Hughes Investigators Rile NIH Peer Reviewers

Study section members want Hughes to take steps to prevent "double-dipping" by its well-funded researchers

WHEN A DOZEN GENETICISTS MET LAST JUNE at the National Institutes of Health to evaluate grant applications, they came across a problem that nearly brought their study section to a standstill. Of the 80 applications they were supposed to rank, about a half-dozen were from researchers who already were receiving generous funding from the wealthy Howard Hughes Medical Institute (HHMI). The question was, were any of these HHMI investigators applying for NIH funds for research that was already supported by Hughes? Such "double-dipping" is forbidden by NIH, which refuses to support research already underwritten by other public or private sources. But the Hughes awards are so open-ended, reviewers can't tell if there is overlap unless the researcher declares it. As a result, the geneticists did not know how to rank the Hughes investigators' proposals.

"At the end of the meeting, people were beside themselves with frustration," says Harvard University genetics professor William Gelbart. Although in most cases suspicions about double-dipping have proved groundless, the uncertainty is "driving the study section mad. It comes up every time. And every time, we waste enormous amounts of time on it," says the genetics section chair, Elizabeth Jones of Carnegie-Mellon University. And the problem is also worrying HHMI officials, who are afraid that there will be a backlash against honest investigators. Says HHMI senior scientific officer Claire Winestock: "What we hope is that in trying to sort things out, the study sections don't jump to certain conclusions, and try to take things into their own hands and shade the scoring accordingly."

An informal survey by *Science* of other study sections that deal with the same research areas in which Hughes specializes—including molecular biology and neurological sciences—found that their members also were worried about possible double-dipping by HHMI investigators. "You don't want to approve funds for the same research twice, particularly at a time when funding is so tight," says Harold Burton, chair of the neurological sciences study section and a professor at Washington University's School of Medicine. "It's unfair to other investigators."

As a result, some of the study section members are calling upon NIH to pressure Hughes to provide better records of the work of researchers it funds. They say that they can see grants from the National Science Foundation, the Department of Energy, and many private foundations, but they can't see the paper trail at HHMI, which considers its reviews of investigators' performance to be similar to tenure committee evaluations—and, therefore, confidential. The complaints have reached the ears of NIH officials—Gelbart wrote a letter last summer to NIH Director Bernadine Healy—and Jones says she is planning to bring up the issue at an upcoming meeting of study section heads with Healy.

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>
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This is not the first time the problem has surfaced. Indeed, last year NIH and Hughes officials thought they had a solution when HHMI agreed to send out emphatic letters to its investigators reminding them to declare any overlap in funding. Hughes has also been providing information about its investigators' work in some instances to NIH, and has contacted researchers where abuse has been suspected. Says Maxwell Cowan, vice president and chief scientific officer of HHMI: "We're obviously very sensitive about this issue."

But relying on voluntary compliance has not been enough: NIH staff are still finding it difficult to get adequate information from an HHMI investigator in about 5% of the cases where study sections have raised concerns about an application, says Geoffrey Grant, grants policy officer for the Office of Extramural Research. And study section members say they are still seeing abuses.

In one case, an HHMI investigator applied for NIH funds for one of his projects, but the genetics study section judged that the work was not up to par and gave him a low score, denying him a grant, says Jones. This year, however, the same researcher has submitted another application to NIH—but this time he put forward his lab's best project. "They have the ability to bury their less worthy projects—that wouldn't get funded otherwise," says Jones. In another case, a geneticist declared that there was about 30% overlap in funding. But when the section looked at the nature and dates of his lab expenses, which had been supplied by Hughes, it calculated that the overlap was more like 80% to 100%. "There are cases where you know darn well there is overlap," says Gelbart.

The difficulty confronting study sections can be traced to the broad nature of Hughes awards. "The problem is that Hughes doesn't require investigators to declare specifically what the HHMI award is for," says Brandeis University professor Michael Rosbash, a member of the molecular biology study section and an HHMI investigator himself. "The award is to do what you like more or less." And the awards, which include the investigators' salary, lab rental, equipment, and staff expenses, often range from $300,000 to $600,000 a year—making them far more generous than the ordinary NIH grant.

What's the solution? NIH says that the study sections should not bother with the problem: It should rank proposals only on their scientific merit and flag questionable applications for staff to investigate for overlap. Cowan at Hughes agrees. He also is worried that a backlash will develop against honest HHMI investigators because of the "envy and jealousy" some feel about their wealth of funds.

But the study sections are loathe to give up control to the NIH staff. "Members are quite aware that there is less than an infinite amount of money," says Keith Yamamoto, vice chairman of genetics at the University of California, San Francisco, and chair of the molecular biology study section from 1987 to 1990. He thinks Hughes should take applications for all of its appointments, awarding them competitively as NIH does—and thereby providing a record of what each researcher plans to spend his money on. But less drastic solutions also exist, says Gelbart. The HHMI could allow the study sections to see its records of periodic reviews of HHMI investigators' work. Or NIH could require more than a few sentences on its applications about work already funded by other sources. "NIH can't control Hughes, but NIH can say, unless Hughes changes its ways, it makes Hughes investigators suspect," says Gelbart. In some ways, however, that already has happened—whether it has been intentional or not. ■ ANN GIBBONS