Doubling the NSF Budget

On May 7 in Washington D.C., the House Science Committee introduced a bill titled "Investing in America's Future Act—NSF Authorization Act of 2002" (H.R. 4664) that would provide an increase in the budget of the National Science Foundation (NSF) by 15% in fiscal year 2003 (starting October 2002) and set the course for a doubling of the agency's budget in five years. This mirrors an effort to double the budget of the National Institutes of Health (NIH) that is now in its fifth year. The NIH doubling effort has aroused feelings of pride in the science community broadly, mixed with considerable envy among physical scientists.

Co-sponsors of the NSF doubling bill come from both political parties in the House of Representatives and include Science Committee Chair Sherwood Boehlert (R-N.Y.) and Ranking Minority Member Ralph Hall (D-Texas); Research Subcommittee Chair Nick Smith (R-Mich.) and Ranking Minority Member Eddie Bernice Johnson (D-Texas); Environment, Technology, and Standards Subcommittee Chair Vern Ehlers (R-Mich.) and Ranking Minority Member James Barcia (R-Mich.); and Science Committee members Lamar Smith (R-Texas), Bob Ethridge (D-N.C.), Connie Morella (R-Md.), Brian Baird (D-Wash.), Ken Calvert (R-Calif.), Joe Baca (D-Calif.), George Nethercutt (R-Wash.), Michael Honda (D-Calif.), Judy Biggert (R-Ill.), and Wayne Gilchrest (R-Md.).

The sponsors of this bill have recognized that while doubling the NIH budget has been very positive for the health of the nation—both literally and metaphoricallyhealth science research is now, more than ever, rooted in the basic biological, mathematical, and physical sciences, in addition to engineering and the social sciences. Balancing the United States' governmentally funded research portfolio is essential if the full benefits of the NIH doubling are to be realized.

Despite its relatively small budget (only 13% of NIH's), NSF has supported a large fraction of the fundamental discoveries that have led to Nobel Prizes and almost all of the work that has underlain the advances made by NIH and the other "mission-oriented" science agencies in the U.S. research portfolio. NSF's hallmark is cutting-edge research, selected through



doubling the NSF budget.

rigorous peer review (yes, I know, it is often annoying, but it is also usually right!). The NSF scientific staff has provided quiet and effective leadership in setting the research agenda, allowing for the most effective use of the limited funds under the agency's control. NSF is recognized as the most efficient of the government agencies, operating with exceptionally low overhead and an exceptionally high level of peer review. It is the very antithesis of the caricature of a bumbling and inefficient governmental agency. Under Director Rita Colwell's leadership, the agency is moving to make the research enterprise even more efficient by increasing the average length and value of the typical award so that researchers can spend more time doing the research and less time seeking the money for it. Bravo!

There are many steps between initiative and action in the U.S. government. The NSF doubling bill in the House of Representatives must be paralleled by a similar bill in the Senate. If both pass their respective houses, then a compromise bill is required, unless the House and Senate

bills are identical. The creation of the compromise bill is the work of the Conference Committee. Once all of these steps have been completed, the results still await several more actions. In Washington, budget authorizations are merely wish lists. They do not have any effect unless they are supported with corresponding appropriations, and Capitol Hill is littered with authorized initiatives that never happened because funds were not appropriated to support them. By the time this letter appears in MRS Bulletin, the NSF doubling bill will probably be in the appropriations process. Now is the time when contacting Washington representatives is most important and effective. Individual contacts from constituents are very important, so if your representative or one of your senators serves on an appropriations committee, this is a good time to call his or her office. Even if not, the work of the appropriations committees must be ratified by the entire Congress, so it is important for all representatives and senators to be aware of the issues involved.

The steps beyond the appropriations process are no less perilous. Once the House and Senate have approved both the authorization and the financial appropriation to support the science budget, and the necessary compromise bills have been crafted and approved, the whole budget still requires the signature of the president. The second half of September is a good time to let the White House know how you feel about the provisions of the federal budget, which is supposed to be in place by October 1. If the doubling legislation survives to this point, with a corresponding appropriation, the rest will be up to us—doubling the research output.

MRS enthusiastically supports the goal of doubling the NSF budget in five years. The Society's leadership will be very active in visiting Capitol Hill to talk about the importance of this for the United States and beyond. A clear lesson from the success of the NIH doubling effort, however, is that it must be supported by individual scientists if the initiative is to pass all of the political hurdles and be sustained for the necessary five years.

ALEX KING 2002 MRS President

MRS PUBLIC AFFAIRS MAILING Sign up to receive e-mails on materials issues of national and international public policy at: www.mrs.org/pa

579 MRS BULLETIN/AUGUST 2002