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Bypassing Peer Review for Scientific Facilities

In the past several months the number of universities making direct appeals to Congress for funds to construct scientific capital facilities has grown to nine. Such tactics allow the schools to bypass peer review from the scientific community and the prospective funding agency. In a tenth instance, universities engaged in political lobbying to have their proposal for an accelerator approved after a scientific review panel had recommended that of another group. Administrators at still another university sought and supported a recommendation to Congress to house two major research activities at their institution. The universities engaged in these efforts are both public and private. In their quest for money, some have hired professional lobbyists; all have exerted pressure through political constituencies. And members of Congress have been encouraged to consider scientific facilities as appropriate objects for pork barrel politics. Congress has responded promptly and favorably, sometimes approving funds without debate or review by committees.

Why look a gift horse in the mouth? For more than a decade university administrators have been unable to respond adequately to the appeals from their scientist to replace outmoded instrumentation and to construct the facilities needed to support new scientific developments. They have watched as their promising graduates and many on their science and engineering faculty have been captured by industry, and they are concerned that training in science and engineering will lose its creativity and innovation. The need for renewed government support for construction and renovation of research facilities is clear.

If, however, government money is awarded to universities as a result of success in a competition for political influence instead of as a reward for success in an open competition for scientific merit, the independence and preeminence of American science could be eroded. Decisions about the placement of sophisticated facilities and instrumentation require that assumptions be made about the productivity and creativity of those who will have access to them. Chances for excellence in scientific endeavors depend on the following:

- Good scientific leadership and a skilled technical support staff,
- Resources available in other departments and schools in a university,
- Opportunities for cooperation with scientists in other universities and in industry, and
- Judgment about the value of the contemplated research compared with alternative uses for funds.

Scientific reviews conducted by funding agencies and the scrutiny of the Office of Management and Budget of funding requests before they are brought to Congress have provided a sound base for the most productive use of taxpayer funds. Special pleading by universities and their professional lobbying agents will not. The Association of American Universities, the Association of State Universities and Land Grant Colleges, the council of the National Academy of Sciences, and the president of the American Physical Society have urged that facilities and instrumentation as well as research proposals continue to be subject to peer review.

Scientists should look carefully at the methods they use or condone in seeking funds. Political favors are by nature based on considerations that do not give high priority to scientific merit. The best scientists may lose favor. The successes won by courting members of Congress before recommendations have been made by the scientific community may be only temporary. And they may soon be outweighed by the dangers that result from abandoning the system of peer review that has kept American science strong and capable of adjusting to change.—ERNESTINE FRIEDL, *Dean of Arts and Sciences and of Trinity College, Duke University, Durham, North Carolina 27706 and Member, Executive Committee of the National Science Board, Washington, D.C. 20550*