

The idea of a major concerted effort to "cure cancer" is not without antecedents. A number of congressional resolutions have called for such an effort, and the concept of a mobilization of resources such as that which produced the atomic bomb or the moon landing has frequently been discussed. A commission established by former Texas Senator Ralph Yarborough (*Science*, 16 October 1970) recommended creation of a massive cancer research pro-

gram administered by a NASA-like agency independent of NIH. This project approach is favored by biomedical research partisans associated with Mrs. Mary Lasker. Senators Edward M. Kennedy (D-Mass.) and Jacob K. Javits (R-N.Y.) have cosponsored a Conquest of Cancer Act (S. 34) incorporating the commission's recommendations. The bill calls for an independent cancer agency which would be provided with open-ended appropria-

tions beginning with \$200 million to \$400 million the first year and rising to \$600 million in the third year.

The appearance of the Nixon cancer research proposal as a separate item in the budget leaves open the possibility that the Administration is thinking of a drastic reorganization of cancer research. But biomedical research officials in the government have generally resisted this approach mainly on the grounds that the necessary fundamental principles were understood for the Manhattan project and the Apollo program but that such is not the case with curing cancer. Health, Education, and Welfare officials, and particularly NIH planners, are now engaged in working out ways to implement the President's proposal.

In the last year's budget NSF was given a modest increase in funding and a somewhat expanded role, and this year's budget carries those initiatives further. The trend in NSF is toward increased support of research projects and away from programs that have the effect of expanding training and research capacity. Direct support of graduate students and postdoctoral fellows is being further reduced. Ph.D. candidates and postdocs will be expected to obtain support under research grants and, presumably, NSF will be able to nudge both research and training in directions it considers important. The Administration is apparently carrying through on its announced intention to give NSF a larger total role in federal science. From the Defense Department, NSF is taking over funding of the National Magnet Laboratory and the interdisciplinary labs devoted to materials research at major universities. And obligations for research bearing directly on major national problems are scheduled to rise from \$29 million this year to \$74 million in FY '72.

The Atomic Energy Commission (AEC) budget reflects the same emphasis on research relevant to practical problems. Funds for development of a liquid-metal breeder power reactor would be raised by 20 percent, or about \$18 million. This year's \$1.7 billion total R & D budget would be reduced by nearly \$200 million, much of the reduction being accounted for by decreases in funds for R & D facilities made possible by completion of projects begun in years past. The 1972 budget does include \$48 million for construction work on the 200-Gev accelerator at Batavia, Illinois.

Pine Bluff Saved, Detrick Critical

One of the Army's biological warfare centers appears to have been saved from the scrap heap by President Nixon's proposed budget for fiscal year 1972, but another of the highly sophisticated facilities seems to have moved a step closer to extinction. The center that will be saved is the Pine Bluff (Arkansas) Arsenal, which will be converted to a civilian facility devoted to the study of the health effects of chemicals. The center that appears doomed is Fort Detrick, the Army's high hazard biological laboratory in Frederick, Maryland.

The Army centers have been in jeopardy ever since President Nixon, in November 1969, announced a total ban on offensive biological warfare. Since that time, teams of scientists and government officials have inspected the secret installations to see if the facilities might be converted to civilian use. The result of the Nixon Administration's review of the facilities became apparent last week.

On 27 January, the White House announced that the Pine Bluff center would be converted to a National Center for Toxicological Research under the administration of the Food and Drug Administration (FDA). The announcement said that the Army would remain at Pine Bluff for about a year in order to destroy biological weapons in accord with the President's order, and that the FDA would occupy the excess facilities as the Army vacates them. The FDA is expected to take over the entire facility by fiscal 1973.

James Grant, deputy director of FDA, told *Science* he expects the newly converted center to perform as much as \$10 million worth of civilian research in fiscal 1972, of which perhaps \$4 to \$6 million would be funded by FDA and perhaps \$4 million by the Environmental Protection Agency (EPA). An ad hoc scientific committee has been established to coordinate the work of agencies that might be interested in using the facilities, including the National Institutes of Health, the National Institute of Environmental Health Sciences, and the Agriculture Department. Cooperation with industry and the academic community is also being considered.

Research at the new center will include studies of the mechanisms of action of chemicals found in pesticides, food additives, and possibly drugs; their effects on animal metabolism; and their rates of absorption and excretion. The arsenal's extensive animal facilities will be used for studies of the effects of long-term exposure to low doses of chemicals.

While Pine Bluff seems to have been saved, the outlook for Fort Detrick has become still bleaker. There is no money in the President's budget for converting Detrick to civilian use, and while there is a chance that Congress might appropriate conversion funds anyway, this must be considered an outside possibility at best. Detrick's problem appears to be that it is simply too specialized and sophisticated for most civilian agencies to use, and it would cost more to operate than most civilian agencies are willing to spend (see *Science*, 22 January).

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