RESEARCH STRATEGIC PLAN
FINAL WORKING GROUP REPORT
ON HUMAN CAPITAL
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Goals
The goal of the Human Capital Working Group is 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. We were also charged with developing an incentive plan to encourage maximal productivity from UNM researchers with the ultimate goal of increasing sponsored research. More specifically, we will identify the main characteristics of the successful research active faculty and staff.

Methods
To accomplish our goals, we reviewed selected peer institutions’ incentive programs for faculty and staff. We also examined trends, needs, and opportunities that will lead toward successful recruitment, retention, advancement, and training of our research active faculty, and we investigated the salient variables that are a critical part of creating a culture that continually recognizes and rewards excellence in research and promotes a higher level of achievement. Also, importantly, we identified opportunities for increasing the diversity of our researchers through the recruitment and retention of persons of color and other underrepresented populations.

To accomplish the goals discussed above, we sought to collect data from a number of different sources. The working group then compiled the results from these sources in order to draft this report with specific recommendations.

Data Sources
1. Interviews. A key method to collect relevant data was to interview a select group of faculty, staff, and other relevant individuals. The people to be interviewed were selected by the working group (list in Appendix A). We asked the interviewees the following questions:
   • What are your perceptions of the research UNM conducts? Do you view our research as excellent relative to our peers or other institutions where you have been?
   • Do you think UNM could do more to encourage faculty (postdocs/students/staff) to be more research active?
   • How can UNM incentivize research?
   • Are you aware of other research incentive programs on campus or off?
   • How can we support research of underrepresented faculty at UNM?
   • Are there Human Resources policies related to research faculty, staff or students that impede or deter researchers from conducting research? If yes, identify the policies and how they could be improved.
   • What additional comments do you have?
   • Do you have any questions for me?
2. **Surveys.** Survey questions related to Human Capital concerns were included in a faculty-wide survey that was sent out in December 2016. The response rate for the survey was 13% (275 individuals responded). The survey questions were:

- Should UNM provide its faculty with more incentives for research involvement and productivity?
- Should UNM do more to encourage unfunded research?
- Do aspects of your current research involve undergraduate or graduate students?
- Do new junior faculty in your unit receive sufficient support for research, including startup funds?
- Should UNM pursue more cross-departmental appointments?

Results and impressions of the research survey are included as Attachment B.

**Findings**

Recognition of research excellence can be one of the best incentives for faculty to engage in high quality research. For example, internal awards for faculty that have achieved research excellence is a great motivator, and it improves the morale of campus researchers.

Publicizing outstanding research contributions is an effective means to incentivize researchers. Most researchers are already highly motivated by their peers and professional societies. However, being recognized locally is a great way to further motivate researchers. This has the additional benefit of increasing our profile locally, which could lead to increased state-level funding for our research.

Time is possibly the most valuable asset. Research productivity of our faculty could be greatly increased by provided more time to the researchers. How could the VPR provide researchers more time? The people interviewed overwhelmingly suggested more administrative support for the researchers. It would be great to remove many of the administrative burdens on research active faculty. Many items were cited, but primary burdens were (1) effort certifications, (2) travel reimbursements, (3) chemical inventories and (4) equipment inventory.

Time for research is especially valuable. Incentives for research should primarily be in the form of time releases. Reduced teaching loads for the most active research faculty is highly supported by the people polled by the interviews. Additionally, ways for less research active faculty to be given course releases to ramp up research activities was highly encouraged.

It is harder for social science research to attract external funding. Some highly influential social science research can be done with very little funding, and UNM could develop a small fund to support highly influential research that would not be too expensive. Social science researchers have a difficult time finding the time to write grants that may provide scant funding. Administrative support for writing grants would be helpful, as
would assistance with finding funding sources that might be fruitful. Of special note for social science researchers was the lack of sufficient technology support. Because social science research does not bring in large sums, computers and other technology support is terribly outdated and prohibits researchers from accessing up-to-date data sources. Social science researchers also mentioned that they were spending their own money to travel to libraries and other institutions that house important documents. Students involved in unfunded research can be supported internally by UNM.

Joint (or secondary) appointments are a good idea. However, these appointments need to be real. The appointments will work when all expectations are defined at the time of the appointment. Clear specification of review and assessment structure should be in place. For example, the U. of Washington goes as far as to define the T&P committee that will evaluated the faculty member. This T&P committee will consist of members from both departments, but prevents the faculty member from being evaluated separately by two different committees.

Some faculty are highly supportive of flexible appointments, and others are not. It is our finding that overall flexible appointments could be a major benefit for UNM faculty, and the impact of flexible appointments on the faculty that do not like the idea is minimal. We also find that flexible appointments are an outstanding incentive for research active faculty. Faculty can take advantage of a flexible appointment in a number of ways. For example, external federal funding can be used to pay salary for protect more time for research, or faculty can be encouraged to interact with the private sector via a flexible appointment. The flexible appointment option is also a great retention tool for highly productive faculty members.

Research active faculty from departments (or centers) with good administrative support felt that the Office for Sponsored Research functioned well, whereas many faculty from departments without adequate support felt the opposite. Therefore, we conclude that administrative support to assist with proposal preparation, and other issues associated with external funding, will greatly improve the productivity of our research active faculty. Support groups for underrepresented faculty is a vital component to ensure the success of highly talented underrepresented faculty. The U. of Washington set up a support system for junior women faculty. The support group met monthly during lunch, and the Provost funded this activity. Senior faculty basically mentored and supported the women faculty. The ADVANCE staff setup interest groups for all new female faculty, to setup and facilitate support groups. Having groups of young faculty, that are all dealing with the same issues helps deal with the associated problems. Senior faculty involvement was critical and this established a highly effective mentoring activity. The involvement of groups like this helps solve the root problem, which is hiring more underrepresented faculty.

National Lab retirees are a tremendous resource that is, under-utilized. Many remain in the Albuquerque area and are interested in continuing to work in research but with significantly reduced time and paper-work commitments. Sandia does essentially nothing to take advantage of this resource – people that are often highly motivated,
experienced, and competent, and often leaders in their research areas. UNM could actively encourage and provide a formal mechanism for these people to work in some capacity with research groups at UNM. The benefits to UNM could be multifold, to include, enhanced research productivity and better connections with Sandia - something both UNM and Sandia have struggled with for years with only limited success. Lastly, unforeseen benefits will come with such broadening of UNM research activities and capabilities.

Similar comments can be made concerning retired Sandia upper management, which could be utilized extensively to advise the research enterprise at UNM. As you know, the upper management is often very well connected within DOE, DOD, and the US Government. Many, we are sure, would be happy to volunteer their time to help UNM.

**Action Plan**
The above findings suggest that UNM embark on the following four strategic objectives and their associated tactics to achieve the goal of developing a comprehensive plan to create and sustain a dynamic, diverse and effective research workforce.

**Objective 1: Recognize and publicize research contributions and research excellence.**

**Task 1.A.** The OVPR will highlight researcher activities on the OVPR website home page with updates made monthly. The OVPR will also create and send out press releases to media to enhance awareness of the breadth and depth of research taking place at the university. Those researchers for whom a press release is submitted will also be invited to a hosted lunch with their ADR and the VPR/AVPR.

**Metrics:** Enhanced awareness of research activities both internally and externally as assessed on an annual basis through a Research Strategic Plan survey.

**Timeline:** The new OVPR website will be launched spring FY2017 with researcher highlights. The Community and Outreach Specialist in the OVPR will develop press releases with researchers and send them out to appropriate media outlets. The VPR/AVPR will host lunches with those researchers for whom press releases/highlights are initiated.

**Task 1.B.** The OVPR will work with the Research Policy Committee (RPC) to enhance the Annual Research Excellence Awards program to include additional categories (e.g., interdisciplinary research, non-senior award categories). The OVPR will set up a plan with RPC, develop and/or update the application and request nominations. The RPC will review the nominations and determine awardees. The OVPR will host an award ceremony to recognize the awardees. A reception for PIs will be held following the ceremony. In addition, the OVPR will review with the RPC the possibility of adding a monetary component to the award.

**Metrics:** Enhanced recognition for outstanding research achievements as assessed on an annual basis through a Research Strategic Plan survey. Also, a trajectory in number and diversity of nominations.
Timeline: The OVPR will engage with the Research Policy Committee to expand the Annual Research Excellence awards in spring FY2017. The first award ceremony will be held Spring 2018.

**Task 1.C.** The OVPR will engage the UNM Alumni Association to explore the possibility of creating a research related award.

- **Metrics:** Enhanced recognition for outstanding research achievements as assessed on an annual basis through a Research Strategic Plan survey.
- **Timeline:** The OVPR will engage the UNM Alumni Association Fall FY2018.

**Objective 2:** Identify and assist in providing more time for researchers to conduct their research.

**Task 2.A.** The OVPR will convene a task force to study how research administrative support is allocated throughout campus. The task force will identify opportunities for additional administrative support for researchers. The task force will present these opportunities and other recommendations to the VPR for evaluation and resource allocation.

- **Metrics:** Reduced administrative burden to researchers, which will allow researchers to dedicate more time conducting research.
- **Timeline:** The task force will be established in the spring of FY2018. The task force report and associated recommendations will be submitted to the VPR for evaluation by the end of fall FY2018.

**Task 2.B.** The OVPR will allocate funds – initially up to $30K/year – for course release for main campus researchers and will work with the Research Allocation Committee (RAC) to set up equitable means for awarding these funds.

- **Metrics:** An increase in the number of research proposals and awards received because of course release. This program will be reviewed annually by the OVPR and the fund may be increased or decreased based upon success of the program.
- **Timeline:** The OVPR will work with the RAC to set up equitable means for awarding course release funds beginning in fall FY2018. The first opportunity to apply for course release award funds will be during the FY2018 RAC season.

**Task 2.C.** The OVPR will allocate seed funds (initially $20K/year) to support fields with limited external funding and will work with the Research Allocation Committee (RAC) to set up equitable means for awarding these funds.

- **Metrics:** An increase in the number of research projects enabled because of the seed funding. This program will be reviewed annually by the OVPR and the fund may be increased or decreased based upon the success of the program.
- **Timeline:** The OVPR will work with the RAC to set up equitable means for awarding course release funds beginning in fall FY2018. The first opportunity to apply for course release award funds will be during the FY2018 RAC season.
Task 2.D. The OVPR will work with the Office of Graduate Studies to develop a pilot program where graduate students with expertise in proposal writing will provide proposal writing support and training for departmental research involving graduate student researchers.

Metrics: Graduate student researchers receive training on proposal writing and administrative burden for the conduct of the research is reduced. The OVPR will assess the success of the pilot program in coordination with the graduate studies program.

Timeline: Discussion about the logistics of the pilot program will be conducted spring FY2017 with the goal of implementing the program spring FY2018.

Objective 3: Foster an environment of support and mentorship with the research community.

Task 3.A. The OVPR will develop a mentorship / support program for junior faculty and underrepresented faculty members. A database of volunteer expert, senior level faculty and national laboratory retirees will be established to support this program. A member of the Faculty Research Development Office will manage the database, serve as program coordinator and will work with the ADVANCE program. Program will sponsor events to create awareness and support mentorship and support activities.

Metrics: Junior and underrepresented faculty will be surveyed (in the annual RSP survey) to determine the effectiveness of the program.

Timeline: The mentorship / support program will be developed and implemented by fall FY2019 and will be assessed annually.

Task 3.B. The OVPR will explore opportunities to leverage expertise from National Laboratory retirees (both researchers and senior managers). Contact information for any identified individuals who have expressed an interest in collaborating with or providing mentorship for UNM researchers will be entered in the database for the mentorship/support program (Experts Registry) and the database will be made available to the institution through the OVPR website.

Metrics: Increased engagement with local human resources outside of UNM.

Timeline: The OVPR will attempt to identify appropriate National Laboratory experts that are interested in participating in this program beginning in Fall FY2018. The database will be established by fall FY2019 and the effectiveness of the initiative will be assessed annually.

Objective 4: Create a task force for the establishment of incentives for research excellence.

Task 4.A. The Provost will convene a task force to establish and implement a policy for salary incentives for research active faculty.

Metrics: Participation of faculty in incentive program(s). Department Chairs and Center Directors will be surveyed to determine if the faculty are taking advantage of the available incentives.
Timeline: The task force will be established by the end of FY2017. The associated policies will be implemented by the end of FY2018.

**Task 4.B.** The task force will consider means to normalize flexible appointments across colleges as a way to incentivize research.
- **Metrics:** Promulgation of normalized, flexible appointment policy. Department Chairs and Center Directors will be surveyed to determine if the faculty are taking advantage of the available incentives.
- **Timeline:** The task force will be established by the end of FY2017. The associated policies will be implemented by the end of FY2018.

**Task 4.C.** The task force will develop a plan for future cross-department appointments (joint/secondary appointments; cluster hires) that includes promotion and tenure considerations.
- **Metrics:** Enhanced number of cross-department appointments. Department Chairs and Center Directors will be surveyed to determine if the faculty are taking advantage of the available incentives.
- **Timeline:** The task force will be established by the end of FY2017. The associated policies will be implemented by the end of FY2018.

**Task 4.D.** The task force will explore the possibility of providing options in the honorific titles given to distinguished professors.
- **Metrics:** Guidelines are developed and provided for distinguished professors to allow him/her to select honorific title.
- **Timeline:** The task force will be established by the end of FY2017.
Appendix A.  
The individuals we interviewed for the Human Capital Working Group Report:  

Research Area #1  
Andrew Sandoval-Strausz, Hist  
Jennifer Denetdale  
Jesse Aleman, English  

Research Area #2  
Greg Cajete  
Felipe Gonzalez  
Sylvia Celdon-Pattichis, Ed  

Research Area #3  
Abhaya Datye, CBE & CMEM  
Steve Brueck, CHTM  
Stephanie Forrest, CS  

Research Area #4  
Brian Goldstein, Arch  
Yael Cannon, Law  
Nick Flor  

Administration  
Carol Parker, Sr. Vice Provost  
Melissa Vargas, Provost Chief of Staff  
Marie Chestnut, Dir, HSC Faculty Contracts  

Deans  
Tom Turner, ADR A&S  
Kym Pinder, Dean Fine Arts  
Christos Christodolou, ADR Engineering  

Individual interviews.  
Kevin Malloy  
Mike Dougher  
Rosa Gonzalez-Rosenblatt, OSP  
Glenda Lewis, Pres GPSA, Ed  

National Lab People  
Roger Hagengruber  

VP Research for other institutions.  
Dr. Mary Lidstrom, University of Washington.  
Dr. Roberto Osegueda, University of Texas-El Paso  
Dr. Marsha Mailick, University of Wisconsin
Appendix B – Response Summary of Human Capital Questions from RPS Survey

Question 95. Should UNM provide its faculty with more incentives for research involvement and productivity?
YES -89.7 %, NO 10.3%
- Current state:  
  - no incentives  
  - model ignores variability in research productivity
- Suggestions:  
  - Reducing teaching load  
  - Paid summer time  
  - Great F&A and IDC returns  
  - Providing research opportunities – internal UNM
- Alternative opinions  
  - Compromises quality of teaching  
  - May be divisive
Question 96. Should UNM do more to encourage unfunded research?
YES - 77%, NO 33%
- Yes, as it leads to funded work, attracts visibility, involves students
- UNM should support by internal funding for students involved in research
- Many are unaware of unfunded research
- Some see it as unlikely successful as need to support time and people from some source
**Question 97. Do aspects of your current research involve undergraduate or graduate students?**

**Undegrad 64%, Grad 77%, No – 19%**

- Limited funding to involve students is a major obstacle
- Low quality of students is another major factor
- Lack of time for some
Question 98. Do new junior faculty in your unit receive sufficient support for research, including startup funds?
YES -52%, NO -48%

- Two major trends:
  - Not enough at all - below average
  - Enough and comparable with other institutions
- Travel support is low, no mentoring and training
- Inequity between junior and senior faculty
Question 99. Should UNM pursue more cross-departmental appointments?

YES - 70%, NO 30%

- Too complicated – UNM support, clear tenure, review and assessment structure must exist
- Some don’t see the value
- Better to support cross-departmental funding
Appendix C.

Faculty Research Incentive programs existing at peer institutions:
Annual one-time research incentive payment.
Cash Prizes for Obtaining Grants of Significant Size or Stature
Salary Replacement Program - budget academic year salary release up to the level required by the department for teaching release.
Post Doctoral Matching Program
Proposal Preparation Incentive
Summer Faculty Fellowships
Independent Research Project Funding Application for Faculty to include Students
Research Project Funding Within a Course
Academic Year Stipends for Students
Student Travel Funds Application
Research Incentive Funds stem from indirect costs recovered from your sponsored project - 5% of their indirect cost recovery available for student support, travel support, hosting collaborators, and computers.
Faculty incentive programs – scholarships, proposal development, campus wide initiative, operating support
Awards for grant submitted ($100-$500)/ awards for grants awarded ($500-1000)
The Research Incentive Funds are returned to the colleges, schools, departments and faculty to incentivize sponsored research program activity.
Internal funding for research seeding, emergencies, time releases, equipment, and student involvement
Course Release Programs
Pre-tenure/Promotion Research release
New Faculty Summer Research Stipends
State initiatives - for example: Texas Research Incentive Program (TRIP)