

ACADEMIC COUNCIL SPECIAL COMMITTEE ON LAB ISSUES ANNUAL REPORT 2013-14

TO THE ASSEMBLY OF THE ACADEMIC SENATE:

Responsibilities and Duties

The Academic Council Special Committee on Lab Issues (ACSCOLI) was established by the Academic Council to provide regular and broadly-based Senate oversight of UC's relationship with the National Labs – Los Alamos National Laboratory (LANL), Lawrence Berkeley National Lab (LBNL), and Lawrence Livermore National Laboratory (LLNL). In doing so, ACSCOLI confers with and advises the President and the Regents on general policies relating to the National Laboratories, which includes the dispersal of UC's share of net fee monies; and policies that affect the 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 management of the labs beyond the time period required by UC's contractual commitments. Academic Council has also charged this special committee with stimulating faculty interaction in research collaboration with the labs by promoting greater intellectual exchange and closer connections between the labs and UC faculty and students, and determining any unmet educational needs that joint collaboration can address. Finally, ACSCOLI identifies UC faculty members with relevant technical expertise for programmatic and personnel reviews, as needed. ACSCOLI also consults with relevant Senate committees on major policy issues affecting relations between UC and the labs. ACSCOLI held two in-person meetings one video conference this year, with the May meeting being held at LLNL.

National Labs Overview

There has been a great deal of uncertainty with respect to National Laboratory budgets over the past couple of years. In general, federal funding has been reduced at all three National Laboratories. For instance, LBNL, LANL, and LLNL respectively lost \$110M, \$253M, and \$240M over the last two years (when compared to budgets from two years ago). In June 2013, LLNL also executed a voluntary separation program with 399 staff members leaving. While many of these budget slides have been arrested, Laboratory budgets are expected to remain flat going forward.

UC is the prime contractor for the management & operation of Lawrence Berkeley National Laboratory (LBNL). The University is also a partner in the Lawrence Livermore National Security, LLC (LLNS) that manages Lawrence Livermore National Laboratory (LLNL), and a partner in Los Alamos National Security, LLC (LANS), that manages Los Alamos National Laboratory (LANL). Each year, all three DOE-owned National Laboratories are assessed on their performance through a set of performance objectives/categories to determine how much of the DOE-NNSA management fee their respective contractors can earn¹, and whether the respective Laboratory contract will be extended for another year term.² In their 2013 annual assessments, the National Laboratories received between 87% and 94% of the available management fee monies. LBNL received 94% of its available fees (the same as last year); it also received a one-year award term, which extends its contract to 2019). It received an overall score of 3.6 (A-) for S&T; and received an overall score of 3.3 (B+) for management and operations. LANL received 89% of its available fees (up from 80% last year); it did not receive a one year award term extension

¹ Each performance objective is worth 20% of the at-risk fee allocation.

² To be eligible to earn award term the Laboratory must earn an adjectival score of Very Good or better in four of the five Performance Objectives and receive no adjectival score of Satisfactory or lower in any Performance Objective.

however (the contract-end stays at 2018). LANL received a “satisfactory” grade in security infrastructure, environmental stewardship, and institutional management. LLNL received 87% of its available fees (compared to 88% last year); it also did not receive a one year award term extension either (contract-end stays at 2018). It received a “satisfactory” grade in contractor leadership. All five categories must be “excellent” to receive an award term extension, which is why LLNL and LANL did not receive the award term extensions.

National Academy of Sciences Study

In 2013-14 ACSCOLI continued to closely monitor the NAS study, which examined the relationship between the National Labs and the NNSA. Towards that end, the committee discussed the study in detail at its May meeting at LLNL with Charles Shank, Co-Chair of the NAS Review Committee, and Raymond Jeanloz, from UC Berkeley, who was a member of the NAS Review Committee. Findings from Phase 1 of the study found evidence of a “broken relationship” between the National Laboratories and the NNSA, and recommended that the reporting and administrative burdens be reduced. Phase II concentrated on the scientific research and engineering being conducted at the Laboratories. Co-Chair Shank related to ACSCOLI that the NAS review committee could not find a moral crisis at the Laboratories, nor were there significant operational changes post-contract. The review committee concluded that there was not a major change in the motivations of the leadership due to the change in the Fee structure. Instead, the review committee found that the problems could be traced back to the level of trust (or mistrust) in the relationship between the National Laboratories and the NNSA, and by extension, the DOE (and not the relationship between the Laboratories and a private entity). This lack of trust translates into expensive transactional oversight costs. There is also a sense that the NNSA is assigning tasks with specific implementation instructions. Congressional language that micromanages tasks at the Labs, in addition to a high rate of turn-over in the DOE site managers has made things worse. This dysfunction has to be replaced by an earned trust by the National Laboratories. Without that, one is faced with entrenched oversight organizations/structures. In part two of the report, the most disturbing finding is the tremendous cost of doing experiments, with much of that being driven by oversight issues. On the whole, members agreed with this assessment, but noted that it will become increasingly important for the University to remain engaged with the National Laboratories in two key areas: 1) Oversight of the quality of the science being conducted; and 2) the “appropriateness” of the National Laboratories’ work.

LLNL’s National Ignition Facility

Over the past several years, ACSCOLI has expressed concern over the National Ignition Facility (NIF), especially federal intervention and micro-management of the facility. In June 2012, ACSCOLI wrote a letter expressing concern over federal management of time-allowances and scheduling of the prescribed shots conducted at the NIF; and in June 2013, ACSCOLI wrote a letter opposing a proposed DOE shot recharge policy. Such a policy would have required that all non- DOE National Nuclear Security Administration (NNSA) users be subject to full cost-recovery on a per-shot (experiment) basis beginning in FY 2014, which would have driven up experimental costs to effectively eliminate most opportunities for fundamental science at the NIF. Partially due to ACSCOLI’s efforts, this recharge policy was rescinded. Reflecting its continued interest in the NIF, ACSCOLI received a presentation on this facility in May 2014. This in-depth presentation included its mission and background; plans to expand the NIF as a user facility for investigatory science; and its progress towards ignition.

Lab Fees Research Program & Graduate Fellowships Pilot

Throughout the 2013-14 year ACSCOLI discussed a possible reorientation of the Lab Fees Research Program (LFRP) competition, which included adding some kind of graduate student and/or post-doctoral fellowship within the program. At its May meeting, ACSCOLI members made a proposal to set aside \$2-3M from some portion of the Lab Fees for direct support to graduate students in the form of competitive fellowships. Members argued that such a fellowship would not only increase UC Laboratory-campus interactions, but also bolster the Laboratories pipeline for future scientists. Coincidentally, in spring 2014, the UC Regents voted to approve a \$400K pilot Fellowship Program from income earned by the University from management of LANL and LLNL. In October 2014, ACSCOLI formally commented on the Office of Lab Management's proposal for this pilot fellowship, suggesting that the campuses should have some input on the definition of the research foci and priorities and that the Laboratories should provide some kind of matching, or partial matching, for the fellowships.

Conference Accountability Act of 2014

In August 2014, ACSCOLI submitted concerns to Academic Council over the proposed Conference Accountability Act of 2014 (S. 1347), which would codify the FY 2013 OMB-imposed 30% restriction on conference travel (from 2010 levels), and would put into statute onerous reporting requirements for any conference costing more than \$50,000 in travel costs per agency. The Act would also prohibit sending more than 50 personnel to any single international conference or spending more than \$500,000 to support or host a scientific conference. ACSCOLI argued that this Act would have a chilling effect on Laboratory attendance at scientific conferences. Given the restricted budgets at the National Laboratories, the numbers of scientists permitted to attend DOE-sponsored conferences would remain limited in order to stay below the approval threshold and avoid the labor involved in the onerous reporting requirements. In addition, the uncertainty associated with travel approvals discourages scientists to such a degree that many are not even seeking permission to attend conferences in the first place. Finally, the travel restrictions already in place have added significant costs to the management of conferences – both in the administrative burdens and the increased travel costs due to late approvals. At the urging of ACSCOLI, Academic Council wrote Senators Barbara Boxer and Diane Feinstein, asking them to vote against this legislation.

Other Issues of Concern

ACSCOLI also engaged with the Office of Laboratory Management on increasing campus/Laboratory interactions, joint faculty appointments, the Laboratory Fee structure, and governance of the Laboratories.

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Robert Clare (UCORP Chair)	Michael Todd (UCSD)
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