

UNIVERSITY COMMITTEE ON RESEARCH POLICY ANNUAL REPORT 2014-15

TO THE ASSEMBLY OF THE ACADEMIC SENATE:

The University Committee on Research Policy (UCORP), as specified in Senate Bylaw 200, is responsible for fostering research; for formulating, coordinating, and revising general research policies and procedures; and for advising the President on research. During the 2014-15 academic year, UCORP met eight times. This report briefly outlines the committee's activities.

RESEARCH POLICY ISSUES

1. Commercialization of Research.

The UC Innovation Council was formed to support President Napolitano's innovation, entrepreneurship, and technology commercialization initiative, which aims to leverage the scale and diversity of UC's ten campuses, five medical centers and three affiliated national labs and to build a vibrant and innovative entrepreneurial culture across the system. It is an outside group of advisers that comprise a cross-section of investment and business executives, venture capitalists and technology experts. The Innovation Council will advise the president on topics such as creating an entrepreneurial environment at UC, communicating opportunities, assessing best practices, investing in innovation, and providing rewards and recognition for faculty participants.

The council receives administrative and technical support from the IAS System-wide Programs & Initiatives group. There are two workgroups – (a) Reward and Recognition and (b) Entrepreneurship (which is examining mechanics and policy issues). There is also a focus group regarding the entrepreneurial area that involves business partners and faculty innovators. As a part of the Innovation Council's Reward and Recognition working group chaired by Ann Marie Sastry, UCOP is conducting a series of facilitated focus groups to explore opportunities for and perceived barriers to creating a more innovative and entrepreneurial culture at UC. The three focus groups will be targeted to senior administrators, entrepreneurial faculty, and industry leaders. The senior administrator group met in June/July and there are plans to hold the remaining two focus group meetings in September. Another workgroup helps President's Senior Advisor Reg Kelly with Academic Innovation Centers. This workgroup will address: (a) how structures should be set up for fields other than medicine and (b) how to get knowledge out so as to benefit the public.

UCORP members saw the strength of the Innovation Council's system-wide efforts as lying in the blending of central support and multi-campus moorings. In providing feedback, UCORP expressed concern about the possibility of conflict of interest and conflict of commitment for UC researchers. UCORP also noted that the Innovation Council's top-down method of identifying promising research might benefit from cultivation of more campus-level contacts. To avoid duplication efforts at the system and divisional levels, the Innovation Council might focus on research areas where bringing in researchers from multiple campuses provided special advantages in terms of expertise, resources, and/or pursuit contracts and grants. There were unresolved questions about: how system-wide leadership would benefit commercialization efforts; faculty incentives to commercialize research; whether private

motives could conflict with institutional goals; how corporate cooperation and concessions would be sought; how to deal with investor unwillingness to invest in “proof of concept” projects.

UC Ventures includes an independent fund that will be used to pursue investments in UC research-fueled enterprises, subject to the approval of the UC Regents. The Office of the Chief Investment Officer will make an initial commitment of up to \$250 million to the fund, with 10% of the amount to be used for innovation on the campuses. The goal is to help nascent projects reach their next step by providing access to UC researchers. The plan is to launch the fund after team selection in Spring 2016.

UC Innovation & Entrepreneurship. Regis Kelly is the UC President’s Senior Advisor on Innovation & Entrepreneurship. He is also the Director of the California Institute for Quantitative Biosciences (QB3) at UCSF. His UCOP focus includes getting faculty members interested in taking their ideas to the world and helping post docs to start their own companies.

At QB3, classes are offered on entrepreneurship and innovation, such as “start-up in a box” class and business grant application workshops. Participants are three times more likely to get a grant. Participants can also go to QB3 for advice and service. Dr. Kelly has been working with campus leaders interested in providing similar support.

2. Multi-campus Research Programs and Initiatives (MRPI). The MRPI program supports innovative multicampus research collaborations that strengthen UC’s position as a leading public research university. This program was cut during the recession. In 2014-15, President Napolitano has restored \$2.6 million to the MRPI program on a one-time basis, and in the 2015-16 budget, a permanent \$2 million restoration has been proposed. UCORP members’ concerns included frustration with the inflexibility of central funds, especially for a mission-critical endeavor such as research. In October 2014, 186 MRPI proposals were received; the reviews occurred in November. In response to the request from faculty and campus leaders, the frequency of the competition was accelerated to once every two years, and two funding options were offered for new awards: 2-year planning awards, and multi-year program awards. Ultimately, 20 proposals were funded as MRPI awards across the breadth of university scholarship, for a total multi-year investment of approximately \$23.5 million. The next competition is scheduled for 2016, with new awards beginning January 2017. The total annual budget is currently projected to be \$8.3 million for both new and continuing award commitments. Additional information can be found: <http://ucop.edu/research-initiatives/programs/mrpi/index.html>

Provost Dorr asked UCORP to review the Compendium section on MRPIs. UCORP suggested that the MRPI program no longer be included in the Compendium, given that the focus of the Compendium is on programs that are formally established (such as Multicampus Research Units). The research projects supported by MRPI grants do not have the same formal organizational status.

3. UC Laboratory Fees Research Program. The UC Lab Fees Research Program is funded by a portion of the fees the University receives for its management of the Los Alamos and Lawrence Livermore National Labs. A new request for proposals (RFP) was released in spring of 2015, with a 3-year award term. The 2015 total is \$13.5M, which decreased from \$18-20M. This is the third cycle of this program, following 2009 and 2012. A two-year cycle is being used now to better match other funding programs. The funded research will bring mutual benefit to the campuses and labs and serve the public interest. These areas have been identified: 1) new or short-term programs that need help getting out of the gate; 2) graduate fellows; and 3) larger research and training programs, which may receive up to 4 years of funding.
4. Graduate Fellowship Program Update. This program is a new pilot under the lab fee program. The Regents have set aside an initial \$400K investment to support 3 students for 2 years or 2 students for 3 years, available to Ph.D. students who have advanced to candidacy for up to 3 years of research at the national labs. It is intended for UC graduate students who are doing dissertation research. They can apply for 2 years of funding (such as in-residence fellowship at the labs), and would receive a UC faculty mentor. There is a lab commitment component, which would provide a meaningful research opportunity; the students would spend a significant time at the labs.

Vice President Budil noted that the program is a good strategic investment and partnership opportunity. Her office is committed to fostering more connections between the labs and campuses, to giving more students experience in the labs, and to protecting the lab free program, though fee restructuring is likely over the next few years. Members appreciated three aspects of the program: the unique educational and research opportunity that is being presented, that UC is the pipeline to lab employment, and that graduate students are the best link between the labs and the campuses.

5. Biosafety Level (BSL) 3 Inventory. President Napolitano appointed a task force to examine UC's hazardous chemical storage and usage protocols. Environment Health and Safety (EH&S) staff leads this project. The task force include two Academic Senate representatives, along with three at-large faculty members, all of whom run BSL3 labs. The charge to the group is to inventory labs, supplies, and storage practices. Findings will be reviewed and redacted by the Office of General Counsel; next steps may include promulgation of best practices, enhanced training, improved decommissioning procedures, and revised exit interview strategies.
6. Doctoral Student Support. In January 2015, recommendations to improve doctoral student support were presented to the Regents. The recommendations are the result of a systemwide workshop. The recommendations addresses four areas: 1) non-resident supplemental tuition (NRST), 2) net stipends and multi-year support guarantees, 3) professional development, and 4) diversity. UCORP members noted that it would be politically difficult to propose eliminating NRST while simultaneously pursuing 5% tuition increases.
7. Openness in Research Policy. At the request of the Vice Chancellors for Research, UC is considering whether to accept federally sponsored research that includes citizenship and

publication restrictions. Traditionally, UC has not accepted funds with “strings”, but this could open new avenues of research and income for the University. Some researchers reach “dead ends” and must change the direction of their inquiry or find a new means of pursuing it. In some departments, federal funding comes largely from the Department of Defense, and the number of projects they sponsor without citizenship and publication restrictions is diminishing. On the other hand, taking this step could restrict the availability of top graduate students to participate on research. UC has long-standing commitments to principles of non-discrimination, but this change could ease that position. Another concern is that additional compliance costs would be incurred, and some infrastructure would need updated.

UCORP advised that the new policy should include a clear statement of principles, limiting the expansion to projects funded by the federal government and for reasons of national security only. No classified research would be allowed in regular campus facilities under this possible change. Campuses would have the option to participate, having weighed carefully the benefits and impacts to students and faculty. Fundamental research would still occur in non-secure zones of the campuses.

8. Communications. UCORP was interested in the various communication approaches used to inform the public about UC Research. The issues discussed included how the public conversation can be expanded to include the importance of research at the University. The resources of campus-level communications departments are limited and often focused on communicating to alumni. ORGS met OP groups to discuss their communication needs. Below are UCOP links to the various communications tools:

www.universityofcalifornia.edu – this site is more news driven. There is a very research intensive section under News > Research.

<https://www.youtube.com/user/UCwebvideo> video content with teachable format. Have partnered with Discovery. Videos made at UC/UCOP, and are published weekly.

<http://ucresearch.tumblr.com/>

<https://flipboard.com/@ucfiatlux>

<https://instagram.com/uofcalifornia/>

<http://ucfoodobserver.com/>

<http://public.universityofcalifornia.edu/#home>

The Conversation is a non-UC, daily online publication that publishes research-based articles by professors and researchers. *The Conversation* is supported by six large foundations. The ideal of this publication is to present accurate information in 600-800 words. Bruce Wilson, who oversees the Development and University Relations of *The Conversation*, is encouraging UC to participate and is visiting each campuses.

9. Open Access Policy. On July 24, 2013 the Academic Senate adopted an open access policy that called on Senate authors to take advantage of U.S. copyright law to grant to the University a non-exclusive license (limited to the purpose of making the work openly available) for each scholarly article authored while employed by UC. During the 2014-15 academic year, the policy was extended to all UC employees and students. The interim report stated that the goal is to have all UC campuses’ publication deposits by the end of fall 2015 semester. This is not about archiving documents; it’s about open access. This policy also puts

pressure on the publishers to aggregate data on authors information and types of articles. The UC California Digital Library (CDL) is not enforcing the policy, but helping with the implementation of the policy and process of deposit, by complying and being efficient. The hope is to integrate this with reporting systems. The benefit for UC is to reduce the price of the licenses of academic journals, and bargain better with the publishers. From the library perspective, UC pays too much for subscription rates as their budgets are decreasing.

10. Principles Guidelines. The Principles Guidelines provides formal guidance on implementation of the “Principles Regarding Future Research Results.” The Academic Council reviewed the Guidelines in the summer, and approved them on July 29, 2014. UCOP Issues Management, Policy Analysis and Coordination (IMPAC) noticed that the language in Section 2 of the Guidelines seemed inconsistent with the university’s communications regarding unionization of graduate students. Former Senate Chair Bill Jacobs worked with Executive Directors Streitz and Winnaker on suitable revisions. The version that was sent to UCORP had revisions in Section 2. There was much discussion on “with a faculty advisor”, the faculty advisor’s obligation to the student, and who will advocate for the student. The Guidelines were issued by the Provost in July 2015.
11. Guidelines on Accepting and Managing Equity in Return for Access to University Facilities and/or Services. The equity is overseen by the Chief Investment Officer (CIO) and the process of accepting equity for access to University facilities is intended to mirror licensing equity by taking a percentage in exchange for housing and services. Concerns include the following (1) space is financed by tax-free bonds used by companies; some think that this should be taxed; (2) possible conflict of interest; and (3) non-profit status of the University. UCORP members also expressed concern about lack of faculty oversight, both in regard to the possibility that private companies might overburden scarce research space and equipment and in regard to the financial and legal intricacies of hosting start-ups on campus. UCORP suggested that, if University relationships with companies in which UC has an equity interest were to be handled efficiently, specialized expertise in finance and law would be needed. Therefore, the establishment of a system-wide faculty advisory committee would be an important step in making such expertise readily available to all campuses.
12. UC MEXUS MRU Program Review. According to the UC *Compendium*, Multicampus Research Units (MRUs) go through a regular review every five years and a sunset review every 15 years. UC MEXUS is scheduled for a Sunset 15-year review, and UCORP is the lead committee; UCPB and CCGA are also part of the review. UC Research Initiatives of ORGS staff the reviews and streamlined the review documents. UCORP participated in the improvement of the review documents; the goal was to update the forms in an effort to encourage a more concise response from the MRU. The reviews will occur in September 2015 with the goal of being finished in November 2015. UCORP suggested a somewhat broader review that included a review of the research team, not just the Director. However, this may not be possible as the Director is committed for 5 years whereas the leadership team is not. The Director may be invited to make a presentation to UCORP.
13. Catalyst RFP. In December 2014, President Napolitano announced the first recipients of the President’s Research Catalyst Awards. These projects involve multi-campus, multi-

disciplinary efforts, incorporating research, as well as teaching and learning for undergraduate and graduate students. The 5 inaugural 2015 Catalyst Awards were selected from the highly competitive MRPI pool, and represented a \$3.1 million additional investment in outstanding multicampus research by the President. In Spring 2015, a separate Catalyst Award RFP garnered 177 letters of intent (LOIs) with a total funding request of \$190 million. There are about 60% STEM and 40% Arts and Humanities, and Social Sciences, and other fields. The initiative will fund up to \$7 million for this competition (new 2016 Catalyst Awards). Up to 30 LOIs were identified in July 2015 to proceed to full proposals for a merit review in Fall 2016. Additional information can be found at this link: <http://ucop.edu/research-initiatives/programs/catalyst-awards/index.html>

14. NSF Funding and American COMPETES Reauthorization Act of 2015, H.R. 1806.
(from http://www.geosociety.org/geopolicy/news/2015/1504_COMPETES.htm)

Background. On 20 May 2015, the House passed the America COMPETES Reauthorization Act of 2015, H.R. 1806, which authorizes the National Science Foundation (NSF), National Institute of Standards and Technology (NIST), and research at the Department of Energy (DOE) for fiscal years 2016 and 2017. Although the bill includes overall increases for all three agencies from FY 2015 funding levels, it contains several sections that are of great concern to the scientific community, including cuts to the NSF geoscience directorate.

The bill sets NSF funding at the directorate level and unevenly distributes it between programs, with engineering, computer science, biology, math and physical science programs receiving authorization increases and geoscience and social science programs receiving authorization cuts. ORGS sent a letter of concern to Academic Council Chair Gilly, who brought up the issue with the President's Office. The UC Office of Federal Governmental Relations shared documents regarding the importance of UC research and the impact of this decision with ORGS.

RESEARCH PORTFOLIO

1. Portfolio Review Group (PRG)

The PRG is a joint Senate-Administration group that was charged to advise the Vice President for Research and Graduate Studies on the portfolio of research enterprises centrally funded at UC. PRG was tasked to evaluate UC's research investments for academic breadth, depth, flexibility, and vitality. UCORP contributed to the creation of the Portfolio Review Group in 2011-12. During 2012-13, UCORP Chair Kleeman nominated Academic Senate members to serve on the PRG and met with the newly appointed PRG Chair to provide an Academic Senate perspective on the history and purpose of the PRG. In 2013-14, PRG issued its recommendations in two parts. The first part focused on research projects with fungible monies, and the second part focused on projects with restricted funding. PRG found that the programs that are most likely to advance knowledge and lead to new research topics are also the programs that are most at risk for being defunded or underfunded.

In response, and in recognition of the fact that OP has disproportionately cut research programs and that across-the-board cuts disproportionately impacted research programs, UCORP worked with the University Committee on Planning and Budget (UCPB) to develop an argument for a guaranteed minimum level of central research funding. A visible

institutional commitment to basic research into new scientific and social areas—and the benefits that research brings—is needed, especially for a public research university charged with acting as the research arm of the state. Institutional actions must reflect the fact that research quality is imperative for faculty and graduate student recruitment and retention, as well as for a quality undergraduate academic experience.

In 2014-15, a three-year cycle was proposed for the PRG in future. Faculty representation was less than administrative representation in the first Group. UCORP recommended stronger faculty representation in the next cycle. A letter was issued to several program directors for strategic plans with a deadline of end of August 2015.

2. UC Natural Reserve System (NRS) Strategic Plan. The following eight goals are described in the NRS strategic plan:
 - i. Achieve financial sustainability with seven initiatives.
 - ii. Develop a coordinated, high-functioning NRS faculty and staff with 11 initiatives.
 - iii. Get the word out about the reserve system to partners and stakeholders.
 - iv. Increase effectiveness in training students. Teacher training.
 - v. Engage groups that are not well represented (such as working with HBCUs and Tribal Colleges) in the conservation community and environmental stewardship.
 - vi. Encourage arts and humanities involvement at the NRS reserves.
 - vii. Continue to foster world-class scientific research while supporting investigations addressing the effects of climate change on California's biodiversity.
 - viii. Exceed NRS stakeholder expectations for meeting the responsibilities of environmental stewardship and ecosystem protection.

Since the 50th anniversary is coming up there is a challenge to raise \$50 million.

3. Agriculture and Natural Resources (ANR)

During 2011-12, the Academic Council created the Academic Council Special Committee on Agriculture and Natural Resources (ACSCANR), comprised of representatives from impacted divisions, UCORP, and the University Committee on Planning and Budget (UCPB). Chair Brouillette represented UCORP on ACSCANR during 2014-15.

4. Department of Energy National Laboratories

UCORP was also represented on the Academic Council Special Committee on Laboratory Issues (ACSCOLI) by Chair Brouillette. ACSCOLI monitored the fee penalty at Los Alamos Lab and supported Berkeley Lab Management on the rehired retiree proposal.

SYSTEMWIDE REVIEW PARTICIPATION AND CORRESPONDENCE REPORT

In addition to the above, UCORP responded to requests that it review of several policies and white papers with systemwide import:

- Future of the Office of Research and Graduate Studies (ORGS)
- Proposed Amendments to Senate Regulation 682
- Proposed Changes to APM 330 (Specialists)
- Doctoral Student Support
- Proposed Revisions to APM 210.1.d (Review and Appraisal Committee)

- Proposed Presidential Policy on Open Access
- The Compendium and MRPIs
- Constitutional Autonomy of UC

FUTURE/CURRENT STATUS OF ORGS

Provost Dorr stated that final decisions on the future of the Office of Research and Graduate Studies (ORGS) will not be made until the strategic review of the Office of the President has concluded. One of the large questions to be addressed is whether and how to redistribute the responsibilities overseen by ORGS. A significant question is where best to house graduate studies since several academic affairs departments touch on this issue. Most stakeholders are not keen to divorce graduate studies and research, but the connection between graduate studies and technology transfer is not readily apparent. Another outstanding question is whether Innovation will become a new department at the Office of the President. If so, will it be an academic unit or a business unit?

President Napolitano indicated that the position of vice president for research and graduate studies would be divided into two jobs: one focusing inward, on the internal concerns of the University, and one facing outward, on interactions between UC and external institutions and organizations. The President is interested in innovation and entrepreneurship, which heretofore resided in ORGS.

The Provost will re-write the job description and appoint a search committee, which will involve UCORP and CCGA. Recommendation presented by ORGS include looking for: (1) a new VP who has a deep understanding of academic research, is knowledgeable about a broad range of scholarly disciplines, and is willing to craft set of competitive programs; (2) a strong and effective advocate for research within OP and with outside constituents; (3) a candidate who is effective at communicating to the President, her office and the outside; (4) a VP who would be the voice of UC, instead of one campus; (5) a strong advocate for increased research funding, especially at the federal level; (6) visionary with outreach. The job description is going to the President with a target start date of July 1, 2016

The Provost asked Interim VP Tucker to continue as Interim VP in 2015-16. The UC Observatory Director Search is completed. The Berkeley Lab Director will be presented to the Regents in November with a possible start date of January 1, 2016.

UCORP REPRESENTATION:

UCORP members participated on the following systemwide bodies during the year: Academic Assembly (Chair Brouillette), Academic Council (Chair Brouillette), Academic Council Special Committee on Lab Issues (Chair Brouillette), Academic Council Special Committee on Agriculture and Natural Resources (Chair Brouillette), and the Academic Planning Council (Chair Brouillette). Throughout the year, UCORP’s representatives provided updates on the activities of these groups.

ACKNOWLEDGEMENTS:

UCORP is most grateful to its consultants, who have provided invaluable information and perspective to the committee: William Tucker, Interim Vice President for Research and

Graduate Studies (ORGS); Mary Croughan, Executive Director for Research Grants and Program Office (RGPO), ORGS; Kathleen Erwin, Director, UC Research Initiatives, RGPO; Wendy Streitz, Executive Director for Research Policy Analysis and Coordination (RPAC), ORGS; and Dotti Miller, Interim Deputy to the Vice President (ORGS).

UCORP also wishes to thank its invited guests and campus alternates for their participation and support, as well as colleagues across the system who brought to the attention of the committee research-related issues of concern.

Respectfully submitted, UCORP 2014-15:

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