

**What are the Respective Roles and Authority of UC and DOE in the
Management of the National Laboratories?**
Academic Council Special Committee on the National Laboratories (ACSCONL)

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Each UC-managed national laboratory is a Federally Funded Research and Development Center (FFRDC) and a Government Owned, Contractor Operated facility. Principles of shared responsibility determine the roles of the government and the contractor. The government has the right to determine what problems the laboratories will work on. The contractor has the right to determine how to carry out the research, including who will actually do it. UC has been able to attract excellent personnel to carry out the scientific and technical work at the labs.

Typically, the government wishes to accomplish a specific set of tasks. The FFRDC provides the government greater flexibility in achieving this than conducting a formal competition for each task would provide. A contractor is also expected to bring in scientific and management talents that typically do not exist in the government.

The Department of Energy (DOE) determines the missions of the Laboratories and provides funding for the work conducted. Under the terms of the contract, the University furnishes the intellectual leadership and the necessary personnel and management expertise required for operation of the laboratories. The University has the responsibility for such matters as intellectual and scientific freedom, staff personnel policies, pension programs, and most employee salaries. UC performs work at the laboratories in government-owned or leased facilities. DOE retains approval over site management systems – financial, property, and procurement.

Although the Government is both “owner” of the laboratories and “customer” for its scientific and technical work, the current contract explicitly recognizes that UC brings special value to the relationship that another contractor would not likely have. The "principles of shared responsibility" are set forth in Appendix F of the present contracts between UC and the National Nuclear Security Administration (NNSA), the DOE subunit that supervises the UC contracts. In particular, UC provides the Government with a pool of expertise needed to carry out research that arguably the Government could not otherwise acquire and maintain. Typically DOE engages in program-wide debates regarding both whether to fund a particular line of inquiry and at what level, and laboratory scientists develop the appropriate methods for conduct of the research. Laboratory staff report that they are rarely challenged by non-scientists in DOE regarding research areas and methods.

Because the scientific and technical expertise in the labs is significantly greater than in the Government, it is recognized that many of the good ideas and opportunities for technical advances related to national security will come from the laboratories. Thus, the Government has the right to decide what it will approve and fund, but the ideas underlying many of the specific research activities in laboratory programs today have

originated in the laboratories. Maintenance of the ability of lab experts to question requests/demands on technical operational grounds is believed by many at UC to be a core issue in any future contract between UC and the Government.

In the 1990's, prior to the signing of the last contract, the DOE assumed a significantly greater responsibility for regulating aspects of lab operation, particularly security, environmental safety, and business functions. Increased numbers of DOE staff, located both within and outside the laboratories, were appointed to these tasks. The laboratories indicated that the growing level of regulation led to confusion regarding the specific responsibilities of the Government and UC, and to inefficiency. Many regulations impeded laboratory operation, increasing costs and reducing the overall scientific efforts, and regular DOE audits occupied laboratory scientists in mundane tasks. Thus, contrary to the intent of an FFRDC, the labs were saddled with federal rules and regulations that reduced speed, flexibility and effectiveness. On the other hand, UC management of some operational functions probably remained inadequate.

In the two years since the current contract was signed, UC has pushed for greater clarity in the responsibilities of the government and the contractor, with positive response from the NNSA. The NNSA has itself reorganized and is reducing its workforce to align with a reduced level of intervention in many routine laboratory activities. Nonetheless, such intervention is still believed to be excessive by lab staff. UC also has worked to strengthen its own management in areas of lab security, environmental safety and business functions, particularly in the last year. Lab officials and UC administration believe that progress has been made, but recognize that additional improvements are needed. As compared with conducting scientific research, the University has less experience in providing security and developing large business functions.

At the last moment during negotiations for the contract extension in 2000, UC agreed to give the Secretary of Energy the right to remove any employee from working on DOE projects. Laboratory employees, who are in fact UC employees, cannot be fired under UC human resources guidelines without a full review, which can require several months. This new right does not allow the Secretary to fire an individual, but it requires UC to remove the individual from DOE-funded projects. This is a fundamental change from previous UC-DOE contracts. UC negotiated several procedural safeguards that limited the likelihood that the measure would be exercised, and to date DOE has not utilized the provisions that allow it to veto lab managers or demanded the removal from contract work of any managers or bench scientists.

In summary, DOE owns Los Alamos and Lawrence Livermore National laboratories and contracts with UC to manage them. DOE is responsible for providing work orders and funding to carry out that work. UC is responsible for employing appropriate scientific and technical staff and for determining how best to carry out the work program prescribed by DOE. DOE provides programmatic oversight of that work. Because much of the specialized expertise regarding technical solutions to national security needs is located in the laboratories, UC scientific staff has been authorized to provide DOE with ideas in developing the work program. In general, once a work program has been established,

DOE does not question the scientific approaches used. Oversight panels established by UC do scrutinize the quality of the research efforts. DOE has the authority to alter work programs as it sees fit. Finally, DOE establishes and then audits a host of regulations regarding security, environmental safety and financial integrity. Though some oversight is needed, lab personnel report that DOE's efforts to protect against all possible lab failures has burdened the labs with detailed regulations and audits, the excessive nature of which has significantly reduced lab efficiency and productivity and impeded UC management policies. Some believe that DOE efforts are usually motivated by an effort to avoid problems that might be politically embarrassing, whether to the DOE or to Congress. Given the political importance of the national laboratories, this problem is certain to be ongoing. Following several embarrassing events involving lab security and lab business functions, UC has attempted to strengthen management in these areas and this effort continues.