
262-001	General Physics	100	300
262-002	General Physics	44	132
267-001	Problems in General Phys	12	12
267-002	Problems in General Phys	9	9
302-001	Optics	37	111
304-001	Analytical Mechanics	20	60
306-001	Electricity -Magnetism	17	51
308L-001	Junior Laboratory	12	36
330-002	Atomic-Nuclear Physics	24	72
400-004	Seminar	15	15
400-002	Seminar	8	8
400-003	Seminar	8	8
430-002	Physics of Matter	24	72
452-all	Research Methods	1	2
467-001	Methods/Theor. Physics II	15	45
477L-001	Exper. Techniques/Optics	4	12
492-001	Contemporary Physics	14	42
500-001	Advanced Seminar	3	3
500-003	Adv Sem Extra Galac Astro	8	8
501-002	Advanced Seminar	9	18
505-001	Statistical Mechanics	19	57
512-001	Electrodynamics II	21	63
521-002	Quantum Mechanics I	22	66
531-001	Atomic Structure	12	36
551-all	Problems	8	20
552-all	Problems	8	26
554-001	Advanced Optics II	11	33
564-001	Laser Physics II	16	48
599-all	Master's Thesis	3	7
650-all	Research	14	59
699-all	Dissertation	43	367
TOTALS		2645	7223

Department of Physics and Astronomy
Colloquia Presentations
July 1988 - June 1989

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- Date
- 08/24/88 Presenter: Roy J. Glauber
 Title: Diffractive Theory of p-p Collisions
 Institution: Lyman Labs. of Physics
- 08/26/88 Presenter: L. Rosen
 Title: New Opportunities and Requirements for Arms Control
 Institution: LANL
- 09/02/88 Presenter: Roy J. Glauber
 Title: Diffractive Collision Theory
 Institution: Harvard University
- 09/09/88 Presenter: Krzysztof Wodkiewicz
 Title: Jumps, Randomness and Nonlocality in Quantum Mechanics
 Institution: UNM/Warsaw U.
- 09/16/88 Presenter: Robert Stellingwerf
 Title: Smooth Particle Hydrodynamics As Applied to Laser Target and Astrophysical Models
 Institution: Mission Research, Albuquerque
- 09/23/88 Presenter: Charles Spangler
 Title: Polaron & Bipolaron Formation in Model Extended PI-Electron Systems: Potential Nonlinear Optics Applications
 Institution: N. Illinois University
- 09/23/88 Presenter: David Emin
 Title: Formation of a Large Singlet Bipolaron: High-Temperature Bipolaronic Superconductivity
 Institution: Sandia Labs and UNM Physics and Astronomy

09:35 Date

- 09/30/88 Presenter: Dave Dearborn
 Title: Nucleosynthesis in Red Giant Stars
 Institution: Lawrence Livermore Laboratory
- 10/06/88 Presenter: W. A. Christiansen
 Title: Magnetic Reconnection in Extragalactic Plasmas
 Institution: University of North Carolina
- 10/07/88 Presenter: Ray Kidder
 Title: The Past, Present and Future of Inertial
 Confinement Fusion
 Institution: Lawrence Livermore Laboratory
- 10/10/88 Presenter: Wolfgang Rudolph
 Title: Femtosecond Pulse Generation and Applications
 Institution: Friedrich Schiller U. Jena, Jena DDR
- 10/11/88 Presenter: Gerard de Vaucouleurs
 Title: Wandering Among the Galaxies
 Institution: University of Texas, Austin
- 10/20/88 Presenter: J. H. Eberly
 Title: Atoms in Short Intense Laser Pulses
 Institution: University of Rochester
- 10/28/88 Presenter: K. Anantharamaiah
 Title: Recombination Lines From Very High Quantum Number
 States
 Institution: NRAO
- 11/04/88 Presenter: R. Blumel
 Title: Quantum Chaos
 Institution: Max-Planck-Inst., Munich
- 11/22/88 Presenter: Nebojsa Duric
 Title: Cosmic Ray Astrophysics
 Institution: UNM

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- 01/19/89 Presenter: Amitabha Chakrabarti
Title: Late Stages of Domain Growth in Phase Separating Systems
Institution: Lehigh University
- 01/19/89 Presenter: R. P. Kirshner
Title: The Supernova of a Lifetime
Institution: Harvard University
- 01/20/89 Presenter: R. P. Kirshner
Title: What's New With Supernova 1987a
Institution: Harvard University
- 01/27/89 Presenter: David H. McIntyre
Title: High Resolution Laser Spectroscopy of Atomic Hydrogen
Institution: Max-Planck-Institut fur Quantenoptik
- 01/27/89 Presenter: Timothy Halpin-Healy
Title: Critical Wetting in Three Dimensions
Institution: University of Maryland
- 01/31/89 Presenter: Jainendra Kumar Jain
Title: Quantum Hall Effect as a Transmission Problem
Institution: Yale University
- 02/02/89 Presenter: Bernard McNamara
Title: Proper Motions--An Investigative Tool in Astronomy
Institution: New Mexico State University
- 02/02/89 Presenter: David Pines
Title: High Temperature Superconductivity: The Challenge and the Promise
Institution: University of Illinois
- 02/03/89 Presenter: David Pines
Title: Spin and Charge Excitations in YBa₂ Cu₃O_{7- δ} : Constraints from NMR Experiments

- Date Institution: University of Illinois
- 02/07/89 Presenter: Mehrdad Mohebi
Title: Study of Saturable Nonlinear Interfaces
Institution: UNM
- 02/09/89 Presenter: Rajarshi Roy
Title: Experimental Statistical Physics with Lasers
Noise, Dynamics and Stochastic Resonance
Institution: Georgia Institute of Technology
- 02/10/89 Presenter: Alan Dorsey
Title: Theory of Charge Transfer in Low Energy Atom-
Surface Scattering
Institution: Cornell University
- 02/13/89 Presenter: Murray Gell-Mann, Nobel Laureate
Title: Complexity
Institution: California Institute of Technology
- 02/13/89 Presenter: Murray Gell-Mann
Title: Is Einstein's Dream of Unification Coming True? Is
Everything in the Universe Really Composed of
Superstrings?
Institution: Nobel Laureate, California Institute of
Technology
- 02/17/89 Presenter: Emil Mottola
Title: Why is there more Matter than Antimatter in the
Universe?
Institution: LANL
- 02/23/89 Presenter: N. Matwiyoff
Title: Physics and Medicine: Magnetic Resonance as a
Medical Tool
Institution: Director of Center for Noninvasive Diagnosis,
Univ. of New Mexico

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Date

- 02/24/89 Presenter: Stuart Raby
 Title: Tale of a Light Higgs
 Institution: LANL
- 02/28/89 Presenter: Rainer Beck
 Title: Magnetic Fields in Spiral Galaxies
 Institution: Max-Planck-Institute for Radio Astronomy,
 Bonn, West Germany
- 03/03/89 Presenter: Richard L. Liboff
 Title: Analytic and Quasi-Analytic Solutions in
 Semiconductor Transport Theory
 Institution: Cornell University
- 03/07/89 Presenter: John Szymanski
 Title: Tests of Time Reversal Symmetry Using Epithermal
 Neutrons
 Institution: LANL
- 03/10/89 Presenter: Simon P. Rosen
 Title: Solar Neutrinos
 Institution: LANL
- 03/24/89 Presenter: Jack O. Burns
 Title: Astronomy From the Moon in the 21st Century
 Institution: UNM
- 03/29/89 Presenter: Fred Ernst
 Title: The Initial Value for Colliding Gravitational
 Plane Waves
 Institution: Clarkson University, Potsdam, New York
- 03/30/89 Presenter: Janet Tate
 Title: Phonon Transport and High Tc Superconductors
 Institution: Technische Universitat Munchen, West Germany

Date

03/31/89 Presenter: Boris Stoicheff
Title: Short Wavelength Electric Discharge Lasers
Institution: University of Toronto

04/04/89 Presenter: Warner Miller
Title: Null-Strut Calculus: Geometric Insights into
Einstein's Equations
Institution: Airforce Weapons Laboratory

04/07/89 Presenter: Lawrence Litt
Title: ³¹P, ¹H, ¹⁹F NMR Spectroscopy in Vivo: Studies of
Brain Metabolic Integrity and Anesthetic
Compartmentation
Institution: University of California

04/10/89 Presenter: Stuart Kauffman
Title: A New View of the Origins of Life
Institution: Santa Fe Institute

04/11/89 Presenter: Richard Hughes
Title: The Search for New Gravitational Forces
Institution: LANL

04/13/89 Presenter: Marlan O. Scully
Title: Laser Probes in the Realms of Atomic, Biological
and Cosmic Research
Institution: The University of New Mexico, Center for
Advanced Studies

04/14/89 Presenter: James Randi
Title: Science and the Chimera
Institution:

04/14/89 Presenter: Marlan O. Scully
Title: The Foundations of Quantum Mechanics: New Tests
and Insights
Institution: The University of New Mexico, Center for
Advanced Studies

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Date

- 04/20/89 Presenter: Richard Palmer
Title: Lost in a Mighty Maze: Slow Relaxation in Glassy Systems
Institution: Duke University and The Santa Fe Institute
- 04/21/89 Presenter: Arnold Rots
Title: The Extra-Galactic Distance Scale
Institution: NRAO
- 04/26/89 Presenter: B. F. Gibson
Title: The Nucleus From the Pion's Point of View
Institution: LANL
- 04/28/89 Presenter: Karl-Heinz Winkler
Title: The Physics of Nonlinear Shockwave Interactions: A Numerical Laboratory Approach
Institution: LANL
- 05/02/89 Presenter: Peter Doe
Title: The Sudbury Neutrino Observatory - A New Window on the Universe
Institution: University of California-Irvine
- 05/03/89 Presenter: Richard Dickhaut
Title: Electromagnetic Characteristics of Brain Information Processing
Institution: Spectra Corporation
- 05/05/89 Presenter: Miguel Orszag
Title: A New Phase in Laser and Maser Theory, Influence of the Atomic Statistics On The Radiation Field
Institution: Universidad Catolica, Chile
- 05/25/89 Presenter: Emil Wolf
Title: A New Mechanism for Generating Redshifts of Spectral Lines
Institution: University of Rochester

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Date

06/08/89

Presenter: Peter Doe

Title: The Physics of Neutrino Scattering

Institution: University of California, Irvine

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Department of Physics and Astronomy
Seminar Presentations
July 1988 - June 1989

- Date
- 08/02/88 Presenter: Lorenzo Zaninetti
Title: Percolation Theory Applied to Synchrotron Emission
in Spiral Galaxies
Institution: University of Turin, Italy
- 08/03/88 Presenter: Richard Elston
Title: A Sporting Guide To Hunting Primeval Galaxies
Institution: University of Arizona
- 08/16/88 Presenter: Julio Gea-Banacloche
Title: Input-Output in Quantum Optics
Institution: CAS
- 08/24/88 Presenter: Roy J. Glauber
Title: Quantum Amplifiers and Schrodinger's Cat
Institution: Harvard University
- 08/31/88 Presenter: Dan McGraw
Title: Excited State Transport in Liquids
Institution: UNM
- 08/31/88 Presenter: Roy J. Glauber
Title: Some Thoughts on Squeezing
Institution: Harvard University
- 09/01/88 Presenter: Bonny L. Schumaker
Title: Ultrasqueezed Light and Quantum Nondemolition
Measure in Optical Fibers
Institution: Jet Prop. Labs.
- 09/01/88 Presenter: Hanns Risken
Title: Quantum Treatment of Dispersive Optical
Bistability
Institution: University of Ulm

- Date

09/21/88 Presenter: Anton Zeilinger
 Title: Neutron Interferometry: A Quantum Physics Laboratory
 Institution: Atominstitut der Osterreichischen Univ. Austria

- 09/23/88 Presenter: James E. Bayfield
 Title: A Classically Chaotic Quantum System
 Institution: University of Pittsburgh

- 09/29/88 Presenter: Berthold Georg Englert
 Title: Quantum Field Theory
 Institution: Max-Planck Institute for Quantum Optics

- 10/05/88 Presenter: Berthold Georg Englert
 Title: Quantum Theory of Measurement
 Institution: Max Planck Inst. fur Quantum Optics

- 10/19/88 Presenter: Dan Walls
 Title: Aspects of Squeezed States & Quantum Optics
 Institution: University of Auckland

- 10/24/88 Presenter: Asher Peres
 Title: On the Quantum Theory of Measurement
 Institution: Technion Haifa, Israel

- 10/25/88 Presenter: Asher Peres
 Title: On the Quantum Theory of Measurement (II)
 Institution: Technion, Israel

- 10/26/88 Presenter: Asher Peres
 Title: Quantum Nonseparability
 Institution: Technion, Israel

- 11/07/88 Presenter: Mel Dyck
 Title: The Wyoming Infrared Michelson Telescope
 Institution: University of Wyoming

OTAS

Date

- 11/09/88 Presenter: G. S. Agarwal
Title: Suppression of Line Broadening by Fast Rabi Flopping Effects
Institution: University of Hyderabad
- 11/09/88 Presenter: Jim Shirber
Title: A Superconducting Superoxide: La₂ Cu
Institution: Sandia Labs
- 11/14/88 Presenter: R. Blumel
Title: Informal Discussion on Quantum Chaos
Institution: Max-Planck Inst.
- 11/16/88 Presenter: Peter Lomdahl
Title: Lattice Solitons in a 3-Dimensional Non-linear Model of a 310 Helix
Institution: Los Alamos
- 11/16/88 Presenter: G. S. Agarwal
Title: Cooperative Effects in the Field of Broad Band Squeezed Radiation Generation of Intelligent Spin
Institution: U. Hyderabad
- 11/18/88 Presenter: John Andersen
Title: Transport Theory of Photoinjected Electrons in Naphthalene
Institution: Rochester Institute of Technology
- 11/21/88 Presenter: Asim Barut
Title: Feynman Diagrams for Undergraduates
Institution: U. of Boulder
- 11/23/88 Presenter: John Andersen
Title: Nonlinear Evolution of Excitations on Spatially Restricted Lattices
Institution: Rochester Inst. of Technology

Date

11/23/88 Presenter: G. S. Agarwal
Title: Theory of the Two-Photon Squeezed Laser
Institution: Univ. of Hyderabad

11/23/88 Presenter: Asim Barut
Title: Theory of the Two-Photon Squeezed Laser
Institution: University of Colorado

11/30/88 Presenter: Ken Schweitzer
Title: Statistical Mechanics of Polymer Liquids
Institution: Sandia Labs

12/02/88 Presenter: B. V. Landau
Title: Wigner Distribution for Spin-One-Half Systems
Institution: University of Tech. Papua, New Guinea

12/06/88 Presenter: J. L. Friar
Title: Recent Numerical Studies of the Three-Body Wave
Function, with Application to Proton-Deuteron
Scat.
Institution: LANL

12/07/88 Presenter: Ahmet Elci
Title: Bloch Electrons in Coherent Light
Institution: UNM

12/07/88 Presenter: B. V. Landau
Title: Wigner Distributions (II)
Institution: University of Technology Papua, New Guinea

12/12/88 Presenter: E. J. Bochove
Title: Quantum Theory of Fluorescence in the Vicinity of
a Phase Conjugate Mirror
Institution: Texas Tech University

12/16/88 Presenter: M. Winters
Title: Experimental Investigations of the Quantum Beak
Lasers
Institution: JILA, Boulder CO

- Date
- 05/02/89 Presenter: F. Di Martini
 Title: QED in Optical Cavity
 Institution: Dipartimento di Fisica, Rome, Italy
- 05/08/89 Presenter: Frank Wilczek
 Title: Fractional Quantum Statistics
 Institution: The Institute for Advanced Study
- 05/09/89 Presenter: Frank Wilczek
 Title: Gauge Theory of Swimming
 Institution: The Institute for Advanced Study
- 05/09/89 Presenter: Frank Wilczek
 Title: Anyon Superconductivity
 Institution: The Institute for Advanced Study
- 05/17/89 Presenter: Russell T. Pack
 Title: Quantum Reactive Scattering in Three Dimensions
 Using (APH) Coordinates
 Institution: LANL
- 06/05/89 Presenter: Murray Sargent
 Title: Theory of Semiconductor Lasers
 Institution: University of Arizona, Optical Sciences
 Center
- 06/08/89 Presenter: J. Haidenbauer
 Title: Consistent Meson-Exchange Model for NN and NNBAR
 Interactions
 Institution: Inst. Fuer Kernphysik, KFA Juelich, FRG
- 06/23/89 Presenter: Rodolfo Bonifacio
 Title: Superradiance in Free-Electron Lasers
 Institution: Universita Degli Studi de Milano, Italy

THE REPORT OF THE DEPARTMENT OF POLITICAL SCIENCE

July 1, 1988 - June 30, 1989

Paul L. Hain, Chairman

A. Significant Achievements1. Institute for Public Policy Symposia and Publications

- a. The department's Institute for Public Policy developed and convened a conference, "Economic Development Strategies for New Mexico." IPP Director Hank Jenkins-Smith, Assistant Professor of Political Science, developed and chaired the conference.
- b. The Institute for Public Policy published An Economic Development Strategy for New Mexico, edited by Assistant Professor Hank Jenkins-Smith and graduate student Gil St. Clair. The volume consists of revised versions of papers presented at the above Economic Development conference.
- c. The UNM Press Public Policy Series, begun at the request of the Political Science Department's Institute for Public Policy, published its second volume. Edited by Richard Coughlin, it consists of revised versions of papers presented at the April 1987 IPP symposium, "Rethinking Welfare: Beyond Left and Right." The UNM Press Public Policy Series is edited by Political Science Professor Fred R. Harris.

d. Professor Fred R. Harris was co-editor of Quiet Riots: Race and Poverty in the United States (Pantheon Books, 1988). The book consists of revised papers from a February 1988 conference developed by and co-chaired by Professor Harris (and co-sponsored by the IPP) to assess the impact of the Kerner Report twenty years later.

2. Visiting Chinese Scholar

In cooperation with the UNM Law School, Political Science had Professor Huang Huikang as visitor Fall term, 1988. Mr. Huang, who is Deputy Director of the Institute of International Law at Wuhan University, taught a course on the Government of China.

3. Dr. Fritz Cocron, a retired Austrian diplomat, served as visiting professor, teaching two comparative politics courses each semester.

4. Legislative Interns

The department enlisted the fund raising ability of alumnus Ed Mahr and raised \$1,100, mostly from lobbyists, to support six undergraduates as interns at the New Mexico Legislature under the supervision of Mr. Mahr and Professor Paul Hain. Each intern spent one week, full time, at the 1989 legislative session. The UNM Foundation received and disbursed the funds for interns' expenses in Santa Fe.

5. Significant Individual Faculty Achievements

Most individual faculty achievements are reported in the individual "Annual Supplement to Biographical Record," but some achievements deserve recognition in the department's annual report.

- a. F. Chris Garcia was editor of Latinos and the Political System, Notre Dame, IN: University of Notre Dame Press, 1988.
- b. Fred R. Harris was coauthor of Understanding American Government, Scott, Foresman/Little Brown, 1988, and coeditor of Quiet Riots: Race and Poverty in the United States, New York: Pantheon Press, 1988.
- c. Neil J. Mitchell was author of The Generous Corporation: A Political Analysis of Economic Power, New Haven: Yale University Press, 1989.
- d. Robert J. Sickels was author of John Paul Stevens and the Constitution: The Search for Balance, University Park, PA: Pennsylvania State University Press, 1988.
- e. The following faculty published at least one professional article or book chapter or presented at least one paper at a professional meeting during the academic year:

F. Chris Garcia
 Larry N. George
 Gregory W. Gleason
 Paul L. Hain
 Fred R. Harris
 Hank C. Jenkins-Smith
 Peter A. Lupsha
 Neil J. Mitchell
 Martin C. Needler
 Karen L. Remmer
 Christine M. Sierra

f. Gregory W. Gleason

- 1) was a funded seminar participant in the May/June Seminar on Soviet Domestic Politics supported by the Social Science Research Council.
- 2) was a funded workshop participant at the June "Arms Control and Global Peace" workshop of the University of California's Institute on Global Conflict and Cooperation.
- 3) was a funded fellow of the Hoover Institution of Stanford, CA.

6. Noteworthy Service

- a. Hank C. Jenkins-Smith served as Director of the Institute for Public Policy.
- b. Fred R. Harris served as Editor of the UNM Press Public Policy Series and as Associate Editor of The Social Science Journal.
- c. Martin C. Needler served as Associate Editor of Armed Forces & Society.
- d. Karen L. Remmer served as Associate Editor of Latin American Research Review.

B. Significant Plans and Recommendations for the Near Future

1. Department Chairman Paul Hain resigned effective August 1, 1989, to become Dean of Arts and Humanities at Corpus Christi State University. Professor Karen Remmer was selected to fill the vacant chairmanship.
2. With outside funding, the Institute for Public Policy is conducting a series of public opinion surveys about New Mexicans' values and their views on various public issues.

C. Appointments to Faculty

1. Lt. Col. Jimmy Farris, USAF, Air Force Research Fellow
for academic year 1988-89.
2. Richard W. Waterman, Assistant Professor, effective
August 14, 1989.
3. Edward K. Fuge, Visiting Assistant Professor (0.50 FTE)
for academic year 1989-90.
4. Major Judith P. Austin, USAF, Air Force Research Fellow
for academic year 1989-90.

D. Separations from Faculty

1. Lt. Col. Jimmy Farris, USAF, Air Force Research Fellow,
June 30, 1989.
2. Larry N. George, Assistant Professor, June 30, 1989.
3. Harold V. Rhodes, Associate Professor, July 31, 1988.
4. Debra Rosenthal, Assistant Professor, June 30, 1989.

E. Sponsored Research and Other Projects

1. Number and percent of faculty submitting proposals to
outside agencies: Seven (44%)
2. Number and percent of faculty obtaining awards from
outside agencies: Four (25%)

APPENDIX A

Political Science Department Organization

Department Chair: Professor Paul L. Hain

Administrative Assistant: Mrs. Mary Boughton - Assists the chair
in performing administrative responsibilities and supervises
department office.

Department Secretary (0.5 FTE): Mrs. Dallas Dee Bauer

Staff Secretary (0.5 FTE): Mrs. Jennie Lopez

Faculty:

Professors:

F. Chris Garcia
Paul L. Hain
Fred R. Harris
Peter A. Lupsha
Martin C. Needler
Karen L. Remmer
Robert J. Sickels
Jay B. Sorenson
Harry P. Stumpf

Associate Professors

Neil J. Mitchell

Assistant Professors

Larry N. George
Gregory W. Gleason
Hank C. Jenkins-Smith (Director, Institute for Public
Policy)
Shane Phelan
Debra C. Rosenthal
Christine M. Sierra

APPENDIX B

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Course Offerings

Course Number	Course Title	Semester	Number of Sections	Number of SCH
PS 110	The Political World	Summer 88	1	87
PS 200	American Politics	"	1	105
PS 220	Comparative Politics	"	1	51
PS 240	International Politics	"	1	87
PS 291	Internship	"	2	8
PS 320	Topics	"	1	90
PS 350	Public Finance	"	1	24
PS 415	Judicial Politics	"	1	63
PS 499	Independent Study	"	4	15
PS 500	Contemporary Public Admin	"	1	6
PS 551	Problems	"	1	3
PS 699	Dissertation	"	2	9
TOTAL STUDENT CREDIT HOURS SUMMER 1988				548

Course Number	Course Title	Semester	Number of Sections	Number of SCH
PS 110	The Political World	Fall 88	2	489
PS 200	American Politics	"	9	1,212
PS 220	Comparative Politics	"	5	570
PS 240	International Politics	"	5	690
PS 245	National Security Forces	"	2	66
PS 260	Political Ideas	"	3	252
PS 270	Public Policy and Admn	"	1	111
PS 280	Intro to Political Analysis	"	2	207
PS 291	Internship	"	2	6
PS 300	Topics	"	4	237
PS 309	Black Politics	"	1	36
PS 315	Constitutional Law-Powers	"	1	108
PS 316	Constitutional Law-Rights	"	1	90
PS 320	Topics	"	1	6
PS 340	Topics	"	2	174
PS 345	Inter American Relations	"	1	216
PS 350	Public Finance	"	1	36
PS 356	Pol Develpmt Lat Amr	"	1	132
PS 357	Gov&Pol Soviet Union	"	1	135
PS 361	Class Political Theory	"	1	51
PS 362	Modern Political Theory	"	1	51
PS 372	Urban Politics and Policies	"	1	75
PS 375	Public Management	"	1	105
PS 420	Political Violence	"	1	114

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Course Number	Course Title	Semester	Number of Sections	Number of SCH
PS 450	Communist China	Fall 88	1	87
PS 475	Environmental Politics	"	1	87
PS 481	Intro to Empirical Research	"	1	12
PS 495	Jr Honors Seminar	"	1	36
PS 496	S/Comparative Politics IR	"	2	18
PS 499	Independent Study	"	8	34
PS 520	Pro-Seminar - Comparative Govt	"	1	18
PS 525	Pro-Seminar - LA Politics	"	1	42
PS 530	Pro-Seminar - International Rel	"	1	36
PS 551	Problems	"	2	18
PS 599	Masters Thesis	"	2	6
PS 699	Dissertation	"	4	23

TOTAL STUDENT CREDIT HOURS FALL 1988 5,580

Course Number	Course Title	Semester	Number of Sections	Number of SCH
PS 110	The Political World	Spring 89	2	441
PS 200	American Politics	"	6	1,245
PS 220	Comparative Politics	"	3	441
PS 230	USSR People-Pol-Cult	"	1	123
PS 240	International Politics	"	4	612
PS 246	National Security Forces	"	2	81
PS 260	Political Ideas	"	3	219
PS 270	Public Policy & Admin	"	1	111
PS 280	Intro to Political Analysis	"	1	99
PS 291	Internship	"	3	16
PS 300	Topics	"	5	417
PS 301	Government of New Mexico	"	1	138
PS 304	Group Politics	"	1	57
PS 312	American Presidency	"	1	120
PS 320	Topics	"	3	303
PS 340	Topics	"	3	177
PS 342	American Foreign Policy	"	1	141
PS 350	Public Finance	"	1	24
PS 351	Western European Pol	"	1	90
PS 368	American Political Thought	"	1	81
PS 371	Pub Policy Theories	"	1	75
PS 375	Public Management	"	1	147
PS 377	Organized Crime & Pol Corrup	"	1	114
PS 470	Public Policy Analysis	"	1	48
PS 478	Seminar/International Studies	"	2	12
PS 496	Seminar/Political Theory	"	1	15
PS 497	Senior Thesis	"	2	12
PS 499	Independent Study	"	7	28

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Course Number	Course Title	Semester	Number of Sections	Number of SCH
PS 500	Contemporary Public Admin	"	1	3
PS 521	Rch Seminar Comp Govt/Pol	"	1	12
PS 540	ProSeminar Pol Theory	"	1	30
PS 552	Problems	"	5	39
PS 584	Problems: Modern Latin America	"	1	27
PS 599	Masters Thesis	"	2	9
PS 699	Dissertation	"	6	66
TOTAL STUDENT CREDIT HOURS SPRING 1989				5,573

Graduate Degrees Awarded

December 1988

MA - None

PhD - None

May 1989

MA - Charles E. Smith

- Elizabeth Larson

- Joseph Massad

PhD - None

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APPENDIX C: Affirmative Action

The department successfully supported Mr. Larry Curley, a Navajo PhD candidate, for his fourth year as a Harris fellow.

Of the twenty-four graduate students in the department during the academic year, nine were protected category students.

In faculty hiring, the department advertises in the American Political Science Association's Personnel Services Newsletter, in which all academic Political Science positions are announced. We also ask Affirmative Action to advertise in La Red and The Chronicle of Higher Education. A letter, with the position description, is also mailed to all PhD departments in the United States, plus many non-PhD departments in the southwest. Faculty recruitment committees are especially sensitive to seeking women and minority candidates.

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ANNUAL REPORT

1988 - 1989

DEPARTMENT OF PSYCHOLOGY

Douglas P. Ferraro, Chair

OTCO

In remembrance of our faculty colleague Thomas P. Friden

October 19, 1944 to August 18, 1988

DEPARTMENT OF PSYCHOLOGY

STATEMENT OF MISSION

The Department of Psychology shares with other academic departments at the University its raison d'etre: the discovery and dissemination of knowledge. It shares with other science departments a commitment to empirical research as the means of validating that knowledge. 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.

Because of its particular historical development, composition and geographical location the UNM Psychology Department 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 an environment in which those faculty and students associated with the Department are encouraged to achieve their maximum potential as scholars.
- Promote active research programs within the Department.
- Maintain a distinctive emphasis on the psychology of learning, broadly defined, in our programs. (That is, those areas of psychology concerned with the scientific study of changes in behavior as a result of experience will be emphasized, which includes, among others, the areas of human and animal learning, memory, cognition and information processing.)
- Place particular emphasis on teaching and cultivate a reputation as a department consisting of unusually effective teachers, both in communicating psychology to undergraduates as a critical part of a liberal arts education and in training graduate students at a professional level.

- Train all graduate students in general experimental psychology in such a way that they will be well prepared for professional positions in academic or applied settings.
- Ensure graduate students in all areas are well trained in methodology appropriate for their effective functioning as researchers and professionals.
- Make available educational opportunities which enable students to understand the development and operation of psychology in the context of the larger culture and its application in the culture of the Southwest in particular.
- Be actively involved in service to the University, the community and the profession.
- Evaluate, in an on-going fashion, our performance as a department with respect to our mission, and the potential need to revise this Statement of Mission to accommodate to changing situations.

Adopted: October 18, 1985

ANNUAL REPORT

1988 - 1989

DEPARTMENT OF PSYCHOLOGY

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ANNUAL REPORT

1988 - 1989

DEPARTMENT OF PSYCHOLOGY

Douglas P. Ferraro, Chair

I. DEPARTMENTAL INFORMATION AND ACHIEVEMENTS

A. DEPARTMENTAL ADMINISTRATION AND STRUCTURE. The Department's administrative structure remained unchanged during the 1988 - 1989 academic year. As has been described in previous Annual Reports, the Department's governance has relied heavily on faculty and students participating on departmental committees. A listing of the committee memberships for the 1988 - 1989 academic year is given in Appendix A.

During this academic year Douglas Ferraro completed his fifth year as Chair of the Department and was very ably assisted in administrative matters by: Gordon Hodge, Assistant Chair (Semester I); Harold Delaney, Chair of Admissions and Associate Chair for Graduate Education (Semester II); William Miller, Director of Clinical Training; John Gluck, Faculty Director of the Psychology Clinic; Daniel Matthews, Staff Director of the Psychology Clinic; and Robyn Santillanes, Department Budget Director.

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The Chair will be serving his last year in his six-year term during the 1989-1990 academic year. This year the faculty voted to use next year as a transition year during which the Department will move away from the "strong chair" model of governance that has been in effect for the past 25 years to a form of decentralized government that empowers more members of the faculty with decision making authority.

An organizational chart for the intended administrative structure of the Department will be presented on the following page. Basically, the Department is conceptualized as having four overlapping areas of educational responsibility, each of which will be administered by an Associate Chair. Appointments for next year are as follows: Associate Chair for Undergraduate Education, Peder Johnson; Associate Chair for Graduate Education, Harold Delaney; Associate Chair for Experimental Training, William Gordon; Associate Chair for Clinical Training, Samuel Roll.

It is presumed that the new administrative structure will lessen the administrative load of the Chair, thereby making it more reasonable for the next Chair of the Department to continue to pursue scholarly activities while administering the Department. An implication here is that the Department will ask the Dean to appoint the next Chair from among the extant faculty.

FACULTY

Chair

Council of Associate Chairs

Associate Chair for
Undergraduate
Education*

*Undergrad Curriculum
Undergrad Honors
Undergrad Advisement
Undergrad Minorities
Psi Chi
etc.

Associate Chair for
Graduate Education*

Core Curriculum
*Admissions
*Financial Aid
Graduate Minorities
Graduate Honors
etc.

Associate Chair for
Experimental Training*

*Experimental Committee
Experimental Curriculum
Methodology/Computer Use
Human/Animal Subjects
Experimental Colloquium
etc.

Associate Chair for
Clinical Training*

*Clinical Committee
Clinic
Clinical Curriculum
Clinical Colloquium
etc.

*It should be anticipated that the Associate Chairs would chair one committee in their areas of responsibility. Likely candidates are indicated by an asterisk.

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The Chair again made annual cash awards to those faculty and staff in the Department who have best served the administration of the Department. Chair's Service Awards this year went to John Gluck and Daniel Matthews for their administration of the Clinic; Bill Gordon, for Chairing the Financial Aid Committee; Henry Ellis and Peder Johnson, for effectively administering our faculty search committees; Gordon Hodge, for serving as Assistant Chair; Jane Smith, for organizing our colloquium and Centennial Lecture Series; and Karen Hayes, for her effectiveness in minority recruiting of graduate students. For the second year in a row, Harold Delaney was given a Special Chair's Service Award for his outstanding service to our admissions process and to graduate student education.

The following staff were also recognized for outstanding service to the Department: Rhonda Fuller, Mary Hungate, Lois Kennedy, Robyn Santillanes, Patrick Sharp, and Wanda Sharts. The Chair further wishes to acknowledge the 1988 - 1989 officers of two important psychology student organizations, namely Psi Chi, the undergraduate psychology honorary society, and the Graduate Association of Students in Psychology (GASP). For Psi Chi the officers were: John Dencoff, President; John Legrave, Vice President; Jodie Bond, Secretary; Winifred Ju, Treasurer. For GASP the officers were: Sheryl Kern, President; Jon Krejci,

Vice-President; Lauren Aubrey, Treasurer; Jill Nelson, Secretary; and Janice Brown, Representative.

As will be described in a later section of this report, the Psychology Clinic had a particularly successful year. In large measure the Clinic's success is attributed to the Dean's willingness to transfer the Clinic Staff Assistant and the Clinic Staff Director salary lines to the Department's budget. These transfers effectively eliminated the burden the Clinic has had of generating its own operating funds in order to offer education and training to our graduate students. It is notable that under next year's administrative structure, the Staff Director of the Clinic will take on the role of Director of the Clinic and report directly to the Associate Chair for Clinical Training. It is hoped that this latter administrative arrangement will better integrate the Clinic's training operations with the academic curriculum for clinical graduate students.

The Department continues to be concerned by the nationwide trend for animal rights activist groups to oppose scientific animal research. Our animal facility continues to comply with all animal welfare regulations and to operate within the main campus HEW animal assurance under the competent guidance of our Department Veterinarian, Michael Richard. We have been given the continued financial support of the administration in order to assure that we remain in compliance with all animal welfare regulations. Indeed,

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we have received approval to remodel our rooftop primate facility next year. Furthermore, we acknowledge the academic support of the administration, in the face of potentially increasing opposition, in retaining the freedom to do scientific research, where merited, with animal subjects.

The Department's highly successful weekly newsletter, Psychology This Week, which completed its fourth year of publication, remains an effective vehicle for both inter- and extra-department communication and is an important adjunct to the administration of the Department. Psychology This Week now has a regular circulation of 240 readers due largely to the accomplished efforts of the editor, Mary Hungate.

With the recognition that the maintenance of excellence in our Department requires considerable additional financial support, the Department undertook several fund-raising activities again this year. The first of these was a telethon fund drive executed with the cooperation of the UNM Development and Alumni Offices. A second effort was a direct mail solicitation sent to our past Ph.D. students. Thirdly, the Department supported its undergraduate honor society, Psi Chi, in organizing "Psych Run '88," the proceeds from which benefited the Psychology Clinic. The responses of our alumni, students and the community to our solicitations for financial assistance continue to be most gratifying. Similar fund-raising activities, including "Psych Run '89," are planned for

the next fiscal year. In this context, the Chair wishes to thank all of those who have been willing to give of their time and money in order to support the educational mission of the Psychology Department.

The Department again benefited this year from the Quad-L Trust, which was endowed through the UNM Foundation by University Professor Frank Logan. This year the Trust's Quad-L Library was moved to more extensive quarters and served not only in support of the study of the general area of learning, but also constituted a meeting place for students' defenses of their graduate degrees and for new faculty recruits. This year the Quad-L Trust, joined by the College of Arts and Sciences, supported the second annual Quad-L Lecture which was delivered by Michael Posner, Professor of Psychology at the University of Oregon.

The endowed trust established last year by the New Mexico Psychological Association and the Department to honor the memory of Professor Emeritus Sidney Rosenblum sponsored the second annual Sidney Rosenblum Award. This year's scholarship support went to Janet Hodde-Vargas for her Ph.D. work with children.

A third endowed trust was established at the UNM Foundation this year by the parents of Barbara Goldman Garland in her memory. The Barbara Goldman Garland Award is to go to a psychology graduate student who is interested in working clinically with teenaged children.

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The New Mexico Psychological Association (NMPA) also established the Eugene Mariani Memorial Award this year which is to benefit graduate students in psychology by awarding them membership in NMPA. The first recipients of this award were Piyadasa Kodituwakku and Sheri Pruitt.

Finally, the Department created the Thomas Friden Memorial Student Loan as a means of remembering our colleague who died this Fall. Graduate students in need are permitted to borrow small sums of money from this fund at no interest for short periods of time. Our graduate students have already benefited by access to this loan fund.

B. UNDERGRADUATE EDUCATION. There is no gainsaying that the Department of Psychology excels in terms of the quantity and quality of its undergraduate education at the University of New Mexico. It leads the College in terms of number of elective (nonrequired) undergraduate student credit hours (SCH), number of undergraduate intended majors, number of undergraduate majors, and number of undergraduate degrees awarded. Stated succinctly, the undergraduate education productivity of the Department's faculty and staff is enormous and unsurpassed. Consider as one example that the Department's student credit hours, at 13,046 for Fall 1988, rank third to Mathematics and English, while the number of budgeted faculty and teaching assistants for the Department ranks but eighth in the College. (It should be noted that at this

writing data pertaining to numbers of SCH and student majors for Spring 1989 were not available from the Office of Planning and Policy Studies. Thus, this report will use Fall data to generalize to the entire academic year. This is not unreasonable inasmuch as no major changes occurred between the two semesters.)

Over the past five years psychology has enjoyed a marked growth in its popularity with students. For example, the five-year percentage gain in Psychology's student credit hours for the Fall of 1988 was 10.3%. This percentage increase compares favorably with those for the other five science and mathematics departments in the College, most of whom experienced student credit hour decreases over the past five years. The average five-year percentage decrease in the other sciences' student credit hours for the Fall was -8.22%. The average five-year percentage increase for the College as a whole this Fall was 8.7%.

Despite this long-term growth in the popularity of psychology, which reflects the long-term growth pattern nationally, the Department's one-year increases in enrollment have actually been considerably attenuated recently. From the Fall of 1986 to the Fall of 1987 we experienced our first SCH decrease in over a decade. While the decrease was small at -0.4%, this downward trend continued between the Fall of 1987 and this Fall when we experienced an overall SCH decline of -3.5%.

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Analysis of the contemporary factors that impact our undergraduate education offerings support the hypothesis that further enrollment declines should be anticipated. Appendix B presents summary statistics for the Department for the 1988 - 1989 academic year along with the preceding four years under the current Chair. Actual enrollment counts per course for each AY 1988 - 1989 semester are enumerated in Appendix C. Viewed broadly, what the long-term data show is that there is a general slowing in introductory enrollments, a steady state in upper division enrollments, and a marked increase in advanced laboratory enrollments and in the number of graduating psychology majors.

These several enrollment trends can be understood in terms of both external and internal factors. Working to decrease our introductory and lower division enrollments is Senate Bill 106, which was passed by the State Legislature in the Spring of 1986. This Bill stipulates that psychology courses are not acceptable for credit per se in the training of College of Education students desiring to obtain teaching certificates from the State. In the past, Psychology offered about 7% of its lower division SCH to the College of Education. A second external factor is that lower division psychology courses are now the most often taught college courses at TVI, and necessarily impact adversely on our lower division enrollments. Finally, this year was the first year in the past five years that Psychology 100, basic skills, was not offered.

This course accounted for approximately 16% of our introductory laboratory enrollments in the past.

An offsetting factor here has been the increased financial influence wielded over departmental curricula by the Evening and Weekend College and Continuing Education. Inasmuch as the College's line-item support of part-time faculty was removed this year, the Department was strongly influenced by the fact that both the Evening and Weekend College and Continuing Education could pay for part-time instructors. For the most part, these units desired that lower division courses be taught. An actual listing of part-time faculty hired for the 1988 - 1989 academic year appears herein as Appendix D. It is instructive that over 61% of the courses taught by part-time instructors were at the 100 and 200 levels.

To the extent that our Department has been able to affect curricula decisions, we have attempted to reduce the number of service-oriented courses offered by our regular faculty in favor of increasing the course offerings for psychology majors. Particular emphasis has been placed on the number of undergraduate research laboratory courses offered. Appendix B shows that both advanced laboratory enrollments and the number of graduating majors have approximately doubled over the past five years.

It would appear, indeed, that our department will be kept quite busy educating psychology majors over the next ensuing years.

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Data for the Fall 1988 semester show that there were 399 undergraduate psychology majors in the College of Arts and Sciences, which averages 76 majors per department. This makes psychology by far the most popular major in the College. Specifically, psychology majors represent 26.2% of all the majors in the College and are 40% more plentiful than the number of majors in the second ranked (Biology) department.

In this context it should not be surprising that Psychology again ranked first in the number of bachelor's degrees, 125, awarded in the College this year. Clearly the monotonic increase in the number of graduating majors shown in Appendix B reflects the Department's now five-year-long emphasis on training psychology majors. We may further anticipate that psychology will continue to attract and graduate impressive numbers of majors. For example, in the Fall 1988 semester Psychology had the largest number of intended majors, 239, among University College students. This represents 26.1% of all the majors intended by University College students in the College of Arts and Sciences.

Another measure of Psychology's impact on undergraduate education at UNM is its centrality, i.e., the extent to which it serves students other than psychology majors. The fact that approximately 75% of our undergraduate educational effort goes to other than psychology majors attests to the importance of Psychology in the broader educational mission of the University.

On a per department basis, Psychology's greatest extra-College teaching is directed to students in the College of Engineering.

Psychology's teaching effort has reached the saturation level. Although Psychology leads the College in elective SCH, undergraduate majors, and bachelor's degrees granted, its permanent faculty at 24.6 FTE is only the sixth largest in the College, the five larger departments averaging nine faculty members more. Considering all budgeted teaching personnel, Psychology slips to the eighth largest in the College. In terms of the teaching productivity index, which is the ratio of full-time equivalent students to full-time equivalent faculty (FTE student/FTE faculty), Psychology obviously ranks first.

From the above it can be anticipated that, in the absence of adding obviously much needed faculty, Psychology's total enrollments may decline over the near term, as they have over the past couple of years. In this context it should be noted that Psychology has already maximized its class sizes at the 100 and 200 levels. Appendix C clearly shows that class sizes in excess of 100 students are commonplace at the lower division level in our department with many class sizes clearly exceeding 200 students.

Other than the elimination of basic skills, the Department made no major changes in the undergraduate curriculum this year. We did continue to reschedule a number of our weekday course offerings to the evenings and to Saturdays in response to the

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University's priority of establishing an Evening/Weekend College. It is now possible to obtain a BA in psychology through this college.

The course enrollments for evening and weekend courses are sufficiently high (cf., Appendix C) to justify our continued support of this attempt by the University to reach the nonconventional student. However, the enrollments are not as high as for weekday courses so that, to the extent that regular faculty are involved, offering nonweekday courses serves to attenuate overall enrollments.

The faculty is committed to a regular review of its undergraduate curriculum and it intends to remain sensitive to changing demographic statistics regarding our student body. Specifically, we know that an ever increasing proportion of the students in our undergraduate classes are women (greater than 60%) and minorities (greater than 35%). The Department of Psychology is fully committed to serving women and minority students in an affirmative and sensitive manner, and we intend continuously to revise our undergraduate curriculum toward that end.

An important adjunct element in our undergraduate educational effort has been the participation of part-time visiting professors and teaching associates. As already shown in Appendix D, these people account for about 20 of our course offerings each semester.

These important contributors to our department have not been given the status nor certainly the compensation that their efforts warrant, and the Department wishes to acknowledge publicly their many contributions.

While much of the focus in this section has been on the quantity of our undergraduate education, it needs to be emphasized that we have accomplished our goals without sacrificing quality. Past reviews of the Department have taken specific note of the Department's emphasis on quality instruction. The flagship for quality education in psychology remains our Psychology Honors Program, which has been in existence for 25 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 1988 - 1989 honors students along with the titles of their research theses and the names of their faculty supervisors.

During the 1989 - 1990 academic year the Department anticipates holding a comprehensive review of its undergraduate curriculum under the direction of the Associate Chair for Undergraduate Education. Some of the purposes of this review will be to determine whether there should be an explicit undergraduate core of courses, whether we can effectively eliminate service courses in favor of more research-oriented courses, and whether we

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can computerize several of our courses so as to provide more contemporary training to our psychology majors.

C. GRADUATE EDUCATION. The Department continued this year to achieve excellence in its graduate program. Indeed, the Department again reaffirmed that its highest educational priority is to offer quality graduate education.

This year saw the initiation of our new core course graduate program. New courses in Systematic Issues in Psychology, Levels of Psychological Analysis, and Biological Bases of Psychology were introduced for our first-year graduate students. These core course offerings will be evaluated next year under the guidance of the Associate Chair for Graduate Education and, if indicated, curricula revisions will be made.

We also expanded the methodology training of our graduate students this year by introducing graduate laboratories in association with our Advanced Statistics and Experimental Design and Analysis courses. Next year a new course, offered to second year students, will be introduced under the title of Multiple Measures. Our methodology training continues to be hampered seriously by the lack of adequate computer resources in the Department. The Department's highest priority for educational equipment, as it has been for the past five years, is to establish a computer laboratory for graduate training.

This year marks the 28th year that the doctorate has been awarded in psychology at the University of New Mexico. Prior to this year the Department awarded 165 Ph.D. degrees. During this 1988 - 1989 academic year, the Department awarded 11 additional Ph.D. degrees as described in Appendix F, which provides the names of the degree recipients, along with the titles of their dissertations and faculty advisors. Appendix B shows that 11 Ph.D. degrees is within the range of recent variation and, thus, maintains us as one of the leading Ph.D. granting departments in the College.

Appendix B further shows that the Department awarded 8 Master of Science degrees this year. Inasmuch as the Department offers no terminal Master's degrees, it can be anticipated that these latter students (listed specifically in Appendix G, along with the titles of their theses and faculty advisors) will achieve their Ph.D.s in the next two to three years. It speaks well of the broad involvement of our faculty in the graduate education program that 11 different faculty members served as major professors to graduate degree recipients this year.

As a further indicant of the Department's emphasis on graduate training, the faculty offered 848 graduate student credit hours this fall, which was the largest number of any College of Arts and Sciences department, and represented 11.2% of the total College effort at the graduate level.

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The five-year gain in psychology graduate student credit hours for the Fall 1988 semester was an impressive 32.5%. This gain reflects an almost linear increase in the graduate course enrollments over the past five years (again see Appendix B). For 1988 - 1989 the Department had 99 graduate students, with 79 students registered on campus and 20 students involved in internship or post internship experiences. This is the largest number of graduate students the Department has had in the past ten years.

Sixteen graduate students have accepted admission to our Ph.D. program for the fall 1989 term. This is a large number of graduate students from at least two perspectives. First, graduate psychology programs nationally are experiencing an average annual increase in enrollment of less than 1.0% (our 1989 - 1990 increase is about 2%). Second, this increase in the number of graduate students will produce a graduate student/faculty ratio of 4.1 in our department, which is considerably above the ideal ratio of 3.0 assumed by the Department's faculty to permit the highest quality graduate education.

Nevertheless, the large number of new graduate students represents the continuance of a purposeful and planned growth on behalf of the Department. To put this into perspective, it should be understood that over the past ten years enrollments in nonclinical areas of psychology have declined nationally by as much

as 50%. Until last year our own graduate admissions unfortunately reflected this national trend away from the experimental areas of psychology. This trend actually posed a serious threat to the accomplishment of the mission and goals of the Department as stated in the preface and produced a mismatch between the interests of the graduate students and the distribution of the faculty.

So as to reestablish a balance between the experimental and clinical areas of the Department, for the past two years the Admissions Committee has taken an affirmative action approach to the recruitment of nonclinical students. Basically this means accepting a higher percentage of experimental than clinical applicants, keeping the credentials of the two applicant pools separate for purposes of financial aid offers, and being especially vigorous in recruiting the experimental applicants to whom we offered admission.

The efforts of the Admissions Committee have met with exceptional success. For this year and next, respectively, 56% and 50% of the incoming students will take Ph.D.s in nonclinical areas. This will help to balance our student population, will better distribute students amongst the faculty, and will maintain the integrity of our graduate course offerings. The Department intends to maintain this affirmative action toward experimental students in recruiting the 1990 - 1991 incoming graduate class.

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A listing of the new graduate students for next year is given in Appendix H by area of research and research advisor.

It should be noted that the 16 students entering the Department this year were among 49 students accepted by the Department (for a 32.6% acceptance rate of the Department by those offered admissions) from among 294 completed applications (for a 16.7% acceptance rate of the applicants by the Department). The Department continues to receive approximately 30% of all graduate applicants to the College and to have an acceptance rate well below the average acceptance rate for the College. One implication here is that admission to the Department of Psychology is highly competitive and, therefore, yields high quality students.

As one indicator of the quality of our applicants, it is useful to consider the GRE composite score of applicants to graduate schools. In the past the national average GRE score for graduate applicants to all fields of study was 505, while the national average for applicants to all graduate psychology departments was 520. In comparison, the average GRE score for students applying to our program this year was 584 and the average score for the students admitted to the program for next year was 604.

The Department has made a concerted and successful effort over the past five years to increase the representation of women and minorities among our graduate students. Using 1984 - 1985 as a base year, our graduate student population was 43% women and 4%

minority, while the corresponding national figures for this base year were 56% women and 11% minority. During the 1989 - 1990 academic year, our graduate student demographics will be 52% women and 16% minority. It is fair to say that our affirmative action toward women and minority graduate students has been successful over the past five years, and we continue to hold this as a high priority goal for next year. Indeed, we continue to be excited by the vigorous minority recruitment procedures that we have developed.

Part of our recruitment success is derived from the decision of the faculty to offer all incoming minority students financial aid and formally to set aside financial aid slots for incoming graduate students. More generally, the Department offered financial aid to 63 of its 79 on-campus students for a support rate of 79.7%, which compares quite favorably with the national support rate of 64% for all public doctoral degree programs of psychology in 1986 - 1987.

Despite the Department's high percentage of support, the dollar amount of support for teaching assistants in the Department remains below the median level of support nationally. Obviously, it is difficult for us to compete for the best graduate students in the nation when our level of support is considerably below that offered by the top flight departments of psychology with which we

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routinely compete for students. It gives the Chair pleasure to report that the College has awarded the Department a 25% increase in its TA budget line for 1989 - 1990. These additional monies will be used to increase TA stipends generally and to create SUPER TAs. Under the SUPER TAs, deserving post-masters students will be given the responsibilities of Teaching Associates and, thereby, have the experience of performing the teaching duties of a beginning professor.

During the Spring 1989 term the doctoral program in clinical psychology was site visited by the American Psychological Association as part of a recertification review. The APA's Committee on Accreditation reaffirmed full accreditation of the clinical program, with the next site visit review to be scheduled in three years.

In its review, the APA noted that our graduate students are well prepared for careers of research and practice in clinical psychology, are productive in scholarly ways, and have clear academic goals. Further, the Department was commended for "its impressive achievement in attracting ethnic minority faculty and students, and in attending to students' needs for education and practical experience regarding multicultural issues of importance in psychological research and practice." Unfortunately, the review raised questions about the degree to which the Department's climate

was supportive of women faculty, and why, in the past decade, more women have not been retained and promoted in the Department.

It was primarily on this latter basis that the Department was not given a full five-year period of recertification. The Chair believes that the Department has an effective plan of action in place for recruiting and promoting women faculty. Nevertheless, the Department intends to continue to assess this issue, and to seek for further ways of improving the general departmental climate for all faculty.

Our high quality graduate students continue to compete well against those of other departments at this University and at the national level. This past year, in open competition against other departments' graduate students, our students were awarded the following by UNM: Graduate Achievement Award, Challenge Assistantship, American Association of University Women Fellowship, MBRS Fellowship, and Graduate Opportunity Fellowship. We are extremely and justly proud as well of the fact that two of our graduate students hold an American Psychological Association Minority Fellowship, that another of our students won one of nineteen minority fellowships awarded nationally to neuropsychology graduate students by the American Psychological Association, and that two other of our students won a National Hispanic Fellowship and the prestigious Spencer Dissertation Year Fellowship.

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D. FACULTY. At the beginning of the academic year the Department had 25 voting faculty (please see Appendix B for other faculty statistics). This number was reduced by the untimely death of Associate Professor Thomas Friden on August 18, 1989. The Department deeply regrets his passing. There was also one resignation from the Department this year in the person of Associate Professor Rafael Diaz who left for Stanford University in January, 1989.

A major change in the Department for next year will be the absence of University Professor Frank Logan who will be retiring this summer after 25 years of service. Professor Logan's contributions to the Department and University have been outstanding for the past 25 years. Accordingly, the Department has proposed, with the College's endorsement, that our psychology building be named the Frank A. Logan Psychology Hall (Logan Hall). The Department is hopeful that this proposal will receive the approval of the UNM Board of Regents in the near future.

Our top hiring priority for this year was to hire a senior woman scientist. This priority was met inasmuch as Lynette Friedrich Cofer will be joining our faculty next year as a tenured full professor. This is the first senior professor hired into the Department since 1968. We are pleased to have Professor Cofer join us and to provide leadership in the developmental psychology area.

Our next hiring priorities were to add a cognitive neuropsychologist, a cognitive psychologist, and, as a replacement for Professor Friden, a perception psychologist. We were fortunate in hiring a new Assistant Professor, Paul Amrhein, Ph.D., University of Wisconsin-Madison, who will be teaching in the cognitive psychology area for the Department next Fall. Other faculty changes that will occur next year are that: Judy Arroyo, having received her Ph.D. from UCLA, will move from the rank of lecturer to first year Assistant Professor; Karen Hayes will move from probationary to tenure track status; and Timothy Goldsmith will be a tenured colleague.

For next year, the Department hopes to attract new faculty in the areas of cognitive neuropsychology and perception as a continuation of our faculty searches this year. We also, importantly, will be looking for a senior professor replacement for Professor Logan in the general area of learning/memory/cognition. Should we make these three hires, the distribution of our faculty among areas of psychology will be in accord with the stated objectives of the Department.

It should be noted that, demographically, the number of women faculty and the number of minority faculty in the Department next year will be above the average numbers of women and minority faculty in other U.S. doctoral departments of psychology in public institutions. Nevertheless, as it has been for the past five

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years, the Department is committed to making exceptional faculty recruitment efforts so as to attract and support competent women and minority faculty.

It should also be noted that the percentage of tenured faculty in our department is below the national average. This has occurred because, until this year, we have not had the financial support of the University to hire senior professors. Instead, we had been replacing senior faculty with junior faculty. It is of critical importance to the future quality of the Department that we hire a senior replacement for Professor Logan next year and that other of our hires occur at least at the beginning associate professor level.

Appendix B shows that the absolute size of our faculty has not grown over the past five years, nor will it be larger next year. The Department of Psychology's continuing need to add faculty has been documented by the data presented in previous sections of this report pertaining to the Department's excellence, to the high student demand for our courses, and to the heavy workload of the faculty. Based on workload calculations alone, the Department should have a full-time equivalent faculty of 32.

It is the strong preference of the Department to hire permanent full-time graduate faculty whenever possible. The Chair notes with deep concern the University's increasing reliance on part-time faculty in order simply to execute its curriculum. While

such individuals are valuable teaching resources, a department that strives for excellence, such as the Psychology Department does, can only achieve this status by amassing a first-rate, full-time research faculty.

In addition to the part-time faculty who served the Department this year (previously listed in Appendix D), there were a number of other people within UNM and the professional community of Albuquerque who made major contributions to our teaching, training and research missions. Based on their service to the Department, these individuals were awarded professional titles in psychology. The 1988 - 1989 list of professional appointments is included as Appendix J. The Department is grateful to these individuals for their unselfish support and productive assistance.

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 K presents a record of this colloquium series.

Finally in this context, the faculty this year participated in a Psychology Department Centennial Lecture Series. This lecture series successfully met its goal of demonstrating to the Albuquerque community how psychology was integrated into issues and problems of everyday living. A listing of the participating faculty and their Centennial lecture topics is given in Appendix L.

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The research activities of the faculty are summarized in Appendix B. No detailed commentary regarding faculty research will be presented herein since these data have been given in detail in each faculty member's Annual Biographical Supplement and in the Dean's 1988 Research and Scholarship Report. It does need to be pointed out, however, that our faculty continue to excel in their research activities and to be productive in terms of publishing and in terms of garnering extramural grant support.

Indeed, by whatever metric one might wish to apply, the faculty of the Department of Psychology is an excellent one. A persistent threat to this excellence is the salary structure in the Department, which for some faculty falls as much as 20% below national and regional norms. While this problem is fully acknowledged by the College, much more remains to be done in order to insure the stability of the current faculty.

There should be no doubt that a high priority of the Chair is to see psychology faculty salaries increased in the immediate future to the level of regional norms and in the near future to the level of national norms. Only by doing this in conjunction with hiring senior professors will the excellence of our department be preserved.

E. DEPARTMENT CLINIC. A separate Annual Report for 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.

What was unique this year was that for the first time since its inception the Clinic was able to operate in the black, even though it had carry-forward losses from prior years to offset. This financial gain was made possible by the hard money support given to the Clinic by the Dean as described previously (cf. Section A). The Chair again acknowledges the Dean for embracing the Clinic as an educational component of the College. It is anticipated that the Clinic will be able to function within its operational budget for years to come, although the Clinic will soon enter a phase where additional major equipment and capital improvements will be needed. When this phase is realized fully, the Clinic will again need the financial support of the University.

The accomplishments of the Clinic this academic year have been outstanding. The reader is urged to give Appendix M a complete reading so as fully to appreciate the contribution that the Clinic makes to the education of psychology graduate students and to the larger community which it serves.

F. STAFF. The Department of Psychology continues to benefit from an extremely competent support staff. This staff numbered eleven during the 1988-1989 academic year. So as better to inform those who may not be familiar with the important duties of the staff in our department, Appendix N presents a brief job

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description of each administrative, instructional, research, and clinical support staff member.

Some important changes occurred among the staff this year. Carolyn Byers, our senior Administrative Assistant, resigned in July 1988, and was replaced in August by Barbara Wright. Barbara resigned in September and Robyn Santillanes, the Chair's Administrative Assistant, moved into the position. The vacated administrative assistant position was then filled by Rhonda Fuller, who was promoted from the Student Advisor position for which she was hired in June 1988. The Student Advisor position was divided into two positions, which created the new position of Department Secretary. Wanda Sharts was hired in August to fill the Department Secretary position and Lois Kennedy came on board in November as Student Advisor II. Mary Hungate was promoted in July from Editorial Assistant II to Editorial Assistant III.

The Clinic Coordinator position was abolished as planned and Daniel Matthews, Ph.D., was hired in October to fill the newly created full-time position of Clinic Staff Director.

The research support staff experienced one change as the result of the resignation in September of Jimmy Casaus, Laboratory Animal Technician. That position is now occupied by Gilbert Borunda, who was hired in December. The continuing research support team members are Patrick Sharp, Shop Supervisor, Ector

Estrada, Laboratory Animal Technician, and Michael Richard, DVM, as our Veterinarian.

The Chair continues to delight and evince pride in the staff of the Department. The staff as it is constituted at the end of this academic year deserves special recognition. They underwent a major series of job shifts and staff reorganizations in order to accommodate to extensive staff turnover at the beginning of the academic year. It is to the staff's clear credit that they molded themselves into a competent, congenial team of people working hard together to achieve the goals of the Department. It is not possible to overestimate the contributions that the staff make, and the Chair wishes to thank the staff for all that they do.

While the staff has the Department's recognition and personal appreciation, they continue to need higher salaries. The Chair protests the fact that the percentage raises given to the staff for next year were less than those given to the faculty. The Chair considers the improvement of staff compensation to be the Department's number one fiscal priority for next academic year.

G. SPACE. As has been highlighted in the Department's Annual Reports for the past seven years, our Department is not accommodated by its current space allocation. We need a new building. Currently, we have insufficient staff space in order to function efficiently. We cannot house all of our faculty in faculty offices. Furthermore, this year we had to convert graduate

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student offices into faculty research space. Even at this, we do not have sufficient, suitable research space in the building to support our current faculty's research needs.

The Department's request for a new building is now acknowledged on the University's Capital Projects list. Additionally, two remodeling projects have been approved for next year. The first is to remodel our rooftop research facility in order to keep us in compliance with regulations guiding the use of animals in research. The second remodeling entails converting corridors to administrative and educational support space. While this latter remodeling will increase our space somewhat, additional remodeling remains essential if we are to improve our research facility.

The Department continues to need financial support in order to initiate a furniture replacement program that would replace 20% of its classroom and laboratory furniture per year over the next five years. The majority of our current furniture was issued as part of the original building's furnishings more than 16 years ago and it has become increasingly worn and has fallen into disrepair. Since the Chair's request for such a maintenance program has gone unheeded in the past, the need for a systematic replacement of used furniture has become even more imperative.

II. FUTURE PLANS AND COMMENT

The past five years in the Department have been characterized by change. Most notable has been the changing demographics of the faculty. The Department now needs to incorporate these changes and adjust to them. Other notable changes have been in the graduate program. It is bigger, better financed, and more highly structured having now major and minor areas and an expanded and contemporized core. It is appropriate next to assess the impact of these changes on the quality of our training.

A planned change for next year will be a new administrative structure that empowers more decision makers in the day-to-day departmental administration. This change, in turn, signals an administrative change in the Chair of the Department beginning in the Fall of 1990.

What has remained unchanged, for the past 25 years, has been the Department's dedication to the science of psychology and to its mission as stated in the preface to this report. This mission should transcend internal demographic, curricula and administrative changes. However, for this to happen it will be necessary to have the broader understanding of the higher administration of the University and the support of all as the Department faces the challenges of the future.

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UNM has now seen its Centennial pass. It is a nice point from which to strike out again, but it is also a point from which to reflect on what has been good about our Department. For all of the people who make up the Department of Psychology, and who are responsible for its excellence, I offer my gratitude, appreciation and respect.

APPENDIX A

0798

COMMITTEE ASSIGNMENTS AY 1988 - 1989

<u>Undergraduate Studies</u>	<u>Faculty (CHAIR)</u>	<u>Student</u>
1. Curriculum	JOHNSON, Ellis, Gangestad, Miller	Ditullio
2. Undergraduate Advisement	PADILLA, Dougher ⁴ , Goldsmith, Jacobvitz, Yeo	
3. Honors	GLUCK, Delaney, Gordon, Logan ²	
4. Psi Chi	JACOBVITZ, Smith	*
<u>Graduate Affairs</u>		
5. Admissions	DELANEY, Dougher ⁴ , Feeney, Gluck, Hayes, Hodge ¹ , Johnson, Miller ⁵ , Yeo	
6. Financial Aid	HODGE, Delaney ¹ , Gangestad, Goldsmith, Logan ² , Smith, Waldron	Smith, R.
7. Minorities	HAYES, Arroyo, Padilla	Amaya- Williams
<u>Departmental Affairs</u>		
8. Human Subjects	YEO, Agostinelli, Padilla	Fouty
9. Animal Facilities & Use	RICHARD, Feeney, Gluck, Gordon, Hodge	*
10. Colloquium	SMITH, Jacobvitz, Gordon	Frauenglass
11. Fund Raising/Alumni Relations	DOUGHER ⁴ , Ellis, LOGAN ⁵ , Miller	*
12. Methodology/Computer Use	GOLDSMITH, Delaney, Gangestad	Santos- Gomez
13. Personnel	FEENEY, Ellis, Johnson	
<u>Area Committees</u>		
14. Clinical	MILLER, Arroyo, Dougher ⁴ , Gangestad, Gluck, Padilla, Roll ³ , Ruebush, Smith, Waldron, Yeo	Pruitt
15. Cognitive	ELLIS, Delaney, Goldsmith, Gordon, Hayes, Jacobvitz, Johnson	McMahon
16. Developmental/Pers/Social	GANGESTAD, Agostinelli, Diaz ⁴ , Gluck, Harris ³ , Hayes, Jacobvitz, Roll ³ , Ruebush	Neal
17. Learning/Psychobiology	GORDON, Delaney, Dougher ⁴ , Ellis, Feeney, Gluck, Hodge, Logan ² , Miller, Yeo	Butt

¹Ex-officio, ²On Sabbatical Fall 1988, ³On Sabbatical 1988-1989,
⁴Fall 1988, ⁵Spring 1989, * to be selected

APPENDIX B

DEPARTMENT OF PSYCHOLOGY SUMMARY STATISTICS

	AY 1984-85	AY 1985-86	AY 1986-87	AY 1987-88	AY 1988-89
<u>Faculty Information</u>					
Voting faculty (total)	25	25	25	25	24.5
Professors	10	11	13	12	11
Associate Professors	7	6	5	6	4.5
Assistant Professors	8	8	7	7	8
Lecturers					1
Budgeted FTE Faculty	23.77	23.77	24.34	24.34	24.6
<u>Undergraduate Education</u>					
Introductory Psychology	3,517	3,672	3,811	3,369	3,550
Introductory Labs	1,161	1,017	1,168	1,261	*1,004
Advanced Psychology	4,192	4,802	4,556	4,850	4,869
Advanced Labs	60	89	97	127	117
Graduating Majors	63	84	87	121	125
Number of Faculty Involved	25	25	25	25	25
<u>Graduate Education</u>					
Graduate Enrollment	365	432	470	530	636
Graduate Assistants	20	26	25	22	31
Research Assistants	9	12	10	17	20
Fellows and Trainees	6	11	12	7	12
Master's Degrees	13	9	5	12	8
Doctoral Degrees	8	9	12	7	11
Applications Received	262	327	352	330	294
Offered Admission	39	36	37	56	49
Accepted Admission	21	16	15	25	16
Graduate Students	73	85	79	81	99
Number of Faculty Involved	25	25	25	25	25
<u>Research Activities</u>					
Books and Articles	90	93	90	** 71	** 51
Lectures and Reports	115	143	118	** 79	** 93
Extramural Support (000)	290	343	1,608	866	960
<u>General Information</u>					
FTE Staff	7	7	7.25	7.75	8.25
Department Budget (000)	945	977	1,095	1,073	1,166

* Does not include Psychology 100 which was discontinued.

** Figures follow guidelines of 1987 Research and Scholarship Report

APPENDIX C



DEPARTMENT OF PSYCHOLOGY COURSE OFFERINGS

AY 1988 - 1989

SUMMER 1988

COURSE	TITLE	# OF SECTS	SCH
101	General Psychology I	1	282
102	General Psychology II	2	330
200	Statistical Principles	2	153
230	Adjustment & Interpersonal Relations	1	153
260	Psychology of Learning & Memory	1	210
331	Psychology of Personality	1	195
327	Social Development	1	156
403	Intermediate Multivariate Statistics	1	19
450	Special Topics: Drugs of Abuse	1	38
499	Undergraduate Problems	13	72
551	Graduate Problems	6	18
599	Masters Thesis	9	27
650	Special Topics: Drugs of Abuse	1	20
699	Dissertation	3	18
Total SCH			1691

FALL 1988

COURSE	TITLE	# OF SECTS	SCH
101	General Psychology I	3	2418
102	General Psychology II	3	2775
103L	General Psychology I Lab	15	297
104L	General Psychology II Lab	11	218
109	Coping with College	8	153
200	Statistical Principles	2	369
202	Psychological Research Techniques	1	102
220	Child Psychology	2	984
230	Adjustment & Interpersonal Relations	1	528
231	Human Sexuality	2	638
232	Clinical Psychology	1	252
240	Brain & Behavior	1	183
250	Special Topics: Alcohol & Drug Problems	1	5
260	Psychology of Learning & Memory	1	219
265	Cognitive Psychology	1	71
271	Social Psychology	1	423

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FALL 1988 continued

COURSE	TITLE	# OF SECTS	SCH
321	Introduction to Child Research	1	48
322L	Child Research Lab	1	34
331	Psychology of Personality	1	189
332	Abnormal Behavior	2	666
333L	Abnormal Behavior Lab	1	51
361	Human Learning & Memory	1	105
362L	Human Learning & Memory Lab	1	34
367	Psychology of Language	1	99
375	Psychology of Women	1	159
391	Junior Honors Seminar	1	42
413	Industrial & Organizational Psychology	1	120
414	Human Factors Psychology	1	42
415	Environmental Psychology	1	102
420	Advanced Developmental Psychology	1	90
421L	Developmental Psychology Lab	1	30
440	Advanced Physiological Psychology	1	30
450	Special Topics: Family Pathology	1	87
450	Special Topics: Developmental Psychology	1	6
454	Health Psychology	1	84
467	Science of Intelligent Systems	1	57
491	Senior Honors Seminar	1	45
499	Undergraduate Problems	17	225
501	Advanced Statistics	1	69
532	Seminar in Psychopathology	1	48
533	Psychological Evaluation: Cognitive & Neuropsychology Functions	1	51
535	Psychological Evaluation: Personality Functions	1	45
541	Animal Cognition and Complex Processes	1	21
551	Graduate Problems	19	165
561	Theories of Learning	1	69
599	Masters Thesis	14	84
600	Clinical Practicum: Interviewing I	1	11
600	Clinical Practicum: Neuropsychology	1	1
600	Clinical Practicum: Alcoholism	1	1
600	Clinical Practicum: Sexual Deviance	1	2
600	Clinical Practicum: Intake Interviewing	1	11
601	Methods of Behavioral Research	1	42
631	Practicum in Psychotherapy with Adults	1	36
650	Special Topics: Family Pathology	1	9
650	Special Topics: Advanced Statistics Lab	1	23

FALL 1988 continued

COURSE	TITLE	# OF SECTS	SCH
650	Special Topics: Seminar in Developmental Psychology	1	15
650	Special Topics: Normal/Deviant Child	1	15
650	Special Topics: Seminar in Recovery Function	1	15
699	Dissertation	10	144
Total SCH			12857

SPRING 1989

COURSE	TITLE	# OF SECTS	SCH
101	General Psychology I	3	1554
102	General Psychology II	3	3290
103L	General Psychology I Lab	14	243
104L	General Psychology II Lab	12	246
109	Coping with College	10	146
200	Statistical Principles	2	387
202	Psychological Research Techniques	1	78
220	Child Psychology	2	1047
230	Adjustment & Interpersonal Relations	2	420
231	Human Sexuality	1	816
232	Clinical Psychology	1	252
240	Brain & Behavior	1	303
250	Special Topics: Alcohol & Drug Problems	5	24
260	Psychology of Learning & Memory	2	321
265	Cognitive Psychology	1	75
271	Social Psychology	1	429
325	Psychology of Infancy	1	174
331	Psychology of Personality	1	480
332	Abnormal Behavior	2	789
361	Human Learning & Memory	1	81
371	Intermediate Social Psychology	1	120
372L	Social Psychology Lab	1	30
373	Cross Cultural Psychology	1	105
392	Junior Honors Seminar	1	36
413	Industrial & Organizational Psychology	2	237
414	Human Factors Psychology	1	60
415	Environmental Psychology	1	96
420	Advanced Developmental Psychology	1	132
421	Advanced Developmental Psychology Lab	1	32

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SPRING 1989 continued

COURSE	TITLE	# OF SECTS	SCH
430	Alcoholism	1	441
432	Child Pathology	1	159
433L	Child Pathology Lab	1	26
444	Human Neuropsychology	1	81
450	Special Topics: Family Pathology	1	42
450	Special Topics: Psychology & Law	1	33
450	Special Topics: Psychology of Bilingualism	1	9
450	Special Topics: Neuropsychology Lab	1	22
450	Special Topics: Issues in Cognition	1	9
465	Learning: Conditioning	1	33
466L	Conditioning Lab	1	28
492	Senior Honors Seminar	1	42
499	Undergraduate Problems	20	279
502	Design of Experiments	1	60
523	Seminar in Social Deviant Child	1	12
531	Professional & Cultural Issues	1	45
551	Graduate Problems	18	153
563	Seminar in Human Memory	1	42
569	Seminar in Psycholinguistics	1	30
599	Masters Thesis	14	75
600	Clinical Practicum	1	6
600	Clinical Practicum	1	30
600	Clinical Practicum	1	6
632	Practicum in Psychotherapy with Adults II	1	36
633	Systems of Psychotherapy	1	30
634	Seminar in Treatment of Children, Adolescents and Families	1	12
650	Special Topics: Biology of Human Sexuality	1	15
650	Special Topics: Psychology & Law	1	9
650	Special Topics: Biological Bases of Psychopathology	1	36
650	Special Topics: Design Analysis Lab	1	21
650	Special Topics: Biological Bases of Psychology	1	72
650	Special Topics: Levels of Psychological Analysis	1	72
650	Special Topics: Practicum Assessment	1	36
650	Special Topics: Issues in Human Cognition	1	15
650	Special Topics: Issues in Cognition	1	15
699	Dissertation	10	120
Total SCH			14155

APPENDIX D

PART-TIME FACULTY HIRED DURING AY 1988 - 1989

<u>Name</u>	<u>Course Number & Title</u>		
<u>Fall, 1988</u>			
Connie Callahan, Ed.S.	Psychology	101-002	General Psychology I
Shelly Hayden, Ph.D.	"	101-003	General Psychology I
Ronald McGowan, Ph.D.	"	102-002	General Psychology II
Milt Lasoski, Ph.D.	"	102-003	General Psychology II
Mary Wood, M.S.	"	200-001	Statistical Principles
Mark Hawley, M.S.	"	200-002	Statistical Principles
Kim Long, B.S.	"	202-001	Psychological Research Techniques
Shelly Hayden, Ph.D.	"	211-400	Applied Psychology
Lynn Vranes, M.S.	"	230-001	Adjustment and Inter- personal Relations
	"	230-002	personal Relations
Dale Smith, Ph.D.	"	231-400	Human Sexuality
Joe Burroughs, Ph.D.	"	265-001	Cognitive Psychology
Kermit Parker, Ph.D.	"	332-400	Abnormal Behavior
Carolina Yahne, Ph.D.	"	375-400	Psychology of Women
Pennie Seibert, M.S.	"	413-400	Industrial & Organizational Psychology
Joe Burroughs, M.S.	"	414-001	Human Factors Psychology
Stephen Rokicki, Ph.D.	"	415-001	Environmental Psychology
Celia Michael, Ph.D.	"	454-400	Health Psychology
Joe Flippo, Ph.D.	"	600-051	Clinical Practicum: Intake Interviewing
<u>Spring, 1988</u>			
Shelly Metz, Ph.D.	Psychology	101-003	General Psychology I
Michael Hillard, Ph.D.	"	101-400	General Psychology I
Pennie Seibert, M.S.	"	102-001	General Psychology II
Connie Callahan, Ed.S.	"	102-003	General Psychology II
Kermit Parker, Ph.D.	"	102-400	General Psychology II
Ed Fouty, M.S.	"	200-001	Statistical Principles
Mary Wood, M.S.	"	200-002	Statistical Principles
Kim Long, M.S.	"	202-001	Psychological Research Techniques
Cynthia Neal, M.S.	"	220-002	Child Psychology
Lynn Vranes, M.S.	"	230-002	Adjustment & Interpersonal Relations
	"	230-400	Relations
Carolina Yahne, Ph.D.	"	232-001	Clinical Psychology
Ron McGowan, Ph.D.	"	332-400	Abnormal Psychology
Beverly Eckhardt, M.S.	"	361-001	Human Learning & Memory
Stephen Rokicki, Ph.D.	"	413-001	Industrial & Organizational Psychology
Peter DiVasto, Ph.D.	"	413-400	Industrial & Organizational Psychology

0105

Part-Time Faculty Hired During AY 1988 - 1989
Continued

Joe Burroughs, Ph.D.	Psychology	414-001	Human Factors Psychology
Stephen Rokicki, Ph.D.	"	415-001	Environmental Psychology
A.J. Ferrara, Ph.D., J.D.	"	450/650	Psychology & Law
		-002	
Roger Enfield, Ph.D.	"	650-008	T/Practicum Assessment

APPENDIX E

0506

SENIOR HONORS THESES

Department of Psychology

AY 1988 - 1989

<u>Student</u>	<u>Thesis</u>	<u>Faculty Sponsor</u>
Bell, Matthew	Task Similarity and the Repetition Effect	Peder Johnson
Busico, Sabrina	Individual Differences in Response to Video Material	Douglas Ferraro
Campos, Henry	Discipline Strategies of Mothers at Risk for Child Abuse	Rafael Diaz & Harold Delaney
Coleson, Paula	Induction of Positive Affect Using Two Discrepant Emotional Themes	Douglas Ferraro
Cordova, James	Correlations Between Death Threat and Self-Actualization	John Gluck & Harold Delaney
#Currell, Thomas	Interaction of Behavior Patterns and Job Characteristics as Indicators of Behavioral Responses to Work	Steve Gangestad & Ben Klein
Grieger, Pamela	Effect of Trait Absorption on Explicit and Implicit Memory	Steve Gangestad
*Jiron, Colleen	Effects of Altered Breathing Conditions on Reaction Time to Lateralized Stimuli	Ron Yeo
Ju, Winifred	Effects of Video Presentations on Play Behavior of Children having High or Low Gender-Role Knowledge	Karen Hayes
Kortegaard, Barbara	Identifying Engineering Employees Needing Educational Support to Maintain Professional Skills	Steve Gangestad
Markham, Michael	Social Contingencies and the Effects of Punishment in Alcoholics and Nonalcoholics	Michael Dougher

0:07

SENIOR HONORS THESES
Continued

Tso-Olivas, Doreen	Effect of Methylphenidate and Massed Trials in Producing an Accelerated and Enduring Rate of Motor Recovery after Sensorimotor Cortex Ablation	Dennis Feeney
Ulibarri, Rodney	Adult Children's Beliefs about Parental Divorce	Robin Jacobvitz

* Outstanding Honors Student Award

Research Award (1st place)

APPENDIX F

DOCTORAL DEGREES AWARDED

Department of Psychology

AY 1988 - 1989

<u>NAME</u>	<u>TITLE OF DISSERTATION</u>	<u>ADVISOR</u>
Alan J. Beauchamp	The Development of Memory in Infancy: A Micro-Analysis of Delayed Response Performance Between 8 and 12 Months	Gluck
Joseph M. Boroughs	Phonological Code Formation and the Word-Superiority Effect	Johnson
Roberta Calderwood	The Role of Context in Modeling Domain Knowledge	Johnson
Martha J. Carmody	Reducing the Young Child's Medically-Related Distress: A Comparison of Cognitive Behavioral and Attention Focusing Strategies	Gluck
Luann R. Ellis	Marital Intimacy, Parenting Attitudes and Adult Development Across the Transition To Parenthood Period	Ruebush
Elizabeth L. Kodituwakku	Outcome and Satisfaction in Mediation of Child Custody and Time-Sharing As A Function of Confidentiality, Personality, and Family Dysfunction	Padilla
Wendy Anne Law	Depression Mediated Cognitive Changes With Normal and Closed Head Injury Populations: General Attentional vs. Specific Right Hemisphere Mechanisms	Yeo
Craig Nettleton	Coping with Disability: The Psychological Consequences of Central Nervous System Injury	Ferraro

0109

DOCTORAL DEGREES AWARDED
Continued

Michael Otto	Affective Judgements, Mood, and Pain Perception: The Role of the Right Hemisphere	Yeo
Carl T. Rimmele	Interventions to Suppress Posttreatment Urges and Drinking	Miller
Rebecca J. Tendler	Individual Differences in Empathy With Children	Ruebush

APPENDIX G

0010

MASTERS DEGREES AWARDED

Department of Psychology

AY 1988 - 1989

<u>NAME</u>	<u>TITLE OF THESIS</u>	<u>ADVISOR</u>
Harold Burke	CT Scan Cerebral Hemispheric Asymmetries: Predictors of Recovery From Aphasia	Yeo
Paul DiTullio	Stimulus Type And The Elicitation of Dimensional Responses	Goldsmith
Beverly Eckhardt	The Influence of Prior Knowledge and Verbal Ability on Adult's Comprehension of Television	Jacobvitz
David Greenway	Transfer of Reinforcement and Punishment Functions Via Stimulus Equivalence	Dougher
Katherine Long	Knowledge Elicitation Through Proximity Data	Goldsmith
Jill Nelson	The Effects of Acute Alcohol Intoxication On Planning and Goal Oriented Behavior	Miller
Sheri Pruitt	Multimodal Assessment of Experimentally Manipulated Affect: An Investigation of Mood Induction With Critical Controls	Ferraro
Edwina Weathersby	Difficult Temperament In Infants of Alcoholic Fathers	Gangestad

0211

APPENDIX H
GRADUATE STUDENTS ACCEPTED FOR
AY 1989-90

<u>NAME</u>	<u>AREA</u>	<u>ADVISOR</u>
Thomas Barbera Illinois	Clinical	Dr. Waldron
Jane Bardal Montana	Social	Dr. Agostinelli
Carmenne Chiasson Canada	Clinical	Dr. Dougher
Kathleen Eagan New Mexico	Psychobiology	Dr. Feeney
Stephen Hahn Missouri	Developmental	Dr. Hayes
John Harlow New Mexico	Clinical	Dr. Roll
Philip Kragnes Maryland	Cognitive	Dr. Johnson
Monica Leccese New Jersey	Clinical	Dr. Waldron
Morris Lee New Mexico	Psychobiology	Dr. Hodge
Cecelia McNamara Georgia	Clinical	Dr. Smith
Nancy Nelson New Mexico	Cognitive	Dr. Gordon
David Perkins Arizona	Clinical	Dr. Roll
Regina Prizont New Mexico	Cognitive	Dr. Ellis

GRADUATE STUDENTS ACCEPTED
Continued

<u>NAME</u>	<u>AREA</u>	<u>ADVISOR</u>
Pauline Sawyers Canada	Clinical	Dr. Delaney
Anne Smith Maryland	Clinical	Dr. Arroyo
Lawrence Varner New Mexico	Cognitive	Dr. Ellis

APPENDIX I

PSYCHOLOGY FACULTY INTERESTS

AGOSTINELLI, GINA

Assistant Professor. Ph.D. Indiana University, 1988.
Experimental and social psychology, social cognition, and social influence processes. Primarily interested in understanding the causes and consequences of confusion (mental perplexity), focusing on how confusion limits the processing of information, individual differences in responding to confusion, and implications for social influence processes (e.g., persuasion). A secondary interest is in biases present in social perception (e.g., false consensus effect, inability to detect and identify deletions).

ARROYO, JUDITH A.

Assistant Professor. Ph.D. University of California, Los Angeles, 1989.
Clinical Psychology. Primary interests are in minority mental health, community and health psychology. Current research is on the influence of physical and linguistic variables on diagnostic bias in psychotherapy with Mexican American clients. Future plans are to extend the videotaped analogue methodology to investigation of diagnostic bias with women and other ethnic groups. Secondary interest is the evaluation and treatment of chronic pain.

DELANEY, HAROLD D.

Associate Professor. Ph.D. University of North Carolina, 1975.
Methodology, quantitative, human learning and cognition. 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 include substantive issues in the areas of individual differences in human learning, including learning from prose materials and vocabulary learning.

DIAZ, RAFAEL M.

Associate Professor. Ph.D. Yale University, 1982.
Developmental Psychology. Primary research focus is the development of self-regulation, that is, children's capacity to plan, guide, and monitor their own behavior. In the past three years, the lab has focused on children's use of self-regulatory language or private speech within the framework of Vygotsky's theory. Current projects: 1) The social origins of self-regulatory development, 2) Self-regulatory deficits in young children of alcoholics: An attempt to understand why young CoAs are at risk for attentional, learning and behavioral problems as well as later addictive behaviors.

DOUGHER, MICHAEL J.

Associate Professor, Director of the Psychology Clinic. Ph.D. University of Illinois at Chicago Circle, 1980. Behavior analysis and behavior therapy. Primary research is focused on complex human operant behavior including stimulus equivalence and rule governed behavior. Also conducting research on the assessment of sex offenders, covert conditioning procedures and the integration of radical behaviorism and psychoanalytic psychotherapy.

ELLIS, HENRY C.

Distinguished Professor. Ph.D. Washington University, 1958. Human memory and learning, cognitive psychology, emotional factors in performance. Primary interest is in the analysis of encoding, storage, and retrieval processes in memory. My current research work focuses on emotional mood states in memory and cognition, depression and memory, long-term recognition and recall, organizational and elaborative processes in memory, constructive processes in memory, context and attention in memory, imagery, text processing and comprehension, and individual differences in learning, memory, and problem solving. Other interests include memory for visual information, eyewitness testimony and identification, psychology and law, and applications of cognitive psychology to educational and clinical issues.

FEENEY, DENNIS M.

Professor (and Professor of Physiology). Ph.D. University of California, Los Angeles, 1968. Physiological psychology, 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, autoradiography and behavior. Our goal is to understand and enhance recovery of behavioral functions after brain damage in humans, and determine what commonly prescribed drugs may slow behavioral recovery.

FERRARO, DOUGLAS P.

Professor (and Professor of Psychiatry) and Chair. Ph.D. Columbia University, 1965. Behavioral medicine/health psychology, behavioral pharmacology and experimental and applied analysis of behavior. Research interests center around an operant conditioning analysis of learned behaviors. Within this context, I am principally interested in behavioral factors pertaining to health and chronic illnesses and the effects of psychotropic agents on behavior.

FRIDEN, THOMAS P.

Associate Professor. Ph.D. University of Illinois, 1970. Perception, quantitative. Current research includes developing a

Euclidean vector model to describe color vision and color mixture data. I am also investigating verbal processes in perception, with attention to the role of stimulus orientation in limiting the amount of verbal encoding.

GANGESTAD, STEVEN W.

Assistant Professor. Ph.D. University of Minnesota, 1986. Personality psychology; social psychology; behavior genetics. Most generally interested in personality and its links to interpersonal behavior. Current research aims at understanding individual differences in behavior in sexual and romantic relationships, the links between these individual differences and more general interpersonal styles, the biological-social-developmental roots of these differences, and their possible evolutionary. Other interests include issues concerning the basic conceptualization of personality, psychometric theory, and philosophy of science.

GLUCK, JOHN P.

Professor. Ph.D. University of Wisconsin, 1971. Clinical psychology, developmental psychology, comparative psychology. My general interest in the interface of biological, conditioning and existential models of human activity led to research programs in animal models of psychopathology, the effects of early experience on social and intellectual development, and the philosophy of clinical intervention. Within the clinical framework I have a particular interest in process issues in long-term psychotherapy.

GOLDSMITH, TIMOTHY E.

Assistant Professor. Ph.D. New Mexico State University, 1984. Applied cognitive psychology, artificial intelligence, human factors. The general theme of my research centers around understanding the nature of cognitive skills, how they are acquired, how they are represented, and how they are applied. My current research investigates structural models of category learning, perceptual organization and graphic representation of multidimensional stimuli, and computational models of human decision-making.

GORDON, WILLIAM C.

Professor. Ph.D. Rutgers University, 1973. Animal learning and memory, cognitive processes in animals. Primary research focus is an analysis of the information retrieval process in animals. Specifically, current research concerns the role of context in learning and memory, the rules governing cueing or reminder effects and the role of retrieval in memory construction.

HARRIS, RICHARD

Professor. Ph.D. Stanford University, 1968.
Experimental and 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.

HAYES, KAREN N.

Assistant Professor. Ph.D. University of North Carolina, 1984.
Developmental Psychology; memory development; cognitive
development; social development. Special interests include
understanding how knowledge mediates memory performance, and the
organization and structure of children's memory. Secondary
interests include social cognition and sex role stereotypes and
memory.

HODGE, GORDON K.

Associate Professor. Ph.D. University of California, Los
Angeles, 1977.
Physiological psychology, psychopharmacology. Research is
directed toward revealing the neural mechanisms underlying
hyperactivity, and in developing useful therapeutic approaches for
eliminating symptoms of hyperkinesis in children. By carefully
observing and recording behavior prior to and following the
placement of precise lesions in rat brains, and by recording
effects of drugs upon behavior, we hope to better understand the
causes of hyperkinesis. Another interest is the evaluation of the
efficacy of biofeedback training in lieu of traditional drug
treatment in ameliorating symptoms of childhood hyperkinesis.

JACOBVITZ, ROBIN SMITH

Assistant Professor. Ph.D. University of Massachusetts, Amherst,
1983.
Cognitive development. Current research focus is on spatial
cognition and on the cognitive processing of audiovisual media.
Special interest in the development of attention and comprehension
and methods for assessing these in toddlers and preschoolers.
Future plans include studies of individual differences in these
domains of cognitive development.

JOHNSON, PEDER J.

Professor. Ph.D. University of Colorado, 1965.
Cognitive processes, knowledge representation, human performance,
attention, and encoding processes. Current research includes
knowledge elicitation and representation, units of visual
encoding, sensitivity to contextual information and mechanisms of
priming.

OBITUARY

LOGAN, FRANK A.

Professor. Ph.D. University of Iowa, 1951.
Animal learning and motivation, behavior theory. Operant and instrumental conditioning and discrimination learning and stimulus control in animals. Primary focus is on the effects of reward and punishment on the acquisition, maintenance and persistence of behavior. Research is guided by an incentive theory and includes problems related to feedback control of behavior.

MILLER, WILLIAM R.

Professor (and Professor of Psychiatry), Director of Clinical Training. Ph.D. University of Oregon, 1976.
Behavior therapies, treatment outcome research, motivation, self-control, pastoral psychology. Current work focuses on the assessment and treatment of addictive behaviors, particularly alcoholism. Other interests include neuropsychology, behavioral medicine, psychology of religion, and cognition/behavior interfaces (e.g., attribution theory, expectancies, psychology of humor).

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 the validity of traditional instruments for the assessment of psychopathology and intelligence among minority populations, differences and similarities between Chicanos and American Indians and the majority along various attitudinal, informational and behavioral dimensions, sexual function and dysfunction in a cross-cultural context and the evolution of health and mental health programs.

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. Projects underway also relate to attachment of children and the psychological reaction of "birth mothers".

RUEBUSH, BRITTON

Professor (and Professor of Psychiatry). Ph.D. Yale University, 1960.
Clinical, child development, family therapy. Research interests

include evaluation of clinical programs and services; the effects of child rearing methods and other family variables on child and family behavior; and the relationship between personality variables such as anxiety and defensiveness, and cognitive, learning and physical functions.

SMITH, JANE E.

Assistant Professor. Ph.D. State University of New York at Binghamton, 1985.

Clinical psychology. Research interests: improving methods of psychophysiological assessment, assessment and treatment of eating disorders (bulimia and anorexia), 3 response-mode evaluations of phobias, implosive (flooding) therapy, and diagnosis and assessment of schizophrenia.

WALDRON, HOLLY B.

Assistant Professor. Ph.D. University of Utah, 1987.

Clinical Psychology. Research interests center on child and adolescent psychopathology and intervention, especially juvenile delinquency research and treatment. Specific research focuses on the role of cognitive factors in adolescent psychopathology, family therapy process and outcome.

YEO, RONALD A.

Assistant Professor. Ph.D. The University of Texas, Austin, 1983.

Clinical and experimental neuropsychology. Research interests include individual differences in brain organization, neuropsychological research methodology, the neuropsychology of brain systems governing visuo-spatial and emotional processing. Also strongly interested in the biological bases of affective disorders and schizophrenia.

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APPENDIX J

PERSONS HOLDING PROFESSIONAL TITLES IN PSYCHOLOGY 1988 - 1989

Name and Address	Phone	Professional Title
Julia C. Barker, M.A. 4600-A Montgomery, NE Suite 102 Albuquerque, NM 87109	883-0100	Clinical Associate
Patricia Boham, Ph.D. 1502 Harvard Ct. NE Albuquerque, NM 87106	848-5122	Clinical Associate
Samuel G. Charlton, Ph.D. 1215 Fruit Ave NW Albuquerque, NM 87102	848-5122	Adjunct Assistant Professor
Lee Davis, Ph.D. Psychotherapist Student Health Center University of New Mexico Albuquerque, NM 87131	277-4537	Assistant Professor (PT)
Phillip W. Day, D.V.M. Director, Animal Resource Facility University of New Mexico School of Medicine Basic Med. Sci. Bldg. G32 Albuquerque, NM 87131	277-3936	Assistant Professor (PT)
Peter DiVasto, Ph.D. Family Practice/ Psychiatry 307 Albuquerque, NM 87131	277-4257 277-2165	Clinical Associate
Susan Eissele, Ph.D. 4300 Carlisle NE, Suite 1 Albuquerque, NM 87107-4811		Clinical Associate
Charles H. Elliott 403 Dartmouth SE Albuquerque, NM 87106	843-2190	Clinical Associate Professor
Roger Enfield, Ph.D. 4300 Carlisle NE, Suite 1 Albuquerque, NM 87107-4811	884-2302	Clinical Associate

Name and Address	Phone	Professional Title
Clara Farah, Ph.D. 715 Grande NE Albuquerque, NM 87102	881-8666	Clinical Associate
Al Fedoravicius, Ph.D. Behavioral Medicine Veterans Administration Medical Center 2100 Ridgecrest Drive SE Albuquerque, NM 87108	265-1771 ext. 2425	Adjunct Assistant Professor
Gail Feldman, Ph.D. 2920 Vista Grande NW Albuquerque, NM 87120	266-8488	Clinical Associate
Joe Flippo, Ph.D. 8100 Constitution Pl. NE Suite 2500 Albuquerque, NM 87110	292-3776	Adjunct Associate Professor
William E. Foote, Ph.D. 4308 Carlisle NE Suite 208 Albuquerque, NM 87107-4849	255-9494	Clinical Assistant Professor
James Franklin, Ph.D. 4733 Southern SE Albuquerque, NM 87108	881-3232	Clinical Associate
Thelma Giomi, Ph.D. 713 Manzano NE Albuquerque, NM 87110	255-9293	Clinical Associate
Therese Goetz 1925 Juan Tabo NE Suite B Albuquerque, NM 87112		Associate
Kathleen Haaland, Ph.D. Psychology Services Veterans Administration Medical Center 2100 Ridgecrest Drive SE Albuquerque, NM 87108	265-1711 ext. 2440	Adjunct Associate Professor
Reid Hester, Ph.D. 4300 San Mateo NE Albuquerque, NM 87110	884-3002	Clinical Associate

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Name and Address	Phone	Professional Title
Bobby Holstead, Ph.D. 4300 San Mateo NE Albuquerque, NM 87110	884-3002	Clinical Associate
Ben Klein, Ph.D. Veterans Administration Medical Center 2100 Ridgecrest Dr. SE Albuquerque, NM 87108		Clinical Associate
Frances Koenig, Ph.D. 1007 Luna Cir. NW Albuquerque, NM 87102	242-0439	Clinical Associate
Marcia Landau, Ph.D. Suite 805 300 San Mateo Blvd. NE Albuquerque, NM 87108	266-8488	Clinical Associate
Milton Lasoski, Ph.D. 1817 Morningside Dr. NE Albuquerque, NM 87110	266-3070	Clinical Associate
A. Lane Leckman, M.D. 11000 Candelaria NE Suite 110 West Albuquerque, NM 87112	841-1031	Clinical Associate
Mark Lewis, Ph.D. Department of Psychiatry University of Medicine & Dentistry of New Jersey School of Osteopathic Medicine 401 Haddon Avenue Camden, NJ 08103	(609) 757-7736	Senior Research Associate
George Luger, Ph.D. Professor Dept. of Computer Science University of New Mexico Albuquerque, NM 87131	277-3204	Professor (PT)
Ron McGowan, Ph.D. 801 Encino Pl. NE Albuquerque, NM 87102	842-1995	Associate

Name and Address	Phone	Professional Title
Charlene McIver, Ph.D. 4600 A Montgomery NE 102 Albuquerque, NM 87109	265-8800	Clinical Associate
Ruth Shore Mondlick, Ph.D. 1605-C2 Carlisle Blvd. NE Albuquerque, NM 87110	881-0618	Clinical Associate
Jean Newman, Ph.D. Associate Professor of Linguistics Humanities 526 UNM Albuquerque, NM 87131	277-7414	Associate Professor (PT)
Stephen R. Perls, D.Ed. Department of Psychiatry University of New Mexico School of Medicine 2400 Tucker NE Albuquerque, NM 87131	256-0500	Associate Professor (PT)
Susan Queen, Ph.D. Department of Psychology University of New Mexico Albuquerque, NM 87131		Research Assistant Professor of Biochemistry in Psychology
Richard Reed, Ph.D. 7520 Montgomery NE Albuquerque, NM 87109	881-6665	Clinical Associate
Michael Richard, D.V.M. Department of Psychology University of New Mexico Albuquerque, NM 87131	277-5009	Adjunct Assistant Professor
Steve Rokicki, Ph.D. P.O. Box 345 Corrales, NM 87048		Associate
Elizabeth Roll, Ph.D. 120 Vassar Dr. SE Albuquerque, NM 87106	266-2631	Clinical Associate
Doris Sahn, Ph.D. 9804 Aztec NE Albuquerque, NM 87111	298-7551	Clinical Associate

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Name and Address	Phone	Professional Title
Joseph Schenkel, Ph.D. Chief Psychology Service (116B) Veterans Administration Medical Center 2100 Ridgecrest Drive SE Albuquerque, NM 87108	265-1711 ext. 2270	Clinical Associate Professor
Will Scofield, Ph.D. 1502 Harvard Ct. NE Albuquerque, NM 87110	265-8455	Clinical Associate
Rene Silleroy, Ph.D. 8100 Constitution Pl. NE Albuquerque, NM 87110	292-3776	Clinical Associate
Edward W. Snyder, Ph.D. Psychology Service Veterans Administration Medical Center 2100 Ridgecrest Drive SE Albuquerque, NM 87108	265-1711 ext. 2270	Clinical Associate
Frank Spring, Ph.D. 708 Marquette Ave. NW Albuquerque, NM 87102	243-3751	Clinical Associate
Jerry Sue Thompson, Ph.D. 1301 Manzano NE Albuquerque, NM 87110		Associate
Maryann Thompson, Ph.D. 8100 Constitution Pl. NE Albuquerque, NM 87110	292-3776	Clinical Associate
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 (PT)
Lisa Vosburg, M.D. 4263 Montgomery NE Suite 230 Albuquerque, NM 87109	881-9230	Clinical Associate

Name and Address	Phone	Professional Title
Verner Westerberg, Ph.D. Department of Psychology University of New Mexico Albuquerque, NM 87131		Research Assistant Professor
Walter Winslow, M.D. Chair Department of Psychiatry University of New Mexico School of Medicine 2400 Tucker NE Albuquerque, NM 87131	277-2223	Professor (PT)
Carolina Yahne, Ph.D. 791 Encino Pl. NE B-10 Albuquerque, NM 87102	242-6705	Clinical Associate

APPENDIX K

DEPARTMENT OF PSYCHOLOGY COLLOQUIA

AY 1988 - 1989

<u>Colloquium Presented By</u>	<u>Colloquium Title</u>
Dr. Nancy Ewald Jackson Research Associate Professor University of Washington Seattle, Washington	Precocious and Average Readers: Group and Individual Differences in Word Identification Strategies
Dr. Marta Kutas Associate Professor of Neurosciences University of California - San Diego La Jolla, California	An Approach to Language Processing Using Event-Related Brain Potentials
Dr. Arthur Shimamura Research Psychologist Psychiatry Service Veterans Administration Medical Ctr. San Diego, California	The Organization of Memory: A Neuropsychological Perspective
Dr. Robert Frick Research Associate Department of Psychology University of Colorado Boulder, Colorado	The Auditory Short-Term Store
Dr. Lynette Friedrich Cofer Carolina Consortium on Human Development University of North Carolina - Chapel Hill	Society and Science: Allegories of Mass Media Research
Dr. Michael Ranney Post-Doctoral Research Associate Princeton University	Conceptual Change in A Loosely Structured Domain
Dr. Richard Lewis Assistant Professor Department of Psychology Pomona College Pomona, California	Are There Long-Term Cognitive Consequences of Mild Head Injury?
Ms. Suzanne Mannes Department of Psychology University of Colorado Boulder, Colorado	Knowledge Organization and Text Organization

DEPARTMENT OF PSYCHOLOGY COLLOQUIA
Continued

Dr. Paul Amrhein
Department of Psychology
Washington University
St. Louis, Missouri

Understanding Verbal
Commitments: The Contribution
of Speech Act Verbs

Dr. Jan Smedslund
Professor of Psychology
University of Oslo, Norway

What is Psychologic?

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APPENDIX L

ANNUAL REPORT

1988 - 1989

DEPARTMENT OF PSYCHOLOGY CENTENNIAL LECTURE SERIES

Jane E. Smith	Bingeing and Purging: It's More Common than You Think
William R. Miller	The Addictions and What Can Be Done about Them
Robin S. Jacobvitz	How Much Do Children Really Understand What They See on TV?
John P. Gluck	Knowledge and Ethics in Psychology
Ron A. Yeo	Neuropsychological Approaches to Individual Differences
Henry C. Ellis	How Accurate Are Eye Witness Testimonies?
Holly B. Waldron	Delinquency and Family Dysfunction
William C. Gordon	What Animal Research Teaches Us about Human Behavior
Peder J. Johnson	Computer Intelligence--Real or Artificial?
Dennis M. Feeney	Potential Treatment for Functional Recovery after Brain Injury
Timothy E. Goldsmith	People and Computers

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APPENDIX M

ANNUAL REPORT

1988 - 1989

DEPARTMENT OF PSYCHOLOGY CLINIC

Daniel Matthews, Ph.D., Clinic Director

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 Clinic's client load of 107 therapy cases and more than 115 assessments are the equivalent of a reasonable workload for a clinic with five or six full-time staff. Here, however, these services are provided by 47 clinicians all of whom must follow normal standards of practice. The reason this is possible is the academic preparation provided by the Department's faculty, especially the clinical faculty, and the ongoing supervision donated by supervisors from the professional community. Each student-clinician, carrying a caseload of two or more cases, receives at least one hour of face-to-face supervision per week, usually individually and sometimes in small groups. Because of bright and responsible graduate students, educational preparation, and dedicated faculty and outside supervisors, the Clinic is a place where both of its missions can be carried out without contradiction.

Services

Individual adult therapy remains the primary service of the Clinic, with a 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, but our referrals from other agencies and practitioners, the Court, and self-referrals provide a cross-section of the community. Because of a sliding fee scale (\$25 to \$60 per hour), we do have a selection factor toward low-income individuals, but even this factor is not universal.

Assessment services put our students in contact with about as many cases as therapy, this service provided by fewer clinicians over briefer periods of time. In general, assessments take place in the context of agency contracts. Piyadasa Kodituwakku returned from a neuropsychology internship to provide neuropsychological assessment services for the Bernalillo County Mental Health Center's inpatient unit. In addition, he coordinated and served as mentor for students providing assessments referred from other sources. The contract with the Metropolitan Court Probation Department for dispositional assessments was carried out this year by Jill Nelson and Marina Amaya under Dan Matthews' supervision; the Sex Offenders Research and Treatment program, Mark Smasal under the supervision of Michael Dougher, has continued assessments for the Public Defenders office. The employee assistance program with American Furniture has resulted in a few assessments for substance abuse. These were conducted by Radka Toscova of the Educational Foundations department primarily under Joe Flippo's supervision. Finally, Bill Miller's Drinker's Checkup assessments for University students and personnel were conducted at the Clinic by Sheryl Kern and Janet Brody.

Group therapies were added to the program this year. Beth Melka, supervised by Virginia Malone, who serves as co-therapist, began an ongoing women's therapy group. Dr. Dougher continued to supervise a sex offenders group lead by Moss Aubrey of the Bernalillo County Mental Health Center acting as senior co-therapist with student-clinicians David Greenway and Tom Bien. Janet Hodde-Vargas helped design and lead a children-of-divorce group in coordination with Elizabeth Kodituwakku and the staff of the Bernalillo County Family Court Clinic and under Dan Matthews' supervision. The first two groups will continue next year, and we hope to repeat the last in conjunction with the Court Clinic.

Another form of indirect service was expanded this year. John Gluck has regularly conducted group supervision at the Clinic. This collaborative approach was paralleled on the assessment side by a neuropsychology case conference, conducted by Mr. Kodituwakku weekly since November, and a personality assessment group organized by Lynn Vranes which began on a bi-weekly basis this June. These serve to help translate knowledge and skills gained in classroom and practicum work into working knowledge to be applied in the Clinic or in outside work.

Bill Miller and the Clinical Committee organized another excellent Update Conference this year. The conference theme, Cognitive Psychology and Clinical Practice, was well received by the participants in spite of a last-minute cancellation by the key presenter. Presenters for the Conference were Drs. William Miller, Charles Elliot, Henry Ellis, Gina Agostinelli, Joseph Boroughs, Pat Boham, Will Scofield, Celia Michael, Holly Waldron, Dan Matthews, and the Honorable Anne Kass.

Personnel

The fiscal year began with Michael Dougher turning over Clinic Faculty Director responsibilities to John Gluck. In October, Joe Flippo left the Clinic Staff Coordinator position for increased private practice, and Dan Matthews took this position with the title Clinic Staff Director. This hiring also marked the change of the position from half-time to full-time. Elizabeth Nance continues as Staff Assistant. Drs. Gluck and Matthews and Ms. Nance have divided and coordinated the administrative aspects of running the Clinic in a way that has utilized each of our skills and abilities in a productive and mutually supportive manner. With Drs. Gluck and Matthews new to administering the Clinic, we have relied heavily on Ms. Nance's knowledge and experience, and have benefited from her positive, helpful attitude and her loyalty to the mission of the Clinic as well.

We were fortunate to hire two excellent work-study students, John Lagrave and Melinda Harris to help with the running of the Clinic. They have each carried out projects with the addition of their own ideas and initiative and the Clinic is a better place because of their efforts, interest and attitudes.

Graduate assistants Piyadasa Kodituwakku, Jill Nelson, Marina Amaya and Mark Smasal have been mentioned above as carrying out the duties of fulfilling our assessment contracts.

Finally, the quality of our services depends critically on the efforts of our clinical faculty and adjunct faculty who supervise cases and support the knowledge, professional development and personal growth of the student therapists. The adjunct faculty are listed elsewhere in this document as Clinical Associates, and those names will not be repeated here. We have special gratitude for our supervisors: put succinctly, the Clinic could not run without their efforts. With them and because of them, it is a program in which we have great pride.

Finances

The Clinic will end this fiscal year having cleared its carry-over debt and additionally netted a modest surplus. We have also added to our neuropsychology testing materials such that we have very up-to-date assessment capabilities in this area. Including this latter as an asset for the year, we estimate being clearly in the black after clearing our debt. A separate accounting line is the American Furniture employee assistance program. In this case, we were, in effect, paid in advance (in furniture) for future services. This debt has been reduced somewhat this year and if the debt is cleared this coming year and the contract is continued, it will be a source of real-dollar revenues for the future.

The bulk of the credit for this turn-around belongs to Douglas Ferraro, who arranged for the Clinic Staff Director's salary, as well as that of the Staff Assistant, to be paid out of educational funds rather than being accounted for in the Clinic budget. In addition, our assessment contracts have provided a good flow of funds, producing a result that leaves the Clinic in good shape for the future, even allowing us to think about some projects and improvements.

Physical Setting

Owing to the remodeling when the Clinic moved to its present location two years ago plus the furniture and fittings provided by American Furniture, the Clinic is a comfortable and pleasing environment for clinicians, clients and staff. Four pleasant therapy rooms are used, and there is office/work space for the students, the Staff Assistant, and the Clinic Staff Director.

This year, due to the efforts and grant support of Judith Arroyo, we have upgraded the videotape equipment in two rooms and are working on a similar setup in a third. The system allows observation of sessions by supervisors who prefer this mode, increased compatibility of equipment through use of VHS format, and greater taping capability when work is complete. By decision of the clinical committee, one room has been left free of equipment for those therapists and supervisors who adhere to the notion that recording is an intrusion on the therapeutic space.

Future Plans

Owing to the unique characteristics of the Clinic, particularly a guaranteed 25% turnover of clinicians per year, continuation of services, especially specialized services such as the SORT program and neuropsychological assessment, becomes an issue of some concern. We hope to continue the neuropsychology and personality assessment groups as a means to help students develop skills and confidence such that the financial and experiential opportunities of our contracts can continue. The SORT program will be represented only in a treatment group next year, as the assessment function will no longer be within the Clinic. The Mental Health Center, Metropolitan Court, and American Furniture contracts are expected to continue. We would like to expand our assessment services in the coming year; for instance, a relationship for substance abuse assessments for the Family Court Clinic is being pursued.

Staffing will remain much the same this coming year. Titles will change as Dr. Matthews becomes Clinic Director taking on duties he shared with Dr. Gluck this past year. The Faculty Director position will no longer be filled. Ms. Nance's title has been

changed to Clinic Assistant, and Mr. Kodituwakku will probably be designated Neuropsychology Assessment Coordinator.

We would like to see some physical changes in the building such as approval by University officials of use of the downstairs space for students. Some remodeling of that area would be a welcome addition to the utility of the building. With all three video set ups working soon, this area would be used as a video observation and supervision space.

Finally, we hope to be able to add to our equipment and materials this coming year, particularly to continue to improve our testing materials, upgrade the computer, and dispose of some of the reams of paper we accumulate with the addition of a shredder.

Personal Note

Having started in October, I remember most of this year at the Clinic, and I remember it fondly. The students, faculty and staff have made me feel most welcome and comfortable in the position. I took over the administration of a well-functioning agency, staffed at all levels with competent and stimulating people. It has been a wonderful job.

I particularly would like to single out John Gluck for his confidence in me in my selection for this position and his support throughout this year. He has taught me a great deal, both directly and by example, and has shared the running of the Clinic in a manner that I believe was beneficial for both of us as well as for the Clinic. He has become and been a valued colleague and a friend.

In the dual line of authority within the Department, Bill Miller, Director of Clinical Training and Douglas Ferraro, Chair, have been helpful and supportive supervisors.. Both have advised and directed me and the Clinic well this year, as always. From both the administrative/financial perspective and the clinical training aspect, the Clinic has been well served by these men and much of its strength is owing to their efforts.

Supporting the leadership have been the faculty, especially the Clinical Committee. I have enjoyed the association with them as supervisors for the students, in meetings and in other contacts. While having many differences of approach to training and clinical practice, they model mutual support and acceptance of differences for the students they train.

I have learned a great deal this year from Piyadasa Kodituwakku, who has served essentially as a member of the regular staff in his role as neuropsychology assessor. Kodi's work at the Clinic cannot

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be described without seeming to exaggerate. He goes far beyond his assigned tasks (which are carried out at a high level of excellence under minimal supervision), consulting with others on cases, supporting research efforts, and generally contributing to the atmosphere of the Clinic as a place of collegial support and exchange.

I have been immeasurably helped and supported this year by Elizabeth Nance. She has introduced me to the running of the Clinic and taught me my job in substantial ways. We have shared the administrative duties of the day-to-day and planning aspects of running an agency. She has handled a variety of crises and unexpected events without losing her perspective, and handled them well. Most of all, she has remained the Clinic's most loyal supporter and the greatest advocate for its personnel and mission. She has made this a better place for us all to work.

Finally, I would like to thank the clinical students, especially those whom I have supervised or who have made additional efforts on the part of the Clinic. I have never enjoyed any work as much as direct and general supervision with them. I only hope that they have learned as much from me this year as I have learned from them.

APPENDIX N

SUPPORT STAFF

DEPARTMENT OF PSYCHOLOGY

1988 - 1989

ADMINISTRATIVE AND INSTRUCTIONAL SUPPORT STAFF:**Administrative Assistant: Robyn Santillanes**

Assists the Department Chair; administers all personnel and budgetary decisions necessary to execute University policies and policies set by the Department Chair. Has fiscal responsibility for all budgetary activities in the Department and related matters. Assists in hiring and supervision of all staff, student, and technical personnel. Coordinates with various administrators on a variety of complex matters, including faculty contracts, student financial aid, staff compensation, and related matters. Drafts policies, procedures, correspondence, etc. for the Chair.

Administrative Assistant: Rhonda Fuller

Works in support of Department Chair and top level administrators. Assists in the formulation of Departmental policies and procedures, particularly in the areas of graduate and undergraduate instructional programs. Has a broad range of responsibilities in a variety of areas, including office management; supervises office clerical and student employees. Responsible for preparation of a variety of administrative and instructional documents.

Editorial Assistant: Mary Hungate

Edits and word processes complex manuscripts for publication in professional journals and textbooks, according to scientific format, and grant proposals primarily to extramural funding agencies, as well as related materials. Provides word processing backup for Department office staff during times of peak workloads. Also produces Department's weekly newsletter, Psychology This Week.

Student Advisor II: Lois Kennedy

Serves as Department's graduate student and graduate admissions advisor; 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 programs regarding policies, requirements, academic standing, and related matters. Maintains all graduate student files and records, coordinates and schedules various comprehensive exams and defenses.

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SUPPORT STAFF
Continued

Interfaces with Graduate Studies Office in policy areas. Coordinates with Scheduling Office, Continuing Education Office and Evening and Weekend Degree Program 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 and Curriculum Change Committee regarding revisions for University catalogs.

Department Secretary: Wanda Sharts

Represents the Department as first point of public contact. Directs telephone callers and foot traffic as appropriate. Has responsibility for maintaining supplies inventory, security of classroom equipment inventory, maintenance of office copier and building key security. Backup to Editorial Assistant for typing of syllabi, exams and correspondence.

RESEARCH SUPPORT STAFF:

Shop Supervisor II: Patrick Sharp

Supports faculty, staff and graduate students with computer needs. Responsible for electronic design, fabrication, troubleshooting, installation, computer upgrades, consulting and repair, and preventive maintenance for mainframe computer and a multitude of microcomputers; also designs experimental and peripheral research equipment. Fabricates wood and metal products using a variety of equipment. Responsible for annual Department equipment inventory. Supervises a Work Study Assistant. Works under general supervision of Department Chair and Administrative Assistant.

Laboratory Animal Technician IV: 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 Work Study Assistants. 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.

Laboratory Animal Technician IV: 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. Backup for senior Laboratory Animal Technician IV.

SUPPORT STAFF
Continued

Veterinarian: Michael Richard, DVM (and Adjunct Assistant Professor of Psychology and Biology)

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.

CLINIC SUPPORT STAFF:

Clinic Director (Psychology Clinic): 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.

Staff Assistant (Psychology Clinic): Elizabeth Nance

Works under general supervision and in support of Psychology Clinic Director, Psychology Department Chair, and Administrative Assistant. 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 para-professional level. Supervises Work Study Office Assistant.

Annual Report of the Department of Sociology, 1988-89
Richard M. Coughlin, Chair

I am pleased to submit this report covering the fourth year of my term as department chair.

A. Significant Achievements

One of the most significant achievements of the past year was the effort to develop a strategic departmental plan to address the imbalances between demands on our programs and the supply of resources available from the university administration. To this end, the Sociology department held a faculty retreat at the Clarion Four Seasons on September 13, 1988. The purpose of the retreat was to clarify the department's priorities in carrying out its mission in instruction and research, and to develop a plan for implementing these priorities over the next few years. Before the retreat faculty were asked to respond to a questionnaire covering a variety of issues facing the department. Responses to the questionnaire served to focus the discussion at the retreat. The consensus was that the retreat was a success, and that it helped the department to deal with the continuing problems of inadequate resources to meet all of our programmatic and other professional commitments. The Chair's report on the outcome of the retreat is included below in the section on Significant Plans and Recommendations.

The department made continued progress in acquiring the latest technology to support our instructional and research activities. Over the past year the department acquired a video camcorder, which several faculty members used to videotape portions of their classes for present and future use. Colloquium presentations given by candidates for faculty positions were also videotaped, allowing faculty and graduate students who could not attend in person to review the candidates' presentations. The department plans to acquire a new video cassette recorder and television monitor, which will enable the previewing of tapes in the Sociology Reading Room.

In addition, the department continued to enhance local computing facilities located in the department office and microcomputing laboratory. We acquired a second laser printer and we plan to purchase a second daisywheel printer for letter quality printing. Distribution of personal computers to faculty members is now virtually complete. During the next year we will begin upgrading faculty personal computers and expanding network capabilities within the department.

The Sociology Reading Room, including a departmental library collection, became available for Sociology faculty and graduate students in October 1988. Credit for organizing the Reading Room is due Professor George Huaco, who also undertook the major task of sorting and shelving the many books and journals that had been donated to the department.

Professor Nelson Valdes represented the University of New Mexico (LAI-LADB) in the creation of a Latin American Data Base Consortium with the University of Texas (Austin), University of Miami and UCLA.

Undergraduate program.

Professor Patrick McNamara was selected to offer a special seminar (Introductory Sociology 101-003) for the first time in the Fall 1989 term under the auspices of the College of Arts and Sciences Participatory Seminar program. The central goal of this program is to provide undergraduate students with seminar-style classes designed to promote critical thinking. Each seminar gives students the opportunity to learn the course content in an active forum of group discussion along with individual attention focusing on writing, speaking, and thinking skills. Professor McNamara's seminar was a great success.

At the suggestion of Professor Phillip Gonzales, the department approved a new course, Sociology 398--Special Topics. This course will be useful in trying out ideas for new courses in addition to offering a regular opportunity for specialized or advanced topics that need to be taught in an upper division course. This course will also provide a means for cross-listing courses with other departments.

Professor Philip May was instrumental in receiving approval for six undergraduate fellowships under the National Institute of Mental Health Minority Access to Research Careers (MARC) program. The MARC grant is scheduled to begin in Fall 1989 with full tuition, fees and \$5000 spending money. Professor May will try to have the UNM administration match several fellowships for non-minorities also.

Ms. Stacy Keeling, President of the Undergraduate Sociology Student Association was awarded the 1988-89 McGee Award of \$400 for her paper "Date Rape: The Effects of Parental Sex Socialization and Peer Pressure". This is the second year Ms. Keeling has won this award. Ms. Keeling is a Sociology honors student who graduated Magna Cum Laude Spring 1989.

This year each department was asked to organize its own commencement program and/or reception. Chairman Richard Coughlin asked Stacy Keeling to coordinate the planning of the Sociology commencement and reception. Under the supervision of the Chair, she organized the commencement ceremony, program arrangement/printing, and the reception, which was held in the Student Union Ballroom. This department commencement ceremony and reception added a personal note for students, parents, and faculty. Assuming the provision of adequate funding, the department plans to continue to hold its own commencement ceremony each year.

Graduate Program.

The graduate program in Sociology continues to make progress with new admissions and awarding of degrees. Diana J. Torres was a summer 1989

graduate with the Ph.D.; also in summer 1989 Victor Larragoite graduated with the Master's Degree. Beginning in fall 1989, Diana Torres will be employed as an instructor at the University of Arizona, Tucson, and Victor Larragoite will be entering the doctoral program at that university.

Other significant developments in the graduate program included the adoption of a formal policy that all students pursuing a Ph.D. must first obtain a Master's degree. This policy was adopted in part due to the difficulty of employment for ABD's who do not possess a Master's degree. Also adopted as a formal policy is a new procedural requirement for students without an M.A. currently enrolled in the doctoral program. Such students may apply for a Master's degree once they have passed the comprehensive exams and been advanced to candidacy. The Sociology Graduate Committee will review the student's progress, written work, grades, and written recommendations of his or her comprehensive examination committee and make a formal recommendation to the department Chair.

B. Significant Plans and Recommendations

The following points and recommendations grew out of a faculty retreat held at the beginning of the fall 1988 semester and summarize the current state of strategic planning for the department:

1. Increasing enrollments have outstripped the department's capacity to offer high quality instruction in all areas.
 - a. We need to focus efforts on maintaining quality in core Sociology degree programs (B.A., M.A., and Ph.D. in Sociology). The department will concentrate resources on these programs (e.g., small sections for undergraduate Sociology majors and minors; enhanced opportunities for graduate seminars serving Sociology M.A. and Ph.D. students). This emphasis constitutes the quality enhancement goal of the department.
 - b. Interdisciplinary degree programs have a lesser claim on departmental resources, except where the interdisciplinary programs coincide with the curricula in core Sociology programs (e.g., graduate courses in deviance/criminology and comparative sociology/Latin America, both of which are central to the Sociology Ph.D. program).
 - c. As long as the current resource base does not significantly expand, service courses for non-majors, especially at the lower division level, will be structured as "mass enrollment" vehicles, with class sizes restricted only by practical considerations and with no expectation of close faculty-student contact, term paper assignments, essay examination, or other labor intensive elements. This emphasis constitutes the quantity production goal of the department.

2. The responsibility for meeting the department's instruction obligations, in both "quality enhancement" and "quantity production" described above, should be distributed equitably across members of the faculty.

- a. Teaching assignments of regular faculty should represent a balance of "quality enhancement" and "quantity production." While the mix of these elements is difficult to specify precisely, each faculty member will be expected to contribute to these goals in the best way he or she can.
- b. The use of part-time temporary faculty and graduate student teaching assistants or teaching associates should be kept within limits judged to be acceptable by the regular faculty. Recognizing that teaching experience (not to mention monetary remuneration) is often beneficial to graduate students and that the "quantity production" goal of the department often necessitates the use of part-time temporary faculty, the number of sections staffed by either or both categories should not be allowed to conflict with the "quality enhancement" goal for core Sociology programs.

3. Research activities carried out by Sociology faculty members have both individual and collective benefits.

- a. Scholarly contributions to the discipline, reflected in the publication of journal articles, books, book chapters, conference papers, etc. form an important part of the mission of the department. Such activity should be recognized and rewarded as part of the individual faculty member's overall contribution to the department.
- b. Funded research, including research grants and contracts, also represents a positive contribution to the department's welfare, particularly (or perhaps exclusively) when such activity generates additional resources for the department.

4. Service activities of faculty also represent an important aspect of professional duty, whether performed at the department, college, university, professional association, or community level.

- a. Faculty members are expected to engage in some amount of service activity at the department level and at least one other level. Such activity constitutes the minimum acceptable degree of professional service.
- b. Significant service to the department--i.e., activities that go far beyond the minimum expected of every faculty member--should be taken into account in determining individual work load (i.e., teaching assignments) and assessments of productivity. In general, service outside the department will be accorded lesser weight, although it will still be recognized as a positive contribution.

5. Charges to standing committees and other specific activities that need to be taken in the coming months include the following:

- a. The Recruitment Committee should develop descriptions of two or possible three positions to be filled this year. Recruitment efforts should reflect current departmental priorities, i.e., support for core degree programs (B.A., M.A., and Ph.D. in Sociology).
- b. The Curriculum Committee should undertake a comprehensive review of the core curriculum for undergraduate majors. The purpose of this review should be to identify specific steps that can be taken to strike a balance between the "quality enhancement" and "quantity production" goals described above. In addition, special task forces should be formed to review and recommend any reforms needed in the theory and research methods curricula (both undergraduate and graduate).
- c. The Undergraduate Committee, working in cooperation with the Curriculum Committee, should also address "quality enhancement" of the undergraduate Sociology major and minor degree programs. This effort should explore specific strategies to achieve this goal, such as designating certain courses as reserved for majors (and minors?), reviving the undergraduate honors seminar, and so on.
- d. The Graduate Committee should study the matter of the use of graduate students in the undergraduate curriculum. In particular, the committee should consider specific steps that the department can take to prepare graduate students for teaching. The Graduate Committee should also develop a clear description of the procedures involved in comprehensive exams and preparation of M.A. thesis and doctoral dissertations. This description should include the responsibilities of the student, committee chair, and other faculty members and should set deadlines for each stage of the process.
- e. The Research and Computer Use Committee should continue its efforts to encourage the development of departmentally-sponsored proposals for funded research. The committee should also consider what, if any, position the department should adopt vis-a-vis research institutes and other units outside the college, particularly in light of the new A&S policy linking merit increases to college-sponsored funded research. The department should explore the establishment of an institute for social research, operating within the College of Arts & Sciences, to facilitate the development of proposals for funded research.

f. A special task force made up of Sociology faculty specializing (or with a special interest) in Southwest studies should be formed to consider ways in which the department can sharpen the focus of its activities in the area. This effort will be coordinated by Nelson Valdes.

C. Appointments

Edward Gilliland was hired for a tenure track Assistant Professor position for the methodology position vacated by Richard McCleary.

Professor Gary LaFree was appointed the Director of the New Mexico Criminal Justice Statistics Analysis Center, June 1988-present. Professor LaFree was also appointed Associate Director of the Institute for Criminal Justice Studies.

D. Separations

Associate Professor David Montejano resigned at the end of the academic year to accept a faculty position in History at University of Texas, Austin.

E. Awards and Interviews

Professor David Montejano was selected by the Organization of American Historians to receive its 1988 Frederick Jackson Turner Award for his book, "Anglos and Mexicans in the Making of Texas, 1836-1986." Professor Montejano received a cash prize, certificate and a medal during a formal ceremony at the annual meeting of the historical group in Reno on March 25.

Professor David Montejano was selected as the winner of the 1989 Book Award of the Pacific Coast Branch, American Historical Association, held this year in Portland, Oregon for his book, "Anglos and Mexicans in the Making of Texas, 1836-1986." This cash award recognizes an outstanding recent first book by a scholar residing in the region of the Pacific Coast Branch.

Professor H. Laurence Ross was selected as the winner of the Widmark Award by the International Committee on Alcohol, Drugs and Traffic Safety, 1989, for his contributions to research on drinking and driving and traffic safety. Professor H. Laurence Ross was also named as Senior Science Advisor for the National Institute on Alcohol Abuse and Alcoholism, 1988-1989.

Professor Jane Hood was interviewed on May 26, 1989, by CBS Reporter Kathleen Sullivan on "The Morning" telecast, New York City, as a result of the publication of her article "Why Our Society Is Rape-Prone" in the May 16, 1989, issue of the New York Times.

Professor Peter Evans was chosen for one of the Guggenheim Fellowship Awards for the period of August 15, 1988 to May 14, 1989. The new Guggenheim Fellows were appointed on the basis of unusually distinguished achievement in the past and exceptional promise for future accomplishment. Professor Evans will devote himself to the study of state elites and the politics of technological development.

Professor Peter Evans received a fellowship for 1988-1989 from the Center for Advanced Study in the Behavioral Sciences, Stanford, California. He will work on a manuscript examining the role of the state in newly industrializing countries. The manuscript will focus on Brazil, Korea, and India as a diverse set of NICs and especially on the efforts of these countries to promote "high technology" industries.

Promotions: Assistant Professor Beverly Burriss was promoted to Associate Professor. Associate Professors Patrick McNamara and Philip May were promoted to Professor.

F. Distinguished Department Visitors

Dr. Christopher H. Birkbeck, Universidad de Los Andes, Venezuela, is on UNM campus for the summer, 1989, as a Research Associate with the Statistical Analysis Center of the Institute for Criminal Justice Studies, working with Dr. Gary LaFree on cross national studies of crime in Venezuela and the United States.

G. Sociology Commons Colloquia Speakers

Professor Marjorie Zatz, School of Justice Studies, Arizona State University, "Comparative Analysis of Social and Legal Change in Cuba and Nicaragua," September 29, 1988.

Professor Bob Gassaway, Department of Journalism, University of New Mexico, "Mexican and U.S. Newspapers: A Comparison of Border Coverages," November 4, 1988.

Professor Cynthia Gentry, Department of Sociology, Wake Forest University, "Six Models of Rape: An Empirical Analysis," February 20, 1989.

Professor Kriss Drass, Department of Sociology, Southern Methodist University, "The Analysis of Qualitative Data Using Boolean Algebra," February 22, 1989.

Professor Carole Case, Department of Sociology, University of Connecticut, "Occupational Uncertainty and the American Dream," February 24, 1989.

Professor Christopher Birkbeck, Universidad de Los Andes, Venezuela, "The Geography of Theory in the Social Sciences: Some Problems Raised by Criminology's Approach to the Underdeveloped Countries," February 25, 1989.

Professor John Crank, Department of Criminal Justice Sciences, Illinois State University, "Contemporary Issues in the Delivery of Police Services: An Examination of Small Agencies," February 27, 1989.

Professor Edward Gilliland, Sociology Department, University of New Mexico, "Linkages to the World Economy and the Rate of Rebellion, 1945-1980: An Event-History Analysis," March 1, 1989.

Professor Nancy Andes, Department of Sociology, The University of Connecticut, "Social Class and Patriarchy," March 3, 1989.

Professor H. Laurence Ross, Department of Sociology, University of New Mexico, "Lost and Found: The Drunk Driving Problem in Finland," March 31, 1989.

Professor Gary T. Marx, Urban Studies and Planning, Massachusetts Institute of Technology, "Are We Becoming a Maximum Security Society: The Future of Social Control," April 25, 1989.

Professor Martin Jankowski-Sanchez, Department of Sociology, University of California, Berkeley, "The Rise and Development of Satanic Cults," May 1, 1989.

Speakers sponsored by the Faculty Scholars Lecture Series:

Associate Professor Beverly Burris, Sociology Department and Professor Louise Lamphere, Anthropology Department, "Technocracy and Work: The Changing Face of Industrialization," March 7, 1989.

Speakers sponsored by the Undergraduate Sociology Student Association:

Professor Patrick H. McNamara, Department of Sociology, UNM, October 11, 1988.

Professor Edward Gilliland, "Methodological Application to the Study of Rebellion," Stanford University, November 9, 1988.

Barbara Johnson, Department of Parole and Probation, New Mexico State Corrections, "The System and How to Get Your Foot in the Door," February 8, 1989.

H. Sabbaticals, Leaves of Absence

Professor Nelson Valdes was on leave for Spring 1989 as a Visiting Professor at Rollins College, Winter Park, Florida. Professor Valdes taught 4 courses he has not offered at UNM: American Dream: Myth & Reality; Social Change and the Future; The Sociology of Perestroika: Social Change in the USSR; and The Sociology of American Culture: The Last 30 years.

Professor Paul D. Steele was on sabbatical leave for Fall 1988 and Spring 1989 to undertake research for the Institute for Behavioral Research at the University of Georgia, Athens, GA.

Professor Peter Evans was on leave for Fall 1988 and Spring 1989 to undertake research at the Center for Advanced Study in Behavioral Science, Stanford, CA.

Professor H. Laurence Ross was on leave in Rockville, MD to undertake research for National Institute on Alcohol Abuse and Alcoholism.

H. Funded Research

Richard Coughlin: Grant from the Swedish Bicentennial Fund for a Study Visit to Sweden, May 12-June 6, 1989. Swedish kronor 20,000 (approximately \$3400).

Gary LaFree: Sentencing Commission grant to collect statewide data on Convicted felons, \$41,000.

Gary LaFree: Bureau of Justice Statistics grant to complete statewide survey of victimization and fear of crime, \$50,000.

Gary LaFree: Bureau of Justice Statistics grant to establish an OBTS System for New Mexico, \$79,000.

Philip May: "Analysis of Injury and Evaluation Data, Native American Adolescent Injury Prevention Program" State of New Mexico, Health and Environment Division, March-October 1988, \$10,400.

Philip May: "A Research Career Program for New Mexico Minorities" submitted May 10, 1988, to Alcohol, Drug Abuse and Mental Health Administration (ADAMHA-MARC), U.S. Department of Health and Human Services, Washington, D.C., \$772,979, (funding requested June 1, 1989 through May 31, 1994).

Gilbert Merckx: Director, "Linkage Program for Faculty Exchanges Between the Universidad de Guanajuato and the University of New Mexico," funded by the United States Information Agency, \$43,956. Project duration, September 1986-September 1989.

OBAS

Gilbert Merx: Director, "Endowment Challenge Grant for the Latin American Institute," funded by the Andrew W. Mellon Foundation, \$200,000. Project duration: January, 1987-January, 1990.

Gilbert Merx: Director, "Developing an Undergraduate Brazilian Studies Concentration," funded by the Center for International Education, U.S. Department of Education, \$70,000. Project duration, September 1987-September 1990.

I. Joint Appointments

David L. Bachelor (Professor, Ph.D., University of Chicago) Education

Table 1

Student Credit Hours in Sociology by Course, 1988-89

Course #	Course Title	Semester	Sections	SCH
101	Intro to Sociology	Fall 88	7	3708
200	Fdn of Soc Welfare	Fall 88	1	123
211	Social Problems	Fall 88	3	360
213	Deviant Behavior	Fall 88	4	714
216	Dynamics of Prejudice	Fall 88	2	510
221	Rich & Poor Nations	Fall 88	2	129
230	Society & Personality	Fall 88	2	243
300	Soc Welf Pol & Prog	Fall 88	1	111
303	Soc Political Behav	Fall 88	1	51
308	Sociol of Sex Roles	Fall 88	3	405
312	Juvenile Delinquency	Fall 88	1	339
313	Criminology	Fall 88	3	456
316	Sociology of Law	Fall 88	1	171
321	Soc of Med Pract	Fall 88	1	159
326	Soc. of New Mexico	Fall 88	1	42
328	Soc of Mex Amer Peop	Fall 88	1	84
331	Collective Behavior	Fall 88	1	87
345	Sociology of Youth	Fall 88	1	210
350	Rural Society Lat Am	Fall 88	1	48
371	Hist Social Thought	Fall 88	1	108
380	Intro Rsrch Methods	Fall 88	2	240
381	Social data Analysis	Fall 88	2	120
413	Criminal Justice	Fall 88	1	147
414	Sociology of Correct	Fall 88	1	165
420	Race & Cult Relations	Fall 88	1	48
421	Sociology of Educ	Fall 88	1	27
422	Sociology of Religion	Fall 88	1	66
441	Complex Organizations	Fall 88	1	54
451	Population	Fall 88	1	33
461	Social Change	Fall 88	1	51
471	Contemp Soc Theory	Fall 88	1	108
481	Research Meth in Soc	Fall 88	2	88
484	Cuban Rev 1959-present	Fall 88	1	24
488	Field Observ & Exper	Fall 88	1	89
490	Directed Study	Fall 88	8	54
514	Contem Soc Theory II	Fall 88	1	27
517	Criminology & Delinq	Fall 88	1	27
520	Racial/Ethnic Relations	Fall 88	1	21
551	Problems	Fall 88	5	21
570	T/Qualitative Method	Fall 88	1	15
580	Soc Rsch I	Fall 88	1	21
595	Special Topics Soc	Fall 88	1	12
588	Sem Fld Obsr Expr	Fall 88	1	3
599	Masters Thesis	Fall 88	1	6
699	Dissertation	Fall 88	3	42

Table 1 (continued)

Course #	Course Title	Semester	Sections	SCH
101	Introduction to Sociology	Spring 89	8	2499
200	Fdn of Soc Welfare	Spring 89	1	30
211	Social Problems	Spring 89	2	366
213	Deviant Behavior	Spring 89	4	975
216	Dynamics of Prejudice	Spring 89	2	393
221	Rich & Poor Nations	Spring 89	1	99
225	Marriage Family	Spring 89	1	141
230	Society & Personality	Spring 89	1	183
303	Soc Political Behav	Spring 89	1	42
308	Sociol of Sex Roles	Spring 89	2	297
310	Soc of Aging & Aged	Spring 89	1	99
312	Juvenile Delinquency	Spring 89	2	243
313	Criminology	Spring 89	2	507
321	Soc of Medical Pract	Spring 89	1	153
322	Soc Epidemiology	Spring 89	1	180
326	Soc of New Mexico	Spring 89	1	129
328	Soc of Mex Amer People	Spring 89	1	72
331	Collective Behavior	Spring 89	2	162
361	Mod Trad Societies	Spring 89	1	63
371	Hist Social Thought	Spring 89	1	123
380	Intro Rsrch Methods	Spring 89	3	240
381	Social Data Analysis	Spring 89	1	42
390	Latin Am Phil	Spring 89	1	15
400	The Welfare State	Spring 89	1	99
413	Criminal Justice	Spring 89	1	108
414	Sociology of Correct	Spring 89	1	141
435	Small Groups	Spring 89	1	75
441	Complex Organization	Spring 89	1	48
445	Occupat & Professions	Spring 89	1	45
461	Social Change	Spring 89	1	69
471	Contemp Soc Theory	Spring 89	1	114
478	Sem Intern Studies	Spring 89	1	3
481	Research Meth in Soc	Spring 89	1	108
488	Field Observ & Exper	Spring 89	1	86
490	Directed Study	Spring 89	7	59
499	Senior Honors Thesis	Spring 89	1	3
500	Classical Soc Theory	Spring 89	1	18
503	Political Soc	Spring 89	1	15
507	T/Women/Dev	Spring 89	2	57
508	Lat Am Dev & Planng	Spring 89	1	9
523	Pro Seminar	Spring 89	1	18
551	Problems	Spring 89	7	30
581	Meth Social Res II	Spring 89	1	33
599	Masters Thesis	Spring 89	1	7
699	Dissertation	Spring 89	4	57

Table 2

Total Student Credit Hours in Sociology, 1978-89

<u>Semester</u>	<u>Lower Division</u>	<u>Upper Division</u>	<u>Graduate</u>	<u>Semester Total</u>
Spring 1978	5442	998	233	6673
Fall 1978	n/a	n/a	n/a	n/a
Spring 1979	n/a	n/a	n/a	n/a
Fall 1979	5437	1432	191	7060
Spring 1980	4769	1700	279	6748
Fall 1980	5508	1649	257	7414
Spring 1981	n/a	n/a	n/a	n/a
Fall 1981	n/a	n/a	n/a	n/a
Spring 1982	4209	1873	245	6327
Fall 1982	n/a	n/a	n/a	n/a
Spring 1983	4704	1720	191	6615
Fall 1983	n/a	n/a	n/a	n/a
Spring 1984	4806	2047	250	7103
Fall 1984	4977	1862	187	7026
Spring 1985	4833	2376	250	7459
Fall 1985	5592	2076	205	7873
Spring 1986	4818	2389	220	7427
Fall 1986	5037	2580	220	7837
Spring 1987	5310	2472	209	7991
Fall 1987	5088	2519	219	7826
Spring 1988	5385	2970	219	8574
Fall 1988	5937	3612	168	9717
Spring 1989	4686	2962	253	7901

Table 3

Degrees awarded in Sociology, 1978-89

<u>Academic Year</u>	<u>BA</u>	<u>MA</u>	<u>Ph.D.</u>	<u>Total</u>
1978-79	22	2	0	24
1979-80	21	0	0	21
1980-81	21	0	0	21
1981-82	23	2	1	26
1982-83	25.5	1	0	26.5
1983-84	29	1	0	30
1984-85	28	2	2	32
1985-86	30	1	3	34
1986-87	31	1	3	35
1987-88*	34	1	1	36
1988-89**	89	1	1	91

*Includes Criminal Justice majors

**47 of these are Criminal Justice majors

Table 4

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Admissions to Graduate Study in Sociology, 1984-89

<u>Semester/Degree Applied</u>	<u>Admitted</u>	<u>Actually Started</u>
Fall '84		
M.A.	-	-
Ph.D.	5	4
Spring '85		
M.A.	6	0
Ph.D.	-	-
Fall '85		
M.A.	6	3
Spring '86		
M.A.	1	1
Ph.D.	-	-
Fall '86		
M.A.	4	1
Ph.D.	3	1
Spring '87		
M.A.	1	1
Ph.D.	1	0
Fall '87		
M.A.	2	1
Ph.D.	3	1
Spring '88		
M.A.	2	n/a
Ph.D.	8	n/a
Fall '88		
M.A.	*n/a	5
Ph.D.	*n/a	5
Spring '89		
M.A.	*n/a	0
Ph.D.	*n/a	2
Fall '89		
M.A.	8	**n/a
Ph.D.	6	**n/a

*Information unavailable at present time.

**Information unavailable until Fall 1989 semester begins.