

Senate Introduces Bill to Double Research Funding in Ten Years

On October 22 Senators Phil Gramm (R-TX) and Joe Lieberman (D-CT) introduced a bill calling for doubling the federal budget for civilian research over the next ten years. At the same time the presidents of 105 scientific societies issued a "Unified Statement" endorsing the bill's general aim. At a Capitol Hill press conference that day Gramm and Lieberman were joined by Pete Domenici (R-NM), chair of the Senate Budget Committee, who has lent his support to the bill. The three legislators were flanked by about thirty presidents and representatives of the scientific societies that had endorsed the joint statement.

In attendance was AMS president Arthur Jaffe, who has helped to marshal the scientific community to press for increased federal support for research. These efforts have "really blossomed into something which can be part of a grassroots movement for science," he says. "I think there's a great chance that we can succeed." Jaffe, together with Samuel M. Rankin III of the AMS Washington Office, has been among the key figures mobilizing the scientific societies. In particular, Jaffe and Rankin played a central role in writing the "Unified Statement".

The Gramm-Lieberman bill specifies yearly authorizations that by 2008 would double the budgets of a number of federal agencies, including the National Science Foundation, the National Aeronautics and Space Administration, and the National Institute for Standards and Technology. (The doubling does not take inflation into account, so in constant dollars the budgets would not in fact double.) Aggregate dollar amounts are given for research and development at these agencies, though

separate amounts are broken out for the National Institutes of Health.

Gramm noted that in 1965, 5.7% of every dollar spent by the federal government went toward research, while today that figure is only 1.9%. "Increasingly, Congress and the executive branch have invested in programs with big political constituencies," he remarked. If the U.S. is to insure a high standard of living, high wages for workers, and good health for its citizens, then "we have to invest in science and technology."

The senators are relying on the bipartisan appeal of science to win support for the bill. "We're not going to add cosponsors until we can add a Democrat and a Republican," said Gramm. They have made a first step: Jeff Bingaman, Domenici's Democratic counterpart from New Mexico, has also given his support to the bill. The goal is to get fifty-one cosponsors for the bill in the Senate.

Gramm and Lieberman have begun talking to congressional representatives to build support for a companion measure in the House. George Brown (D-CA), who over the years has been a strong supporter of science in the House, introduced in 1997 a bill that would increase research and development funding by 5% a year, a figure which, depending on how the split between research and development is made, could be consistent with the aim of the Gramm-Lieberman bill.

The statement by the scientific societies does not directly endorse the Gramm-Lieberman bill, because some of the societies that signed on were not comfortable supporting specific legislation, and some were unhappy that the research funding agencies of the Department of Defense were not



AMS President Arthur Jaffe (left), MAA Executive Director Marcia Sward, and Senator Phil Gramm at the press conference.

included in the bill. Indeed, the societies' statement mentions the Department of Defense as one of the government entities that has contributed to the national research effort.

The DOD funds a fair amount of basic research, but funding levels have dropped in recent years. Including the DOD agencies in the Gramm-Lieberman bill would have entailed political complications that the bill's sponsors were trying to avoid. Jaffe said that some of the scientific society presidents had urged Gramm and Lieberman to include the DOD research agencies in their bill, but "that seems not to be politically possible." Because DOD agencies account for 40% of all federal funding for mathematics research, the health of these agencies "is a very serious issue." He says he will work on it with the Joint Policy Board for Mathematics (JPBM).

The Gramm-Lieberman bill, while a positive sign for support of science, could end up having no effect on actual spending levels. This is because the bill contains only budget authorizations, while it is through appropriations bills that money is actually allocated. According to Lisa Thompson, who has long observed the Washington science policy scene as JPBM congressional liaison, the Gramm-Lieberman bill is helpful but cannot be pushed too far "because the appropriators are very insistent on their right to make appropriations" as they see fit.

Furthermore, because the bill involves so many different agencies, it would have to pass through many different Senate and House committees, reducing its chances of being passed. Another obstacle is the drive to reduce spending: although the pressure of the budget deficit has eased recently, "any deficit hawk is going to look at this bill with

suspicion," says Thompson. Nevertheless, if the scientific societies can activate their memberships to press Congress to support this bill, they could have an impact.

And this is just what Rankin is working on, in collaboration with other societies. "We will begin a grassroots effort to obtain endorsements from other senators for the Unified Statement, especially targeting senators who are members of the Committee on Appropriations," he says. They will also work on encouraging government agency heads to push the administration and the Office of Management and Budget to increase research funding.

In concert with these efforts, Jaffe is continuing to work with the representatives of some of the other societies to get statements of support for scientific research from industry, in particular the financial industry. The most important thing is that it should not be only politicians making these decisions, says Jaffe. "Scientists and mathematicians are an important group with input into the way things are done."

In addition to Jaffe, mathematics was represented at the press conference by Marcia Sward, executive director of the Mathematical Association of America, who stood in for MAA president Gerald Alexanderson. Alexanderson signed the statement, as did John Guckenheimer, president of the Society for Industrial and Applied Mathematics, and Sylvia Wiegand, president of the Association for Women in Mathematics. The presidents of the American Statistical Association, the Institute for Mathematical Statistics, and the Institute for Operations Research and Management Sciences also signed on.

Three society representatives spoke at the press conference: D. Allan Bromley, president of the American Physical Society and science adviser to President Bush; Ronald Breslow, past-president of the American Chemical Society; and Winfred Phillips, president-nominee of the American Society of Mechanical Engineers.

— *Allyn Jackson*