

## Smale and NSF: A New Dispute Erupts

The National Science Foundation has tossed back the grant application for a research group headed by Stephen Smale, the internationally renowned Berkeley mathematician whose antiwar declarations have drawn congressional ire. As is often the case in dealings between the cautious NSF and the hot-tempered 37-year-old topologist, assertions of high motives and allegations of rank calumny clog the Berkeley-Washington circuits (*Science*, 7 October 1966). But, though Smale is no easy client for a federal agency in the politically rancid atmosphere that now prevails in Washington, NSF must still be accorded high marks for a tour de force in bureaucratic weaseling. Precisely who has said what to whom, and what was intended in saying it, is not altogether clear at this point. This is in no small part because NSF darkly reports that certain matters are better left unstated, though Smale himself demands that the Foundation spell out whatever it has. In any case, the ascertainable elements of the affairs are as follows.

In the summer of 1966, after spending time at various European academic centers, Smale went to the International Congress of Mathematicians, in Moscow, to accept the Fields award, which is often referred to as the Nobel prize of mathematics. His salary for 2 summer months came out of a \$91,500 grant NSF had awarded Berkeley for partial support of a small research group, of which Smale was director. In addition, the grant provided Smale with \$1000 in travel funds; for the trip to Moscow, this sum was supplemented by \$400 from a fund administered by the National Academy of Sciences. Smale, who had led anti-Vietnam protests at Berkeley, used the occasion of his visit to the U.S.S.R. to mount the steps of Moscow University and publicly berate (i) U.S. foreign policy, (ii) Soviet foreign policy, and (iii) Soviet treatment of Soviet intellectuals.

While several congressmen threatened virtually to expunge NSF from the federal landscape, and NSF, the Academy, the State Department, and the Berkeley administration ran up stupendous phone bills talking with each other, Smale made a leisurely trip across Europe, boarded the *France*, and sailed home. Berkeley, under pressure from NSF, withheld some money from him for a time until he accounted for his whereabouts during the NSF-subsidized summer months, but eventually it was concluded that though his behavior was perhaps a touch irregular, there were no grounds for punitive action or failure to honor the grant commitment. In fact, after lengthy deliberations among the elders of the Foundation, NSF director Leland J. Haworth advised one apoplectic legislator that it was long-established NSF policy to support a man on the basis of his science, regardless of his politics. It was a noble, upright statement, a bit long in gestating, but one of which the Foundation and the scientific community felt justly proud.

After that, outside the boundaries of the topological fraternity, little was heard of Smale, except for a garbled, and denied, newspaper report that credited a spokesman for Haworth with stating that "political considerations" would enter into the evaluation of Smale's application for a new grant.

That application, which was submitted several months ago in anticipation of the present grant's expiration next March, asked NSF to provide approximately \$250,000, to be spent over a 2-year period, with Smale again as principal investigator. According to Smale, the current grant helps support three tenured mathematicians and a junior researcher. The expanded program, he says, would support five tenured people, plus three at the junior level.

A good deal of phone-calling between NSF and Berkeley followed the arrival of the grant application and, again, who said what to whom is a matter of high-temperature dispute, but there is at least one item in writing, and that is a letter, dated 31 August, from William E. Wright, the NSF division director of mathematical and physical sciences, to Dean Sanford S. Elberg, at Berkeley.

"We have come to the conclusion," the NSF official wrote, "that, in light of Professor Smale's performance in the administration of the present grant, we cannot tender a new grant to the University based on the proposal in its present form."

"This does not reflect any adverse decision on the part of the Foundation concerning the intrinsic merit of the research proposed," Wright continued. "Rather it reflects a decision by the Foundation that the proposed administrative arrangements are unacceptable."

Wright went on to add that, if the University wished to reapply for support for the Smale group, it should carve up the application into at least two new proposals, so that Smale's financial requirements could be considered separately. "One of the new proposals," Wright stated, "should confine itself strictly to the needs of Professor Smale in the pursuit of his own research interests without involving NSF support of other faculty members."

What is meant by "Smale's performance in the administration of the present grant"? NSF declines to say publicly, but inquiry reveals that the Foundation is prepared to make its case, at least in part, on such matters as Smale's having returned to the U.S. on a foreign ship, in violation of regulations that U.S. carriers are to be used by grantees when available; that he spent 8 months last year at the Institute for Advanced Studies in Princeton, without formally notifying the Foundation; that he did not inform the Academy that NSF had provided him with part of the costs of his trip to Moscow; and that the 2 summer months for which he received NSF support in Europe last year had to be pieced together from "bits and scraps of time" at various institutions.

Smale responded to Wright's letter by declaring that he would not be a party to cutting up the grant proposal. Asserting that "the NSF has dishonored itself," he went on to say, "Submitting a proposal on just my own research would be giving in to unprincipled political intervention on the administration of research funds. If I were to do this, other science administrators and scientists receiving federal research funds would find it more difficult to disassociate themselves from Johnson's brutal Vietnam policy."

Such is the latest episode in the affairs of Smale and NSF.—D. S. GREENBERG