Scientists Mobilize to Fight Cuts

Congressional budget resolutions—the Republicans' opening shots in the battle to cut the deficit—are drawing fire from science groups and the Clinton Administration

The research community isn't usually known for aggressive political lobbying. But Republican plans to reshuffle research agencies and cut funding for science, which are moving quickly through Congress (*Science*, 19 May, p. 964), drew an uncharacteristically sharp response last week, as academic and industry groups began mobilizing to fight the proposals. The proposed cuts, included in budget resolutions aimed at eliminating the federal budget deficit by 2002, also came under heavy fire from the Clinton Administration in an attack that highlights the growing partisan gulf in Washington over government-sponsored research.

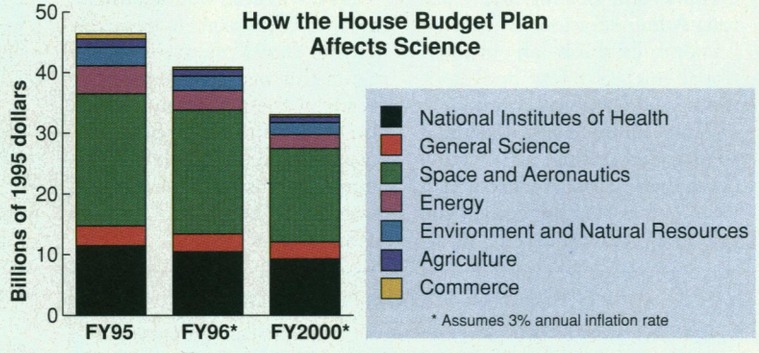
The White House Office of Science and Technology Policy (OSTP) took the unusual step of calling a press conference on 18 May to denounce the Republican plans. "The bottom line is that science and technology are going to suffer tremendously," said Robert Watson, who oversees environmental issues at OSTP. Office director and presidential science adviser Jack Gibbons added: "There is an incredible disconnect between what the Republican leadership is saying versus what it is doing."

Gibbons was referring to the support for science voiced by Representative Robert Walker (R–PA) and other Republicans. Walker said that the House budget resolution—which was approved by the House last week—would trim only $300 million by 2000 from the $7.1 billion a year that the government is now spending on nonmedical civilian basic research.

The White House calculates the damage differently: The House GOP plan, Gibbons said, would cut the civilian basic research budget—currently some $14 billion a year, including medical and defense research—by roughly 25%. The Democrats' numbers are larger in part because they assume that growth of 3% a year would be needed just to keep up with inflation, a factor that is absent from the Republican plans.

Gibbons isn't alone in carrying the banner for academic research. The news that the Senate was considering a cut of 10% in next year's budget for the National Institutes of Health (NIH) sparked a frenzied response among supporters of biomedical research. On short notice, a group of research societies put together a Capitol Hill press conference last week to dramatize the risks of cutting NIH funds. On hand were leaders of patient groups and some prominent scientists—including Paul Berg of Stanford University, Judah Folkman of Harvard, and former Merck & Co. executive P. Roy Vagelos.

Ora Weisz, a postdoc at Johns Hopkins University heading toward her first independent research job, spoke at the press conference about the potential penalty on young researchers. "When I first heard about [the budget proposal]," she later told *Science*, "it didn't make a big impression, but then I saw the numbers—they're frightening." If the cuts are made, she thinks she might have a 1 in 100 chance of getting funded next year. "I'm beginning to wonder if I'm doing the right thing" in pursuing an academic career, Weisz said.



Going down. OSTP's analysis shows the civilian federal R&D budget would decline under the budget plan passed last week by the House of Representatives.

Later that day, NIH Director Harold Varmus took the same message to a hearing called by the Senate appropriations subcommittee that approves the NIH budget. He warned that the Senate budget resolution, if approved as written, would be "devastating" for NIH and particularly hard on researchers seeking their first grant. Using a 4% medical inflation rate, he said NIH would actually lose 14% of its funds under the Senate provision. (Under some assumptions, the figure tops 20%.) Because of previous commitments, NIH would have to lower the success rate for new grant applications from 24% today to between 6% and 12% in 1996, Varmus said.

Senator Mark Hatfield (R–OR), who chairs the Appropriations Committee, intended to offer two amendments this week that would shield NIH from the full brunt of the 10% cut. "We are going to fight this prescription for disaster," Hatfield said. "We may fail, but if we fail, we're going to die with our boots on." Subcommittee Chair Arlen Specter (R–PA) urged Varmus and NIH institute chiefs to come up with "sound bites" to describe the crisis that he could use in the debate on the budget resolution.

The Federation of American Societies for Experimental Biology (FASEB) is also trying to rally its members to the cause. Last week FASEB President Samuel Silverstein sent out a letter warning of "deep, destructive cuts," adding that "it's absolutely vital that you immediately call, wire, or fax your state's two U.S. Senators and urge them to encourage Senator Hatfield to proceed with his amendment." And Carla Shatz, president of the Society for Neuroscience, likewise urged members in an electronic bulletin "to create a groundswell of grassroots activity to tell Capitol Hill that the future of brain and spinal cord research is at great risk."

The Internet was also humming last week with calls for social and behavioral scientists to fight potential cuts in the National Science Foundation's (NSF's) funding for the field. In his remarks on the House budget resolution the previous week, Walker said that the foundation should focus on the physical sciences. NSF, he added, had "wandered into" the social sciences field to be "politically correct." Gibbons and others interpreted these remarks to mean that Walker wants to eliminate NSF's support for social and behavioral science, but Walker's office insists that is not the case. Melissa Sabatine, Walker's press secretary, said on 22 May that the chair "is not singling out" those disciplines for elimination but that the physical sciences should have a higher priority in a shrinking budget.

There is no doubt about Republican intentions for the Department of Commerce's $430 million Advanced Technology Program (ATP): Both the House and Senate

budget resolutions would eliminate it next year. That threat has brought industry groups to the program's defense. At a workshop previously planned to discuss the effect of a $90 million cut in this year's budget, numerous company officials defended the program as the only way to support long-term, precommercial research in the face of skittish stockholders and venture capitalists.

"I think what they're doing here is as important as guarding the shores," said Robert Cross, president of Burr Ridge, Illinois–based Nanophase Technologies Corp., comparing ATP to national defense. Cross said his company's $1 million ATP grant was "critically important" in developing a new technology for making ultrafine inorganic powders used in ceramics manufacturing, and that the company recently signed a licensing agreement worth $20 million a year.

Administration officials encouraged the company executives to make known such success stories. "That message has got to get to the Hill," said Arati Prabhakar, director of the National Institute of Standards and Technology (NIST), ATP's parent organization. If Congress decides to fund only basic research, warned Mary Good, the undersecretary of Technology Administration at the Commerce Department, "we will end up in the next 10 years as the science base on which the world draws its precompetitive research." Added Commerce Secretary Ron Brown: "Calls for the elimination of the [Commerce] Department—or its essential technology programs—are just plain ludicrous. They amount to unilateral disarmament in the battle for global competitiveness."

But ATP and NIST officials acknowledged that the program is vulnerable. "In terms of our fate, I think we have a tough battle," said Prabhakar. "I'm not sure there is a great desire to truly understand these issues." Indeed, a staffer for one Republican scoffed at a comment from Gibbons that the Administration would consider new ways to restructure ATP if it is killed by Congress—including joint ventures with industry. "We already have restructured ATP," he said. "We eliminated it."

Gibbons is optimistic that some of the proposed cuts in R&D can be headed off as legislators learn more about the programs and understand their value to the country. "Philosophies change on the basis of what facts you have," he said. In addition, the budget resolutions are only spending guidelines and not binding on the appropriations committees. Even so, the newly energized science lobby may need to exercise political muscle as well as rational argument to win its case in the halls of Congress.

–Andrew Lawler

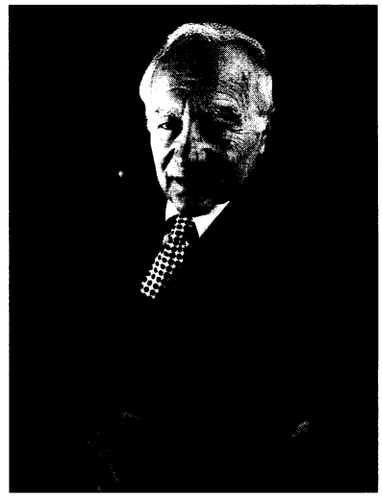
With reporting by Eliot Marshall and Robert Service.

WAR ON CANCER

Panel Offers Radical Therapy For National Cancer Institute

Leaders of the war on cancer received a blunt critique of their operations last week, along with advice on how to carry out a sweeping overhaul of the $2.1-billion-a-year National Cancer Institute (NCI).

The review—delivered by Michael Bishop and Paul Calabresi, co-chairs of a panel of independent researchers—called for major changes in NCI intramural funding, structure, and management. The panel began work last October at the request of Harold Varmus, director of the National Institutes of Health (NIH), and labored night and day to meet a deadline set for mid-May. Calabresi, a prominent clinician at Brown University, says members realized they would have to tackle sensitive issues, including NIH's desire to squeeze more science out of an institute with an aging staff and a frozen budget (*Science*, 10 March, p. 1412). Their final report attempts to do just that, calling for radical surgery. Varmus has indicated that if this therapy succeeds, it may be applied to other NIH institutes.



RICK KOZAK

Sensitive issue. Panel co-chair Paul Calabresi urges review of AIDS research.

The Bishop-Calabresi agenda asks NCI to trim and consolidate many intramural functions, scrutinize the growth of big labs (those costing over $1 million), "wean" NCI away from AIDS research, move researchers from a remote site in Maryland to headquarters, replace "muted" internal reviews with rigorous ones, hold senior scientists strictly accountable for the training of juniors, spur independent studies with special grants, and put working scientists on NCI's top executive council.

These and other ideas are sketched out in a 14-page summary given to the National Cancer Advisory Board (NCAB) on 16 May. The full text will be delivered in mid-June, 6 weeks before NCI is expected to get a new director. The agency has been without a permanent chief since March, when former Director Samuel Broder left. His successor, according to Varmus, will be in place by 1 August. Varmus couldn't say who that will be, although rumor has it that NIH cell biologist Richard Klausner is in line for the job.

The Bishop-Calabresi report has a provisional quality, but for many reasons, it's likely to make an impact. For one, it delivers the message in "plain language," Bishop said, even using terms that might "sound harsh" to some. But Bishop—a University of California, San Francisco, cancer biologist and winner of a 1989 Nobel prize with Varmus for oncogene research—added that the gritty sections were only meant to help "polish the gem" of NCI.

Reaction to the report at NCI has been muted, largely because researchers haven't yet had time to digest its implications. But the report has been welcomed by NIH's top brass. Deputy NIH director for intramural research Michael Gottesman notes, for example, that the conclusions "dovetail nicely" with recommendations for NIH-wide reform given by another panel last spring, following an inquiry by *Science* (27 August 1993, p. 1120). Varmus himself indicated that he intends to help the new NCI chief follow through on these proposals—the most prominent of which are summarized below:

■ *Reslicing the pie*. The panel found that the share of NCI funds devoted to intramural research—18% of the agency's budget by the official measure—was "disproportionately high." And Bishop said that "a more accurate figure" is actually 25%. That's the total one gets by including contracts that support intramural projects. This figure is at odds with the NIH norm: Overall, just 11.3% of the NIH budget goes to intramural science. The panel concluded that it would be "advisable" for NCI to "adjust the allocation" downward.

■ *Less AIDS, more cancer*. "We didn't go looking for this," said Calabresi in an interview with *Science*, but the panel stumbled onto what may become a treacherous issue for NCI in the future. About 35% of NCI's intramural projects are labeled AIDS research. But, as Varmus explained, they only fit this category by "some stretch of the imagination." Bishop noted that a "liberal definition" of AIDS permitted this trend to