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## New Cuts in Agency Budgets

President Reagan's announcement on 24 September that the fiscal year 1982 budget for most government agencies was to be reduced a further 12 percent sent a wave of apprehension through our national laboratories and major research universities. The earliest impact will be felt in the national laboratories. Hundreds of scientists and technicians will be dismissed during the next several months in anticipation of budgetary reductions yet to come. The concern on university campuses is no less in degree, even though the impact will be less precipitate. Prospects for FY 1983 are still worse, if a balanced FY 1985 budget remains an Administration goal. Alarm is deep and pervasive.

Previous cuts by the Reagan Administration in the R&D budget, although damaging to social science research and science education in particular, were of a different order than what may now follow. Those cuts were more surgical in nature, protecting the hard sciences and cutting back on large demonstration projects, with the belief that these would be more appropriately taken up by industry. The Administration accepted the principle that federal support was warranted to preserve the strength of the national effort in basic research. But if an across-the-board cut of 12 percent is now imposed, with even deeper cuts in succeeding years, it is clear that the nurturing relationship between science and government may be changing in a manner quite different from the oscillations of the past. Science and government may be approaching a moment of decision in which the health of both is at risk.

The Reagan Administration believes that a new austerity in government spending is warranted and that it has a popular mandate to that end. But there remains a general responsibility, which the scientific community certainly shares, to point up the consequences of specific cuts and to ensure that the remaining federal resources are allocated wisely and to maximum effect. What avenues are open to the scientific community to make its case? Indeed, what kind of case does it have?

- It must point out more effectively—with documentation, if necessary—that the nation's economic strength and military security (both goals of the Administration) are tightly coupled to achievements in high technology and that, in turn, high technology is dependent upon scientific accomplishment. It must continue to point out that less than 15 percent of the \$38 billion in the federal budget for R&D goes to basic research; the bulk is spent on development. The required cuts could be made in the overall R&D budget, while allowing for modest growth in fundamental research.

- It may have to take its case to the authorization and appropriations committees of Congress, hoping to find support through public rather than quiet diplomacy.

- It might also direct its attention inward, offering to reexamine the national research enterprise—including academic research, national laboratories, and industrial research—to learn whether new institutional relationships and other structural changes can preserve our scientific strengths in a period of financial stringency. All sectors of the scientific community must be prepared to set aside the shibboleths of the past and perhaps propose new modes of research just as effective yet less costly. There has been no truly comprehensive examination of the relationship between the federal government and the scientific community since shortly after World War II. Out of this time of trial may emerge a totally new environment for science in the United States, perhaps even a better one.

It is clear that present circumstances require broad and informed consideration at the highest level. Accordingly, the National Academy of Sciences is calling a national convocation of scientific and engineering leaders to meet with government officials for a clarification of the prospects for science and technology in the light of proposed federal budgets and, if consensus permits, to suggest a course of action.—FRANK PRESS, *President, National Academy of Sciences, Washington, D.C. 20418*