cause a data base was created which researchers in the future are expected to use and refine. Data were collected not only from institutions which were SD recipients, but from a control group composed of the leading doctorate-awarding institutions in the United States. In the physics group, for example, 34 institutions were SD recipients and 52 were in the control group. Data were collected for a 15-year period (1958 through 1972).

The SD program was an experiment in institutional funding—the only major one to date. Until the time of the program, NSF hewed close to the line of supporting excellence in science, with the result that foundation funds tended to flow through the medium of research grants to those identified by the peer review system as the best people in the best institutions. In 1963, the federal government spent about $1.3 billion for academic science, some $500 million, or 40 percent, of which went to 17 institutions. Each of these 17 received more than $20 million.

The early 1960's was a boom period for science. The boom was stimulated at least in part by Sputnik, and the implied threat of Soviet superiority, but there was also an assumption that R & D was a catalyst for regional economic growth, as the high technology enclaves around Boston and in California seemed to prove.

Logic thus led to the conclusion that the way to serve both national security and the economy was to increase the number of science departments of the first rank and thus the number of graduate students in science, mathematics, and engineering.

The President's Science Advisory Committee had fostered the idea of creating what, in the cliché of those days, were called "new centers of excellence." And the machinery of institutional grants meshed well with growing congressional insistence on more equal geographical distribution of R & D funds. This demand had been spurred by studies which showed that military procurement orders tended to be concentrated where military R & D contracts were performed.

The SD program was authorized in 1964 and the first grants awarded in fiscal year 1965. The grants were awarded on a competitive basis to universities which not only had to come up with detailed plans for developing their science programs, but could also provide assurances of sustaining the new momentum in science after the grants ended.

The NSF program was, in fact, three programs. Of the total $230 million spent, some $177 million, or more than four-fifths, went into the University Science Development (USD) program, under which 31 universities judged to have the potential for developing excellence in science were given funds to upgrade clusters of departments. Grants were made usually for from 5 to 7 years, and many of the institutions received supplementary grants. The totals of most grants ranged between $3 million and $7 million. At the top end, Indiana University got about $9.2 million; the University of Southern California, $7.5 million; and the University of Arizona and Washington University in St. Louis, over $7 million each. Two smaller subprograms were also funded. A Departmental Science Development (DSD) program was designed for single departments regarded as having the potential for work of high quality, but which were in "weaker" institutions. Some 73 grants were made in this program, averaging about $500,000 each. Special Science Development (SSD) grants were given to 11 institutions identi-

President Ford at NIH: Courting Biomedical Science

President Gerald R. Ford recently paid biomedical researchers a kind of tribute they are not used to receiving. He treated them like any other group of constituents whose votes he will need in 1976 by making a personal appearance at the National Institutes of Health (NIH). It has been some time since a President has bothered much about courting the research vote.

The occasion of Ford's visit to NIH was the swearing-in of Theodore Cooper as assistant secretary for health in the Department of Health, Education, and Welfare (HEW) and Donald S. Fredrickson as director of NIH. The swearing-in had originally been planned to be an in-house affair on the afternoon of 7 July, but it was hastily moved up a week to the morning of 1 July to accommodate the President's desire to attend.

The Marine Band was there, playing show tunes for the 400 or so senior scientists who had been invited to witness the festivities in the Clinical Center auditorium. On stage, Cooper and Fredrickson sat with their families and a poker-faced Secret Service agent. The President, delayed in traffic, was a little late. Someone gave Mrs. Cooper and Mrs. Fredrickson white orchid corsages. Former NIH Director James Shannon and his wife were introduced to the crowd that thinks of him as something of a patron saint. He received several rounds of applause. The band played on. There was an air about the place that reminded one of a high school graduation.

Outside, a crowd estimated at 1000 persons waited to greet the President who, reportedly, took several minutes on entering and leaving to shake hands. He entered the auditorium to the familiar strains of "Hail to the Chief."

The ceremony thereby became a "historic event," as HEW Secretary Caspar W. Weinberger noted in his introduction of the President. Weinberger called the President's presence at NIH a "clear and unambiguous" statement of his commitment to health and research.

A Presidential Pat on the Back

Ford then made a few brief remarks—no policy speech, just a pat on the back for a community that has felt sorely neglected by the White House. The President said he wished to pay a "long deserved tribute" to NIH, which he called "a symbol of hope, not only for patients here, but for all peoples everywhere." He praised Cooper and Fredrickson and spoke with special affection of Weinberger who has recently resigned as HEW secretary, effective next month. Ford declared that, under Weinberger, HEW worked at "peak efficiency."

The President commended NIH as a premier research establishment, telling Fredrickson that "the people" look to him not only to develop new knowledge but also to make it widely available. Ford affirmed his belief in quality medical care for all Americans at a reasonable cost and said we can look to Cooper for progress in that area. All in all, it was a pleasant, predictable speech. It was followed by the formal oath-taking, after which Cooper and Fredrickson received their letters of appointment, tied like diplomas with white ribbons. The crowd loved it. The President had come to NIH—a gesture that will not be soon forgotten.—BARBARA J. CULLITON