The Science Establishment: Where Is It Headed?*

The Eisenhower and Kennedy years were particularly good ones for science support. Government research and development expenditures increased by an average of 15.1 percent during the Eisenhower administration, and 16.6 percent during the Kennedy years. Under President Johnson the percentage has continued to increase, but only at a 3-percent annual average, which is less than the cost-of-living escalation. Particularly significant is the current fiscal year, which actually saw a percentage decline in federal R & D money of 1.2 percent. For next year, the total is up 4.6 percent, to $17.3 billion, about 11 percent of the overall federal budget. It is to be noted that R & D's percentage of the total budget has been declining slowly but steadily since President Johnson's first budget in fiscal year 1965.

But percentages and even money totals alone fail to reveal three other significant trends in federal R & D spending: (i) whereas formerly the bulk of the money was spent by the Pentagon and NASA, now more than half of the R & D funds are controlled by other agencies; (ii) whereas previously the share for social sciences was negligible, the fiscal year 1969 budget boosts it to $238 million; (iii) whereas basic research claimed a lion's share in the past, the fiscal year 1969 budget puts an increasing emphasis on applied research. On the other hand, spending by NIH increased by only 1 percent, with an Administration directive to put more emphasis on improved patient-care techniques and less on long-range research.

What has caused this leveling off and change in emphasis of federal R & D spending? My three answers are these. First, the heavy financial cost of the Vietnam war is draining our resources and manpower. Its consequences are felt in every corner of this country, and they increase day by day. The public's love affair with science was cooling anyway, but there is no doubt that the added impact of the war has accelerated the process. Second, events in recent years have focused attention on the neglected problems of our domestic environment. In response to public demands, both the President and Congress want more direct and visible results from R & D dollars. Such things as pollution control, faster and safer transportation, better housing, and crime control now are at the top of the priority list. Third, there seems to be a new emphasis on achieving national goals through R & D, and considerably less concern about the acquisition of knowledge for its own sake. Such concepts as world leadership in science are rather nebulous to the average citizen as compared with immediate social and political goals.

What can the scientific community do about this? I believe it must go back to the equation PE = PM—public esteem equals public money—and consciously rekindle some of the public's former affection for science. The scientific community should take greater pains to make clear that its efforts contribute directly and indirectly to the public good. Research priorities should be adjusted, whenever possible, to the public's priorities. The public should be reminded ceaselessly of scientists' vital contributions to national security. There is no function more appropriate for the federal government than that of providing for national defense. And the scientific community should face the problem of cost cutting as it relates to getting rid of self-perpetuating, outmoded activities and as it relates to consolidation of federal science effort.—Craig Hosmer

* Adapted from remarks by Craig Hosmer, ranking House Republican member of the Joint Committee on Atomic Energy, at the Neutron Cross Sections and Technology Conference, Washington, D.C., 5 March 1968.