

editorial

Basic research: inflation fighter

It is gratifying to report that, despite the frenzied concern in Washington over budget cutting this year, it would appear that federal support of basic research in FY 1980 will *not* be cut but will receive something close to a cost-of-living increase. This result has implications beyond just the coming budget year. It could well be that we are witnessing the beginnings of the responsible national science policy that has so long been lacking.

In his recommendations to Congress, President Carter had originally proposed an overall 9% increase for basic research (except for NIH funds) with the idea that this figure would provide a small "real" increase beyond inflation. Unfortunately with the step up in inflation since the first of the year, the 9% figure may do no more than cover the cost-of-living, after all. Also several weeks ago, there were rumblings that the Congressional committees were considering massive cuts in the administration's proposals for science. However, as we go to press it seems that Congress is disposed, at least on the authorization level, to accept the President's recommendations for the research budget.

Hence this year the President's budget recommendations for research were accompanied by a strong policy statement detailing the importance of science and technology and we see Congress responding to the President's recommendations in the spirit in which it passed the National Science and Technology Policy, Organization and Priorities Act which restored the White House science office three years ago. The Association of American Universities in a recent statement commended the administration "for proposing a broad strategy designed to produce sustaining and balanced national policies for advancing science and technology. The FY 1980 budget proposals for the National Science Foundation and for several mission agencies are important and necessary steps toward a controlled, coherent investment policy for the nation that would help to regain momentum in the search for new ideas, for new knowledge, and for solutions to the economic, technological and social problems that confront our society."

Congress, as well as the Administration, should be commended for its increasing awareness of

the importance of long-term research to the nation. There had been concern that, if Congress were to reject the administration's budget recommendation this year embodying this important initiative on science policy, it would be a long time before a future administration would be willing to risk a similar initiative.

Happily (unless trouble develops in the appropriations phase in Congress) the nation can begin to look forward to the benefits issuing from a responsible policy for research funding. And never was there a time when these benefits were more sorely needed. Threatened by inflation on one side and recession on the other, our country is desperately struggling to get back on the road of real economic growth. Economists are agreed that one of the most important steps we can take to achieve that goal is to invest federal dollars in R&D. Studies of the causes of economic growth and gains in productivity in the United States, led economist Edward Denison to conclude that "advances in knowledge" is the biggest single source of growth, accounting for one third of the growth in the nation's output for the period 1929 to 1967. A study by another economist, Edward Mansfield, shows that our society realizes cost savings equivalent to a 56% annual rate-of-return on investments in R&D efforts devoted to industrial innovation. The message is that a vigorous research program is essential to the well-being of the economy—money invested in the laboratory literally acts to counter inflation and recession.

We are heartened that Washington is recognizing this economic principle and using it as the foundation on which to build a responsible science policy. Great strides have already been made. We urge physicists and other scientists to do whatever they can to help in the continuation of this effort. To this end we should all make sure we are fully enough informed to convince non-scientists of the key importance of research to the economic growth and prosperity of our nation.

HAROLD L. DAVIS