

RESEARCH2020

The Strategic Plan Of The
UNM Office Of The Vice President for Research
Last Updated On March 8, 2018

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PREFACE

Over the past decade, the Office of the Vice President for Research at UNM has seen considerable flux in its leadership and has been primarily reactive to budgetary and operational exigencies. My immediate predecessors did laudable jobs of establishing a sustainable operations and management structure for the Office. With my commencement of job duties as Vice President for Research in January 2016, the UNM leadership saw an opportunity for the OVPR to develop a plan that would allow the Office to enhance our stature as a research institution through deliberate implementation of proactive strategic initiatives. The OVPR is pleased to take on this strategic planning process, and with a diverse group of the campus research community, develop a roadmap to further strengthen UNM's research excellence.

This document describes the process and outcome of this effort. I am very grateful to the many faculty members, staff members, students, external partners and stakeholders who engaged in this process by participating in the surveys, interviews and forums necessary to gather data for, and to hone, the plan. Special thanks to the Research Strategic Planning Committee, our Working Groups, the staff of the Office of the Vice President for Research and to our partners in academic, support and administrative units across campus whose collaboration will be necessary to implement this plan. I am also very grateful for the sage advice of Dr. Robert Barnhill and Regent Lt. Gen. Bradley Hosmer regarding our plan and this document.

The plan presents many concrete means by which to achieve its stated mission over the next four years, with additional overarching themes of achieving more interdisciplinary synergies as well as enhanced awareness and cultivation of the broad diversity of our research activities and strengths. Importantly, these means and ends can be accomplished without disruption of the important research and scholarly efforts on campus that are already recognized as world class. I look forward to working with the campus community over the next few years to make our collective vision a reality.

¡Adelante!

Gabriel P. López, Ph.D.

Vice President for Research, UNM

April 12, 2017

EXECUTIVE SUMMARY

VISION

UNM will dramatically enhance its research excellence such that its culture of scholarly creativity, discovery and innovation is recognized internationally, is an integral part of education, and is a source of inspiration for all New Mexicans.

MISSION

To significantly enhance capacity, competitiveness and impact in world class research and creative activity by tenure track, tenured and research faculty, graduate students and postdoctoral fellows, research staff and undergraduates.

THE STRATEGIC PLANNING PROCESS

At the beginning of fiscal year 2017, the Office of the Vice President for Research (OVPR) assembled a diverse Research Strategic Planning (RSP) Committee of faculty and staff members from colleges across UNM's main campus to oversee the process of developing a strategic plan to realize and execute the vision and mission presented above. The goal was to complete the plan by March 2017, so that implementation could coincide with the annual budgeting cycle. OVPR personnel comprised the RSP Leadership Team and each faculty member on the committee was assigned to help lead a Working Group (WG) in an area that the RSP Committee deemed to be critical to achieving its mission. The six formal WGs were *Environmental Scan*, *Research Excellence*, *Human Capital*, *Research Infrastructure*, *State and Federal Relations* and *Corporate Relations*. Each WG was led by members of the RSP Committee and included additional faculty and staff members considered to be expert in the WG focus. In turn, the WGs gathered data through review of written material, interviews of key internal and external experts, and surveys of relevant UNM personnel. In sum, the draft reports produced by the WGs by January 1, 2017 included input from hundreds of internal stakeholders and many external experts. The RSP Committee, each WG and their sources mobilized quickly and worked efficiently and effectively to assemble their reports; *this considerable, determined and concerted effort is a testament to the dedication of our community to improving UNM as a research institution*. Following collection of the reports, the RSP Leadership team worked with each WG to develop a logical and high-impact set of recommendations, and then worked with units and organizations across campus to obtain feedback and buy-in on the plan assembled. The resulting final set of objectives, tasks, metrics and timelines are presented herein. This strategic plan focuses on the UNM main campus research enterprise, which serves our four branch campuses as well.

university, leading to a decrease in the rate of replacement of research-active faculty and elimination of salary enhancements to reward excellence in research. State appropriations are the single largest funding resource for UNM's main campus and these reductions have had a devastating effect on faculty morale such that several top researchers have chosen to relocate or retire. These negative effects are compounded when one considers their impact on the loss of potential research revenue to the university's budget and its core mission of educating students. Arguably, the challenges are quite daunting and may impact UNM's ability to even maintain its current standing as a research institution. Another challenge is presented by the current funding models for new research initiatives on the main campus. Among its designated peer institutions, UNM is currently the flagship university with the smallest research enterprise. This may be due to the fact that there is little centralized institutional funding support (beyond that garnered from research contracts and grants) for new research initiatives. Main campus research expenses have been virtually constant (within 3%) during the period of FY14-17. It is the goal of this plan to substantially improve the trajectory of our research quantity and quality despite these challenges and inauspicious trends.

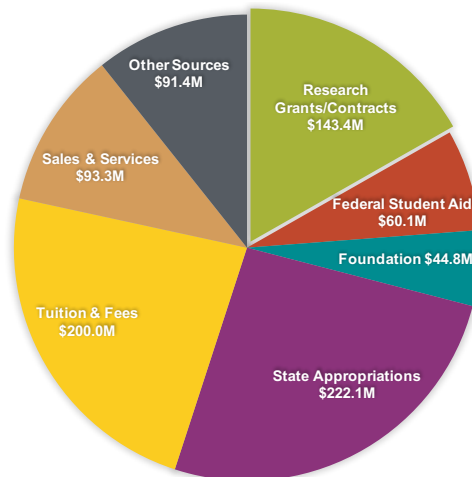
UNM RESEARCH FY16
(Main and Branch Campuses)

Principal Investigators: 365
 Doctoral Degree Programs: 37
 Doctoral Degrees Awarded: 200
 Research Expenditures: \$122.4M

(Source: UNM Office of Institutional Analytics,
Office of Sponsored Projects)

HIGHLIGHTS OF THE RESEARCH STRATEGIC PLAN

Even though the membership of the RSP Committee was very diverse, and each group worked independently on their respective WG charges, there were consistent themes that emerged from their findings. First, it was generally acknowledged that UNM needs a better system for documentation of accomplishments and excellence across the diversity of research and creative scholarly works in which our faculty, staff, and students engage. Such a system will allow the creation of a more effective process for acknowledging and rewarding research excellence, and will also provide a rational and fair means by which to make strategic investments that can be used to catalyze further research activity and excellence. Similarly, researchers who create connections across the diversity of research activities at UNM through interdisciplinary scholarship should be acknowledged and promoted. Second, it was uniformly acknowledged that UNM can and should enhance the quality of service and efficiency in its infrastructure for submitting proposals and administering grants and contracts. Likewise, awareness of UNM's capabilities for performing research should be



UNM REVENUES FY16
(Main and Branch Campuses)

enhanced to make the most of our physical and human resources, including through collaborative research. Third, UNM must establish a proactive culture of effectively partnering with external entities that can have a significant positive impact on our research capabilities. These will include our federal and agency personnel, our proximal Department of Energy (DOE) and Department of Defense (DOD) laboratories / facilities, and local and global industries. A final common thread that emerged was the acknowledgement of the resource limitations that exist at UNM for support of research infrastructure. It is telling that the explicit recommendations from the faculty and staff groups generally focus on maximizing efficiency rather than substantial (re)allocations of existing or new resources. The modest monetary and human resource investments outlined herein should be achievable over the next four years within the current OVPR funding model.

NEXT STEPS

The campus community has provided comments and suggestions on the RSP through many in-person gatherings and electronic communication. Meetings with administrators and presentation to the Board of Regents have also informed the document. The OVPR has developed a concrete implementation plan that includes formation of an Evaluation Committee which will meet at least biannually and will be charged with monitoring progress and suggesting modifications to the plan as necessary to contend with changes in the research environment or fiscal circumstances at UNM.

SYNOPSIS OF WORKING GROUP RECOMMENDATIONS

RESEARCH EXCELLENCE*

Melanie Moses (Chair), Caroline Smith (Co-Chair), Vince Calhoun, Julie Coonrod, Kathryn McKnight, Mary Ane Newhall, Christine Sims, Tom Turner

The broad goals of the Research Excellence Working Group (REWG) were to characterize the breadth and depth of excellent research on the UNM main campus and to make recommendations to elevate UNM's status as one of the world's great research universities, within the particular, stated mission of this Strategic Plan and within the next 4 years. The REWG attempted to identify the breadth of excellent research across large and small departments and centers at UNM, particularly those areas that are recognized as having significant national and/or local impact but have not been broadly recognized at UNM. The REWG sought to highlight excellent UNM research that is distinctive, particularly research related to the environment, diverse communities, and natural and technological resources of New Mexico. The REWG also aimed to highlight interdisciplinary research, especially research that draws from multiple schools to answer questions of regional, national, and global importance.

OBJECTIVES, TASKS & METRICS

RE-1 Develop a mechanism to assess and communicate research excellence across the diversity of research programs on campus.

RE-1A: The OVPR will collaborate with the Provost's Office in efforts to develop and implement a campus-wide Faculty Annual Activity Report (FAAR) system. Specifically, OVPR will provide input on collection of data on research, creative and related activities (herein simply referred to as "research") on main campus.

Metric: A single, campus-wide mechanism will be in place for annual collection of data on faculty research activity that acknowledges the diversity of such activities across campus.

RE-1B: The OVPR will also work with the Associate Deans for Research and Center Directors (ADR/CDs) to analyze the data with respect to the diversity of excellence in research and will distribute a report (i.e., the OVPR's Annual Report) to university leadership, and to faculty listservs, and will post the report to the OVPR website. A part of this analysis will be the identification of cross-cutting and emerging areas of research strength.

* Note: Timeline for implementation and completion of all tasks listed herein is given in the following section entitled "Timeline".

Metric: An annual report of research-related activities will be disseminated in which cross-cutting areas of research strength are identified.

RE-1C: The OVPR will collaborate with the Provost's Office to create and publish a searchable database with the data acquired through the FAAR.

Metric: A searchable database that is updated annually will be in place to inform administrative policy, budgetary decisions, and efforts toward increasing collaboration across campus.

RE-1D: To help inform its resource allocations, the OVPR will communicate identified cross-cutting areas of research strength and areas of existing and growing research excellence to the Provost, Deans, Chairs and campus community.

Metric: Resource allocation including start-up funding for new faculty hires will be directed toward cross-cutting areas of research strength and those representing areas of emerging research excellence.

RE-2 Develop a plan for investments into new research areas.

RE-2A: As an immediate priority for FY17 and FY18, the OVPR will augment efforts within the three most promising emerging areas as identified in REWG report (i.e., social and cultural place-based research relating to the southwest, renewable energy, and water in the west) by supporting efforts to develop externally funded proposals in each of these areas.

Metric: At least two new externally funded, multi-investigator research programs in each of the above areas. A compilation of outputs of the identified areas (including submitted proposals and awards and publications) will be gathered by December 31, 2017 (for FY17 investments) and December 31, 2018.

RE-2B: Once the FAAR is implemented across campus, the OVPR, working with the ADR/CDs, will utilize the data acquired to determine possible new areas for investment through limited seed funding / proposal support. Resources (financial and otherwise) will be made available to areas identified as emerging cross-cutting priorities.

Metric: Significant increase in participation by faculty investigators and administrators in formalized OVPR strategic research initiatives (goal: 15 proposals per year) and start-up packages for interdisciplinary hires (goal: 4 hires per year).

RE-2C: The OVPR will proactively communicate a UNM vision for research (e.g., on the OVPR website, in the OVPR Annual Report and through presentations) that includes areas of cross-cutting strength and investments into priority research areas.

Metric: A newly designed communications strategy for OVPR that emphasizes the UNM vision for research and that includes an updated website, enhanced

cooperation with UNM University Communication & Marketing (UCAM), additional outreach by OVPR to campus stakeholders and an Annual Report.

RE-3 Improve and encourage excellent interdisciplinary research.

RE-3A: The OVPR will work with the Provost's Office to change the culture of research at UNM so that the benefits and synergies of interdisciplinary collaboration in research are acknowledged and cultivated. A number of specific initiatives will be implemented, including the provision of start-up funds from the OVPR for interdisciplinary hires. Other initiatives are described elsewhere in this plan (e.g., strategic investments for seeding interdisciplinary research projects, using the FAAR to help identify areas of emerging interdisciplinary excellence).

Metric: Interdisciplinary research will be bolstered and each year at least 4 new faculty hires with interdisciplinary research programs will be made.

RE-3B: The OVPR will initiate and maintain a closer working relationship with the Office of Community Engaged Learning and Research.

Metric: The Associate Dean of the Office of Community Engaged Learning and Research is added as a member of the ADR/CD group and included in discussions of areas of research excellence and strategic investment. The OVPR will proactively support community-engaged research activities and their FAAR-based monitoring to help achieve the designation as a Carnegie Community Engaged Institution.

HUMAN CAPITAL

Jeremy Edwards (Chair), Rebecca Blum-Martinez (Co-Chair), April Davidson, Virginia Scharff, Tim Lowrey, Paul Schwoebel, Julia Fulghum, Kateryna Artyushkova, Kiyoko Simmons

The goal of the Human Capital Working Group was to examine relevant data on faculty and staff to develop a comprehensive plan to create and sustain a dynamic, diverse, and effective research work force. They were also charged with considering and identifying possible incentives to encourage maximal productivity from UNM researchers with the ultimate goal of increasing sponsored research.

OBJECTIVES, TASKS & METRICS

HC-1 Recognize and Publicize Research Contributions and Research Excellence.

HC-1A: The OVPR will work with the Research Policy Committee (RPC), the Provost and the President to enhance the Annual Research Excellence Awards program to include additional categories (for example: interdisciplinary research, non-senior award categories). The OVPR will also host an award ceremony to recognize the awardees and a reception for Principal Investigators (PIs). The OVPR will discuss with RPC the possibility of adding a monetary component to the new awards.

Metric: Increased recognition of research active faculty members above baselines as collected from the RPC for FY17 and prior years through the establishment of four new research awards (i.e. Junior, Mid-Career, Research Faculty, and Interdisciplinary).

HC-1B: The OVPR will engage the UNM Alumni Association to explore the possibility of creating a research related award.

Metric: Enhanced recognition for outstanding research achievements through the establishment of a UNM Alumni Research Award.

HC-1C: To supplement the activities of UCAM, the OVPR will highlight researcher activities on the OVPR website (a minimum of once/month) and through increased PR work (monthly and on an ad hoc basis). Researchers for whom a press release is submitted will be invited to a hosted lunch with their ADR and the VPR/AVPR.

Metric: New OVPR website will be launched in Spring 2017 that highlights research activities on campus and is updated monthly.

HC-2 Identify and Assist in Providing More Time for Investigators to Conduct Their Research.

HC-2A: The OVPR will allocate funds (initially up to \$30K/year) for course release (for Main Campus researchers) to develop complex research proposals.

Metric: Increased numbers (initially 3/yr) of large (>\$1M multi-investigator research proposals submitted as a result of course releases. This will be reviewed annually by the OVPR and the fund may be increased or decreased based upon success of the program as gauged by funding success.

HC-2B: The OVPR will allocate seed funds (initially \$20K/year) through a simple proposal process to support fields with limited external funding (e.g., non-STEM fields) and will work with the RAC to set up equitable means for awarding these funds.

Metric: Monitor the percentage of RAC grants made to non-STEM investigators yearly (using 2017 as a baseline) so that equitable RAC funding to non-STEM researchers is achieved.

HC-2C: The OVPR will coordinate with Graduate Studies and FRDO to develop a Pilot Program where graduate students provide support for proposal preparation for research involving graduate students.

Metric: Graduate students (up to 2) will be employed to augment investigator effectiveness in proposal development.

HC-2D: The OVPR will convene a task force to study how research administrative support is allocated throughout the campus. The task force will identify opportunities for enhanced administrative support for researchers. The task force will provide recommendations to the VPR for evaluation and resource allocation.

Metric: The task force will be established with a clear charter that suggests mechanisms to optimize administrative support.

HC-3 Foster an Environment of Support and Mentorship within the Research Community.

HC-3A: The OVPR will coordinate with the ADVANCE program to develop a mentorship/support program for junior, women, and underrepresented STEM faculty members that includes how to develop effective relationships with funding agency program managers. Volunteer, expert, senior-level faculty will be recruited to support this program. The new program will sponsor events to generate awareness of support and mentorship resources.

Metric: At least 50% of junior, women, and underrepresented STEM faculty will participate in at least one ADVANCE/FRDO support/mentoring activity per year. OVPR will use results from ADVANCE evaluation studies to assess initiative's effectiveness.

HC-3B: The OVPR will explore opportunities to leverage expertise from UNM and National Laboratory retirees (both researchers and senior managers).

Metric: Establishment of a directory of retirees who are willing to provide pro bono consultation on research related matters.

HC-3C: The OVPR will facilitate communication across main campus regarding undergraduate research initiatives, networks, resources, and programs.

Metric: A new web repository will be developed in collaboration with colleges and programs with active undergraduate research, and hosted on the OVPR website.

HC-4 Create a Task Force for the Establishment of Incentives for Research Excellence.

HC-4A: The Provost's Office will (i) convene a task force to establish and (ii) implement a policy for salary incentives for research active faculty, and (iii) communicate the opportunities afforded by the new policy to the faculty.

Metric: Development and implementation of the incentive policy. Department Chairs and Center Directors will be surveyed to determine if the faculty are aware and taking advantage of the available incentives.

HC-4B: The task force will consider means to normalize flexible appointments across colleges as a way to incentivize research.

Metric: Promulgation of normalized, flexible appointment policy. Department Chairs and Center Directors will be surveyed to determine if the faculty are aware and taking advantage of the available incentives.

HC-4C: The task force will develop a plan for future cross-department appointments (joint/secondary appointments; cluster hires) that includes best practices for promotion and tenure.

Metric: Enhanced number of cross-department appointments (8 per year). Department Chairs and Center Directors will be surveyed to determine if the faculty are aware and taking advantage of the available incentives.

HC-4D: The task force will explore the possibility of providing new options in the honorific titles given to deserving, accomplished professors.

Metric: Guidelines are developed and provided for deserving professors to be bestowed honorific titles.

INFRASTRUCTURE

Christopher C. Witt (Chair), Theodore Jojola (Co-Chair), Karl Benedict, Katie Witkiewitz, Joel Straquadine, Steve Cabaniss, Abhaya Datye, Kathryn Jacobson, Linda Petree, Jennifer Kavka, Mary Jo Daniel, Emily Ballo

The goal of this working group was to assess the research infrastructure on UNM Main Campus, and to make recommendations on the basis of that assessment. Research infrastructure comprises facilities, service centers, major equipment, instruments, technologies, and administrative support units that provide or enhance research capability or capacity.

OBJECTIVES, TASKS & METRICS

I-1 Improve efficiency of research administrative services provided by the Office of Sponsored Projects (OSP) and improve coordination between OVPR Faculty Research Development Office (FRDO) and OSP.

I-1A: OVPR leadership will provide input into the goals and annual performance review of the OSP Director to ensure a consistent focus on a PI/customer service approach and will meet at least monthly with financial services leadership to review processes and collaborations between OSP and FRDO.

Metric: Improved customer service in OSP as ascertained through annual review of OSP proposal submission and award metrics (e.g., number of proposals submitted, submitted with full review, not submitted, proposals awarded, award setup time, etc.).

I-1B: The OVPR will engage with the Controller to establish a visiting committee to conduct an external evaluation of OSP procedures and processes to suggest improved approaches.

Metric: External evaluation completed and report of findings and recommendations submitted to VPR and Controller.

I-1C: The OVPR and OSP will implement and evaluate a pilot project in which one or two Contract & Grant Administrators (CGAs) from OSP (Pre-Award) are voluntarily assigned to a College Dean's office (or equivalent) to work as part of a research team that includes an ADR (or equivalent) and a Faculty Research Support Officer (FRSO).

Metric: Evaluation of pilot is completed by CGA(s), OSP Director, ADR, Director of FRDO and AVPR and recommendations are submitted to VPR and Controller.

I-1D: The OVPR and the Director of FRDO will work with OSP to evaluate and improve (if necessary) the quality of data and data reporting in CayuseSP. The OVPR website will link to the new OSP dashboard.

Metric: Data in CayuseSP and the OSP dashboard is accurate and reliable. Researchers, leadership and administrators can easily access research award data reports on an as-needed basis.

I-2 More efficiently manage research equipment and facilities and plan strategically for future needs.

I-2A: OVPR will create a standing Large Equipment Advisory Group (LEAG) comprised of representatives of College of Arts and Sciences (A&S), School of Engineering (SOE), Category 3 Centers, and Physical Plant Department (PPD) (i) to identify significant gaps in research equipment, (ii) to serve as the limited competitions review committee for major instrumentation programs and (iii) to serve as the review committee for the internal equipment fund (see I-2C)

Metric: Identified equipment gaps are filled, enabling submission of proposals in new areas; success in MRI proposals.

I-2B: OVPR and LEAG will coordinate the development and annual update of a main campus Research Equipment Inventory of shared-use equipment.

Metric: Inventory completed and posted on OVPR website.

I-2C: OVPR and LEAG will reinstate the internal equipment fund (if funds are available) to repair/update key research equipment through a competitive process.

Metric: Funds allocated through competitive process.

I-2D: The OVPR will invite the FAMIS Data Manager to make a presentation to ADRs and Center Directors (CDs) each year to communicate the importance of keeping the FAMIS database updated with accurate information. In addition, the OVPR will invite representatives from PPD & Planning, Design and Construction (PDC) to make a presentation to ADRs and CDs regarding how to access architectural, engineering and maintenance services.

Metric: FAMIS data is deemed reliable by OVPR and other users.

I-2E: The OVPR will engage with PPD and the PDC to provide input into the facilities master plan to identify future research facility needs and funding sources.

Metric: Research facility needs included in Capital Request to Legislature (based on master plan).

I-3 Improve OVPR visibility and effectiveness in supporting research.

I-3A: OVPR will develop a mission statement and incorporate a stronger customer service based approach.

Metric: Mission statement along with Research Strategic Plan will be posted on OVPR website. The OVPR will seek additional opportunities (e.g., develop an Annual Research Administrators Symposium) to increase awareness of enhancements in customer service provided by research support units.

I-3B: VPR and/or AVPR (with the appropriate ADR) will regularly attend department faculty meetings to hear and address research concerns and promote OVPR mission and services.

Metric: At least three department faculty meetings attended each semester.

I-3C: The OVPR will create an easily accessible "road map" of the UNM research process and resources to be posted on the OVPR website.

Metric: Easily accessible, one-stop-shop for process/resource information for researchers/research staff will be promulgated on the OVPR website, presentation materials and outreach activities.

I-3D: The OVPR will serve as an advocate for the research community and will continue, on a case-by-case basis, to assist and facilitate interactions with support offices to ensure that important research needs are met in a timely and satisfactory manner.

Metric: The OVPR will assign ombudsperson roles to members of its team to facilitate faculty interactions with research support units (e.g., OSP, HR, Purchasing, IT).

I-4 Improve research IT capacity and services.

I-4A: OVPR will provide input into the Central IT restructuring process to ensure research computing needs are addressed.

Metric: The OVPR will designate ombudsperson roles to one or more of its members to monitor the responsiveness of IT to research needs and to facilitate faculty interactions with IT support units.

I-4B: The Center for Advanced Research Computing (CARC) will develop a strategic plan to better meet the needs of their users and expand services to future users. In the strategic plan, they will develop a funding model to enable the expansion of CARC's research support that does not solely rely on OVPR funding.

Metric: A new funding model for CARC will be established that allows for increased efficiency (i.e., reduction in effective OVPR funding) and enhanced outreach to the research community (i.e., more users).

FEDERAL & STATE GOVERNMENTAL RELATIONS

Karl Benedict (Chair), Ivan Deutsch (Co-Chair), Gabriel Sanchez, Anne Jakle, Melissa Binder, Shirley Baros, Meriah E. Heredia-Griego.

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

OBJECTIVES, TASKS & METRICS

FSG-1 Improve the Process of Developing UNM's Federal and Legislative Priorities as it Relates to UNM's Research Focus Areas.

FSG-1A: The OVPR will coordinate with the Office of Government and Community Relations to organize forums to consult annually with ADR/CDs and other key campus stakeholders on recommendations that will be developed into UNM's legislative priorities.

Metric: Development of a method for selection of concepts for UNM legislative priorities submitted from campus stakeholders through a systematic and equitable process.

FSG-1B: The OVPR will work with the Office of Government and Community Relations to seek NM legislative appropriation for cost share on grants that contribute significantly to institutional infrastructure.

Metric: Legislative appropriation designated for cost share of major federal grants.

FSG-2 Improve and Grow the Relationships with the Federal Laboratories.

FSG-2A: The OVPR will work with the President, Provost and Senior Advisor to the President for National Labs Relations to monitor the federal laboratories for new research and collaborative opportunities.

Metric: Yearly progress report of potentially new research and collaborative opportunities to ADRs/CDs and the UNM Academic/Student Affairs and Research (ASAR) Regent Committee.

FSG-2B: The OVPR will work with the President, Provost and Senior Advisor to the President for National Labs Relations to seek new opportunities for joint ventures between UNM and federal laboratory partners.

Metric: New joint ventures between SNL/UNM, LANL/UNM and AFRL/UNM.

FSG-2C: The OVPR staff will review mechanisms for graduate students to perform Ph.D. dissertation research at the laboratories using the Advanced Materials Laboratory (AML) and Center for Quantum Information and Control (CQuIC) as case studies.

Metric: Development of recommendations and guidelines for graduate students to conduct dissertation research at the national laboratories.

FSG-2D: The OVPR will work with the Senior Advisor to the President for National Labs Relations and the Senior Vice Provost for Academic Affairs to review and disseminate the eligibility, roles, and responsibilities for laboratory faculty designations (letters of academic title, National Laboratory Professors, joint hires).

Metric: Processes have been developed and vetted through partner organization and disseminated as appropriate.

FSG-2E: 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 federal laboratories.

Metric: Processes have been developed and vetted through partner organization and disseminated as appropriate.

FSG-2F: The OVPR will, in collaboration with the Senior Advisor to the President for National Labs Relations, construct a user-friendly, web-based resource describing existing federal partnerships and associated UNM policies and processes for interactions with these organizations.

Metric: The Federal Partnerships webpage(s) will be the go-to resource for faculty, staff, students and external constituencies for information related to UNM's partnerships with federal laboratories (i.e., DOE national laboratories, Army Research Laboratory, etc.).

FSG-3 Strengthen Institutional Linkages and Enhance Relationships with Funding Agencies.

FSG-3A: The OVPR staff will develop a strategy for systematically identifying and promoting opportunities for senior UNM researchers to serve in funding agency rotator positions.

Metric: OVPR will liaise with funding agencies and help identify senior faculty to apply for rotator positions.

CORPORATE RELATIONS

Gabriel López (VPR, Chair), Steve Brueck, Jeremy Edwards, Michele Huff, Lisa Kuuttila, Edl Schamiloglu, Wendy Stires, Richard Larson, Jeffrey Norenberg, Eric Prossnitz, Angela Wandinger-Ness

The broad goal of this group was to examine the current range of industrial interactions at UNM and propose new ways in which UNM can dramatically increase corporate-sponsored research. The group focused specifically on enhancing sponsored research agreements and gifts directly from corporate partners. It did not focus on enhancing SBIR/STTR funding, IP licensing and start-up formation, industrial service agreements, nor clinical trial agreements. Means to achieve the broad goal included: (i) reviewing academic corporate relations initiatives nationally and at selected exemplar institutions; (ii) identifying and assessing current mechanisms by which UNM is successful in securing industrially funded research, as well as barriers to such success; and (iii) reviewing institutional infrastructure at UNM (specifically OVPR, STC.UNM, UNM Foundation, OSP and OUC) for effectively engaging with corporate sponsors of research and identifying best practices for approaching corporations, intellectual property agreements, publication agreements and contracting.

OBJECTIVES, TASKS & METRICS

C-1 Establish an Office for Corporate-Sponsored Research.

C-1A: Convene a round-table (i) to review best practices for corporate-sponsored research in academia, (ii) to catalog current, relevant UNM resources and barriers, (iii) to optimize current campus infrastructure to maximize effectiveness of corporate relations and corporate-sponsored research, and (iv) to provide a regular forum for informational exchange regarding corporate relations.

Metric: Establishment of the Roundtable should increase corporate-sponsored research 10%/year, on average, over the next 4 years. Continuation of the Roundtable is contingent on this metric.

C-1B: Transition the Roundtable into a formal Internal Advisory Committee (IAC) for a virtual Office of Corporate-Sponsored Research.

Metric: Traffic to the virtual office will be monitored and analyzed for potential correlations with increase in corporate-sponsored research. Specific functions and components of the virtual office that are particularly effective will be bolstered.

C-1C: Secure funding for dedicated personnel for the Office of Corporate-Sponsored Research. The Roundtable/IAC of the Office of Corporate-Sponsored Research will seek funding (internal and external) to provide staff support for the Office's functions.

Metric: Proposals and grants for internal and external funding to support the mission of the Roundtable/IAC will be monitored and fostered. These proposals can be from any of the units supporting the Roundtable/IAC.

C-2 Establish a Comprehensive UNM Web Portal for Corporate-Sponsored Research.

C-2A: The Roundtable/IAC will construct a user-friendly, easily searchable, web portal that will form the basis of a virtual UNM Office of Corporate-Sponsored Research.

Metric: Traffic to the UNM Web Portal will be monitored and analyzed for potential correlations with increases in corporate-sponsored research.

C-2B: Add to the Web Portal easy access to UNM policies (e.g., IP policies, indemnification policies, F&A policies) so that industrial sponsors can have easy access to the basic terms and conditions by which UNM can engage in sponsored research and clear explanations of the reasons for these policies.

Metric: Traffic and downloads to these parts of the UNM Web Portal will be monitored and analyzed for potential correlations with increases in corporate-sponsored research. Specific functions and components of the virtual office that are particularly effective will be made more prominent on the Portal's homepage.

C-2C: Add to the Web Portal an Experts Registry that will allow prospective industry sponsors to easily gain knowledge about the capabilities of UNM investigators and infrastructure facilities that are of potential benefit to their business mission.

Metric: Traffic and downloads to this part of the UNM Web Portal will be monitored and analyzed for potential correlations with increases in corporate-sponsored research. Participating investigators and infrastructure facilities will be surveyed to obtain their views of the effectiveness of the Experts Registry.

C-3 Establish a New Model for OSP to Facilitate Corporate-Sponsored Research.

C-3A: The Roundtable/IAC will work with OSP (Pre-Award) to identify Sponsored Project Specialists (SPS) that are (or will be trained to become) expert in engaging with industry and negotiating corporate funded research contracts. Depending on increase in demand, 1 or 2 SPS's will be given explicit job duties that allow them to facilitate corporate-funded research across the main campus. These duties will include interfacing with the Office of University Council (OUC) as necessary on complex contract negotiations.

Metric: Turnaround time for completion of negotiations with corporate research funders will be monitored and correlations with increases in corporate funding rates will be sought. A set of PIs who routinely secure corporate-funded research contracts will be chosen as a "focus group" and will be surveyed as to their satisfaction with new processes implemented and their recommendations for further improvements.

C-3B: The Roundtable/IAC will work with OSP to identify contract Fiscal Monitors (FMs) in Post-Award that are (or will be trained to become) expert in regulations regarding corporate-sponsored research including fixed price contracts. Depending on increase in demand, 1 or 2 FMs will be given explicit job duties that allow them to facilitate

corporate-funded research across the main campus. These duties will include interfacing with Purchasing, HR and other UNM departments as necessary to implement nonstandard contracts.

Metric: A set of PIs who routinely secure corporate-funded research contracts will be chosen as a "focus group" and will be surveyed as to their satisfaction with new processes implemented and their recommendations for further improvements.

C-3C: The Roundtable/IAC will work with OSP (Pre-Award) and Contract and Grant Accounting (Post-Award) to minimize and mitigate instances when companies default on payments for services in subcontracts (e.g., in SBIR and STTR programs). In Pre-Award, such subcontracts can be negotiated to be either fixed price, or so that a minimum amount of the subcontract is provided up-front (e.g., 50%) to minimize the threat of default on the subcontract. In Post-Award, billing for services rendered can be expedited on a monthly basis and, if payment is not made within a specified number of days (e.g., 15 days), performance of the contract can be stopped.

Metric: A set of PIs who routinely secure corporate-funded research contracts will be chosen as a "focus group" and will be surveyed as to their satisfaction with new processes implemented and their recommendations for further improvements.

TIMELINE

| Tasks | Spring FY17 | Fall FY18 | Spring FY18 | Fall FY19 | Spring FY19 | Fall FY20 | Spring FY20 |
|--------------|-------------|-----------|-------------|-----------|-------------|--------------------------------------|-------------|
| HC-1C | | | | | | | |
| HC-2C | | | | | | Corporate = C | |
| I-1A | | | | | | Fed/State Government Relations = FSG | |
| I-1D | | | | | | Human Capital = HC | |
| I-2D | | | | | | Infrastructure = I | |
| I-3A | | | | | | Research Excellence = RE | |
| I-3B | | | | | | | |
| I-3C | | | | | | | |
| I-3D | | | | | | | |
| I-4A | | | | | | | |
| RE-2A | | | | | | | |
| RE-2C | | | | | | | |
| RE-3B | | | | | | | |
| C-1A | | | | | | | |
| C-3A | | | | | | | |
| C-3B | | | | | | | |
| FSG-1A | | | | | | | |
| FSG-2A | | | | | | | |
| FSG-2B | | | | | | | |
| FSG-2D | | | | | | | |
| HC-1B | | | | | | | |
| HC-2B | | | | | | | |
| I-2A | | | | | | | |
| I-4B | | | | | | | |
| C-1B | | | | | | | |
| C-2A | | | | | | | |
| C-2B | | | | | | | |
| C-2C | | | | | | | |
| C-3A(eval) | | | | | | | |
| C-3C | | | | | | | |
| FSG-2E | | | | | | | |
| FSG-2F | | | | | | | |
| HC-2A | | | | | | | |
| HC-2D | | | | | | | |
| HC-3C | | | | | | | |
| HC-4A(a) | | | | | | | |
| I-1B | | | | | | | |
| I-1C | | | | | | | |
| I-2B | | | | | | | |
| I-2C | | | | | | | |
| RE-1D | | | | | | | |
| HC-1A(a) | | | | | | | |
| HC-1A(b) | | | | | | | |
| HC-4B | | | | | | | |
| HC-4C | | | | | | | |
| HC-4D | | | | | | | |
| RE-1A | | | | | | | |
| FSG-1B | | | | | | | |
| FSG-2C | | | | | | | |
| HC-3A | | | | | | | |
| HC-3B | | | | | | | |
| HC-4A (b)(c) | | | | | | | |
| I-2E | | | | | | | |
| RE-1B | | | | | | | |
| RE-1C | | | | | | | |
| RE-2B | | | | | | | |
| C-1C | | | | | | | |
| FSG-3A | | | | | | | |
| RE-3A | | | | | | | |

GLOSSARY

| Acronym | Definition |
|----------------|---|
| A&S | Arts and Sciences |
| ADR | Associate Dean for Research |
| ADVANCE | NSF funded program: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers |
| AFRL | Air Force Research Laboratory |
| AML | Advanced Materials Laboratory |
| ARL | Army Research Laboratory |
| AVPR | Associate Vice President for Research |
| CARC | Center for Advanced Research Computing |
| CD | Center Director |
| CGA | Contract and Grant Administrator |
| CQuIC | Center for Quantum Information and Control |
| DOD | Department of Defense |
| DOE | Department of Energy |
| F&A | Facilities and Administration |
| FAAR | Faculty Annual Activity Report |
| FAMIS | Facilities Asset Management Information System |
| FM | Fiscal Monitor |
| FRDO | Faculty Research Development Office |
| FRSO | Faculty Research Support Officer |
| FSGR | Federal and State Governmental Relations |
| FSM | Finance Systems Management |
| FY | Fiscal Year |
| HSI | Hispanic Serving Institution |
| HR | Human Resources |
| IAC | Internal Advisory Committee |
| IP | Intellectual Property |
| IT | Information Technologies |
| LANL | Los Alamos National Laboratory |
| LEAG | Large Equipment Advisory Group |
| MRI | Magnetic Resonance Imaging |
| NSF | National Science Foundation |
| OSP | Office of Sponsored Projects |
| OUC | Office of University Counsel |
| OVPR | Office of the Vice President for Research |
| PDC | Planning, Design and Construction |
| PI | Principal Investigator |
| PPD | Physical Plant Department |
| PR | Public Relations |
| RAC | Research Allocation Committee |
| RE | Research Excellence |
| REWG | Research Excellence Working Group |
| RPC | Research Policy Committee |
| RSP | Research Strategic Planning |
| SBIR | Small Business Innovation Research |
| SNL | Sandia National Laboratories |

| | |
|---------|---|
| SOE | School of Engineering |
| STC.UNM | Science and Technology Corporation at UNM |
| STTR | Small Business Technology Transfer |
| UCAM | University Communication & Marketing |
| UNM | The University of New Mexico |
| VPR | Vice President for Research |
| WG | Working Group |