

13 Reasons Why Continued State Support for UC Research Is Essential

UC Office of Research
October 21, 2003

State support for UC research is a sound investment in California's present and future well-being. UC research fosters advances in scientific knowledge that bring countless tangible benefits to the health, economic well-being, security, and overall standard of living of the state, the nation, and beyond.

State support for UC research enhances the University's ability to serve California by fulfilling all three parts of its tripartite mission – not only RESEARCH, but also EDUCATION (by providing both undergraduates and graduate students with meaningful opportunities to participate in research-based learning and by enhancing the curriculum with cutting edge ideas) and PUBLIC SERVICE (by translating scientific discoveries into practical knowledge and technical innovations that benefit the state's farmers, business leaders, teachers, policy makers, and people from all walks of life.

Specifically, State support for UC research is essential because:

1) It creates critical infrastructure.

State support enables the development of critical research infrastructure, which in turn allows UC to make the research discoveries that bring benefits to California, the nation and beyond.

2) It supports training of the state's specialized workforce.

UC researchers, faculty and graduates provide the intellectual and human capital essential to the demands of California's knowledge-based economy. By participating in UC research, and by being taught by world-class faculty who are often also leading researchers in their fields, UC undergraduates and graduate students gain specialized skills and knowledge that make them essential members of the California workforce. During these times of rapid technological developments and growing global markets, UC researchers produce the discoveries that keep California in the forefront, and they partner with industry to drive the continuous innovation that characterizes the state's economy.

3) It provides the seed funding.

The state's investment in research provides start-up funding that fosters entirely new fields of research, often ahead of federal programs. It seeds new funding in research areas of particular importance to the state, such as earthquake research and improved crop varieties.

4) It brings in federal dollars.

State funding keeps UC and California competitive in terms of attracting federal grants. UC leverages each state dollar into four federal dollars – funding that, in turn, invigorates the California economy.

5) It keeps California competitive.

UC-generated research provides a constant stream of technological innovation and intellectual property that serve as economic engines to help drive the California economy. Almost all of the industries in which California leads the world – agriculture, aerospace, aviation, biotechnology, computers, semiconductors and telecommunications – depend heavily on the contributions of UC research. Hundreds of companies have been founded based on discoveries made at UC.

6) It keeps California and the world healthy.

State funding to UC health researchers has contributed to major advancements in the prevention and treatment of a multitude of diseases, from AIDS, cancer, Alzheimer's disease, cardiovascular disease, arthritis, lupus, neurodevelopmental disorders and Down's Syndrome, among many others.

7) It keeps the state in the forefront in diverse areas of research.

State support keeps UC in the forefront of research in critical areas of the social sciences and humanities, which do not receive federal support or much other extramural funding.

8) It allows California to recruit and retain the best and the brightest.

UC competes nationally and internationally for the top-notch faculty and graduate students. State commitment to research allows UC to recruit and retain the best minds, who are attracted to UC because of opportunities to conduct research.

9) It supports graduate students.

State funding for research provides a major source of support for graduate students, who are supported through faculty and direct grants. Further cuts, coupled with increased fees and tuition, will have a direct proportional effect on UC's ability to support graduate students, which already lags compared to many other state university systems.

10) It enhances graduate and undergraduate training.

Research enhances graduate and undergraduate instruction, invigorating the curriculum. Research and teaching are thus inextricably linked; the quality of instruction will suffer when research opportunities are reduced.

11) It makes possible outreach and public service.

Research makes possible the third mission of the university – public outreach and service to the state. Research findings developed at UC lead to the ideas, products, treatments and technologies that improve the lives of Californians.

12) Cuts threaten UC's excellence.

UC has already endured, in 2002-04, a 20% across-the-board cut to research programs, as well as one-time cuts totaling \$18 million. These cuts are on top of 20% cuts suffered during the early 1990's. Existing world-class programs have been scaled back, and many meritorious proposals have been shelved due to lack of funding resources. Instead of playing a leadership role, UC is being forced to retreat.

13) Continued state funding for research lays the groundwork for future success.

Continued state support for UC research is essential for laying the groundwork for California's future economic growth through new ideas and breakthroughs and by training the next generation of scientists, engineers, farmers, teachers and business leaders.