



CALIFORNIA BUDGET

Latest Cuts Send Universities Reeling

A rapidly ballooning budget deficit is forcing California to make substantial cuts in state-funded science programs. The reductions affect facilities used by a global community of researchers, from astronomical observatories to oceanographic collections. And the bad news is expected to get worse: Next month, Governor Gray Davis will propose chopping at least \$29 million, roughly 10%, from the state's next research budget in response to a \$21 billion deficit.

California's woes are a result of a nationwide economic downturn, declining tax revenues, and an increased need for social services across the country. State officials who only a few years ago were debating how to spend surpluses are now putting the squeeze on universities and research institutes. "There's not much joy

in finding misery elsewhere, but this problem is no longer unique to California," says Joseph Miller, director of the Lick Observatory at the University of California (UC), Santa Cruz. "It's a precarious situation," adds Nils Hasselmo, president of the Washington, D.C.-based Association of American Universities.

Earlier this year, the California legislature imposed a \$32 million cut on state-supported science at the nine-school UC system as part of a 10% spending rollback for the fiscal year that began 1 July. Last week, the governor proposed taking another \$18 million bite out of research as part of an extraordinary set of midyear cuts to higher education. And in January, Davis will propose another round of cuts of at least 10%, according to UC spokesperson Brad Hayward. "These [new] budget cuts will be painful because we have already absorbed major cuts," says UC president Richard Atkinson. The details of the 2002-03 cuts will be fleshed out this week at a meeting of the university system's Board of Regents, which is also re-

viewing a hike in student fees.

For the Scripps Institution of Oceanography at UC San Diego, the belt tightening means reducing by half the \$300,000 budget for its oceanographic collections. Among the most extensive in the world, they include marine vertebrates and invertebrates as well as sediment cores and dredged rocks. If the state subsidy is eliminated in 2004-05, as expected, the collections would need to find alternative funding to remain open, says Scripps Director Charles Kennel. He says commitments to



Sinking fast. Scripps's famed marine collections face closure unless researchers can find alternatives to state funding.

staff salaries and collaborative ventures come first, leaving him with little choice.

Kennel hopes that by sounding the alarm, curators will be able to generate enough non-state funding to keep the collections intact and operating. "Our folks aren't going to go quietly into the night; they will fight like hell," says Kennel. But Scripps's Mark Ohman, curator of the pelagic invertebrate collection, says it will be difficult to find alternate sources. "Scientists who run the collections think that it is unrealistic to expect to raise a permanent endowment of \$5 million to \$10 million in 9 months," he says.

The next round of cuts may also leave Scripps with nothing for its portion of the California Cooperative Oceanic Fisheries Investigation, a 50-year effort with the National Oceanic and Atmospheric Administration (NOAA) and California's Fish and Game Department to monitor the ocean ecosystem. Kennel says that NOAA is setting up a committee to examine the problem.

At Lick Observatory, Miller is coping with a \$500,000 cut to his \$5 million budget

by laying off a handful of technicians. "This is hitting us at our heart," he says. The cuts are also expected to delay several projects, including work on advanced coatings for telescopes and planning for the \$600 million, 30-meter California Extremely Large Telescope project. "Research at UC has been a driver for the economy," Miller adds. "Such cuts are so shortsighted."

Agricultural research is taking it on the chin, too. The renowned agricultural and environmental sciences department at UC Davis will be losing 25 research positions through attrition, says its dean, Neal Van Alfen, who notes that the department has not yet recovered from the last recession in the early 1990s. But until the U.S. economy bounces back, he and other research managers can expect more hard times.

—ANDREW LAWLER

SCIENCE AND SECURITY

Academy Asks to Ease Visas for Scholars

University of Utah physicist Xiaomei Jiang rushed home to China this fall after her parents died in a car crash. But new security reviews adopted after the 11 September terrorist attacks have so far blocked the fifth-year doctoral student from rejoining her lab in Salt Lake City. Jiang, unfortunately, has plenty of company as she waits for a new visa. Security reviews are causing delays that threaten the health of U.S. science, say the leaders of the National Academies, which last week called on the government to fast-track foreign researchers seeking to enter the country.

The academies issued a 3-page warning after hearing "numerous" reports of immigration problems from academic researchers and seeing the impact on several of its own meetings, says Bruce Alberts, president of the National Academy of Sciences. The restrictions, enacted "in the name of national security, are having serious, unintended consequences for American science, engineering, and medicine," says the 13 December statement, which was also signed by William Wulf, president of the National Academy of Engineering, and Harvey Fineberg, president of the Institute of Medicine. To prevent future disruptions, they ask the Department of State to reinstate a "precleared" status for foreign scientists who travel frequently to the United States,