

editorial

Basic research in jeopardy

A recent report by the Organization for Economic Cooperation and Development documents in scholarly detail a situation we can no longer avoid recognizing. "The honeymoon is over," OECD concludes for US government support of basic research in universities. ("The Research System," OECD Paris 1974, had started out to survey the organization and financing of fundamental research in the Western nations but found this financing declining drastically while the study was taking place.) One is tempted to use an even stronger metaphor than the one used by OECD—in the marriage between the government and the universities, not only is the honeymoon over but there are imminent prospects for separation or divorce. Starting with the Mansfield amendment five years ago, there have been growing signs of disaffection with support for basic research at both ends of Pennsylvania Avenue. Looking back we recall the Administration proposal and Congressional acceptance of the RANN program at NSF, which forced the sole agency dedicated to basic research to divert some of its efforts to applied research. Then there was the "dismantling" (as OECD calls it) of the White House advisory machinery and more recently openly disparaging remarks by members of Congress about basic research with bills proposed requiring Congress to scrutinize all research grants.

In retrospect, we can see now that the generous support for basic research in the 1960's was simply one of the consequences of our national concern about avoiding a shortage of trained scientists. Government policies aimed at increasing production of trained people by universities automatically generated funds for basic research. Now in the 1970's with predictions of manpower surpluses for the next decade, this source of funding for basic research has disappeared.

The result has been a major trend to decouple government R&D support from traditional university departmental research programs, with no prospects in view for alternative sources of funding to fill the gap for these programs.

In its recent report "National Patterns of Funds & Manpower in the United States—1953–1975," NSF predicts that total spending for R&D in the US will decline 3% in constant dollars from 1974 to 1975 while spending for basic research will decline by 8%. And we have just learned that the House Appropriations Committee is recommending a \$44

million cut in NSF's budget for FY 1976, with the bulk of this reduction coming out of support for basic research.

The desperate attempt on the part of universities to adapt to this sharp trend is reflected in the proliferation of non-departmental interdisciplinary institutes springing up everywhere on campuses designed to attract mission-oriented support funds. But this is hardly a solution to the fundamental problem—a problem often discussed on this page—namely the continuing lack of a responsible federal policy for science. The de-emphasis we are seeing in basic research is clearly a short-range response to immediate pressures and not the result of careful long-range planning of what will be best for the future of the country.

The first step towards achieving such a policy should be to make sure scientists themselves are fully aware of the perilous situation for basic research and are motivated to seek action. With this goal in mind, the American Institute of Physics is planning the program of its annual meeting of the Corporate Associates in October (see page 63) to serve as a "consciousness raising" experience for the physics community concerning this problem.

Another essential step is re-establishing a White House Science Advisory Structure. We urge Congress to act positively on the President's proposal to create an advisory structure permanently mandated by law.

By the time the advisory office comes into being the scientific community must be fully prepared to argue that the priority task of this office should be to formulate a responsible science policy for the long-range national interest.

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