

What are Some Benefits to UC Students and Faculty from UC's Management of the Laboratories?

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Specific faculty, groups and programs have benefited significantly from UC's management of the laboratories. It is clear that some UC faculty benefit from collaborating directly with laboratory personnel and that the two weapons labs employ roughly two hundred UC students and post-docs. Benefits arise both from direct research collaborations and from the Institute for Geophysical and Planetary Physics and the Institute on Global Conflict and Cooperation. The laboratories and some campuses have sponsored professorships: UCLA and Livermore have established the National Ignition Facility (NIF) professorship in "high energy density science," and Los Alamos and UCSD have the Los Alamos Neutron Science Center (LANSCE) professorship.

The laboratories also provide opportunities for UC students. Sixty-five UC graduate students served as Student-Employee Graduate Research Fellows at Livermore in 2003, while 41 UC graduates held post-doctoral appointments. In the same year, Los Alamos' student program hired 33 UC undergraduates, 28 graduate research assistants, and 35 post-docs. The percentage of graduate students and post-docs from UC at Los Alamos is about 8% of the total. At Livermore the corresponding percentage is 34%. The labs also provide a significant employment opportunity for UC students after graduation. Roughly a quarter of LLNL scientists with a doctorate received their graduate degrees from UC. For LANL, the comparable figure is about 10%.

Recently, LLNL has also played a useful role in program development. Livermore, for example, is playing an important role in helping recruit some of UC Merced's founding faculty. The research partnership between Davis' Cancer Center and Livermore involves more than 200 laboratory scientists and engineers and medical school clinical researchers. This partnership also helped the Cancer Center secure its designation as a National Cancer Institute-Designated Cancer Center. Other collaborations include the Center for Adaptive Optics at UCSC, the Center for Biophotonic Science and Technology at UCSD, and the Center for Accelerator Mass Spectrometry at Livermore.

Another recent development concerns the Memoranda of Understanding that have been developed between LANL and several individual UC campuses that provide special opportunities for UC faculty and students to connect with the labs. Primarily, these collaborations have been associated with UC's science and engineering programs, but links for social scientists and others also have been forged.

It is not entirely clear how many of these benefits is due to UC's management of the labs and whether they would continue even if UC were not the manager. Much of the research collaboration between UC faculty and laboratory personnel is surely based on intellectual affinities and mutual benefit rather than the fact that UC manages the labs.