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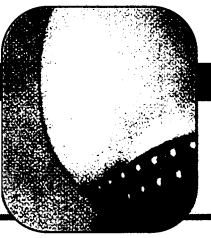
Swiss GM trial nixed



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The biology of belly fat

2003 U.S. BUDGET

NSF to Gain Funds From Smithsonian, Other Agencies?

Funding for three Smithsonian research centers would be transferred next year to the National Science Foundation (NSF) under a White House budget strategy aimed at rewarding agencies for their management prowess. *Science* has learned that the move is part of a proposed shift of roughly $120 million from several agencies to NSF. Parts of the $30 million water resources program at the U.S. Geological Survey and the $60 million university-based Sea Grant program run by the National Oceanic and Atmospheric Administration would also be moved.

Storming the castle. OMB director Mitch Daniels wants to transfer money from three Smithsonian research centers.

Last week, the White House Office of Management and Budget (OMB) wrote Smithsonian secretary Lawrence Small that it intended to take $35 million away from his agency's 2003 budget and give it to NSF. The proposal, still under wraps by the Bush Administration, came as a surprise to Smithsonian officials wrestling with their own controversial plan to restructure science at the institution's 16 museums, National Zoo, and half-dozen research centers. Scientists at the affected institutes—the Harvard-Smithsonian Center for Astrophysics, the Smithsonian Environmental Research Center (SERC), and the Smithsonian Tropical Research Institute—would be free to compete for funding under NSF's regular programs.

NSF director Rita Colwell declined to comment on the proposed transfer, and an OMB official said the agency doesn't comment on ongoing negotiations leading to the president's 2003 budget proposal to Congress in February. But last week OMB director Mitch Daniels foreshadowed the move during a Washington, D.C., speech in which he singled out NSF for praise and warned other agencies to shape up or suffer the consequences. "Programs [like NSF's] that perform well, that are accountable to you as taxpayers for reaching real results, and measuring and attaining those results, deserve to be singled out, fortified, and strengthened," Daniels said. "Conversely, programs that make no such attempt or fail to deliver really need to be scrutinized and the money we are now investing in them redeployed to higher purposes."

The OMB directive, in response to the Smithsonian's 2003 budget submission, came as a shock to Smithsonian leaders and the research community. "To say that I was taken aback is an understatement," says Jeremy Sabloff, director of the University of Pennsylvania's Museum of Archaeology and Anthropology and head of a commission evaluating the future of Smithsonian science.

Research at the Smithsonian has been squeezed for the past 20 years as the institution has struggled with ever-expanding needs for renovations and new construction. The situation came to a head last spring when Small proposed closing two research centers and rearranging scientific research throughout the institution (*Science*, 13 July, p. 194). Although Congress stepped in to protect those research centers, Sabloff and more than a dozen other experts were tapped to advise the Smithsonian on what it should do.

The OMB plan would force scientists at the three centers to compete with academic researchers for the majority of their funding, although it provides for a 1-year transition in 2003. The research centers already support some of their work through outside grants: SERC, for example has $18 million in peer-reviewed grants and contracts, including about $1 million from NSF, says SERC director Ross Simons. But ending appropriated federal support "would be disastrous," says one Smithsonian scientist. Adds Sabloff, "it would be very unfortunate if [the proposed transfer] came to be."

The Smithsonian has asked OMB to reconsider its proposal in the next round of budget negotiations. Meanwhile, OMB has requested that Smithsonian and NSF leaders map out a plan by mid-January to implement these changes. **–ELIZABETH PENNISI**

With reporting by Jeffrey Mervis.

WOMEN IN SCIENCE

Caltech Aims for Big Jump in Women Faculty

The California Institute of Technology (Caltech) hopes to more than double the number of women faculty members over the next decade to help rectify a glaring gender disparity at the elite science- and technology-oriented school. The goal would mean adding a net of four women faculty members a year, as women currently make up a mere 31 of Caltech's 284 faculty members. The target is included in a new report that examined the status of women faculty members at the university.

"Female faculty are markedly more dissatisfied than their male peers" with life at Caltech, says the report, which was commissioned 2 years ago in the wake of a similar report by the Massachusetts Institute of Technology (MIT) (*Science*, 12 November 1999, p. 1272). Although the Caltech committee found no conclusive evidence that women suffer in terms of salary or space, panel members say that the paucity of women made it difficult to carry out a meaningful statistical analysis or provide the necessary anonymity. The panel was chaired by astronomer Anneila Sargent.

The most sweeping recommendation in the report is to increase the number of female faculty members from the current 11% to

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25% within a decade. "The worse thing about Caltech has been the low numbers [of women]," says faculty chair Marianne Bronner-Fraser, a biologist who was chosen this summer as the first woman to hold that elected position. The number of women in each Caltech division (department) outside the humanities varies from 18% in biology to 5% in engineering.

Women wanted. Sargent panel sets high target.

Caltech president David Baltimore cautiously embraced the target, which he estimates will require some 40% of new hires over the next decade to be women. "It's not an unattainable goal, but it will be very difficult to achieve," he says. With faculty growth unlikely, he says that the shift will have to come primarily through replacements. The committee also called for a fund-raising campaign to bolster the number of women faculty members and to attract more women students.

The survey, which included all women and a sample of men, found that more than half the women say they have encountered gender bias, and 30% recalled "adverse interactions" with their chairs over gender issues. Women are three times as likely as men to be dissatisfied with their visibility at Caltech, and less than half expressed satisfaction with their jobs, compared with 73% of men. Tenure decisions are another sticking point: "As many as 70% of women who have successfully attained tenure have at least reservations about the process," the report notes, compared with just 19% of men.

The small numbers of women made it hard to determine the reason for a disparity in salaries between men and women, says Sargent. It also forced the committee to abandon attempts to investigate differences in lab space—a key metric in the MIT report.

The report also urges Caltech to hire women as senior administrators, and Baltimore says he is committed to making changes in the male-dominated upper tier as positions come open. None of the six current division chairs is a woman, although last month biologist Barbara Wold—who also served on the Sargent panel—was named director of the Beckman Institute, a biology and chemistry research facility on campus.

–ANDREW LAWLER

CREDIT: (TOP) CALIFORNIA INSTITUTE OF TECHNOLOGY; SOURCE: *FROM SCARCITY TO VISIBILITY*, NATIONAL RESEARCH COUNCIL (2001)

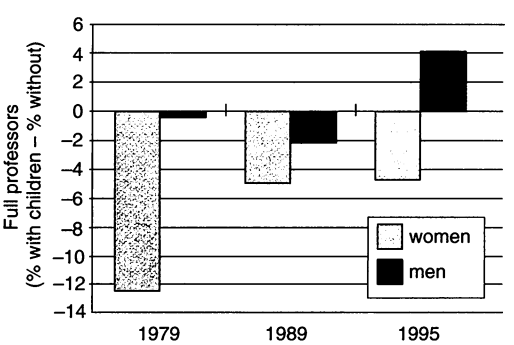
WOMEN IN SCIENCE

Men Still Have Edge in U.S. Science Careers

Having children improves a man's chances of becoming a full professor but hinders a woman's progress in academia. That's one of many provocative findings from a National Research Council (NRC) panel that has been exploring gender differences in the careers of U.S. scientists and engineers.

Issued last month, the panel's 340-page report* eschews the usual analysis of existing studies with policy recommendations. Instead, the panel did its own research on gender differences in the scientific workforce, mining four versions of two ongoing federal surveys. Its conclusion—that men retain an edge that cannot be explained by any objective criteria—may be disturbing to those who think that discrimination is a thing of the past.

"There's clear evidence that women have been treated unfairly," says panel chair J. Scott Long, a sociologist at Indiana University, Bloomington, and a scholar in the field of women's studies. "It's also clear that marriage and family issues are major factors that need to be addressed." Although the five-member panel was not asked to make recommendations, its report suggests that employers consider policies to help "promising employees with young families." It also calls on top research universities to revise graduate school admissions practices to attract and retain more women. "I think every university should do the type of review" carried out by the Massachusetts Institute of Technology and Caltech (see previous story), says Long, "to see if there are current policies that are discriminatory or past practices that need to be addressed."



The family effect. Married women with children are less likely to be full professors than those without. The opposite is now true for men.

Among the panel's findings:

- Tenure is becoming more elusive for women than for men. Comparing data in the 1995 and 1999 surveys, the panel discovered that the share of academics in tenure-track positions dropped from 70% to 55% for women and from 82% to 72% for men.
- Male graduate students are more likely than women to get jobs as research assistants; the difference ranges up to 9% in mathematics, although the gap is narrowing for all disciplines except those in the physical sciences.
- The salary gender gap is widening among more senior academics. Tenure-track men who earned their Ph.D.s in 1979 earned 10% more than women from that class, compared with a 6% difference for those with degrees from 1975.

"Women certainly represent a growing percentage of the scientific workforce," Long notes—from 7% in 1973 to 22% in 1999. "But they're finding a tougher job market, especially in academia."

–JEFFREY MERVIS

* *From Scarcity to Visibility: Gender Differences in the Careers of Doctoral Scientists and Engineers* (www.nap.edu/catalog/5363.html)

SWISS BIOTECH

Government Shoots Down GM Plant Trials

ALLSCHWIL, SWITZERLAND—In a blow to Swiss biotechnology, the government has rejected a high-profile application to conduct field trials of genetically modified (GM) wheat. The decision, now being appealed, has caused widespread consternation among Swiss scientists, who argue that it amounts to a de facto moratorium on field tests of any transgenic plant. Five members of the federal biosafety commission have resigned in protest, including its president, Riccardo Wittek. "If I were working in plants," Wittek says, "I would leave the country."

In November 2000, Christof Sautter of the Institute for Plant Sciences at the Swiss Federal Institute of Technology (ETH) in Zürich sought permission to sow, on a small outdoor