

Studying glaciers before they melt



Problems and challenges of new cancer drugs



The 2002 Nobel Prizes

quest “some modifications” and ask clinicians using retroviral vectors to notify participants in their study of the leukemia found in this case and revise their consent forms to include this information. But he couldn’t say when the trials might resume.

One panel member—Abbey Meyers, president of the National Organization for Rare Disorders—made a pitch for placing all retrovirus-based trials on hold because no one can judge the risks. But her message didn’t carry as much emotional weight as another advocate’s. A woman who identified herself only as a grandmother of a SCID child rose from the audience to ask that the trials continue. Her grandson, she said, has failed bone marrow transplantation four times and has been waiting 3 years to be enrolled in a trial, now on hold, at the National Institutes of Health. The FDA panel paid heed.

—ELIOT MARSHALL

## NSF BUDGET

### Panel Prescribes Study To Treat Growing Pains

Call it tough love. Last week a U.S. House spending panel approved a 13% increase for the National Science Foundation (NSF), putting it on course for a doubling of its budget in 5 years. But the committee, concerned that the agency might not be ready to handle such an infusion, asked an outside group of management experts to delve into how NSF does its business. The review is expected to question some well-worn practices at the 52-year-old agency, including borrowing many of its managers from academia.

The House Appropriations Committee approved a 2003 budget for NSF of

\$5.42 billion. That’s \$70 million more than its Senate counterpart approved in July (*Science*, 2 August, p. 755) and \$394 million more than the Bush Administration requested for the new fiscal year, which began 1 October. Although Congress is currently mired in a budgetary morass, the similarity of the House and Senate numbers augurs well for NSF. “It’s a historic time,” says Director Rita Colwell about the congressional vote of confidence.

Within that overall boost, both NSF’s research and its major facilities accounts would get 15% hikes, with the House adding \$26 million to finish a high-altitude environmental research plane and \$25 million for a neutrino experiment beneath the South Pole. Education programs would get only the requested 4% rise, although the panel took \$40 million from the \$200 million sought for math and science partnerships and distributed it among several smaller programs. The overall NSF number is very close to the 15% annual rate needed to double the agency’s budget over 5 years, a cherished goal of community lobbyists.

With the agency about to march off in double time, legislators are asking the National Academy of Public Administration (NAPA) to see if NSF is ready for the journey. “We’re not criticizing them, but we want to be sure they can handle the growth,” says one congressional aide. Looking at recent budgets, legislators wonder if NSF has gorged itself on top-down cross-disciplinary initiatives in information technology, nanotechnology, and biocomplexity while starving individual fields, in particular physics, chemistry, and astronomy. Those disparities, says a report accompanying the spending bill, could undermine a time-tested precept that “the choice of research priorities and individual projects should flow principally from practicing scientists ... through external peer review.” Notes another aide, “A lot of NSF’s budget is broken down into tiny pieces, with the chunks carved up at the top. Is that the best way to stay at the cutting edge of science?”

The report language also expresses concern about NSF’s extensive use of scientists borrowed for a few years from somewhere else, usually a university, to fill positions at all levels. NSF officials

believe strongly that such rotators, who make up almost 40% of NSF’s 600-person scientific work force, represent new blood and also spread the word about NSF after returning to their home institutions. But the result might also be staff members “who have less experience and could have split loyalties between their federal roles and past or future employers,” says the report. Legislators are especially concerned about the prevalence of rotators at the top: The heads of five of NSF’s seven research directorates are currently on temporary assignments. (There’s a search on for a sixth chief.)

Colwell says NSF “welcomes the attention” from NAPA or any other group asked to look at its management acumen, although she insists that the agency “is already seen as a model organization” within the federal government. And she strongly defends NSF’s personnel

practices. “It’s a constant renewal of ideas and views,” she says about the use of rotators, who typically stay for 2 to 4 years. The NAPA study, which can’t start until after NSF’s 2003 budget is approved, is expected to take a year or so.

—JEFFREY MERVIS



## NASA BUDGET

### Plans for Pluto and Hubble Gain in Congress

Pluto was the Roman god of the dead, but a \$488 million mission to his planetary namesake is very much alive. Last week, a U.S. House spending panel brushed aside objections by the Bush Administration and agreed to a Senate plan to continue funding the effort. The decision, coupled with a National Research Council report this summer that backs exploration of Pluto and the nearby Kuiper belt, virtually ensures that the controversial mission will move forward.

Pluto’s kiss of life came from the House Appropriations Committee, which voted to boost NASA’s 2003 budget by \$400 million over this year’s \$14.9 billion. That’s \$300 million more than the Administration requested, although most of that will go to projects requested by individual legislators. Within science programs, the bill increases funding to explore Mars, asks NASA to consider extending the life of the Hubble



**Management model.** NSF’s Rita Colwell “welcomes” review of agency practices.

CREDIT: (LEFT) SAM KITTNER