

# RESEARCH STRATEGIC PLAN FINAL WORKING GROUP REPORT ON FEDERAL AND STATE GOVERNMENTAL RELATIONS

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**Federal And State Governmental Relations Working Group Members:**

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## Goals

The goal of the Working Group on Federal and State Governmental Relations (FSGR) is to examine UNM's current practices as they relate to 1) the development and execution of the institutional legislative priorities and initiatives; 2) activities and alliances with federal laboratories (including national laboratories and other federally funded labs); and 3) building and maintaining linkages with funding agencies at the regional, state and federal levels. From the results of this background work, the working group is to develop recommendations for ways in which UNM can 1) improve its performance in the areas of developing and achieving its legislative priorities, 2) more effectively build and maintain productive relationships with federal laboratories, and 3) enhance the competitiveness of UNM's researchers through expanding and improving relations with sponsoring agencies.

## Methods

To accomplish the goals discussed above, the working group sought to collect data/information from a variety of sources detailed below.

*Interviews:* A key method to collect relevant data was to interview individuals from within and outside of UNM who were identified to provide insights relating to UNMs practices, effectiveness, and potential strategies related to the three broad topic areas defined in the working group's charge (legislative priorities, federal laboratories, sponsoring agencies).

The identified individuals were assigned to groups that would allow for efficient outreach and information capture. The identified groups consisted of:

- Individuals involved in the **process** of developing and communicating UNM's legislative priorities.
- Individuals affiliated with UNM programs or projects that are funded by governmental sponsors through **contracts**.
- Individuals affiliated with UNM programs or projects that are funded through grants or other types of **sponsor** agreements.
- Individuals that are involved with the development or maintenance of linkages with **federal laboratories**.
- **Other individuals** that can provide insights from the perspective of the government agencies and legislators relating to the process of developing and communicating institutional legislative priorities and proposals.

Interview protocol templates were developed and used for consistency of questions and information being solicited (See Appendices A, B and C)

Review of written materials: relevant sources of materials and data were identified, reviewed, and included:

- Written materials from UNM and peer institutions relating to institutional legislative priorities and their development
- Sources of data relevant to trends in linkages and relations with federal laboratories and sponsor agencies

Following the conduct and summarization of notes from the interviews, review of available written materials and data, the FSGR synthesized the material into a set of findings and action plan.

## Findings

(Organized by broad topic areas)

### Legislative Priorities Development and Implementation

- A review of the postings from 2012-2016 to the GOVREL (Government Relations) mailing list indicated that there were no open forums announced through that list in which the development of the legislative priorities were discussed. While the interview with the Office of Government and Community Relations (OGCR) staff provided an overview of the legislative priority development process that is based upon the Provost developing a set of proposed legislative priorities through input from the Deans (with the Deans presumably seeking input from the programs within their respective Colleges/Schools), the list of proposed priorities is provided to the President/EVPs/Chancellor, who narrow down the list, which in turn is proposed to the Board of Regents for their final approval. While this process has implicit input at the College level, interviews with contract and grant sponsored researchers suggested that the actual process for identifying candidate priorities at the College level is not clear, and seems to be more based on individual actions as opposed to seeking broad input. This is inconsistent with the description in *Administrative Policy 2050*, Section 3 of the process for developing legislative priorities which is described as: "an inclusive and transparent process which provides students, faculty, and staff an opportunity to participate in the development of the University's priorities. This year-round process includes **open forums**, committee meetings, and legislative hearings during the months leading up to the legislative session." (emphasis added)
- While state-level legislative priorities have historically focused on a limited number of Research and Public Services Projects (RPSPs) in combination with other university-related issues (e.g. funding formulas, I&G, lottery scholarships), Federal legislative priorities have had a specific focus on research priorities developed in consultation with the OVPR.
- The OGCR coordinates with the OVPR and Deans to develop opportunities for researchers and UNM leadership to meet with agency officials and program managers to help build support for UNM programs that would benefit from improved linkages with those agencies and programs.
- The different funding models at the state and federal levels necessitate different strategies as, with the exception of contracts with individual state agencies, New Mexico does not have an established pool of funds in support of competitively bid research projects. This is in contrast to the multiple federal funding agencies that, while their levels of funding vary from year to year, have established budgets and processes for reviewing and awarding competing proposals for research funding. These different models have an impact on where the OGCR focuses its efforts -

primarily at the legislative level in the state, and with a greater emphasis in sponsor agency interactions at the federal level. In both cases, demonstrating the impact and importance of UNM's research was identified as a key area of work for their office.

- Funding of and the development of a more transparent policy and process for required cost share was highlighted in the researcher interviews. Related to that stated need, it was determined that there is a need to establish a pool of money for cost share. In support of this objective, we suggest that the OVPR, in conjunction with the OGCR, develop a plan to submit a request for legislative appropriation for cost share.

### **Improve and Grow the Relationships with the National Laboratories**

New Mexico benefits from a rich environment of federal and national laboratories including the Air Force Research Laboratory (AFRL), Los Alamos National Laboratory (LANL), and Sandia National Laboratories (SNL). The proximity of the labs to UNM, the flagship research university in New Mexico, thus provides unique opportunities for partnerships that mutually benefit the research missions of the respective institutions.

#### *Existing agreements and partnerships between the labs and UNM.*

The University of New Mexico enjoys very good relationships with the federal laboratories in the area. For example, UNM has a Strategic Educational Partnership Agreement in place with the Air Force Research Laboratory since 2011 and the Air Force Office of Scientific Research (AFOSR) has funded basic UNM research at approximately \$12M over a three-year period (2012–2014).

Moreover, Los Alamos National Laboratory has had a long history of partnership with UNM with formal agreements under a current MOU, and discussions are ongoing with the Provost's office for a new more specific Institutional Agreement. UNM is LANL's largest research contract customer and staffs LANL's scientific and administrative functions more than any other university.

Sandia National Laboratories has recognized UNM as one of its five Academic Alliance schools (together with Purdue, Georgia Tech, University of Illinois Urbana-Champaign, and the University of Texas Austin). The current MOU and other formal agreements renew the SNL/UNM partnership. UNM and SNL jointly occupy the Advanced Materials Laboratory (AML), which serves as a gateway facility for SNL on UNM's South Campus. There are currently three UNM professors with true joint appointments as SNL scientific staff. UNM is the largest university recipient of SNL Laboratory Directed Research and Development (LDRD) funds through contracts on collaborative research.

#### *Areas of current joint research and opportunities for growth.*

A key area of collaborative research with the Air Force Research Laboratory is Directed Energy (lasers, optics, high-power electromagnetics), as represented, for example, by the Applied Electromagnetic Group that receives a \$1M/year grant to study high power electromagnetics. There are opportunities to expand this collaboration, particularly in

the areas of ultra-short lasers and optics with CHTM and the Optical Science and Engineering program. Another key area of joint activities is Space Systems, including building and launching space vehicles and the associated science. An additional area for growth includes Big Data Analytics, leveraging the Maui High Performance Computing Center.

There are a number of areas of research collaboration between LANL and UNM. Energy technologies and science provides the basis for much collaboration, particularly through materials science. An example is the historic Los Alamos Meson Physics Facility (LAMPF), now called the Los Alamos Neutron Science Center (LANSCE). Health science is an active area of collaboration, including cancer research and genomics. There is also a strong tradition of collaboration in geosciences. Other areas include nuclear engineering, radiochemistry, and nuclear/particle physics, particularly studies of neutrinos and the mysteries of “dark energy.” High performance computing has been a cross-cutting area of collaborative research. Additional collaborative projects are being facilitated by the New Mexico Consortium, including a new proposal for a Bioenergy Research Center and an Ultra-scale Systems Center.

Sandia National Laboratories has a long history of joint research with UNM in the areas of energy/materials, microfabrication, and nanoscience, particularly via CHTM, the AML, and related centers. This continues to be an area of strength, particularly in the area of photonics and the development of next-generation nanoscale devices. The current MOU calls for increased joint research in other areas including high-performance-computing/cyber-security/quantum-information-science, high energy density science, water, bioscience, and nuclear engineering. Some of these areas already involve joint activities, e.g., quantum information science via the Center for Quantum Information and Control (CQuIC) in which SNL staff have adjunct and research professor letters of academic appointment. New joint hires, mentioned above, are expected to create strong bonds in these areas.

Additionally, graduate education and research go hand-in-hand, particularly in apprentice-style training that is an integral part of MS theses and Ph.D. dissertations. Participation of students in the research endeavor is a key component of building a research partnership between UNM and federal laboratories. There are currently many opportunities for students at the labs, particularly through summer internship programs. Dissertation research is typically funded directly by a given project through a contract to UNM.

Finally, there are a number of outstanding issues that are barriers to student participation in laboratory-based dissertation research including the mismatch in the funding cycle for DOE/LDRD projects vs. the duration of a PhD project, salary levels, and ITAR/export control.

*Role of joint hires, adjunct and other mechanisms for shared personnel.*

There are currently three UNM faculty members who have true joint positions with SNL (shared salary, benefits, etc.). Joint hires should be senior people, able to navigate

these issues and bring strategic partnership between UNM and the National Laboratories. A key component of a truly effective joint hire program will be for UNM to clearly articulate a crafted and well-communicated process for effectively and efficiently supporting joint hires with the national laboratories. The Office of the Vice President for Research will work with the Provost Office and Faculty Contracts Office Staff to develop a joint hire policy. The policy should be communicated to deans, department chairs and center directors.

Another mechanism for shared personnel is the letter of academic title: adjunct professor, research professor, and National Laboratory Professor (NLP). The relative rights and privileges of these titles need further clarification and should be uniform across interactions with each partner national laboratory. The NLP is meant to be a special high-value title associated with particular rights and responsibilities, would be limited to a few senior staff members, and approved at each federal laboratory. The role of an NLP is to establish, strengthen, and grow strategic research collaborations between the labs and UNM. An NLP should have passion for the mission of the university, particularly working with students.

### **Linkages with Funding Agencies**

*Impact of UNM relationships with funding agencies.*

The impact of UNM's relationships with funding agencies seems to be primarily focused at the level that individual researchers are able to make with sponsors through increased familiarity and interactions with those sponsors, both in terms of linkages with program managers within federal sponsor agencies, and programs within state agencies with whom UNM's research centers interact. Overall, currently institutional relationships do not seem to play as strong a role in the competitiveness of research proposals in comparison with the experience and familiarity that UNM researchers have with and by the sponsoring agencies.

When considering the specific researcher-sponsor linkages that provide the greatest benefit, several productive activities emerged: participation in review panels (proposal, site visit, reverse site visit, etc.), service on external advisory committees, serving as "rotators" within NSF and other agencies, and meeting and getting to know program managers within the sponsor agencies (at either the state or federal level). One potential barrier to UNM researchers being able to take advantage of opportunities for gaining deep sponsor agency connections is the potential<sup>1</sup> for sponsor agencies to enforce a requirement for institutional cost share for Interagency Personal Agreement (IPA) positions. In anticipation of this becoming a potential issue, we recommend that UNM identify a funding pool to cover the expected institutional contribution (10% in the case of NSF<sup>2</sup>) for IPA positions.

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<sup>1</sup> discussions with OVPR personnel indicate that the NSF "requirement" for institutional cost share for IPR salary has not been a barrier to recent NSF rotators from UNM.

<sup>2</sup> <https://www.nsf.gov/careers/rotator/ipa.jsp>

An additional dimension emerged when considering relationships with state government agencies - that of UNM being more effective at promoting and streamlining the delivery of UNM services and capabilities to the state. In many respects this relates to UNM demonstrating the benefits that some UNM research (and applied research) programs can provide to the state in contributing to economic, human capital, and quality of life development, and lowering the administrative barriers to establishing productive partnerships with state agencies. In particular, the contractual nature of many agreements with state agencies was noted in the interviews with research center personnel as a significant barrier to efficient execution of funding agreements, often creating significant delays in being able to initiate and successfully complete fixed-period awards. This challenge within UNM's award process is compounded by the complexities of negotiating state contracts with agencies. The development of master agreements with state agencies within which specific awards can be executed was identified as a potential solution to this significant problem. Additionally, providing an increased award amount for which PIs would have signature authority was seen as an additional strategy to lower the administrative barriers to timely initiation of projects with state agencies.

While lowering administrative barriers to efficient development and delivery of valuable research products to state agencies is critical, it was also noted in the interviews with the Center Directors that institutional barriers exist that reduce the potential impact of the applied research that is conducted in support of (primarily) state agencies. In particular, the absence of funding beyond that provided by the sponsoring agencies to support transitioning applied research products (which are the common focus of state agency contracts) into more traditional scholarly outputs (the more valuable products within the context of the university) was seen as a barrier to achieving broader impacts for applied research projects. Additionally, the current emphasis within the promotion and tenure process on traditional peer-reviewed publications as opposed to (potentially) high-impact community-engaged scholarship and applied research serves as an impediment to some UNM faculty contributing to projects that would produce both high-impact results for the state, but also increase the visibility and value of UNM's contributions to the state.

#### *Strategies for increasing UNM competitiveness*

At the federal level, the importance of researchers developing effective relationships with sponsor program managers and familiarity with programs was highlighted as a critical path to increased competitiveness. Institutional support and capacity building can contribute to the development of these capabilities through:

- Developing a robust mentoring and professional development program for incoming faculty (and post-doctoral researchers) that provides them with access to successful researchers and research strategies.
- Instituting funding and logistical support for facilitating faculty meetings with sponsoring agency program managers.

#### *Role of UNM Legislative Priorities in impacting UNM's competitiveness*

From the perspective of the sponsored research interviewees, the impact of federal legislative prioritization is variable - appearing to vary by disciplinary area. Specifically, the inclusion of support for DOE programs that are aligned with UNM research foci has proven beneficial in supporting those programs - ultimately contributing to the continued alignment between DOE programs and an area of UNM research strength. The development of a more visible process for identifying additional areas of focus for federal legislative prioritization could broaden this impact beyond the DOE programs that have received the greatest attention.

*Strategies for strengthening linkages with state and federal policy makers and the federal laboratories*

Linkages with policy makers were identified as being strengthened through reinforcement of alignment between policy and national lab priorities and research focus areas at UNM. The importance of UNM as a pipeline for developing the workforce in support of national lab activities was also highlighted in interviews with both sponsored project researchers and national lab interviews. Alignment of UNM's research strengths and policy and national lab priorities and workforce needs may be accomplished through continuing assessment of both. This is an activity that could be supported through work with UNM's government relations team to track evolving areas of policy focus such as those identified by the President's Council of Advisors on Science and Technology.

**Action Plan**

The above findings suggest that UNM embark on the following five strategic objectives and their associated tactics to achieve the goals identified in the working group charge.

*Objective 1: Improve the process of developing UNM's Federal and Legislative Priorities as it relates to the research focus areas.*

Task 1.A. The OVPR will coordinate with the Office of Government and Community Relations to organize forums to consult annually with ADRs, Center Directors and other stakeholders on recommendations that will be developed into UNM's legislative priorities.

Metrics: Encouraged open feedback and participation in recommendations for legislative priorities.

Timeline: Forums will be implemented in fall FY2018, prior to the annual legislative session. May occur on 2-year cycles.

Task 1.B. The OVPR will work with the Office of Government and Community Relations to seek legislative appropriation for cost share.

Metrics: Submission of legislation for cost share appropriation.

Timeline: Fall FY2019

*Objective 2: Improve and grow the relationships with the National Laboratories*

Task 2.A. The OVPR will work with the Associate Provost for National Laboratory Relations to monitor the National Laboratories for new research and collaborative opportunities.

Metrics: Yearly progress report of potentially new research and collaborative opportunities.

Timeline: Fall FY2019

Task 2.B. The OVPR will work with the Assoc. Provost for National Laboratory Relations to seek new opportunities for joint ventures between UNM and the national laboratory partners.

Metrics: Submission of a proposed new joint venture between SNL and UNM

Timeline: Fall FY2019

Task 2.C. The OVPR Staff will review mechanisms for graduate students to perform Ph.D. dissertation research at the labs using the AML and CQuIC as case studies.

Metrics: Submission of a policy for graduate students to conduct dissertation research at the national laboratories.

Timeline: Fall FY2018

Task 2.D. The OVPR will work with the Assoc. Provost for National Laboratory Relations and the Senior Vice President for Academic Affairs to review and disseminate the eligibility, roles, and responsibilities for laboratory faculty designations. (National Laboratory Professor, Adjunct Professor and Research Professor).

Metrics: Review is complete and dissemination to department chairs has occurred.

Timeline: Fall FY2018

Task 2.E. The OVPR will work with the Provost's Office (Faculty Affairs) to develop the jointly crafted and well-communicated processes for effectively and efficiently supporting joint hires with the national laboratories.

Metrics: The jointly crafted process for joint hires has been disseminated to department chairs and center directors.

Timeline: Fall FY2019

*Objective 3: Strengthen institutional linkages and enhance relationships with funding agencies.*

Task 3.A. The OVPR Staff will develop a strategy for systematically identifying and promoting opportunities for UNM researchers to serve in funding agency rotator positions.

Metrics: Strategy has been developed and disseminated to UNM researchers.

Timeline: Spring FY2019

Task 3.B. The OVPR will identify a funding pool to cover the expected institutional contribution (10% in the case of NSF) expected for IPA positions.

Metrics: An initial fund of \$XX will be created.

## Further Recommendations

In addition to the above specific objectives and tasks in the action plan, some further general recommendations should be considered in the long run for continuing to increase UNM's research success through more effective connections with state and federal sponsors, agencies, and the federal laboratories. These include:

- Aligning objectives in the Research strategic with long-term legislative initiatives that can realistically be expected to play out over multiple legislative sessions, and potentially executive terms.
- Develop infrastructure that enables more efficient communication of positive impact UNM's research has on the state.
- Develop administrative models that recognize the diversity of research activities on campus (small-scale to large-scale, unfunded to large funding, short-term [quick turn-around] to long-term) and are nimble (a term coming out of the interview with the OGCR) in response to changing funding and research collaboration scenarios.

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## **Appendices**

Appendix A: Office of Government & Community Relations Staff Interview Protocol

Appendix B: Interview Summary related to Government & Community Relations

Appendix C: Sponsored Research Interview Protocol

Appendix D: Interview Summary related to Contract Funded Research [centers]

Appendix E: Federal Laboratory Interview Questions

Appendix F: Interview Summary related to National Laboratories

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## **Appendix A: Office of Government & Community Relations Staff Interview Protocol**

Interviewer Name and Title: Meriah E. Heredia-Griego & Anne Jakle

Interviewee Name and Title: Staff in the Office of Government & Community Relations  
[Note to Interviewer: Confirm interviewee's name and title.]

### **Introductory Protocol**

My name is <interviewer name>, and I/we am/are conducting this interview on behalf of the Government Relations Working Group of the UNM OVPR Research Strategic Planning Committee. To facilitate our note-taking we would like to record this conversation. Please sign the informed consent and release form. We respect your privacy; only members of the Government Relations Working Group will have access to this recording and your individual responses. Responses that could identify you will be held confidential. The recording will be destroyed after it has been transcribed and we have had the chance to contact you to clarify a response or to ask further questions. Your responses will be summarized and shared with the larger Strategic Planning Committee as part of the process of integrating the outcomes of all of our interviews into working group reports and the overall research strategic plan. We have planned this interview to last no longer than <e.g., one hour>. Thank you for agreeing to participate.

### **Introduction**

The Office of the Vice President for Research at UNM is developing a research strategic plan to provide the strategic framework under which UNM's main campus research enterprise will be managed for the next five years. For our purposes, research refers to systematic and original investigations to generate, develop, and validate new knowledge or solutions to contemporary problems. Research involves scholarship—the critical and accurate synthesis and dissemination of knowledge and of creative works in the arts, literature, or professions. The governmental relations working group is one of several teams focusing on different aspects of the strategic plan. In particular, our working group is specifically examining the relationships with local, state, and federal funding and other agencies; federal laboratories (including our two national labs); and state and federal legislative processes. As part of this examination we seek to characterize these relationships, the outcomes of these relationships, and identify areas for improvement. Your input is vital to this process.

### **Questions**

1. How long have you been:
2. In your present position?
  - a. At UNM?
3. Briefly describe your role:
  - a. In teaching.
  - b. In research.
4. What is the process to create internal legislative priorities?
5. What role does OGCR play in this process?

6. What is the best way to inject support for research into this process? How can we improve the priority development process to include strategic research activities?
7. What types of research is state government interested in? Federal government?
8. Perceptions are that UNM research is not well-known to the community, legislators, and individuals in state government. What do you think are the best ways to talk about UNM research/sell it/raise awareness and support for it in the state? What strategies do you suggest to highlight UNM research nationally?
9. What do you look for when choosing to pursue direct appropriations for research (e.g., UNM Utton Center or programs like the Water Resources & Research Institute at NMSU)?
10. What are ways that you think the research community at UNM can strengthen ties with state and federal policy makers and the national laboratories?
11. What other comments would you like to make?
12. Do you have any questions for us?

#### Conclusion

Thank you for your valuable time. We appreciate your input. The research strategic plan, when developed, will become the road map for research over the next five years at The University of New Mexico. You can learn more about the planning process at <http://research.unm.edu/research-strategic-plan>.

## **Appendix B: Interview Summary related to Governmental and Community Relations**

Interviewer Name and Title: Meriah E. Heredia-Griego & Anne Jakle

Interview Date: October 27, 2016

Interviewee Name and Title: Office of Government & Community Relations – Connie Beimer, Director; Matt Munoz, Gov Relations Manager

[Note to Interviewer: Confirm interviewee's name and title.]

### Introductory Protocol

My name is <interviewer name>, and I/we am/are conducting this interview on behalf of the Government Relations Working Group of the UNM OVPR Research Strategic Planning Committee. To facilitate our note-taking we would like to record this conversation. Please sign the informed consent and release form. We respect your privacy; only members of the Government Relations Working Group will have access to this recording and your individual responses. Responses that could identify you will be held confidential. The recording will be destroyed after it has been transcribed and we have had the chance to contact you to clarify a response or to ask further questions. Your responses will be summarized and shared with the larger Strategic Planning Committee as part of the process of integrating the outcomes of all of our interviews into working group reports and the overall research strategic plan. We have planned this interview to last no longer than <e.g., one hour>. Thank you for agreeing to participate.

### Introduction

The Office of the Vice President for Research at UNM is developing a research strategic plan to provide the strategic framework under which UNM's main campus research enterprise will be managed for the next five years. For our purposes, research refers to systematic and original investigations to generate, develop, and validate new knowledge or solutions to contemporary problems. Research involves scholarship—the critical and accurate synthesis and dissemination of knowledge and of creative works in the arts, literature, or professions. The governmental relations working group is one of several teams focusing on different aspects of the strategic plan. In particular, our working group is specifically examining the relationships with local, state, and federal funding and other agencies; federal laboratories (including our two national labs); and state and federal legislative processes. As part of this examination we seek to characterize these relationships, the outcomes of these relationships, and identify areas for improvement. Your input is vital to this process.

### Questions

1. How long have you been at UNM?
  - a. 12 Years; in present position ~2 years, including when interim Director of Government Relations
2. Briefly describe your role:
  - a. Director of Government Relations -- oversee the government relations for university main campus, health sciences, and branch campuses. No

teaching or research done directly: role is related to mission of supporting teaching and research from a government relations perspective.

3. What is the process to create internal legislative priorities?
  - a. State priorities: This year (and for the foreseeable future), it's different because there's no money. In general, there is a process to identify new RPSPs (Research and Public Service Projects) – the Provost leads the effort and seeks out proposals and ideas from faculty through their Deans/direct reports. The Provost's office culls the ideas and then works with the Government Relations Office to align ideas with legislative priorities. New RPSPs are identified through this process, and current/ongoing ones can ask for additional funding.
  - b. Timeline: The Provost sends out letter in May/June for RPSPs; HED wants them by August 1<sup>st</sup>
  - c. Continuing RPSPs must be submitted by September 1—this is required by administrative code.
  - d. Chain of RPSP/legislative ask approvals: Provost → President/EVPs/Chancellor → Board of Regents → HED → Legislature
  - e. Beyond special funding asks, the Government Relations Office works on overarching university priorities like funding formulas, I&G, lottery scholarship (big priority) – office helps university administration look at these issues and identify priority packages. Issues that are identified at the Budget Summit are important.
  - f. Federal priorities: Federal priorities are largely research related. Government Relations Office works with the VPR to identify priorities that he and the research community at UNM have. Gov Relations Office can assist setting up relationships with program managers and connect researchers with specific agencies. The Government Relations Office takes the VPR to DC to meet with specific agencies – this helps provide information about what funders are thinking and what future directions they may be taking. VPR goes with President to present federal relations package in DC to Congressional representatives.
4. What role does OGCR play in this process?
  - a. Work closely with VPR and Provost and specific Deans to provide information/input/opportunities and meet with agencies and key people. Helps UNM become more competitive.
5. What is the best way to inject support for research into this process [of creating legislative priorities]? How can we improve the priority development process to include strategic research activities? [Better question: How can the VPR office

best engage in the process to elevate strategic research activities as university priorities?]

- a. At a federal level: this is what we already do – priorities are all research related.
  - b. At the state level: The state budget situation has put a crimp in the plans – worked with VPR since he arrived to identify some research-focus projects at the state level. At the state level there are contracts that come out of state agencies (small contracts) – there is opportunity for UNM to be competitive and get more of those contracts.
  - c. Overall, it would be very helpful to identify an area or areas of research excellence that UNM is good at or would like to be known for and where we want to put our energies for research: “We want to be known as [this].” Then, we can create a federal relations plan (that targets specific agencies, and through that process increases grant opportunities) that ties into a state relations plan (e.g., a state ask includes an integrated agenda for a lab renovation in a specific research area that matches the university-level research priorities).
  - d. It is helpful if the UNM research community is flexible and nimble, so it can respond to the interests of state agencies and legislators. (E.g., recently, UNM was able to get additional funding for medical residencies, which helped meet the need of having more health professionals in the state.) Be nimble, but also have this strategic plan to strike where there is opportunity for priority hot topics.
  - e. The interim committee process is also another place where VPR can promote strategic research activities identified in the plan.
6. What types of research is state government interested in? Federal government?
- a. Federal government: Lately there have been opportunities with the Department of Energy and Clean Energy Technologies; directed energy.
  - b. Provost has said arts and humanities opportunities should be pursued.
  - c. College of Ed visited DC in May (5 researchers) went to program managers and matched interests to a competitive solicitation that was funded.
  - d. State government: Much of the policy-based research is done at DFA and LFC; the better question is not what they are interested in, but where can we fit ourselves in. The state is not like the federal government where there is money set aside for competitive process for a specific topic. Funding is problem-driven. In NM, economic development and rural economic development are always hot topics.

7. Perceptions are that UNM research is not well-known to the community, legislators, and individuals in state government. What do you think are the best ways to talk about UNM research/sell it/raise awareness and support for it in the state? What strategies do you suggest to highlight UNM research nationally?
  - a. It would be helpful to have the VPR or other priority research areas present more at the interim legislative committees; having a focus in some key areas (i.e., the strategic plan) will help with messaging and direction for those who support the OVPR office. Arrange meetings with legislators for some of our projects.
  - b. Communications and marketing is important. Get injected into the news.
  - c. Highlighting UNM research nationally: there are opportunities to do that if there's a priority of the research office. There are organizations that UNM is a part of that support information/knowledge of basic research, but there has to be engagement from UNM to take advantage of the opportunities. (E.g., the Science Coalition has a campaign right now on highlighting energy research). Takes effort to put together information to do this. APLU doing a Twitter campaign on the importance of scientific research (but don't have a structure currently to engage with that). This needs to be a priority and there needs to be someone (or a designated team) to do the work. We need an efficient process to get information about what's going on in research areas. This takes a variety of skills: someone from research, marketing and communications, government relations = purpose of team is to promote research nationally.
  - d. When promoting ourselves nationally, mention that we're an HSI.
8. What do you think are the characteristics of the successful RPSPs (e.g., UNM Utton Center or programs like the Water Resources & Research Institute at NMSU)?
  - a. Good to show that something we're doing has a statewide impact or benefit (and influence); programs that benefit students.
  - b. Finding a problem and finding out how we can be a solution for it. E.g., degree transfer among 27 different higher education institutions. Students were wasting credits and the Provost's office was working on it for UNM and expanded the effort to the entire state. See what's important to legislature and respond.
9. What are ways that you think the research community at UNM can strengthen ties with state and federal policy [decision] makers and the national laboratories?

- a. The most effective way is to have a structured process that is centralized through the VPR office to have a unified voice on what the priorities are. Research Office should be the lead to engage the research community on campus to know what we're doing and where we can go – what are we growing – what are we starting that's new? This process is most effective if individual researchers aren't going out and advocating their individual causes.
10. What other comments would you like to make?
- a. There are great opportunities from a government relations perspective to advance the research mission at UNM, and the research strategic plan will be very helpful for the government relations staff to provide the greatest benefit to the research office.
11. Do you have any questions for us?
- a. No.

#### Conclusion

Thank you for your valuable time. We appreciate your input. The research strategic plan, when developed, will become the road map for research over the next five years at The University of New Mexico. You can learn more about the planning process at <http://research.unm.edu/research-strategic-plan>.

## **Appendix C: Sponsored Research Interview Protocol**

Interviewer Name and Title: Karl Benedict

[Note to Interviewer: Confirm interviewee's name and title.]

### Introductory Protocol

My name is Karl Benedict, and I am conducting this interview on behalf of the Government Relations Working Group of the UNM OVPR Research Strategic Planning Committee. To facilitate our note-taking we would like to record this conversation. We respect your privacy; only members of the Government Relations Working Group will have access to this recording and your individual responses. Responses that could identify you will be held confidential. The recording will be destroyed after it has been transcribed and we have had the chance to contact you to clarify a response or to ask further questions. Your responses will be summarized and shared with the larger Strategic Planning Committee as part of the process of integrating the outcomes of all of our interviews into working group reports and the overall research strategic plan. We have planned this interview to last no longer than one hour. Thank you for agreeing to participate.

### Introduction

The Office of the Vice President for Research at UNM is developing a research strategic plan to provide the strategic framework under which UNM's main campus research enterprise will be managed for the next five years. For our purposes, research refers to systematic and original investigations to generate, develop, and validate new knowledge or solutions to contemporary problems. Research involves scholarship—the critical and accurate synthesis and dissemination of knowledge and of creative works in the arts, literature, or professions. The governmental relations working group is one of several teams focusing on different aspects of the strategic plan. In particular, our working group is specifically examining the relationships with local, state, and federal funding and other agencies; federal laboratories (including our two national labs); and state and federal legislative processes. As part of this examination we seek to characterize these relationships, the outcomes of these relationships, and identify areas for improvement. Your input is vital to this process.

### Questions

1. How long have you been:
  - a. In your present position?
  - b. At UNM?
2. Briefly describe your role:
  - a. In teaching.
  - b. In research.
3. How do you see UNM's relationships with federal, state, and local government agencies impacting (positively or negatively) our institutional success in competing for sponsored research funds?

4. What do you see as the most productive strategies for improving UNM's competitiveness for sponsored research support? Particularly in the area of our institutional or other relationships and connections with government agencies.
5. What role do you see in the development of UNM's legislative priorities (state and federal) in supporting the success of sponsored research at UNM.
6. What are ways that you think the research community at UNM can strengthen ties with state and federal policy makers and the national laboratories?
7. In what research areas do you see the most potential growth in interest and support over the coming 3-5 years?
8. In what research areas do you see potential for decline in interest and support over the coming 3-5 years?
9. What other comments would you like to make?
10. Do you have any questions for us?

#### Conclusion

Thank you for your valuable time. We appreciate your input. The research strategic plan, when developed, will become the road map for research over the next five years at The University of New Mexico. You can learn more about the planning process at <http://research.unm.edu/research-strategic-plan>.

## **Appendix D: Interview Summary related to Contract Funded Research [centers]**

Meeting Date: January 30, 2017

Interviewer Name and Title: Melissa Binder, Karl Benedict

Interviewees present: Staff from the Earth Data Analysis Center (EDAC), the Institute for Social Research (ISR), and the Center for Education Policy Research were interviewed.

Written responses received from staff at the Bureau of Business and Economic Research (BBER)

Respondents have served in their present positions for 3 months to 2-½ years, and have been at UNM from 13 to 27 years.

Summary of discussion

Contracts with government agencies at all levels account for 50% or more of the revenue for all centers. The estimate for EDAC is 80-85%.

Among the government partners are:

- City of Albuquerque
- NM Department of Finance and Administration (DFA)
- Bernalillo County
- Department of Information and Technology
- NM Children Youth & Families Department (CYFD)
- Public School Facility Authority (PSFA)
- NM Public Education Department (PED)
- USGS
- NM Higher Education Department (HED)
- Legislative Education Study Committee (LESC)
- US Department of Transportation
- Council of Governments (COGs)
- NM Department of Public Safety (DPS)
- NM Department of Health (DOH)
- US Department of Labor
- Office of the State Engineer (OSE)
- US Department of Education
- NM Department of Homeland Security and Emergency Management (DHSEM)
- FEMA
- NM Environment Department (NMED)
- Albuquerque Public Schools
- NM State Auditor
- ABC Community Schools
- NM Attorney General
- NASA
- NM Tax and Revenue Department (TRD)

The Centers benefit the state by:

- providing expert research services and access to cutting edge technologies;
- contributing independent scientific analysis to policy debates;
- assembling and responding to requests for data from government agencies;
- testifying before legislative bodies;
- building government capacity to manage and report data;
- training analysts.
- The Centers benefit the University by:
- generating good will in the state;
- demonstrating the University's commitment to the state;
- generating positive publicity, as when "UNM's BBER" publishes an economic impact study or "researchers from UNM's Institute for Social Research" conduct research for the Albuquerque Police Department on body cameras;
- providing research opportunities for students;
- bringing in revenue.

The Center directors all reported serious administrative challenges related to contracting. One characterized the challenges as "an accounting nightmare." Another said that the University had lost hundreds of thousands of dollars due to its slow and sometimes tortuous contracting process. UNM-State contracts are particularly difficult to complete due to the reinvention of the wheel with each new contract.

Proposed remedies include:

1. Negotiate Master MOU's with the state and other agencies that contract with the Centers. According to the Directors, HSC has managed this task with DOH and CYFD. In the recent past, a data sharing agreement signed by the presidents of UNM and CNM and the APS superintendent greatly reduced the administrative burden for education research projects. An MOU between the national laboratories and UNM allows for the quick execution of projects.
2. Assign staff in the contracting offices to work with Center directors and prioritize resolution of longstanding issues on administrative delays.
3. Grant signature authority to Directors for contracts under \$60,000.
4. Return enough F&A to Centers to support the administrative burden of managing many complex contracts.
1. Another shared challenge is lack of recognition for the groundbreaking research and supportive state role taking place in the Centers.
2. Proposed remedies include:
5. Recognition of the value of applied research, including in the promotion and tenure process.
6. Returning enough F&A to support scholarly activity, including the preparation of academic manuscripts and conference presentations.
7. Recognition that the Centers are viewed as a state asset and that fulfilling requests from state agencies and testifying at the legislature serve both to support state functions and to promote the University's value to the state. These activities need to be supported—and financed—by the University.

## Objectives and Tasks

Objective 1: Reduce the administrative burden on applied research centers.

Task #1- Convene a working group composed of Center directors and VPER staff that develops a plan for (a) negotiating Master MOU's with the State and other government entities that contract with the Centers, (b) resolving contracting issues involved with time-sensitive projects, and (c) considers F&A return policies consistent with the increased administrative burden of managing multiple and complex contracts, (d) work towards update the current Regent policy ### for small contract signature authority to align with the state's policy on d) work towards update the current Regent policy ### for small contract signature authority to align with the state's policy on the cap for agency level awards, which is \$60,000  
([http://www.generalservices.state.nm.us/statepurchasing/FAQs\\_1.aspx](http://www.generalservices.state.nm.us/statepurchasing/FAQs_1.aspx)).

Objective 2: Recognize the value of applied research and expert support in serving the state.

Task #1- Create a fund from the VPER's top slice to support scholarly activity by Center researchers and to fund staff time devoted to fulfilling state requests for data and to testifying before the state legislature and other public bodies.

Task #2- Encourage the participation of tenured and tenure-track faculty in Center projects by broadening the definition of research in tenure and promotion guidelines to include applied research projects.

### Addendum: Interview Questions

1. How long have you been:
  - a. In your present position?
  - b. At UNM?
2. Describe your involvement with research contracts for government entities.
3. What is the importance of these contracts to your organization? To the University? To the state?
4. What are the challenges to securing and completing these contracts?
5. What does or could UNM do to help with securing and completing these contracts? What is UNM doing well and what could be improved?
6. Is there potential to increase the volume and/or impact of this work both in the near-term and beyond? What should UNM do to position itself to undertake this work?
7. In our group's interview with the government relations folks at UNM, they said it helps them when they can highlight UNM activities that have a statewide impact or benefit. Is your work known to the UNM Office of Government Relations? How could UNM best capture and communicate the impact of your work more broadly? To whom should this communication be directed?
8. What are ways that you think the research community at UNM can strengthen ties with state policy makers?

9. Are we missing anything?
10. Do you have any questions for us?

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## Appendix E: Federal Laboratory Interview Questions

### Interview Questions: UNM Partnerships with National Laboratories

1. Big picture – existing partnerships and vision for future
  - a. In what ways does your institution already partner with UNM?
  - b. What are effective models/programs/strategies for increasing linkages between UNM and the national laboratories?
    - i. What is the role of the New Mexico Consortium in facilitating partnerships between the UNM and the national laboratories?
  - c. What is your general vision for future partnerships between UNM and the labs?
2. Joint Projects
  - a. What are the research topic areas that you think have the greatest potential for collaboration between UNM and the national laboratories?
    - i. Are there some specific examples of ongoing joint research in these areas?
  - b. What are some of the challenges to funding collaborative projects between universities and the national labs? How could we address these challenges?
  - c. What role do you see for students and postdocs in joint projects and how can we effectively facilitate this?
3. Joint and adjunct hires
  - a. What is your opinion of joint hires as an effective tool for increasing linkages between UNM and National Laboratories, e.g., as called for in the MOU between Sandia and UNM?
    - i. What challenges do you see, given the differing missions of institutions?
    - ii. What is the role of a joint hire – attracting an established leader to UNM/SNL, retaining an existing Sandia staff member, bringing a more junior person to UNM/SNL to fill existing needs, other? o How do we ensure mutual hiring priorities and success of these hires, given the differing demands of the institutions?
  - b. What is the role of faculty adjunct positions for national lab staff in establishing linkages?
    - i. UNM has a special letter of academic title – National Laboratory Professor. What role do you see for this title?
4. Lab staff recruitment and retention
  - a. How can UNM/Lab partnerships help in recruiting and retaining technical and non-technical staff?
    - i. What is the role of students?
    - ii. What is the role of adjunct positions and joint hires?
5. Miscellaneous topics
  - a. What role do you see for the labs in education?
    - i. Lab employees teaching classes?
    - ii. Students performing dissertation research at labs?

- b. Are there specific areas where the labs and UNM could work together to better promote tech transfer?
- c. What would be your advice to an incoming UNM President or Vice President for Research about developing strong partnerships with the national labs in New Mexico?

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## Appendix F: Interview Summary related to National Laboratories

### UNM Partnerships with National Laboratories

New Mexico benefits from a rich environment of federal and national laboratories including the Air Force Research Laboratory (AFRL), Los Alamos National Laboratory (LANL), and Sandia National Laboratories (SNL). The proximity of the labs to UNM, the flagship research university in New Mexico, thus provides unique opportunities for partnerships that mutually benefit the research missions of the respective institutions.

We review here the existing partnerships, new opportunities going forward, and some key takeaway findings that inform our recommendations for the research strategic plan. Our findings and recommendations are based on a Roundtable Discussion conducted by members of the Working Group on Governmental Relations, Ivan Deutsch and Anne Jakle, on December 5, 2016.

In attendance were senior staff from Sandia National Laboratories, Los Alamos National Laboratory, the Air Force Research Laboratory, New Mexico Consortium.

#### Findings

- Existing agreements and partnerships between the labs and UNM:

AFRL has had a Strategic Educational Partnership Agreement (EPA) with UNM since 2011; a renewal may be necessary soon. This allows for sharing and gifting of equipment and establishing joint research programs. AFRL is a strategic partner in Innovate ABQ and is enthusiastic about this project. Its tech transition office will be moved from behind the fence on Kirkland Air Force Base to a new 2000 square foot space on the Innovate ABQ site. The Air Force Office of Scientific Research (AFOSR) has funded basic UNM research at approximately \$12M over a three-year period (2012–2014).

LANL has had a long history of partnership with UNM with formal agreements under a current MOU, and discussions are ongoing with the Provost's office for a new more specific Institutional Agreement. UNM is LANL's largest research contract customer and staffs LANL's scientific and administrative functions more than any other university. The New Mexico Consortium (NMC), a 501(c)(3), provides additional mechanisms for fostering joint activities between LANL and UNM, including joint appointments for LANL staff at NMC to carry out collaborative research at UNM, mechanisms for UNM faculty to have a sabbatical at LANL, support for joint research proposals, and support for workshops.

SNL has recognized UNM as one of its five Academic Alliance schools (together with Purdue, Georgia Tech, University of Illinois Urbana-Champaign, and the University of Texas Austin). The current MOU and other formal agreements renew the SNL/UNM partnership. UNM and SNL jointly occupy the Advanced Materials Laboratory (AML), which serves as a gateway facility for the Engineering School and South Campus.

There are currently three UNM professors with true joint appointments as SNL scientific staff, and the current MOU calls for potential additional joint hires in areas including cyber security, high energy density science, and quantum information science. UNM is the largest university recipient of Laboratory Directed Research and Development (LDRD) funds through contracts on collaborative research.

- Areas of current joint research and opportunities for growth:

AFRL: A key area of collaborative research with UNM is Directed Energy (lasers, optics, high-power electromagnetics), as represented, for example, by the Applied Electromagnetic Group that receives a \$1M/yr grant to study high power electromagnetics. There are opportunities to expand this collaboration, particularly in the areas of ultra-short lasers and optics with CHTM and the Optical Science and Engineering program. Another key area of joint activities is Space Systems, including building and launching space vehicles and the associated science.

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