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SCIENCE PHILANTHROPY

Hughes Cuts Researcher Grants As Endowment Takes a Hit

The U.S. economic slump has hit the lab bench. After enjoying years of soaring research spending fueled in part by an economic boom, some life scientists are being told to tighten their belts. A major blow landed last week, when the Howard Hughes Medical Institute (HHMI), one of the world's largest private research philanthropies, confirmed that it will trim spending by about 10%, or \$100 million, over the next 2 years. "The great expansion is over," says HHMI president Thomas Cech. "We're spending too much, so we have to make some hard decisions."

Other research institutions are also feeling

the pinch. But the picture isn't uniformly bleak: Diversified fundraising and low interest rates have allowed some institutions to weather-or at least delay—the financial storm. "We're still on track to grow the research program," says Ray Bye, vice president for research at Florida State University in Tallahassee. Thanks to an infusion of federal funds and patent licensing fees, the school's research budget will hit \$175 million this year, double its 1998 level.

Much of the financial woe is due to nearly 3 years of falling stock prices.

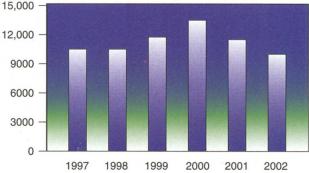
Overall, U.S. universities have seen the value of their endowments and other investments drop by an average of 10% since 2000, analysts estimate, with some faring far worse. Foundations are also hurting, with about half of 225 major charities planning to cut spending this year, according to the Center for Effective Philanthropy in Boston, Massachusetts.

At HHMI, a shrunken endowment (see graph) no longer produces enough income to cover the institute's annual spending, up 60% since 1996 to nearly \$650 million for the fiscal year that ended 30 September. To pare back, HHMI's governing board started at home. It has cut this year's administrative budget by about 6%, or \$3.5 million, and frozen hiring at its Chevy Chase, Maryland, headquarters. "You have to clean your own house before you ask others to do the same," says Cech. It also trimmed a \$100-million-plus-ayear grants program, eliminating a \$22 million program serving medical schools.

But most of the savings will come out of the institute's prestigious \$442 million biomedical research program, which currently supports about 330 investigators and their 3000 staffers. The investigators, who are employed by HHMI but work at universities, will have to cut spending by up to 10% annually in

(in millions of dollars)

HHMI Endowment Values



Financial pinch. A declining stock market has shrunk HHMI's endowment, leaving it with less money to support investigators such as UC Berkeley's Carolyn Bertozzi.

> 2003 and 2004. The average investigator receives \$500,000 to \$1 million a year in support for 5 years, renewable after a rigorous review.

> To soften the blow, HHMI is allowing investigators to squirrel away spare cash saved

over the next 8 months. Researchers will also be able to plead their case to HHMI officials, who will decide budgets on a case-by-case basis. "I felt an across-the-board cut was a mindless approach," say Cech. "It might be a mistake to make an early-career investigator take as big a cut as a more mature investigator."

Flexibility, however, will be limited by Cech's overall goal of lowering HHMI's spending from the current 6% of its endowment to 5%, based on a rolling, 3-year average. If successful, Cech says, the result should be a budget that can accommodate a new class of investigators within a few years. But he expects the steady-state number of investigators to be about 300, down from a high of about 350 last year.

Researchers are bracing themselves. Organic chemist Carolyn Bertozzi, an HHMI investigator at the University of California, Berkeley, says she has already cancelled some expensive service contracts, has stopped paying some travel costs for job candidates, and plans to reduce the size of her 34-member research group through attrition. "I may have to eliminate some projects as well," she adds, but she won't decide until next year. Bertozzi says she could lose up to \$100,000 in salary and supply funds.

Bertozzi and HHMI aren't alone. At Stanford University in Palo Alto, California, administrators are trying to close a \$40 million budget gap by, among other actions, freezing hiring; the school has added more than 1200 staff over the last 5 years, boosting the total to 7900. It is also slowing a planned \$1.6 billion construction program. Other science powerhouses planning reductions include Duke University in Durham, North Carolina, where officials plan to reduce faculty through attrition but say they might have to lay off professors if the economy doesn't improve. The Massachusetts Institute of Technology in Cambridge and the California Institute of Technology in Pasadena are eyeing cuts.

Institutions that depend on § narrow funding sources face special problems. The Palo Alto-based David and Lucile Packard Foundation, a major backer of marine science. might lay off up to half of its 160 staff members next month because the value of its endowment, made up mostly of beleaguered Hewlett-Packard \$ stock, has sunk to \$4 billion \(\bar{\frac{1}{2}} \) from \$13 billion in 1999.

There is some good news. Low interest a rates have made it easier to sustain construction projects, including HHMI's \$500 million § Janelia Farm research campus in Loudoun 2 County, Virginia. And a growing stream of 2 government research dollars, led by a 5-year doubling of the National Institutes of Health's



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budget, has helped some campuses grow despite declines in other income streams.

Even with cutbacks, notes Cech, who spent 22 years at the University of Colorado, Boulder, before joining HHMI in 2000, many academic research programs will end up ahead of where they were just a few years ago. "It just may take a little longer to fill those build--DAVID MALAKOFF ings," he says.

U.K. RESEARCH

Courting Universities Break Off Engagement

LONDON-To some observers, it was shap-

ing up as a marriage of necessity: London's two leading research universities uniting to pose a more potent challenge to the United Kingdom's academic powerhouses, Cambridge and Oxford. But mounting resistance to a plan to merge Imperial College and University College London (UCL) forced administrators earlier this week to call off the wedding.

The decision is a stunning retreat for Imperial rector Richard Sykes and UCL interim provost Derek Roberts, who when announcing the engagement on 14 October had argued

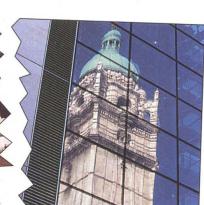
that joining forces was the only way to compete in the knowledge economy. Despite needing parliamentary approval, Sykes had predicted last month that the two universities would "start sharing resources by December."

That vision is shattered. In a terse, unsigned statement on 18 November, UCL said that "the best interests of the two institutions are not served by a formal merger." Roberts told Science that "there were very strong opinions both for and against ... but overall there were not enough people giving strong support." Sykes did not respond to requests for comment. Although the architects of the failed plan were circumspect, many faculty members-particularly at UCL, where opposition ran high-aren't hiding their glee. "I'm completely delighted," says UCL biologist Steve Jones, a comment echoed by several others contacted by Science.

The climb-down is all the more remarkable considering that Sykes, before coming to Imperial, had orchestrated the megamerger of GlaxoSmithKline, now the world's largest pharmaceutical company (Science, 16 November 2001, p. 1443). He and Roberts, formerly managing director of General Electric Co., found common ground and agreed on a merger in a private meeting last month. They created a committee to report to their councils on 19 December about how a merger would affect operations.

The committee's initial "vision" statement portrayed the combined university as a world-beater that would attract more funding for research in part by eliminating some competition for grants. Existing funds would also be spent more efficiently by not duplicating purchases of expensive equipment, and amal-

would forge new col-



gamating departments



Irreconcilable differences. UCL (left) and Imperial have abandoned their merger plans.

laborations and attract new blood. The new institution would have had a research budget of \$600 million a year.

But within days of the proposal, many academics started balking. Some argued that the merger was far too slanted toward business interests. UCL immunopharmacologist John Foreman, dean of students and leader of the Committee for UCL, a group that voiced doubts about the merger, speculated that Sykes and Roberts might have been "blinkered by their extensive industrial experience." His concern was that the new university would be governed by market forces, not educational needs. There was also a feeling that the merger was being "pushed through," says UCL neurochemist John Clark. Adds UCL biologist Adrian Lister: "We'd been asked to subscribe to a great vision without being given any of the details." Dissent also emerged at Imperial, where 160 staff members had signed a petition requesting an all-staff referendum on whether the merger should proceed. The petition was presented to the university senate at a 6 November meeting that Sykes chaired. According to Tom Pike of Imperial's electrical engineering department, Sykes subsequently denied the request.

Many scientists expressed fears that the merger would narrow the range of subjects taught and studied, triggering staff cuts and a reduced scope of research. And the Committee for UCL claimed that some departments might have to relocate. Roberts insists that no such relocation was in the works and lashed out at the committee, which he claims was "behaving in a malignant way and deliberately stirring up fears."

Stung by the criticism nevertheless, Roberts and Sykes offered in an 8 November statement to UCL and Imperial staff members

to "clarify the process" and assured them that a final decision would not be reached at the next month's meeting. But following what the UCL statement described as "intense deliberation," the universities shelved the plans altogether. UCL has resumed its search for Roberts' replacement, who will take the helm in October 2003.

All the soul-searching triggered by the merger hasn't been for naught, re-

searchers say. The discussions "highlighted the advantages and disadvantages of the current system," says Jones. "We can now take these deficiencies on board and deal with them."

-KERI PAGE

Keri Page is an intern in the Cambridge, U.K., office. With reporting by John Bohannon.

RESEARCH MISCONDUCT

German Inquiry Finds Flaws, Not Fraud

BERLIN-A paper claiming a spectacular remission of tumors is marred by shoddy scientific practices, but investigators aren't saying whether the results are also too good to be true. Last week the University of Göttingen said that its investigative committee had found evidence of sloppiness that constitutes misconduct, but not fraud, in a disputed paper about an experimental cancer vaccine. But with only a brief statement to go on, scientists following up on the work still don't know