ACADEMIC COUNCIL SPECIAL COMMITTEE ON LAB ISSUES ANNUAL REPORT 2014-15

TO THE ASSEMBLY OF THE ACADEMIC SENATE:

The Academic Council Special Committee on Lab Issues (ACSCOLI) was established by the Academic Council to provide broad-based Senate oversight of UC's relationship with the National Laboratories – Los Alamos National Laboratory (LANL), Lawrence Berkeley National Lab (LBNL), and Lawrence Livermore National Laboratory (LLNL). ACSCOLI advises the President and Regents on general policies relating to the National Laboratories, which includes the dispersal of UC's share of net fee monies, policies that affect the lab science management, and the quality of science being performed at the labs. ACSCOLI is also concerned with evaluating the benefits of UC's continued participation in the management of the labs. The Academic Council has also charged ACSCOLI with stimulating closer connections between the labs, faculty, and students. ACSCOLI held two in-person meetings and two video conferences in 2015-16.

National Labs Overview

<u>Changes in Administration</u>. At LBNL, there is a new Associate Lab Director and Lab Director Paul Alivisatos announced his plans for departure. The Regents policy describes that five Regents should be on the search committee. The goal is to present a candidate at the November 2015 Regents meeting. The UC Office of the President (UCOP) Office of Laboratory Management changed its name to "Office of the National Laboratories."

<u>Super-Computing</u>. The next generation of high-performance computers at LANL and LLNL have been developed and installed. The Trinity (Cray) is installed at LANL, and the Sierra machine (IBM) will be completed and installed at LLNL in 2016.

<u>LBNL Flex-Lab.</u> The Flex-Lab is a comprehensive and advanced building efficiency simulator. It features customizable integrated-systems test beds, an occupied space for evaluating user comfort, and a virtual design. There are four components to this facility, and it is already being employed by some high-tech firms (e.g., Genentech) for the purposes of designing new energy-efficient buildings.

Accelerated Climate Modeling for Energy (ACME) is an ongoing, state-of-the-science Earth system modeling, simulation, and prediction project that optimizes the use of Department of Energy (DOE) laboratory resources to meet the science needs of the nation and the mission of the DOE. ACME's scientific goals address three areas of importance to climate research – the water cycle, biogeochemistry, and the cryosphere-ocean system. Eight national labs are involved in this initiative, and the UC National Labs are represented on the governing board.

<u>DOE Performance Evaluations for the National Laboratories</u>. LBNL earned 92.7% of its fee in FY 2014; it received another award term of one year. In FY 2013, it received 94% of its fee and another contract term of one year. Its current contract duration is 15 years, or until 2020. The issues negatively impacting its grade primarily revolved around management and electrical safety.

In FY2014, LLNL earned 92% of its fee, and another year award term. Last year, LLNL received 87% of its fee, but was not awarded another award term. Its current contract duration is 12 years, or until 2019. Compared to the previous year, the grading for FY2014 is positive. LLNL received high marks in the science and technology area; however, LLNL was criticized on

its work processes. To improve those processes, LLNL has examined their work processes emphasizing streamlining these processes while maintaining rigor.

In FY2014, LANL only earned 10% of its fee, did not receive another award term of one year, and had one year removed from its contract. Out of the available \$63 million fee, LANL only received \$6 million. By comparison to the previous year, in FY 2013 LANL received 89% of its fee, and but did not receive another award term. Its current contract duration is now 11 years, or until 2017. Despite this, LANL's S&T work was graded positively, as it generally exceeded expectations. LANL fared well in the area of mission execution. However, on the operations side, LANL received low marks, especially regarding the Waste Isolation Pilot Plant (WIPP) leak.

<u>National Ignition Facility (NIF)</u>. The NIF is making significant progress towards becoming a user facility. NIF had been under pressure to increase their shot rate and the number of external users of NIF. The full cost recovery policy was rescinded on the NIF, in part due to ACSCOLI's advocacy.

Waste Isolation Pilot Plant (WIPP) Incident at LANL. The WIPP incident highlighted a significant failure in the LANL's conduct of its operations, driving the overall rating of this performance objective to "unsatisfactory." With respect to WIPP, AVP McCallen clarified that "the WIPP is the sole U.S. geologic repository for transuranic waste, which is defined as heavy elements above uranium, with a half life greater than 20 years." This waste comes primarily from the Cold War era production and maintenance of nuclear weapons. The WIPP is located in a natural salt dome geologic formation, which will eventually compress upon itself and seal the waste in. LANL was nearing completion of the disposition of all legacy waste (~93% done), with all legacy transuranic LANL waste scheduled to be moved to WIPP by June 30, 2014. However, on February 14, 2014, there was a small, detectable release of material at WIPP. One single drum seems to have breached, which released a small amount of radioactive waste. LANL immediately took measures, reinforcing the remaining drums and implemented containment and environmental control of remaining waste drums. LANL also assigned Terry Wallace, Principal Associate Director, to lead an extensive investigation into the incident. Subsequently, a decision was made to transition responsibilities for legacy transuranic waste disposition to the DOE Office of Environmental Management and a new contractor.

Graduate Fellowships Opportunity Pilot & the UC Lab Fees Research Program (LFRP)

The Graduate Fellowship Opportunity Pilot, which is mandated by the Regents, will provide two years of support for Ph.D. candidates who wish to conduct thesis research on-site at LANL and LLNL. The purpose of the pilot is aimed at enhancing the engagement of UC graduate students at the Laboratories, further developing the employee pipelines for LANL and LLNL, and establishing appropriate expectations for the Fellowship Program in terms of enhanced strategic alignment between the UC and the NNSA Laboratories. Based on the outcomes of the pilot, the program may be expanded with a significant number of fellowships associated with UC Campuses and both LLNL and LANL. A target of opportunity also emerged at the end of the last fiscal year with approximately \$400K to fund such a program. The final RFP is scheduled to be released in April 2015.

<u>UC Lab Fees Research Program (LFRP)</u>. In light of LANL's \$57 million reduction in its fees for 2014, ACSCOLI discussed the future of the Lab Fees Research Program, both short- and long-term. Associate Vice President David McCallen updated the committee on the next steps for the

Regents-mandated Graduate Fellowship Pilot Program. The Office of Laboratory Management submitted a proposal to integrate the UC LFRP into one that both maximizes UC campus faculty collaboration, but also links key Lab Strategic Initiatives to campus interests.

The fee reduction at LANL has significant implications for the LFRP. \$13.5 million had been allocated for a new RFP, scheduled for April 2015. However, the loss in LANL fee revenue led to the postponement until December 2015. The Regents acted upon this issue and recommended that this money be rescinded from the budget this year. There are sufficient monies to fund the ongoing projects until completion. Since LFRP awards are paid out from the previous year's lab fee income. The Graduate Fellowship Opportunity Pilot program and LFPR have been delayed to gain more time to raise \$5 million.

Medical Benefits for LLNL Retirees (MOEN, et al. v. REGENTS – Class Certification Granted – Breach of Implied Contract for Retiree Health Benefits)

Ten former employees of Lawrence Livermore National Laboratory (LLNL) have brought a class action alleging that the University violated an implied contract to provide them with University-sponsored retiree health insurance when it transferred responsibility for their health benefits to Lawrence Livermore National Security (LLNS). Petitioners' university-sponsored retiree health insurance ended, and LLNS assumed responsibility for providing their benefits at the time when the University's management and operation of the Laboratory transferred to LLNS in 2007. A trial date may be scheduled for late 2015 or early 2016. DOE would be responsible for those costs if this were to happen. UC is currently working on the financial arrangements of the case, which financial arrangements have not been completely negotiated with the DOE.

Joint Appointments

Establishing joint appointments between UC campuses and the National Laboratories has been a long-standing area of interest for ACSCOLI. The 2010 the Commission on the Future noted that

"...researchers at the national laboratories and other organizations would welcome the opportunity to become regular members of the UC community as visiting professors. Those whose job at their parent organizations would benefit from the UC connection can establish regular contact with students through teaching, thereby reducing the overall student/faculty ratio without increasing the University's costs."

The Commission included joint appointments as one of their recommendations. There are four appointment categories for UC Faculty Scientist/Engineer Appointments. ACSCOLI's concerns include that labs don't have the concept of an FTE, but financial responsibility is with the lab management. With Adjunct and Professor-in-Residence, there is no systemic way to know who has these appointments; they rely on self-identification. There are 244 UC faculty appointments at LBNL, 150-160 Senior Scientists, who are not faculty, but have credentials to be full faculty members. The Senior Scientist promotion process is very rigorous and has a lengthy review process. Not all senior scientists are inclined to seek campus appointments, but a good number would like to pursue a campus appointment and would contribute to the campuses.

Based on a model from Harvard University, UCSD has proposed one such appointment called "Professor of Practice." ACSCOLI members discussed the opportunities and possible mechanisms for collaboration between lab scientists and UC faculty, and explored the possibility of creating a new title, called "Laboratory Professor" in the Academic Personnel Manual (APM).

After much discussion, ACSCOLI members concluded that the Adjunct Professor title is the most appropriate. The different campus' interpretations of teaching obligations are problematic.

ACSCOLI requested that UCAP consider allowing Adjunct Faculty without salary meet teaching obligations via graduate student mentoring rather than classroom teaching.

UCAP responded that they would welcome clarification of the Adjunct Faculty title, which would include more than laboratory sciences. UCAP recognized that the title should be meaningful, not just honorific. In other words, the person who has the title should be contributing to the University. And, at a minimum, there should be an expectation of mentoring of doctoral students. Further discussion included that one campus emphasizes teaching for the Adjunct Faculty title.

ACSCOLI was interested if it's feasible to change the APM on Adjunct Faculty for lab scientists/staff. It was also discussed that each campus defines the teaching load differently. ACSCOLI wants to help with this, since ACSCOLI brought up this topic. Further discussion included that titles should have real meanings and have meaningful reviews.

Better clarification is needed if lab scientists can be classified as Adjunct Faculty. At a minimum, they would have to mentor students. Discussion followed on the benefits of an Adjunct Professor as a lab scientist. The benefits include that the scientist will have the opportunity to mentor students, to teach, to spend time on the campuses, and to improve career development (i.e., the academic title carries honor and allows access to certain research grants). The labs would have to pay the Adjuncts, and these Adjuncts would have to go through the academic review process. There are a key group of people that labs want to keep, and are considering moving them into the Academic position full-time. It was suggested not to change the APM section on the Adjunct Faculty since the Adjunct titles on campuses are handled differently.

LBNL Rehire Retiree Proposal

Retired Employees may be reemployed by the University for reasons of University need if there is a break in service of at least 30 days, but preferably 90 days; and may be reemployed with an appointment of no more than 43% during any 12 month period. Appointments may not normally exceed 12 months with the possibility for up to a maximum 12 months extension for substantive business reasons. Once a total of 24 cumulative months has been reached, no further extension is permitted by this policy. While LBNL agrees with the stated intent of this policy to ensure responsible stewardship of the UC retirement program and provide appropriate succession planning, LBNL argues that a restriction of a 24 month maximum for the scientific and research professional rehired retiree appointments compromises LBNL's ability to maintain continuous research programs. However, the UC's APM provides a separate Recall for Academic Appointees policy (APM 205), which outlines requirements for handling retiree appointments for teaching, research or administrative service in an academic title. Under this policy, retiree appointments can be for a term of one year with eligibility for renewals on an annual basis. LBNL therefore proposes an exemption for its scientific and professionals research retiree appointments from the maximum 24 month restriction on appointment length, and permission for annual extensions similar to the treatment of academic appointments based on research program needs.

Academic Council Chair Gilly sent a letter to UC Vice President of Human Resources Duckett, and he responded positively. Vice President Duckett stated that "the Berkeley Lab Director or designee, after review and sign-off by the local Chief Human Resources Officer, has the authority to approve the reemployment of the UC Retired Employees beyond the 24-month appointment length limit in accordance with business needs."

Strengthening the Relationships between UC Campuses and the National Laboratories

Some of the ideas included: (1) "Meet and greet" sessions for the lab fee research program (joint UC and lab)/(2) Lab Science Day, which happened at UCSD two years ago, and encouraged the pipeline for students to consider working at the labs. This is a great opportunity for building connections with the medical schools and schools of engineering; (3) Meet systemwide, every two years, for a long weekend. Invite students and senior people that could lead to proposals.

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