# Science and Congress: Outlook Uncertain

The 101st Congress returns to Washington this week to face ongoing budget crises. How will R&D fare in this environment?

### Gramm Rudman: \$64 Billion Question Mark

With the Gramm-Rudman-Hollings fiscal chainsaw poised to bear down on federal spending for the fourth year in a row, budget battles will once again dominate Congress's agenda. The battles will begin next week, when the Bush Administration is scheduled to deliver its fiscal year 1991 budget proposals to Capitol Hill. By all accounts, they will include hefty increases in funding for many science programs, in part to pay mounting installments on a variety of megaprojects such as the space station and the Superconducting Super Collider (SSC).

This may turn out to be a tough year to shoehorn these programs into the budget and still provide increases for other areas of science. The reason: it's getting progressively harder each year to trim the federal deficit to the level required by Gramm-Rudman. Last year, the target was \$100 billion; in 1991 it will be \$64 billion. If it exceeds \$74 billion, across-the-board cuts will automatically be imposed.

Despite talk about a "peace dividend" from reduced military spending, there is no immediate prospect of any significant amount of Department of Defense funds being shifted to civilian accounts for the next fiscal year. The Bush Administration, in

## More Misconduct Hearings

Congress's appetite for rooting out scientific misconduct and exposing what some members regard as misguided scientific policies appears to be growing. Topics ranging from conflict of interest to restrictions on fetal tissue research are slated to be examined in a series of House and Senate hearings in the next few months.

Representative John Dingell (D-MI), chairman of the House Energy and Commerce Committee, is expected to ask Whitehead Institute Chief David Baltimore to come by for another hearing on a 1986 paper he coauthored. Dingell's committee has already held two highly publicized sets of hearings on the authenticity on some of the



John Dingell. Another round with Baltimore?

data in the paper generated by one of Baltimore's coauthors, but aides say the congressman is not yet satisfied. Dingell has also asked the National Institutes of Health to look into allegations contained in an article in the *Chicago Tribune* last November that NIH researcher Robert Gallo made extensive use of a virus isolated by a team of researchers at the Pasteur Institute when he nailed down the cause of AIDS (*Science*, 8 November 1985, p. 640). If Dingell is not satisfied with NIH's response, he may hold hearings on the matter, according to committee sources.

The chairman of the House Government Operations Subcommittee on Human Resources, Representative Ted Weiss (D–NY), aims to look into conflicts of interest involving federally supported researchers who work with industry. Last year, after Weiss held hearings on the topic, NIH drafted guidelines to guard against conflict of interest among researchers it funds. But the guidelines were withdrawn in December under a barrage of protests from the research community. Weiss is expected to continue to probe into the issue this year.

He also is preparing to examine the lack of federal funding for in vitro fertilization research and the Bush Administration's moratorium on funding fetal research. Representative Henry Waxman (D–CA), chairman of the health subcommittee, also may take up the issue, and aides say he might hold hearings on the Administration's pro-life litmus test for selection of a new NIH director.

fact, is expected to propose an increase of about 3% in DOD's budget. Says one Congressional Budget Office analyst, "it's going to be a tough year. There will be a definite squeeze on discretionary programs." And that would be a real problem for science because virtually all federal support for nondefense research is counted as discretionary spending.

In this harsh environment, the increases being planned by the Bush Administration in a variety of science programs are expected to have a bumpy ride through Congress. The Administration's budget, for example, is expected to call for an increase of about \$296 million in the National Science Foundation's overall budget, which would bring it up to \$2.4 billion. The agency's research programs would get \$1.9 billion, an increase on the order of \$220 million, sources say.

But NSF will be in direct competition with the National Aeronautics and Space Administration, the Environmental Protection Agency, and the Department of Housing and Urban Development. All these agencies are included in the same appropriations bill and are thus battling for a share of a shrinking pie.

The outlook for research funding at the National Institutes of Health also is uncertain. The agency is expected to fund only 4700 new grants in 1990 compared to 6500 nearly 2 years ago. This dismal situation has arisen in part because NIH funded a lot of new grants in previous years and their average duration has risen from 3 to 4 years. One result: only about 25% of approved grants are getting funded (*Science*, 24 November 1989, p. 988).

Researchers' complaints about the impact of NIH's plight on young researchers have caught the attention of Representative Henry A. Waxman (D-CA), chairman of the subcommittee on health and environment. Aides say he is interested in beefing up the numbers of new and competing grants, but not if it means hurting other public health

programs. Moreover, it is not clear how much support there is among other committee members for bailing out NIH. Says one aide, "there is a certain sensitivity up here that it's not Congress's fault that there is a lack of money."

In contrast, the

**SSC magnets.** Will the project attract an extra \$100 million?



SCIENCE, VOL. 247

## Spotlight on Education

The dismal state of the nation's science and mathematics education is certain to attract a lot of congressional attention again this year. One reason: Senator Edward M. Kennedy (D-MA), chairman of the Committee on Labor and Human Resources, is introducing a massive, catch-all science education and training bill in early Feb-



ruary. Though the bill may not win passage, it will be the focus of hearings by Kennedy's committee, and Jerry Roschwalb, a lobbyist with the National Association of State Universities and Land Grant Colleges, predicts it could ultimately wind up serving as a catalyst for action. "Kennedy is saying, 'Hey! We've got real problems in this country,' " says Roschwalb.

Kennedy is not alone. Another 23 bills aimed at encouraging students to pursue careers in science, math, and engineering or to provide additional technical training and scholarships already are pending in the House and Senate. With congressional interest continuing to mount, the American Association for the Advancement of Science has offered to sponsor a retreat to enable congressional staff members to work out differences in their legislative approaches.

Meanwhile, the National Science Foundation, taking note of the fact that Congress has consistently bumped up its education funding in previous years—often at the expense of some increases in research funding—is reported to be seeking a big increase itself. The 1991 budget request, to be unveiled next week, is said to include \$251 million for NSF's education programs, a \$47-million increase from this year. While that would still fall way short of the \$600 million that NSF education head Bassam Z. Shakhashiri thinks the agency should be spending (*Science*, 20 October 1989, p. 317), it reflects Director Erich Bloch's growing interest in the area—as well as his reading of the congressional realities, NSF officials say.

grant scene at the U.S. Department of Agriculture (USDA) may be on the verge of dramatic change, albeit from a small base. The Bush Administration is expected to propose an increase in funding for competitive grants from \$43 million to \$100 million in 1991. This would be the first installment toward the \$500 million recommended by the National Research Council for new agricultural research grants (*Science*, 6 October 1989, p. 27). Also on the way at USDA may be a change in the way the grants are



26 JANUARY 1990

administered. Representative George Brown (D-CA), chairman of the House subcommittee that oversees agricultural research, is drafting legislation to set up an "Institute for Agricultural Science" to manage an expanded competitive grants program. Brown's legislation would also subject many existing USDA research programs to peer review and competition.

As for big science projects, the rising costs of both the space station and the Superconducting Super Collider has budget watchers worried. NASA reportedly will seek a \$750million increase in 1991 for the space station, bringing the total to \$2.5 billion. Both the House and Senate science committees are planning to take a close look at the project, and the Senate Budget Committee also aims to dissect the space station plans to see how they mesh with President Bush's proposal to build a base on the Moon and send a mission to Mars. Senate Budget Committee aides say it may be necessary to limit increases in the SSC's budget in 1991. DOE wants at least \$100 million added next year to the \$250 million appropriated for the SSC this year, but its success may hinge on how legislators react to a hike in the project's price. SSC Laboratory estimates suggest that costs could go up \$1.2 to \$1.5 billion. At this point, however, political support for both these programs still appears strong.

Congress and the Administration have managed to avoid the full impact of Gramm-Rudman cuts in previous years, in part by fiscal tricks such as not including some outlays in the calculations. There is no reason to expect the coming year to be any different.

#### Science Committees: Change at the Top

The election of Representative James J. Florio (D–NJ) to the New Jersey governor's mansion last November has prompted upheaval in the leadership of several House subcommittees that have authority over federal science programs and policies.

Representative

Doug Walgren (D-



**Rep. D. Walgren.** Swapping subcommittee chairmanships.

PA) has announced that he is planning to swap the chairmanship of the subcommittee on science, research, and technology for Florio's former spot at the head of the subcommittee on commerce, consumer protection, and competitiveness. The move would give Walgren far greater political visibility than he has enjoyed in the 9 years he has headed the science subcommittee, which oversees the National Science Foundation and is the focal point in the House for discussions of federal science policy.

Representative Tim Valentine (D-NC), chairman of the subcommittee on transportation, aviation, and materials, reportedly wants to step into Walgren's shoes. So who will replace Valentine? Word has it that it will be Representative Robert G. Torricelli (D-NJ).

Still more changes could be in store next year. Representative Bill Nelson (D-FL) is expected to run for governor of Florida and will be giving up his chairmanship of the subcommittee on space science and applications. Representative George Brown (D-CA), whom Nelson defeated 5 years ago in a contest to head the space subcommittee, is said to be planning another run for the post. But Brown may have to face another contender: Representative Harold L. Volkmer (D-MO).