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Basic Research and Congress

If scientists needed another reminder that there are no certainties in the relationship between government and science in the United States, a House appropriations subcommittee furnished it on 30 April. The subcommittee trimmed more than \$50 million from the President's basic research request for the National Science Foundation, and in one stroke-for the second year running—undid the prospects for recovery from eight years of declining investment.

Meanwhile, on another front the Congress was settling its differences over a bill to restore an Office of Science and Technology Policy to the White House, and downtown a signing celebration was being orchestrated for the Rose Garden. The contrasts speak for themselves. It is obvious that basic science is in trouble with Congress, and that the past four years of debate over national science needs and goals has not sufficed.

True, the troubles of the NSF during the past year or two may well have something to do with the current budget outcomes. NSF has been mauled remorselessly by its congressional pursuers, and its supporters in Congress have been obliged to come to its defense time and again. In this atmosphere, the cut in basic research funds can be interpreted as punitive. But punitive budgeting of this kind is a heavy-handed form of legislative discipline.

Consider the swath that the House subcommittee cut: \$27 million was subtracted from support for mathematics, physical sciences, and engineering; another \$13 million came out of astronomy, atmospheric research, and oceanography; \$16 million more was stricken from the biological and behavioral sciences. Curiously enough, the reductions resemble the amounts that the President decided to add to the NSF budget at the very end of his decision-making, when he was satisfied that the overall federal budget could be held within his predetermined totals. It was this increase which made it possible for him to point to a rise of 11 percent in support of basic research, signaling a reversal of the previous trend in which federal support for research at colleges and universities had declined more than 20 percent from 1968 levels.

In our editorial of 6 February 1976, we warned that the President's budget for basic science deserved credit for its good intentions but that the response by the Congress was problematical. So it has proved to be. Although the full House Appropriations Committee could restore some or all of the current subcommittee cuts when it meets on 1 June, that it will do so is very unlikely in the absence of a storm of reaction from the country. There is another aspect to all of this. Twice in a row President Ford has gone to the Congress with proposed budget increases for basic research. If he is rejected the second time around, will he or his successor care to try again?

The AAAS is on the verge of publishing its first analysis entitled Research and Development in the Federal Budget, which will be largely a description and an assessment of the maze of decision-making stages through which science budgets must find their way. It is anything but dull reading. As we struggle to improve what is called the public understanding of science, we must also try to upgrade the scientists' understanding of government's behavior, including the uses of congressional budget power.

Over the decades, the Congress has done much to see to the progress of scientific research and development. That is beyond dispute. The research capability of this country will not be dismantled if the present action in the House stands. The point is that a decline of nearly ten years duration in the resources allocated to basic science is a very serious matter, and the current cuts will deepen and prolong that decline. In this light, the timing of celebrations and garden parties has more than a touch of the grotesque.

—William D. Carey