

6-1-2012

Office of the Vice President for Research, Overview 2008-2012

Office of the Vice President for Research

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

Recommended Citation

Office of the Vice President for Research. "Office of the Vice President for Research, Overview 2008-2012." (2012).
https://digitalrepository.unm.edu/ovp_research_publications/52

This Report is brought to you for free and open access by the Archives & University Administrative Records at UNM Digital Repository. It has been accepted for inclusion in Office of the Vice President for Research by an authorized administrator of UNM Digital Repository. For more information, please contact disc@unm.edu.

THE UNIVERSITY OF NEW MEXICO
OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND ECONOMIC DEVELOPMENT

OVERVIEW 2008-2012



TABLE OF CONTENTS

CLICK HEADER TO JUMP TO SECTION

Message from the Vice President	3
Financial State of Main Campus Research	4
OVPR Structure	7
Research Services	9
Research Initiatives	11
External Partnerships	14
Support of Government Relations	18

MESSAGE FROM THE VICE PRESIDENT

May 31, 2012

Dear Colleagues,

Four years ago, hundreds of us crowded into a seminar room for a general faculty meeting (<http://facgov.unm.edu/specialmtg/April2008/>). The room was crowded and hot, the meeting was long and the tension was high. I had just been appointed interim VPR and was anxious to show that I supported a more transparent approach to running the office I did not yet occupy. When it came time to express support for consulting with ERAC (Executive Research Advisory Committee), I said “I support the revolution” rather than “I support the resolution”.

Thus was the Revolution born. Since May 2008, the OVPR staff and I have worked with you to consistently make decisions and set priorities based on four goals:

- Excellence in faculty research
- Facilitation of faculty-driven research
- Integration of research and education
- Transparency in decision-making

Main Campus faculty and staff had spent FY07 and FY08 on efforts that provided the initial context for decisions and priorities in the OVPR. The 2007 Research Study Group Report, 2007 NCURA Peer to Peer Review and 2008 Audit of Main Campus Research Business Practices and Processes were critical to the early efforts in the office (<http://research.unm.edu/publications/auditsreports.cfm>). As we gained an understanding of the budget and of ways to better serve faculty, we moved on from these reports to expand services and opportunities in ways that fit the constantly changing constraints, opportunities and context.

We have taken pride in on our ability to rapidly restructure to take advantage of opportunities or minimize the burden of new federal policies. Working with you, we have created a main campus research infrastructure that provides a wide range of services and assistance for faculty, staff and students, is responsive to changes in federal and state policy and opportunities, and offers a broad range of collaborative options both internally and externally for all faculty and students. The Executive Research Advisory Committee (ERAC) has been a valuable partner throughout this four-year effort, as have other standing and short-term committees that have engaged faculty, staff and students.

The complex dynamic created by the higher education funding formula, and the state and federal economic situations have caused us to reach out to an increasingly broader range of campus colleagues in the past year. The result has been coordinated and consistent responses to information requests from the Regents, the State Legislature or the Federal Delegation and creative research partnerships.

It has been a privilege and an honor. I am proud to have been your VPR and remain permanently in support of the revolution.

All the best,



FINANCIAL STATE OF MAIN CAMPUS RESEARCH

OVPR Budget & Debt Overview

The OVPR has maintained budgeting priorities and procedures that are in accord with two overarching goals: (1) facilitating faculty research and scholarship across campus, and (2) cultivating an atmosphere of collaboration among campus researchers, department and college staff, and research administration. The operations and initiatives of the OVPR are almost entirely funded by Facilities and Administration (F&A) cost recovery revenue. In FY2011, UNM's Main Campus generated \$20.8M in Facilities and Administration (F&A, also called "overhead" or "indirect costs") revenues. Expenditures in the OVPR are broken down into three types: Research Support and Compliance, F&A Investment, and Institutional Support. For a more detailed analysis of the OVPR budget please refer to the following link to the OVPR Fiscal Review document: <http://research.unm.edu/budget/>. This document includes an explanation of the current F&A distribution method.

Debt reduction is obviously a priority, and the OVPR has successfully adjusted to significant financial constraints since May 2008. The OVPR, at the beginning of FY2009, had accumulated a total debt of \$4,021,065. This included an FY2007 deficit of \$2.155M that was covered by loans from several campus units and an FY2008 deficit of \$1,866,065. The Office had been the subject of an internal audit, and the audit set some of the budget expectations and actions required (<http://research.unm.edu/publications/auditsreports.cfm>).

In an effort to simultaneously decrease the debt and bring the OVPR budget under control, the original FY2009 budget incorporated several spending reduction measures that would result in positive year-end balances sufficient to eliminate the deficit over a period of three years. These changes included reduced allocations to units and the phasing out of budget allocations for some of the units reporting to, or funded by, the OVPR. However, it quickly became apparent that removal of all funding from some of the units was not feasible, and we negotiated a slower timeline in order to more effectively balance debt reduction and the advancement of Main Campus research. We repaid the "loan" from Colleges, Schools and Centers in FY10. Since that time we have reduced expenditures and improved service through a wide range of cost-cutting, internal reallocation, and cost-containment procedures. A summary of these efforts can be found in the FY11 OVPR Cost Cutting document (<http://research.unm.edu/budget/>).

FY11 was a very good year for F&A generation, due in part to ARRA (stimulus) funding. After discussions with President Schmidly, EVP Harris and Provost Abdallah, we paid off another \$1M of the OVPR debt. The OVPR debt now stands at \$866K, with FY11 carry forward of approximately \$1M in parallel with the debt. The OVPR is providing money for Presidents' initiatives during FY12/FY13 and remains committed to decreasing the debt.

Principal investigators have been aggressively submitting proposals, allowing Main Campus to take advantage of stimulus funding opportunities and maintaining significant forward momentum despite increasing federal budget instability and looming funding agency cuts. Proposals and Awards for FY07-FY11 are shown in Figure 1. Stimulus (ARRA) funding opportunities resulted in increased proposal submissions in FY08 and FY09, with concomitant increases in awards in FY09 and FY10. Current awards under management include 959 active awards totaling \$415,328,836. There are at present time 398 total PIs with active awards.

The OVPR evaluates data on proposals, awards and F&A generation monthly and has begun discussing trends with ERAC, ADRs, Deans and UNM leadership. This is particularly important given the range of competing forces impacting extramural funding opportunities. Figure 2 shows year-to-date proposal and award data for FY08-FY12. It is important to look at *both* proposal submissions and new award data. We are approaching the end of research expenditures related to ARRA awards and seeing the combined effect of years of continuing resolutions in the federal budget along with concerns about research agency budget cuts. One result is that federal research agencies are changing procedures and policies to decrease both opportunities to submit proposals and the number of proposals that are reviewed during any given request for proposals. Main Campus PI's are ambitious and highly motivated, and although there are fewer federal funding opportunities, the dollar value of the proposals being submitted is increasing. New awards for FY12 year-to-date are similar to this time of year in FY08 (pre-ARRA

funding). There are significant delays in award decisions at this point, which is likely to result in a slow down in award expenditures by PI's who have the flexibility to do so.

ARRA funding successes resulted in the UNM Main Campus experiencing record-breaking research expenditures and F&A generation (Figures 3 & 4). Most ARRA awards are not eligible for no cost extensions, which has meant even fiscally conservative PI's must spend these grant dollars. F&A is generated (and allocated) in real-time, so slow downs in awards and expenditures have an immediate impact on the OVPR budget. The OVPR will be watching Main Campus trends and federal budget discussions carefully.

Main Campus Awards 2008-2012

Figure 1. Proposals & Awards Thru June 30, 2011 (FY 08-12) – Main Campus and Branches (Does not include Financial Aid)

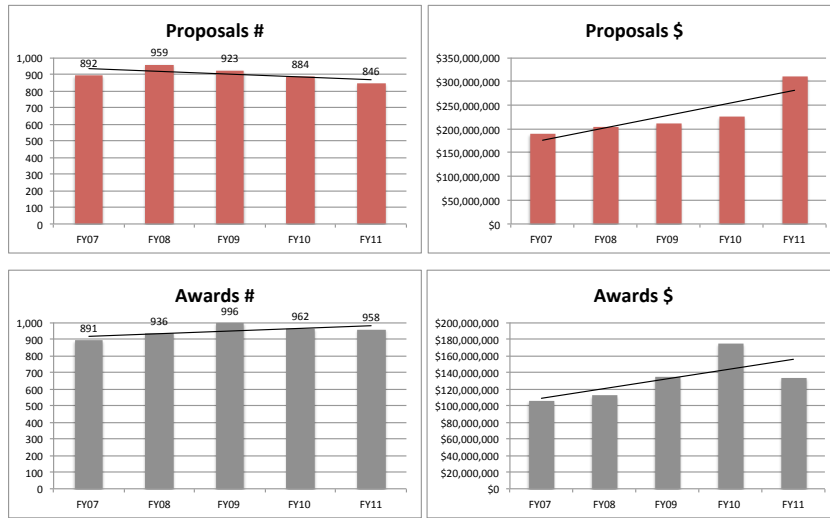
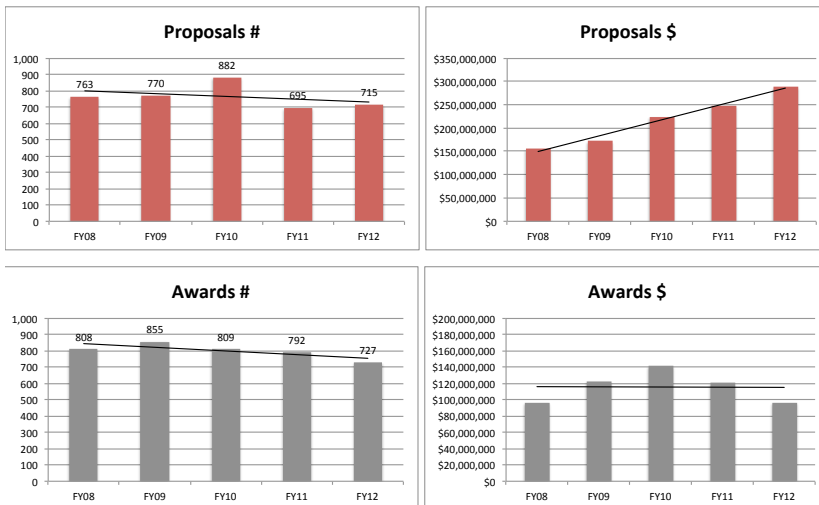


Figure 2. Proposals & Awards Thru April 31st (FYTD 08-12) - Main Campus and Branches (Does not include Financial Aid)



Main Campus Expenditures 2008-2012

Figure 3. Expenditures and F&A Generation Thru June 30, 2011 (FY 05-12) - Main Campus and Branches

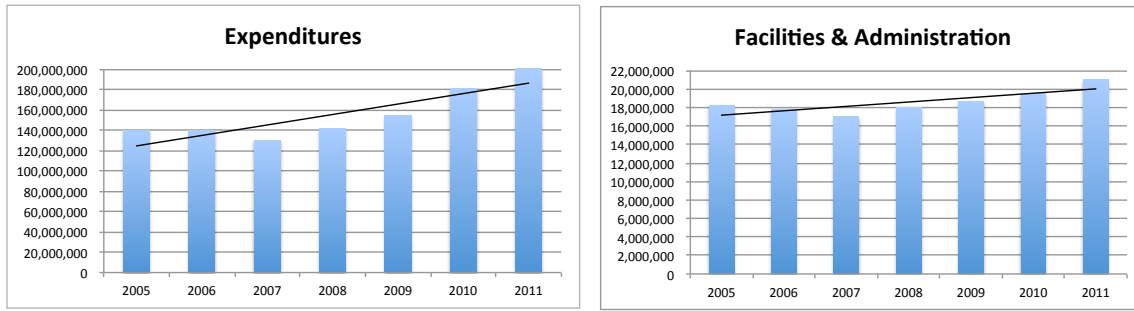
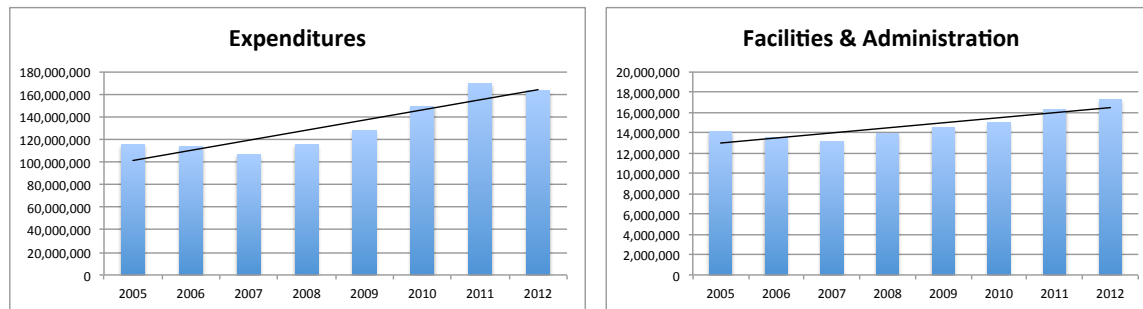


Figure 4. Expenditures and F&A Generation Thru April 31st (FYTD 05-12) - Main Campus and Branches



OVPR STRUCTURE

Office Administration & Organization

From 2008-2012 there were significant changes in personnel, several center director appointments, and one program closure. Over this period of time the OVPR made a number of changes to the organizational structures of both the central office and direct-report units. Our general approach has been to use retirements or departures from the OVPR as an opportunity to re-evaluate office structure and job descriptions. The reorganization efforts in the OVPR were designed to maintain a cost-effective administrative structure, while simultaneously reassigning FTE's to maximize faculty support and services. The aforementioned report on cost containment also discusses effort reallocation, see link <http://research.unm.edu/budget/>.

The on-going process of reorganization began in Spring 2009 with significant reductions in upper-level administrative positions and internal reallocation of personnel. We eliminated the positions of Associate Vice President for Lab Affairs, Assistant Vice President for Centers and Institutes, Chief Economic Development Officer and two senior level staff positions. As result of these reductions the Vice President for Research and Associate Vice President for Research Initiatives were required to absorb a broader range of responsibilities. To expand focus on faculty-driven initiatives, two director-level positions were created to facilitate projects in the Arts & Humanities Initiatives and Special Science, Engineering and Policy Research Initiatives. These positions were specifically created to broaden faculty participation in

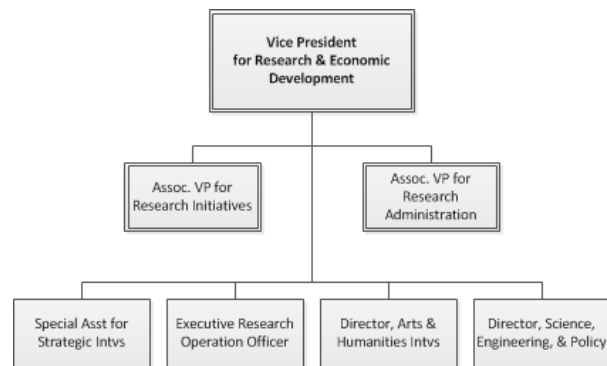


Figure 5. OVPR Senior Administration Spring 2012

research and cultivate new relationships with funding agencies to create new opportunities. The AVP for Research Administration has a dual reporting line between the VPRED and the VP for Finance. Pre-Award thus exists in-between the OVPR and Finance while Contracts & Grants Accounting reports to the VP for Finance. Contact information for the OVPR leadership can be found at <http://research.unm.edu/contacts.cfm>.

The reorganization process included evaluation of OVPR staff managers and administrative support personnel. The office has made a concerted effort to maintain an administrative support staff that is small and efficient. The smaller central administration enabled the OVPR to significantly increase FTE's in Pre-Award and to hire four Faculty Research Support Officers (FRSOs), to work directly with faculty. A new component in this administrative model was the development, this Spring 2012, of the position of Executive Research Operations Officer. This position unifies the internal finance, accounting, human resources, and general administration functions of the OVPR and its direct-report units. These faculty-driven initiatives were accomplished with no increased expenses in central research administration.

A high level of service in Pre-Award is a central priority, and we have restructured Pre-Award staff and assignments as we gained experience and identified opportunities to improve proposal flow. We have more than doubled the FTE's in Pre-Award in the last 4 years, in addition to creating positions to enhance electronic research administration and research compliance support. Our goal is to provide Pre-Award staff with opportunities that have clear career paths, leading to increased employee retention, while also providing greater support for all Main Campus units.

Faculty Governance & Committees

Faculty involvement in the decision-making of the OVPR has become an essential component of the administration of research on Main Campus. The office has engaged dozens of faculty members in a range of advisory and standing committees. There are a number of ad-hoc committees that have been convened to address issues of a

short time period or limited scope. The committees noted below demonstrate the diverse nature of faculty input. However, these committees represent a small subset of the OVPR's overall efforts to continuously make process improvements through faculty consultation:

Committee	Charge
Executive Research Advisory Committee (ERAC)	Engage members of the University of New Mexico research community and its administration to enhance the University's research enterprise. The ERAC was established as part of the University's response to the recommendations of the Research Study Group and the report of the National Council of University Research Administrators. <i>FY13 Chair: Julie Coonrod</i>
AVP/ADR Meeting	Regular meeting of the Associate Vice Presidents for Research with the Associate Deans for Research from SOE, COE, A&S, SA&P, and CFA. The AVP/ADR meeting was established as a forum for research active schools and colleges to interface with OVPR senior management for problem-solving, updates and development of shared research agenda across Schools and Colleges. <i>FY13 Chair: Johann van Reenen</i>
Internal Competitions Committee	Reviews Main Campus funding proposals that are limited by the funding agency in the number of proposals an institution may submit. Limited Competitions Committee evaluates the proposals, selects the proposal(s) for submission, and provides comments and suggestions for improvement to all proposers. <i>FY13 Chair: Steve Gangestad</i>
Research Compliance Committees: <i>Conflict of Interest-D</i> <i>Export Control</i> <i>Institutional Review Board</i> <i>Institutional Animal Care and Use</i>	The COI-D and Export Control committees are directly supported by the OVPR. The IRB and IACUC are staffed by the UNM HSC with support from the OVPR.
DTRA Faculty Advisory Committee	Coordinate DTRA activities on-campus and identify opportunities for further development. <i>FY13 Chair: Andrew Ross</i>
AFRL Strategic Partnership Committee	Coordinate AFRL activities on-campus and increase research and educational collaborations. Co-chaired by UNM and AFRL. <i>FY13 UNM Chair: Andrew Ross</i>
Arts & Humanities Committee	Enhance scholarship and creative works in the arts and humanities. Specific emphasis is given to attracting funding opportunities from the National Endowment for the Humanities (NEH) and National Endowment for the Arts (NEA). <i>FY13 Chair: Jane Slaughter</i>

RESEARCH SERVICES

Overview

PIs regularly request additional services and support from the OVPR to facilitate proposal development and submission in an increasingly competitive and complex funding environment. Changes in federal priorities and procedures also require rapid responses. Relative to 2008, we now provide a vastly different range of services in support of faculty and student research, as described in this section.

- Do we do more than is described in this document? Of course! If you have questions about other services, initiatives or issues, just ask.
- Who do you ask? Your Faculty Research Support Officer is a great starting point, but you can ask anyone in the OVPR; staff are cross-trained to be able to direct inquiries to the right person.

Electronic Research Administration

After a multi-year transition Main Campus is well on its way to effectively utilizing electronic Research Administration (eRA) to facilitate proposal submission, award tracking and research compliance. The eRA Manager is leading the implementation of Cayuse and enhanced reporting and tracking of research metrics. Cayuse424 has been used for proposal submissions on the main and branch campuses since March 2010. The system has reduced time and the paper work required for proposal submission, and facilitated proposal development through the creation of a central portal. Staff and faculty enjoy the fact that proposal signoff is now electronic, and no one has to run around campus pursuing signatures! This feature was particularly useful when the university was closed for bad weather during Winter 2011; administrators, faculty- and staff- approved, worked on, and submitted proposals, from home.

Watch for: CayuseSP will be rolled out to Main Campus this summer. CayuseSP continues our efforts to integrate all aspects of sponsored research from proposal development to compliance to award tracking. Faculty will find it easier to track proposals and awards, Department Chairs and Deans will be able to run reports on current funding and everyone will find it easier to get complex proposals approved as parallel approval queues are allowed. Stay tuned for announcements of opportunities to learn about (or just play with) CayuseSP!

Research Compliance

We have taken a number of steps to better integrate relevant aspects of research compliance with the Pre-Award Office. The Associate Vice President for Research Administration now manages Export Control, Industrial Security and administrative components of the Conflict of Interest Committee D (COI-D). An OVPR central office FTE was reallocated to coordinate COI and Export Control efforts and develop process improvements. Conflict of Interest saw major revisions with a reconstituted committee, committee training and campus training. We are pleased to have SOE Associate Dean Charles Fleddermann as Chair of the COI Committee D. We've had a major reduction in the wait time for COI reviews and management plans, and have a number of process improvements underway for FY12 and beyond.

Additionally, we have restructured Research Compliance oversight in order to decrease risk and facilitate compliance without increased reporting burden. With regard to contract administration, Research Administration staff and training resources have been allocated to focus on contract negotiations and export control within the Pre-Award Office. The Office of University Counsel (OUC) has provided increased assistance and training for Pre-Award staff engaged in contract negotiation, including export control issues. A dual report staff member in the OUC to the VPR has been used to provide expertise and a "checks and balances" approach to all aspects of research compliance. We expect that with the implementation of CayuseSP this summer several reporting aspects of research compliance will be integrated in order to simplify proposal preparation and submission.

Human and animal subjects protection (IRB and IACUC) are outsourced to HSC. The Associate Vice President for Research Initiatives is now an observer on the IACUC committee, which has improved information flow to main campus. IRB proposal processing remains an on-going concern. Our emphasis, in collaboration with Deans across campus, on increasing research activity by all faculty has resulted in an increase in proposals from the humanities, social sciences and education. We have worked with the Human Research Protection Office (HRPO) to increase assistance and training opportunities for faculty and students who need IRB approval. We are aware that significant additional effort is required, particularly given the large number of new faculty colleagues who will arrive in FY13.

Watch for: On-line, annual COI disclosure compliant with new NIH regulations will be implemented this summer, starting with SOE. No more COI forms with every proposal!

- Research compliance support in CayuseSP.
- Formation of a second Main Campus IRB committee during FY13 to facilitate review of IRB proposals from the humanities, social sciences and education.
- Streamlined Export Control processes.

Faculty Research Support Services

FRSS was established in Spring 2009 to help faculty, students, administrators and staff with efforts to obtain external funding. FRSS currently reports to the Associate Vice President for Research Initiatives. Selected for their diverse talents, Faculty Research Support Officers (FRSOs) offer assistance in finding funding sources, proposal development, navigating UNM's proposal process and coordinating large and complex proposal efforts requiring numerous partnerships and multidisciplinary collaborations. Since the inception of FRSS the unit's portfolio continues to grow as faculty and student research support needs increase. Every unit on campus has an FRSO assigned to it - find your FRSO here: <http://research.unm.edu/frss/index.cfm>. If you are working on a proposal that crosses colleges or disciplines, contact the OVPR and an FRSO will be identified to assist you.

The FRSO's are also responsible for a number of larger efforts to keep Main Campus faculty, staff and students informed about research opportunities and the functioning of research administration. Be sure to take advantage of the information they provide, including:

- The new *Proposal Development and Award Guide* (<http://research.unm.edu/frss/index.cfm>), which provides an overview of all aspects of proposal preparation, submission, compliance, etc. This searchable pdf is a living document that will be updated as local or federal procedures and policies change. The document is reviewed and update monthly.
- Information on Limited Competitions (<http://research.unm.edu/findfunding/limited/view.cfm>) and Completed Limited Competitions with Results (<http://research.unm.edu/findfunding/limited/index.cfm>).
- UNM-Eligible Funding Opportunities (<http://research.unm.edu/findfunding/grantopportunitieslist-1.html>).

During the past two years, NSF and NIH have implemented requirements for responsible conduct of research (RCR) training for students and postdocs as well as requiring PI's to provide data management plans. RCR training is provided throughout the year as part of Faculty Research Support Services. For more information on RCR please refer to the following link <http://research.unm.edu/researchethics/rcrcertification.cfm>. RCR is also part of the Graduate Student Funding Initiative, described below. In collaboration with University Libraries, FRSO's and Data Librarians provide rapid assistance to faculty who need to develop data management plans. Find more information on getting assistance with digital data management, curation, and archiving at http://libguides.unm.edu/content.php?pid=137795&search_terms=digital+data.

Watch for: Consolidated calendar of research-related training opportunities, workshops and seminars for faculty, staff and students. FRSO's will also be active participants in helping the over 60 faculty joining UNM during FY13 become research active. Most activities will be open to all interested faculty and will be widely publicized.

RESEARCH INITIATIVES

What do we do when we're not in meetings? Plan more meetings! A cross-section of our current initiatives and the relevant contacts are briefly highlighted below. If in doubt during the transition, contact the Associate Vice President for Research Initiatives for further information.

Graduate Student Funding Initiative (GSFI)

The Graduate Student Funding Initiative is a new program (created in Fall 2010 and launched in January 2011) offering a one-stop shop to provide Graduate and Professional Students with assistance in all aspects of preparing proposals. Students are offered 50 distinct educational sessions at no cost. Students have the opportunity to participate in sessions independently or obtain certificates in four areas: Grant Writing, Principal Investigator Eligibility, Research Ethics, and Research Compliance. The initiative is a collaborative effort among the Office of the Vice President for Research, the Office of Graduate Studies, the Title V Graduate Resource Center, Graduate Professional Student Association, Project for New Mexico Graduates of Color (and other student organizations), and University Libraries. Elly Van Mil, OVPR Faculty Research Support Officer, leads the program.

For more information on the GSFI, and to see the calendar of events for Summer and Fall 2012, go to the following link <http://research.unm.edu/graduatefunding/> or contact Elly Van Mil directly. Offerings, content and scheduling are based on student feedback, and we are using a mix of in-person and on-line sessions to provide additional flexibility and access.

GSFI Impact

Fall 2011		
<i>Course:</i>	<i>Certificates Awarded</i>	<i>Comments</i>
Grant Writing & Proposal Preparation	27	57 certificates were awarded to 44 individuals in 19 departments in 6 colleges (21 A&S, 2 Anderson School of Management, 2 College of Education, 18 School of Engineering, 1 OGS
PI Eligibility	10	
Responsible Conduct of Research	18	
Research Compliance	2	
Spring 2012		
<i>Course:</i>	<i>Certificates Awarded</i>	<i>Comments</i>
Grant Writing & Proposal Preparation	14	26 certificates were awarded to 19 individuals in 14 departments in 5 colleges (8 A&S, 2 College of Education, 2 Public Administration 3 School of Engineering, 1 School of Medicine, 3 Other
PI Eligibility	4	
Responsible Conduct of Research	5	
Research Compliance	3	

Student Hiring on Contracts & Grants

This past year we have been working closely with GPSA to assist them in their goal of finding more financial support for graduate students through both external and internal funding sources. Both graduate and undergraduate students are anxious for even short-term employment opportunities on grants and contracts. Student Hiring on Grants and Contracts (<http://research.unm.edu/policiesprocedures/unmpolicies.cfm>) contains two charts that explain the different mechanisms through which graduate and undergraduate students can be written into proposals and/or hired. Contact your FRSO if you have questions. The students appreciate your support!

Arts & Humanities Initiative

The Director for Initiatives in the Arts & Humanities, Jane Slaughter, is responsible for the coordination of individual and collaborative campus research initiatives in the arts and humanities. The objective of this program

is to promote the visibility of faculty scholarship in the arts and humanities and encourage an increase in extramural funding in related disciplines. The last fiscal year (FY 11) was a highly active period for the program with strong extramural activity. Jane and OVPR staff provided support for college initiatives, particularly in the College of Fine Arts and the School of Architecture & Planning. The director met with individual faculty to discuss grant possibilities, helped create interdisciplinary teams for the grants and assisted with the reading/editing of draft proposals.

These efforts resulted in a successful linkage of faculty research interests in the sciences and engineering with collaborators in arts and humanities. Some of the highlights of this activity include Jane’s coordination of grant-writing teams to support several interdisciplinary grants including NSF ADVANCE, NSF CO-I grant, NEH Challenge Grant, NEH Bridging Cultures Grant, and NEH Digital Humanities Grant. The NSF CO-I grant, and all others had favorable review and are in the re-write process.

A key component of this effort is increasing the visibility of UNM Arts and Humanities faculty research at the National Endowment for the Humanities (NEH) and National Endowment for the Arts (NEA). Visits to these agencies have been spectacularly successful, resulting in a dramatically improved understanding of the funding processes at NEA and NEH, new opportunities for Arts & Humanities faculty, and increased submissions to, and funding from NEA and NEH. Jane has had brown bag lunches for faculty and worked with Deans and ADRs to promote opportunities and explain NEA and NEH processes. This effort has been particularly successful with NEH. During FY08-FY09, 10 proposals were submitted to NEH resulting in an award total of \$24K. In contrast, during FY10-FY12, 30 NEH proposals were submitted resulting in new awards totaling \$880K. Congratulations and thanks to the Deans, ADRs, Chairs and Faculty who are enthusiastically participating in this initiative!

There have been several events coordinated by the program that involved outside participants and had broad representation from faculty.

Event	Purpose	Date
Visit of Jim Leach, NEH Chairman	Sponsored a lunch with Chairman Leach and a diverse group of Arts & Humanities faculty and tour of the University Art Museum and Tamarind Institute	November 5, 2010
Barry Lopez Lecture	In conjunction with Sr. Assoc. Dean Gilbert (CFA) coordinated the Lopez visit to campus to talk about interdisciplinary arts and humanities research; arranged small group meetings and large public lecture	February 10-11, 2011
NEH Grant Writing Workshop	Arranged for NEH representative to come to campus to hold a Grant Writing Workshop attended by ~ 50 faculty from diverse UNM departments, UNM Branch Campuses, and other external institutions	April 31, 2011

Protecting Intellectual Property

The Supreme Court Decision, *Stanford v Roche* (<http://www.supremecourt.gov/opinions/10pdf/09-1159.pdf>), and the new Federal “America Invents Act” (www.judiciary.house.gov/issues/issues_patentreformact2011.html) weaken university and faculty ownership of intellectual property (IP). We have worked closely with STC, UNM and the Office of the University Counsel to make sure IP is protected in this rapidly changing environment. There will be new language in the annual faculty contracts and a certification step in Cayuse proposal submission in addition to the invention disclosure process. These steps will strengthen university ownership of IP while adding no new administrative effort for faculty and staff.

We brought a national expert to campus in April to begin educating the Campus about these changes. Concerned? Talk with STC.UNM President Lisa Kuuttilla and her staff (<https://stc.unm.edu/>).

Watch for: Guidelines or a template for consulting agreements. Stanford University and the faculty inventor lost valuable IP due to language in a consulting agreement. We will make additional process improvements as we

approach key effective dates of the “American Invents Act” which moves us from “first to invent” to “first to file”. For more information on effective dates please refer to www.uspto.gov/aia_implementation/aia-effective-dates.pdf.

Facilitating Industry-sponsored Research

In parallel with the effort to ensure protection of IP, we have worked with STC.UNM and OUC to facilitate industry-sponsored research. We now have templates for industry-sponsored research agreements and non-disclosure agreements (NDAs) that can be processed within 5 days with no modifications. PI’s will need to develop the budget and scope of work in collaboration with their industrial partners, but other aspects of negotiations should be simplified if these templates are used as a starting point. The template are available at <http://research.unm.edu/business/>. This summer we are working with STC. UNM and OUC to make certain that all websites link to the same templates, and that old versions are removed as modifications occur to improve the process.

Watch for: An increasing number of faculty are interested in submitting SBIR/STTR grants. The OVPR, STC.UNM and OUC have collaborated to develop a workshop that will provide an overview of the process, including which office to contact about the issues that inevitably arise during SBIR/STTR proposal development. In-person and on-line assistance will be provided.

STEM Outreach Coordination

Our most recent initiative is to assist in coordinating STEM Outreach efforts across campus. Participants include the College of Education, HSC, the Center for Educational Policy Research, Arts & Sciences, Student Affairs and well, anyone who wants to join in!

Our goals include:

- Provide resources and opportunities to assist faculty in strengthening outreach components of proposals
- Increase education and training grants
- Coordinate our disparate efforts to more effectively assist with K-12 education in our local community and the state
- Create alliances with external partners engaged in substantive K-12 outreach (including SNL, LANL and AFRL)

If you are a PI working on a grant requiring outreach and need assistance with contacts in the K-12 community or want to know who is doing what on campus, contact Johann van Reenen, Karen Kinsman or Connie Beimer to get started.

External Partnerships

Our initial directive in May 2008 was to improve internal research services, bring the budget under control and decrease the OVPR debt. During the past two years, the OVPR has successfully increased emphasis on collaborative activities and partnerships with several local, national, and international institutions. In particular, UNM is increasingly recognized as a leader with expertise and proven success in partnerships with National Research Laboratories. We have important partners in the “neighborhood” and these partnerships are critical as federal deficit reduction plans mean that federal agencies face budget cuts and research-funding opportunities could decrease. In order to maximize the effect of these partnership efforts the OVPR has established a strategic vision for UNM research collaborations that encompasses the following points:

Leadership and Management	Develop relationships with colleagues at National Research Labs (and other external partners) that enable easy discussion of problems and issues and position UNM to quickly respond to opportunities.
Meaningful Partnerships	Shared management and leadership on an institutional level with goals relevant to both organizations.
Organizational depth and commitment to partnership values	Avoid single-point-of-contact failures.
Faculty Involvement and Oversight	Engage faculty in research collaborations and workshop development as quickly as possible.
Research Focus	Determined by areas of shared or complimentary expertise and interests.

We have devoted a great deal of time to these external negotiations and discussions, as they require establishing institutional relationships in order to facilitate new opportunities for faculty, staff and students. Andrew Ross, Director of Special Science, Engineering and Policy Initiatives, is critical in many of these efforts. Connie Beimer has played a key role, particularly in the complex intersection between UNM, the federal delegation and the National Research Labs.

Broad participation and new ideas leading to funded research collaborations are critical outcomes. We also expect that additional funding opportunities for undergraduate and graduate students – whether through internships, jobs or assistantships – will assist with recruitment, retention, and graduation in STEM fields.

More detailed accounts of National Lab efforts are being prepared in collaboration with SNL and LANL in order to assist UNM leadership in developing the next phase of UNM-National Research Lab interactions. The following gives an overview of the range of efforts. During the transition, consult with Johann about the New Mexico Consortium, with Johann van Reenen, Andrew Ross or ADRs about Sandia and LANL, and with Andrew Ross about AFRL for additional information or with questions about other activities.

Air Force Research Laboratory (AFRL)

After a series of meetings between AFRL senior leadership, led by Colonel William Cooley, and UNM leadership, led by the OVPR, an Educational Partnership Agreement (EPA) was signed between AFRL and UNM on April 22, 2011. The objective of this agreement is to facilitate collaborative research opportunities between AFRL and UNM, improve career opportunities for UNM students, advance technological development in the state of New Mexico and expand STEM education outreach initiatives throughout the New Mexico educational system. Specifically, the agreement encourages UNM faculty and students to establish a dialogue with AFRL scientists and engineers for the exchange of data, guidance, and development of collaborations in the research areas of the Directed Energy and Space Vehicles Research Directorates located at KAFB. For further please refer to the following link: <http://research.unm.edu/partnerships/AFRLAgreement.pdf>.

The UNM-AFRL Strategic Partnership Committee is chaired by Andrew Ross and composed of science and engineering faculty and AFRL technical staff. The committee has been particularly active this spring, with a number

of workshops and seminars with participation by AFRL Technical Staff from the Directed Energy and Space Vehicles Directorates and UNM faculty. UNM faculty, particularly ME Chair Chris Hall and ECE Professor Christos Christodoulou, have been active leaders in the partnership effort, most recently organizing a Space Systems symposium attended by over 70 people in April.

There are currently BAAs that can be used to apply for funding from the research directorates:

Information about the AFRL Directed Energy Small Grants BAA is available at:

<http://www.grants.gov/search/search.do?mode=VIEW&oppld=161214>

Information about the AFRL Space Vehicles Small Grants BAA is available at:

<http://www.grants.gov/search/search.do?mode=VIEW&oppld=56950>

Watch for: Additional opportunities for developing research collaborations, ways to engage AFRL staff in departmental seminars, teaching and student mentorship and BAAs of special interest to UNM faculty. For further information please contact Andy Ross.

Sandia National Laboratories (SNL)

A formal Memorandum of Understanding (MOU) between UNM and SNL was signed on September 23, 2011. This MOU differs from past agreements in that it has a number of goals for the two institutions to jointly meet. The MOU is available at <http://research.unm.edu/partnerships/UNM-SandiaMOU911.pdf>. Over the course of FY11 and FY12, the OVPR and SNL leadership have actively engaged in further developing the UNM-SNL partnership. In particular, there has been significant progress made in research collaborations in the areas emphasized in the MOU, including Quantum Information, Nanoparticles in Humans and Energy materials and technologies. Recent examples of UNM-SNL efforts include:

Quantum Information	Funding of 5 graduate students in the Center for Quantum Information and Control with no fiscal year mismatch in the support; Collaboration on a Physics faculty hire in Quantum Information (Although the hire was not successful, everyone learned something from the coordinated effort!)
Advanced Materials Lab (AML)	On-going meetings with UNM and Sandia researchers to discuss how to fully utilize and manage the South Campus Advanced Materials Lab (AML). The goal is to return to the original vision of shared research space that is truly jointly managed and can serve as a hub for an ever-expanding network of collaborative research ventures. The initial focus is on energy materials and technologies, and there should be some announcements about this effort in the coming months.
Nanoparticles in Humans	A workshop organized by Jeff Brinker (Professor, ChNE and Distinguished Member of Technical Staff at Sandia) and Cheryl Willman (Director & CEO, UNM Cancer Center) in Summer 2011 engaged over 150 participants from UNM (Main and HSC), Sandia and LANL. Proposal submissions and new research collaborations resulted from this meeting. Andrew Shreve (Director, Center for Biomedical Engineering) and Jeff Brinker are currently developing plans for the next phase, which will include UNM (Main and HSC), Sandia and LANL.
Cybersecurity	In keeping with MOU goals of introducing at least one new collaborative effort each year, a cybersecurity workshop will take place in June. This meeting will include a discussion of opportunities created by the establishment of Sandia's Computer Science Research Institute in the Sandia Science and Technology Park.
Joint Hires	We have on-going discussions in preparation for a national search for a joint position in the Fall. Currently there are two senior faculty with positions that are jointly funded by UNM and Sandia. The goal is to increase this number to six over the next few years, if institutional budgets allow this. We plan to identify research areas in which UNM and Sandia are, or could be, collaborating but for which there are identified gaps in expertise hampering development of nationally and internationally recognized programs. We will then have a national search at a senior level to attract researchers who can strengthen research collaborations in areas important to UNM and SNL.

Watch for: Search for a senior-level hire in the fall, AML announcements and opportunities, new areas of collaboration

For further information on opportunities talk to Johann van Reenen, Andrew Ross or ADRs. For further information on the UNM-SNL collaboration please refer to the following link:
<http://news.unm.edu/2011/09/unm-and-sandia-broaden-collaboration-in-science-technology-and-education/> .

Los Alamos National Laboratories and the New Mexico Consortium

On-going discussions with LANL leadership overlap with, but are distinct from, UNM’s role in the New Mexico Consortium (NMC, discussed below). We have actively worked with LANL to both expand UNM-LANL collaborations and to create a sustainable structure for the NMC.

Recent discussions with LANL leadership have focused on establishing a more effective relationship on an institutional level, new ways to define and facilitate joint hires, and identifying shared research interests. Some of the specific efforts include:

Assisting junior faculty in developing research collaborations	We recently completed a year-long process in which the OVPR collected research interests from junior faculty interested in collaborating with LANL; LANL colleagues evaluated the research interests, met with junior faculty and identified potential collaborators. Faculty were then given time to develop research proposals with LANL collaborators. As a result of this competitive process, 8 junior faculty received funding for 1-2 years of support for a graduate student in order to pursue research that can lead to externally supported collaborations.
Biosciences	Collaborations with LANL in biosciences (broadly defined) were facilitated by the arrival (from LANL) of Andrew Shreve, the new director of the UNM’s Center for Biomedical Engineering (CBME). In parallel with (but unrelated to) this move to UNM, Richard Sayre moved to LANL and NMC from the Danforth Plant Science Center. This combination offers new research opportunities for faculty with research interests in bio-fuels, biomedical engineering, and the impact of climate change on global food security and plant distributions.

Discussions with LANL are on-going, and we continue to strengthen existing areas of partnership, including energy technologies and nuclear engineering. For additional information, contact Johann van Reenen, Andrew Ross or ADRs.

Watch for: Biosciences workshops and research opportunities, exascale computing initiatives, development of flexible positions to facilitate UNM-LANL research programs, opportunities for faculty and students through externally funded LANL-NMC programs.

New Mexico Consortium

The New Mexico Consortium (NMC, <http://newmexicoconsortium.org/>) is a non-profit corporation formed by the three New Mexico Research Universities under a teaming agreement with The University of California (UC) to partner with Los Alamos National Laboratory (LANL) to advance scientific research and education in New Mexico. By Charter, the UNM Main Campus VPR is the Chair of the NMC, and establishing a structure that broadly facilitates and supports funded research collaborations with UNM, NMSU and NMT has been a priority. NMC activities specifically engaging UNM faculty and students have recently included:

- In FY 11, NMC programs involved over 130 UNM faculty, primarily through 14 conferences and workshops.
- NMC assisted UNM-LA with 3 successful proposals, including a \$337K NSF award to integrate cybersecurity into an existing IT program and an \$875K NSF award for an applied technologies program
- CARC and CS faculty are benefiting from the NSF PRObE (Programmable Reconfigurable Observational Environment) grant and the LANL USRC (Ultra-scale Systems Research Center) program.

- Funding for grad students in CS and Math, summer research funding for faculty and matching funds for proposals.

Other Partnership Initiatives

We actively look for opportunities to showcase UNM research expertise to federal agencies. Visits to NEA and NEH were mentioned in the Arts & Humanities Initiative section. We have had visits with a range of agencies during the past few years, including the Department of Energy, the Department of Agriculture and the Department of Education. During FY12 we had a number of discussions with the Department of Homeland Security, including in a visit to DHS to discuss possible collaborations in cybersecurity, energy technologies, training the future STEM workforce, and other areas. We also visited the Defense Threat Reduction Agency to discuss future funding opportunities as our DTRA-funded University Strategic Partnership with Penn State comes to an end. These efforts are on-going, and are currently managed by Connie Beimer and Andrew Ross.

The UNM Foundation (UNMF) and the OVPR have a number of complementary goals. We have worked with UNMF to develop relationships with Corporations and Foundations that fund faculty or research programs. The goal is generally not to bring funding to the OVPR but rather to faculty or specific programs. The OVPR role ranges from providing information on UNM and identifying faculty or programs to actively arranging and leading campus visits. The economic downturn and leadership changes that can result from a difficult economy have complicated these efforts. Through UNMF, we do have on-going discussions however, including HP Labs, Aerospace Corporation, IBM and Fraunhofer. These visitors to campus are inevitably impressed by the expertise and enthusiasm of faculty and students.

UNM has a critical role to play in economic development in Albuquerque and the State. The economic impact of UNM and of STC.UNM-based startup companies has been analyzed by BBER, and the reports are available at <http://research.unm.edu/publications/index.cfm>. We have assisted Albuquerque Economic Development and other members of the economic development community with recruiting hi-tech companies to the region. One specific success is the location of a Fraunhofer research center and the CFV Solar Testing Laboratory at Mesa Del Sol.

CFV Solar Testing Laboratory, a PV (Photovoltaic) certification test company opened a new solar module testing laboratory in the Mesa Del Sol development site during 2011 (<http://www.fraunhofer.org/2011/09/01/New-CFV-Solar-Testing-Laboratory-Opens-In-Albuquerque/News/1>). The OVPR, and UNM faculty engaged in energy research, assisted local economic development groups in discussions and tours that secured Albuquerque as the site for the lab's location. A key factor in Fraunhofer's choice of Albuquerque was the close proximity of a national laboratory and a major research university (Sandia National Laboratories and UNM). UNM faculty and students now have funded research collaborations with Fraunhofer.

The combination of these efforts – identifying new opportunities with federal agencies, expanding collaborations with the National Research Labs, working with UNMF to increase research funding from corporations and foundations, and partnering with the economic development community - can be key components to advancing UNM's research and education mission.

SUPPORT OF GOVERNMENT RELATIONS

NM Higher Education Funding Formula

FY12 saw the implementation of a new funding formula for the higher education institutions in the state. The State Higher Education Funding Formula Task Force was led by Curt Porter (Associate VP for Academic Administration, Provost's Office) and had wide participation from UNM. The new formula focuses on "outputs" rather than "inputs" and places an increasing emphasis on course completion, student graduation, and the awarding of degrees in STEM (science, technology, engineering and math) and allied health fields.

Of particular relevance to the research community is both the emphasis on STEM degrees and the distinction between MS and PhD degrees, which did not exist in the previous formula. One as yet unmet goal of the new formula is to include "mission-specific" metrics, which separate the two-year institutions, the comprehensive schools, and the research universities. At the request of President Schmidly, we worked with Marc Saavedra (Office of Government Relations) and Curt Porter to form a UNM committee to discuss the funding formula, possible mission-specific goals and to keep key constituencies aware of the ever-changing status. We also participated in a number of meetings with leadership from NMSU and NMT to discuss mission-specific metrics. Although there is currently no agreement, metrics which are being discussed include federal research expenditures, students employed to do research, total research expenditures and graduate degrees awarded. One option may be to agree upon 3-5 metrics and allow each institution to be evaluated by a subset. From the UNM perspective, it is important to have metrics that can be consistently defined and calculated by the three research universities.

State Legislative Relations

UNM's interactions with the State Legislature are led by the Office of Government Relations. We have worked closely with Marc Saavedra and Tanya Giddings and have participated in a number of committee hearings, particularly with the interim Science Technology and Telecommunications Committee (STTC) and the Legislative Finance Committee (LFC). We have consistently included UNM faculty and staff in these appearances, which have allowed us to highlight the wide-ranging impact that UNM has on the state of New Mexico.

Federal Delegation Relations

New Mexico is fortunate to have a federal delegation that is accessible and passionate about advancing educational and research opportunities in the state. The OVPR has played an increasing role in federal relations since research is one key area in which we interact. During the last four years we have coordinated our efforts with the President's Office and the Office of Government Relations. The federal delegation has provided outstanding assistance in a number of critical areas, including enhancing our collaborations with national research labs, understanding changes in federal funding as it impacts research opportunities, assistance with UNM's eligibility for Title V funding, and working to maintain Pell Grant funding.

One of our most successful events has been the Congressional Staff Academy. During the August Congressional recess, we host both Washington-based and local delegation staff on campus. The Fourth Annual Congressional Staff Academy will be held this August. In collaboration with HSC, we combine briefings, tours and demonstrations to inform Delegation Staff about UNM activities, answer questions and discuss policy issues. The Main Campus schedule has included everything from reports on enrollment to demonstration of portable fuel cells to tours of the Pit and Lobo Village. We vary the content each year, and have had tremendous participation and support from colleagues all over campus. Delegation staff enjoy this event and we have had participation from all five Congressional offices each year.

Increasing Faculty and Research Recognition

Last but certainly not least - highlighting and promoting research accomplishments, and just plain thanking people for their hard work is a high priority for us. We continually look for new ways to highlight significant research successes, and each year increases our collaborations with University Communications and Marketing. There have been a number of positive research stories in the local press during the past year. On the OVPR home page, we focus on faculty research achievements through several different approaches including stories on awards, and significant research accomplishments and a side bar that lists and congratulations PI's who have recently received funding. We encourage everyone to let us know about successes and significant accomplishments - your own or a colleague's! We'll do everything we can to generate internal and external publicity.

We also help prepare materials on UNM for the UNM Foundation, for distribution to the federal delegation and the state legislature as well as to assist Albuquerque Economic Development in attracting companies to the area.

During this past year, our efforts included working with KNME to increase the visibility of UNM research. The "Why did you become a scientist?" and UNM Research branding efforts have brought positive comments from campus and community members.

It is hard work to get funding, and we appreciate all of the PI's on campus. Two years ago we started a "just thanks, no speeches" PI recognition reception that is held in the early fall. These receptions not only allow us all a chance to celebrate another year of advances in our research mission, but have resulted in new collaborations due to the range of attendees!

Watch for: The OVPR works with the Faculty Senate Research Policy Committee to pick one faculty member as the Annual Research Lecturer. This year's awardee is Stephanie Forrest. She'll be giving her talk early in the fall.

And this is a good spot to end – with one more "Thanks" to all of you! We are grateful to everyone across the Campus for their support and help in advancing UNM's research mission during turbulent times. Main Campus is well-positioned to continue to advance through creative partnerships, responsive research infrastructure and the efforts of our talented faculty, students and staff.