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NEWS AND COMMENT

Share the Wealth: LBJ Directive Beginning To Show Some Effects

Ever since September 1965, when President Johnson issued a directive titled, "Strengthening the Academic Capability for Science Throughout the Nation," it has been government policy to promote the development of new centers of academic excellence.

Just what has happened as a consequence of this policy is difficult to determine, since, first of all, the money that is an instrument of this policy moves slowly, and, secondly, once delivered, its impact is likely to be felt slowly. Furthermore, in some instances there has been more talk than action. Last spring, for example, the Defense Department announced that it would parcel out \$20 million among institutions that had received little or no Defense research support; but the money is yet to go out.

Nevertheless, the capillary system that carries federal funds outward from Washington is beginning to flow with money specifically earmarked for development. Last week the National Science Foundation announced three more grants in its development program, bringing the total to 20 institutions and \$63.7 million. The latest are the Uni-

versity of Texas, Austin, \$5 million—the largest single grant so far in the program; the University of Indiana, Bloomington, \$3.7 million; and Duke University, \$2.5 million. (NSF's program actually got under way in May 1965, when pressures had built up for a broader distribution of research funds but before the President had made such a goal a matter of national policy.)

Though little attention has been paid so far to the consequences of this federal policy, the available evidence suggests that it is beginning to introduce a considerable amount of turbulence into the academic marketplace. Whether the turbulence is beneficial depends on one's vantage point. But, just recently, a panel of deans (mostly from the wealthier enclaves of the academic world)* put together a cautiously worded statement which suggests that Johnson's academic welfare program may be pinching some of the haves in its efforts to promote the betterment of the have-nots. Sitting as the Com-

*The members are Robert A. Albery, Wisconsin; J. P. Elder, Harvard; Ralph Halford, Columbia; Joseph L. McCarthy, University of Washington; M. N. McGeary, Pennsylvania State; John L. Snell, Tulane; and V. Whitaker, Stanford.

mittee on Policies of the Association of Graduate Schools of the Association of American Universities, they stated (in a draft of a document yet to be released):

"... Federal programs are needed which provide for additional centers of excellence in graduate education and research, and at the same time preserve the existing centers of excellence. [original italics]

"... new centers of excellence can be created only relatively slowly since the number of professors qualified to offer graduate education and research can be increased only relatively slowly. If new centers are created too rapidly, the result simply will be the raiding of established departments and the consequent game of musical chairs will unduly inflate salaries and debase standards of appointment in areas of scarcity. The tendency of some professors to be predominantly concerned with rising within their professional specialty rather than growing with their university will tend to be strengthened while their loyalty to the university and the students, an important part of sound graduate education, will become weakened."

Though it would be interesting to trace the career patterns of some of those who espouse the virtues of staying put, the fact is that the deans do have a point when they note that "the supply of available qualified professors appears to be the factor which, above all others, will govern the maximum possible rate of expansion of the centers of excellence in graduate education. . . ." They go on to suggest that "statis-

tical studies should be conducted in appropriate Federal agencies to estimate and publish the numbers of graduate faculty professors who will become available in future years, as well as the numbers of well-staffed centers of excellence which properly may be maintained." Which is another way of asking, where will Texas get the people to help spend that \$5 million?

Among administrators of federal granting agencies, there is apparently a sense of confidence that the development programs will not have a disruptive effect on existing centers of excellence. For example, in an address earlier this month to the National Council of University Research Administrators, John T. Wilson, deputy director of the National Science Foundation, observed, "As you might suspect, there were those in large university centers who were less than wildly enthusiastic, especially in anticipation of tightening budgets, at the prospect of sharing limited funds with institutions having only scientific potential. . . . Many of us believe," Wilson continued, "that it is possible to strengthen more colleges and universities and, at the same time, not necessarily diminish the quality of research to be performed in laboratories of first rank." He went on to say, "institutional support, plus the use of traineeships and other techniques, seem to me to provide mechanisms that are appropriate to serving the ends of broadening the base of Federal Government support in science without doing harm to traditional forms of support for established investigators and for first-rank institutions."

Just how NSF, with a budget that has been static for the past two fiscal years, proposes to do this, Wilson did not say. Furthermore, figures compiled by the Bureau of the Budget indicate that, while federal support of academic research has annually increased during each fiscal year since 1965, the rate of increase has dropped off sharply. In 1965 the total was nearly \$1.2 billion, an increase of 18 percent over the previous year; in 1966 the increase was 15.7 percent; in the current year it is 10 percent. Just what it will be in the Vietnam-dominated budget of fiscal 1968, no one knows, but Washington science administrators are as gloomy as ever.

Meanwhile, there is no relaxation of the political pressures for ever-broader distribution of federal re-

search funds. If anything, the triumph of the Midwest in the competition to provide a site for the 200-Bev accelerator demonstrates that it pays to throw tantrums if you feel you are not getting a fair share. Furthermore, there is no decline in the productivity of the federally financed fellowship and traineeship programs which annually turn out thousands of new customers for research funds. In the ranks of these newcomers lies the ultimate answer to providing faculty for the new and old centers of excellence, but they are coming onto the market at a time when research funds are in short supply and the demands are greater than ever. The statesmen of science automatically shrink from anything that might be called a science policy, preferring a *laissez-faire* setup which implies that all good science is equal. But whether they

wish to recognize it or not, a financial crunch is developing throughout the American scientific community, and, before it gets any worse, it would be useful to devise some order of priorities and long-range designs. It is extremely difficult to match the slow and uncertain pace of scientific education and research to the peculiarities of the governmental budgetary process, but there must be something better than a system that, in large part, is based on hope and good luck. Congress has now become fairly well informed about the peculiar problems of science, and perhaps it is time to argue that, if science is to thrive and achieve all that Congress asks of it, a new multi-year system of appropriations should be adopted so that long-range planning can take the place of year-to-year ups and downs.

—D. S. GREENBERG

U.S. Patent System: Commission Recommends Reforms to President

"The United States patent system is an institution as old as the Nation itself," begins the recently released report of the President's Commission on the Patent System.* But, while the basic features of the system have remained constant for well over a century, the demands placed on it have greatly multiplied in recent decades. The Patent Office and the system have come under increasing criticism for invalid patenting of inventions, complexity and expense of patent litigation, and delay in the granting of patents.

Approximately 95,000 patent applications are filed annually in the United States, and at present there is a backlog of more than 200,000 applications. The average period from filing to final disposition is 2½ years, but, as the commission reported, "A substantial number of applications have a period of pendency of five to ten years or more."

In an effort to meet some of these objections and to make other determinations on the patent system, Presi-

dent Johnson, on 8 April 1965, established a Commission on the Patent System. Harry Hunt Ransom, Chancellor of the University of Texas, and Simon H. Rifkind (a New York City lawyer who acted as counsel for Mrs. John F. Kennedy in the recent publication dispute) were named co-chairmen of the commission, and Alfred C. Marmor was appointed executive secretary. During the past 16 months the commission has met for a total of 31 days to determine the current need for a patent system and to suggest possible revisions.

The members unanimously concluded that, as in the past, "The patent system today is capable of continuing to provide an incentive to research . . ." and that they had discovered no practical substitute. The commission noted that the patent system encouraged the inventor and his supporters, created the climate necessary for early public disclosure of technological information which helped avoid duplication, and promoted exchange of international technological information and products by protecting the interests of foreign nationals.

The commission's 65-page report,

*Copies of the "Report of the President's Commission on the Patent System" are available from the Superintendent of Documents, Government Printing Office, Washington, D.C. for 65¢ each.