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NSF-Backed Scientists Raise Alarm Over Deepening Congressional Inquiry

By Paul Basken

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Two years into the latest round of attacks by Congressional Republicans on federally sponsored research, an escalating effort by the House science committee to find fault with the National Science Foundation is taking a growing toll on researchers.

NSF grants to some 50 professors across the country are now being investigated by the Republican-controlled committee. More than a dozen of the researchers, in comments to The Chronicle, said they had little idea what the politicians were seeking, but warned of a dangerous precedent in what they described as a witch hunt.

"This is an outrageous politicization of science," said one of the researchers, Glenn Gordon Smith, an associate professor in instructional technology at the University of South Florida who has used NSF money for work involving climate change.

"This is a ludicrous waste of taxpayers' money," said Celia Pearce, an assistant professor of digital media at the Georgia Institute of Technology whose studies the work applications of large-scale, multiplayer online worlds. "It saddens me that elected officials are attacking science in this way," said Robert M. Rosenswig, an associate professor of anthropology at the University at Albany, a campus of the State University of New York, whose NSF-financed grant involved studying Mexican history.

Aides to the chairman of the House committee, Rep. Lamar Smith of Texas, have been visiting NSF headquarters, just outside Washington, for the past several months to study the grants—primarily in the social sciences, many in anthropology—approved in recent years.

It's the latest step in a saga that dates to at least last year, when Mr. Smith began criticizing NSF grants largely on the basis of the project titles, such as "Picturing Animals in National Geographic" and "Regulating Accountability and Transparency in China's Dairy Industry."

Similar questions have been raised for years by members of Congress, usually Republicans in more recent times, including Sen. Tom Coburn of Oklahoma. The tactic regularly drew headlines decades ago when it was practiced by a Democrat, Sen. William Proxmire of Wisconsin.

'Higher Priorities'

The NSF has staunchly defended the integrity of its grant-review process, in which panels of outside researchers judge the scientific merit of funding applications. In cases where some research topics might not show obvious value to a layperson, the agency has taken the time to explain the underlying purpose of its studies.

One heavily publicized example cited by Congressional Republicans as wasteful involved NSF-sponsored research that included a video of shrimp walking on a treadmill. Less publicized was the value: investigating the effects of low oxygen levels on marine life, an increasingly common problem with significant economic implications.

Mr. Smith hasn't precisely explained the basis for choosing which research projects to subject to scrutiny by his staff. In a written statement, the chairman said taxpayers deserve explanations for NSF decisions, involving hundreds of thousands of dollars, on projects that include musicals about climate change, studies of bicycle designs, and a video game that lets users "relive prom night."

"We all believe in academic freedom for scientists, but federal research agencies have an obligation to explain to American taxpayers why their money is being used on such research instead of on higher priorities," he said.

Under Mr. Smith's leadership, the committee has made a series of efforts to impose new restrictions on the NSF's grant-writing ability, with a particular emphasis on cutting its budgetary authority in the social sciences. Those efforts have largely hit a roadblock in the Democratic-controlled Senate. Mr. Smith might have more success next year, however, if Republicans gain control of the Senate—as predicted by many political analysts—in next month's elections.

Real-World Value

The NSF's director, France A. Córdova, a former president of Purdue University, took office in March and almost immediately engaged Mr. Smith in a running discussion of the conditions under which his staff would be able to examine grant applications and associated paperwork.

Their negotiated resolution allowed the legislative staff members to inspect the paperwork at NSF headquarters and take notes, but not leave with any originals or copies. The goal, Ms. Córdova said, was to maintain promises to researchers and outside reviewers of confidentiality in the process. In one letter to Mr. Smith, she defended the integrity of the NSF's grant-award process but welcomed constructive suggestions for improving it.

The grant for studying bicycle design was awarded to Mont Hubbard, an emeritus

professor of mechanical and aerospace engineering at the University of California at Davis. His work involved incorporating aerospace technologies into "the design of bicycles for a wider population audience and for a wider range of tasks," according to an NSF summary.

"Although I respect the oversight right and responsibility of Congress," Mr. Hubbard told The Chronicle, in one of more than a dozen written responses provided by the affected researchers, "I find it disturbing that the committee apparently thinks they can do a better job of deciding what is in the nation's interest scientifically than NSF can."

Another of the researchers, Mr. Smith of the University of South Florida, used an NSF grant to develop a curriculum on climate change for high-school students. He suggested pure political motivation lay behind the committee's focus on his work. "When you are selectively in denial of overwhelming scientific evidence," he said, "you seek out ways to discredit investigators who research in that area."

Studies in anthropology, a frequent target of the legislative inquiry, may appear to have little real-world value to Americans in the present day, said Paja L. Faudree, an assistant professor of anthropology at Brown University who made the investigative list for a study of how connections among people, words, and other items collectively shape global trade in indigenous plants.

Yet one needs only to look at current headlines on the global threat of the Ebola virus to see that value, Ms. Faudree said. Anthropological studies, she said, have "done a lot to help us understand how local cultural norms affect important priorities like public health."