

Political Science



Scientists at Johns Hopkins and around the country — whose research involves politically sensitive subjects such as prostitution, AIDS, and drug use — are under scrutiny as never before.

By Dale Keiger
 Illustration by Michael Gibbs

In October 2003, conservative members of the U.S. House of Representatives prompted a hearing on 10 research grants funded by the National Institutes of Health (NIH). The grants included studies of Asian sex workers in San Francisco and women's responses to pornography, and some in Congress wanted to know why taxpayers' money was paying for that sort of thing. After Rep. Michael Ferguson (R-N.J.) asked NIH for information on the supposed public benefits of the 10 studies, an NIH staff member contacted the House Energy and Commerce Committee, co-sponsor of the hearing, and requested a list of the grants in question.

That staff member got back more than expected: not summaries of 10 projects, but page after page of NIH grants, dozens of them, all seemingly listed because the research involved prostitution, substance abuse, homosexuality, or sexually transmitted diseases. By mistake, someone on Energy and Commerce had revealed a list that was making the rounds of Republican members of Congress, a list of 181 NIH-funded researchers whose studies had been targeted by a conservative religious lobbying group, the Traditional Values Coalition.

The work of five Hopkins researchers made the roster. What landed the targeted quintet — Chris Beyrer, David Celentano, Jonathan

Ellen, Charlotte Gaydos, and Carl Latkin, all faculty at Hopkins' **Bloomberg School of Public Health** — in the sights of the Traditional Values Coalition was research on sexually transmitted diseases, especially HIV/AIDS. Beyrer, for example, made it on the basis of a study on HIV transmission among prostitutes in Moscow, and another on injection drug users in China and their response to HIV. He says, "In the middle of an epidemic in which sexual behavior and drugs have been linked for 20 years, you'd think it would be uncontroversial to try to understand more about that interaction."

Evidently not. For more than two years, NIH has been under serious political pressure to justify, and in some cases discontinue, its support of research in areas problematic to social and religious conservatives, pressure that is unprecedented, according to many scientists and science advocates. Says Rep. Henry A. Waxman (D-Calif.), "In all my years in Congress, I've never seen anything like this. The effort to undermine science crosses all science-based agencies and a wide range of issues." (See "**An Unprecedented Assault?**") Waxman's office recently issued a report charging that the current "administration's political interference with science has led to misleading statements by the President, inaccurate responses to Congress, altered Web sites, suppressed agency reports, erroneous international communications, and the gagging of scientists."

Alfred Sommer, SPH '73 (MHS), dean of the Bloomberg School, is world renowned for his research on the use of vitamin A for preventing mortality among children in developing countries — research he has been conducting for decades. "I've been in this game a fairly long time," Sommer says, "and to my knowledge and personal experience, this is a unique time — this micromanagement and politicization and ideological scrutiny of science."



Hopkins researchers may share a wide range of concerns about the many examples of politics overriding science, but of most concern to them is the politicization of the National Institutes of Health. Last year, Hopkins, the single biggest recipient of federal research money in the nation, received \$555.9 million in grants from NIH.

(Hopkins' total federal-sponsored research in FY03 was a whopping \$1.302 billion.)

NIH sponsors about 1,000 scientists directly in the government's employ and about 45,000 research-grant recipients, fellows, and trainees at American universities. Central to this sponsorship, and to good science, is the process of peer review. When a researcher wants tax dollars to fund, say, a study of tuberculosis in East Baltimore, she applies to NIH, which assigns her application to an NIH integrated review group, or IRG. The IRG assesses the scientific merit of the proposed study, then passes it to a study section. Each study section is composed of 20 or more scientists from the applicant's area of research; two or three members of the section will conduct a detailed examination of the application, evaluating its scientific merit and

drafting written critiques. Only about half of all applications make it out of this review stage for presentation to a meeting of the full study section. At that meeting, each remaining application is presented and discussed, and every member of the full study section assigns it a priority score on a private score sheet. At the end of the meeting, the score sheets are tabulated, and the highest-rated applications are designated for funding. In fiscal 2002 (the latest year with available data), NIH received 30,000 grant applications, and approved funding for only the top 31 percent.

Central to the process is objective evaluation solely on a proposal's scientific merit. Politics, philosophy, religious doctrine — none are supposed to sway the selection of approved applications. Scientists, not politicians or political appointees or advocacy groups or lobbyists, decide who gets funded.

Until recently, how NIH spends the money appropriated by Congress has not been subject to the sort of criticism leveled at, for example, the National Endowment for the Arts. "The NIH has been a sacred cow for some time because it pursues research for the good of all people," says Judith Auerbach, vice president for public policy at the American Foundation for AIDS Research (AMFAR). "Everybody's got someone with some disease or disorder." Beginning in 1998, Congress approved a doubling over five years of NIH's budget to a hefty \$28 billion per year, and left the allocation of those billions up to the scientists through NIH's peer review process.

The money comes out of NIH's share of the massive annual appropriations bill — \$440 billion in '03 — that pays for the Department of Labor and the Department of Health and Human Services (HHS). In July 2003, the House was debating the annual appropriation when Rep. Patrick J. Toomey (R-Pa.) took the floor of the House and proposed an amendment to the bill that would prohibit fulfillment of five research grants already approved by NIH. The grants included funds for one study of mood, arousal, and sexual risk taking, and a study of HIV risk reduction among Asian prostitutes. Toomey and other members of Congress wanted the studies defunded.

"If you accept the argument — put forward by the CIA, not Hopkins — that HIV has the potential to be a national security threat, then our engagement in helping those countries deal with HIV/AIDS is of direct relevance to the national security of the U.S.," says Chris Beyrer.

Photo by Claudio Vazquez

Scientists and NIH defended the studies. Erick Janssen of Indiana University, the researcher studying mood and arousal, noted that a significant number of people under stress respond with risky sexual behavior; a deeper understanding of them, Janssen said, would help public health experts to reach people who jeopardize their own safety when stressed. Regarding the study of Asian prostitutes, NIH director Elias Zerhouni pointed out that sex workers spread HIV, and are of many



nationalities. To counsel them on preventive measures means first reaching them, and that requires a greater understanding of their cultural backgrounds. Plus, NIH peer review had determined this research and the other grants under fire to be scientifically worthy and among the top third of projects proposed that year.

Toomey declined to be interviewed by Johns Hopkins Magazine — as did other congressional critics of NIH, including Rep. Randy Neugebauer (R-Texas), Rep. Joseph R. Pitts (R-Pa.), and Rep. Mark Souder (R-Ind.). But when he proposed his amendment, he said on the floor of the House, "Mr. Chairman, I ask my colleagues, who thinks this stuff up? And worse, who decides to actually fund these sorts of things? Well, unfortunately, the NIH has done so." He added, "And as for those who suggest that we should not interfere with the process by which the NIH decides how to allocate their funds, let me strongly disagree. We have an affirmative obligation in this Congress, as the body that controls the purse strings of the federal government, to supervise and provide oversight."

Rep. David Obey (D-Wis.) rose to defend the studies listed in Toomey's amendment: "I have served on the subcommittee that deals with NIH for a long time, and the one thing I came to understand very quickly is that the day that we politicize NIH research, the day we decide which grants are going to be approved on the basis of a 10-minute debate in the House of Representatives with 434 of 435 members who do not even know what the grant is, that is the day we will ruin science research in this country."

When Toomey's amendment came to a roll-call vote, it lost — but only by two votes, 212-210. The NIH cow appeared to be sacred no longer. Researchers and advocates of publicly funded science were startled by the narrowness of the amendment's defeat. Pat White, director of federal relations of the Association of American Universities, says, "We were caught flat-footed because though some of us knew the amendment was coming, we'd been assured by folks at NIH that it was under control and there was no way it was going to pass. What was so terrifying was that if they can get the votes, you can't stop these people from doing this."

"Basic research discoveries usually come at right-hand turns. They're not what someone was expecting to find," says Dean Alfred Sommer. "It's very hard for Congress to know what should be supported and what not."

Photo by Peter Howard



Three months later came the Traditional Values Coalition with its own hit list. Andrea Lafferty, the coalition's executive director, says, "The list was a draft, it wasn't even finished. We've been compiling this information through various means, and also through the Internet. A lot of it is public information. The accusation has been that I was put up to this by the administration. I had this information long before Bush was even a candidate for president, and had been tracking

it and tracking it."

A simple glance at the list makes clear that whoever put it together did so by searching grant titles, and possibly abstracts, for key words. Beyrer, a Bloomberg associate research professor of **epidemiology**, recalls a meeting, after the list came out, of NIH investigators and program directors: "At that meeting, a project officer stood up and said, 'We have to tell you that there is a new policy at NIH, and the policy is that if any of the following words or terms are in your grant title or abstract, we're going to send it back to you to take them out.' Then she proceeded to list the words: sex worker, injection drug use, harm reduction, needle exchange, men who have sex with men, homosexual, bisexual, gay, prostitute. It was unbelievable. We were literally looking around the room, like, 'You're kidding me. Everyone sat in silence. I raised my hand and said, 'We're proposing to do a training program in harm reduction throughout Southeast Asia. That's one of our main activities over the next five years because the data tell us that injection drug use remains a problem and there's more injection drug use transmission happening in this region. I want to do that. It's the right thing to do. How do we proceed?' And she said, 'Don't make me speak to you about this in public. There are spies everywhere.' This is at NIH! This is the United States of America! This is not China! I spoke to her afterwards outside the room and she said, 'Look, you can say what you want in the body of the grant. We don't think anybody is going to get to that level. But the title and abstract are part of the database that's searchable by these people, and we're trying to help you avoid not getting funded.'"

Once the list was made public, Waxman quickly fired a letter to HHS Secretary Tommy Thompson protesting what he called "scientific McCarthyism." Lafferty, who has called NIH "the National Endowment for the Arts with a chemistry set," was quoted in the press: "We know for a fact that millions and millions of dollars have been flushed down the toilet over the years on this HIV/AIDS scam and sham." Scientists with studies on the list worried not so much that someone was complaining about tax dollars funding research on sensitive subjects, or ridiculing their work based only on a skim of the abstracts. Those things had happened before. What worried them was that conservative lawmakers had the list and seemed willing to consider ignoring NIH's peer review and try to zero out grants that they or TVC objected to. Ultimately, no action was taken against the research projects on the "hit list." But it's had an impact, say scientists whose work was targeted.

Celentano notes the increased attendance at NIH research meetings by politically appointed administrators, and by others: "All of a sudden, we were seeing at the table representatives of the faith community, who were observing these grant reviews. We were told that they'd been invited to the table 'from downtown,' meaning the highest level of HHS. A number of my colleagues said it was incredibly uncomfortable because they'd be discussing a grant and these faith-based people were asking questions."

Lafferty believes that scientists should be willing to answer such questions. She approves of more citizen involvement in peer review

and advising. "There's an arrogance in science. Many people who are scientists don't believe in God because they believe they are God. That's part of the problem. They treat people with any kind of faith as stupid or ignorant, and it's not true."

The critics of NIH almost always insist that they are not trying to dictate scientific inquiry or prevent research on, say, transmission of HIV/AIDS by prostitutes. They claim they are simply trying to bring greater accountability to the spending of taxpayers' dollars. The TVC's Lafferty says, "There's a limited amount of money available for research. It's a large amount, but it is limited. Autism is a major issue. We've got juvenile diabetes. We've got all kinds of diseases. We have to decide how the money will be spent." Referring to the grants on the TVC list, she concludes, "I think most Americans, if you put it to them honestly and tell them the facts, are going to say, 'We don't want our money spent on this kind of stuff.'"

If the concerns were only about waste or questionable priorities, one might expect to find objections to studies over a wide range of disciplines and research subjects. Yet every one of the more than 250 studies on the Traditional Values Coalition's hit list involved a narrow set of research subjects: homosexuals, prostitutes, drug users, etc. Researchers and advocates for science charge that "accountability" is a smoke screen for social conservatives who believe government money should not go to research that might benefit marginalized social groups.

Says Auerbach, "[The critics] ask questions about who makes decisions about what science gets funded, and do those people reflect the general interest of the taxpayers. Now that's a legitimate question. I don't think any of us would argue that accountability by federal agencies for programs that spend federal tax dollars is unreasonable. But how you define that accountability and how you go about assessing it is where the problem lies."

Scientists concede that to a large portion of the tax-paying public, it would seem to make more sense to funnel research dollars to the study of major diseases that are widespread in the United States, like juvenile diabetes or breast cancer, than to fund, say, the study of HIV/AIDS transmission among drug-using prostitutes in Russia. In reply, Beyrer points to a 2002 CIA report that cited as a national security threat the potential instability of Russia and four other countries due to extraordinary rates of HIV/AIDS infection. He says, "If you accept the argument — put forward by the CIA, not Hopkins — that HIV has the potential to be a national security threat, then our engagement in helping those countries deal with HIV/AIDS is of direct relevance to the national security of the U.S. In Russia, [HIV/AIDS] is largely an injection drug use epidemic, with a major sex-work component, and we know very little about it. The only way [to learn more] is high-quality research on the ground that engages those folks at risk. In the short term, it may be true that there isn't a lot of direct benefit to U.S. citizens. But we're not just in the short-term business. We're in the medium-to-long-term business. HIV/AIDS is

with us. We don't have a vaccine. We don't have a cure. And it's the most important infectious disease epidemic since the Black Death."

Scientists also say that the public, and some of their political representatives, don't understand that simply prioritizing money for, say, cystic fibrosis research will not necessarily guarantee a cure for cystic fibrosis, because no one can predict where the next research breakthrough, the next vaccine, the next miracle cure will come from. Says Sommer, "Basic research discoveries usually come at right-hand turns. They're not what someone was expecting to find. It's very hard for Congress to know what should be supported and what not."

So far, no Hopkins researcher has lost research funding due to political pressure. Beyrer, Celentano, and Sommer express more concern about the future than the present. They expect the pressure to continue, especially if the Republicans keep the White House and control of Congress in November. Pat White notes that over the years science funding has been shielded from political influence not by large legislative majorities but by a few influential individuals like Arlen Specter (R-Pa.) and Tom Harkin (D-Iowa) in the Senate, and Obey in the House. "What we need to do is identify five to seven members of Congress and work with them for the next 10 or 15 years, so they'll take the reins."



He adds, "In the classic Washington sense, all we have to do is fight long enough that [the opponents] get tired and lose steam. Maybe it won't be next year, maybe it won't be three years from now. But folks will move on to something else and we won't be fighting off these silly amendments. There's always another inning, and we always have an opportunity to correct a stupid thing that's done. It's a lot easier to stop things in this town than to start them. We get to be the stoppers on this."

But Hopkins researchers worry about younger colleagues, especially people just entering the field, who must decide where to devote their careers. Young scientists may harbor a deep interest and commitment to the study of HIV/AIDS or drug addiction, but from a practical standpoint they can't work where there's not financial support, and they may be unwilling to gamble on an area of research where funding is under fire from political forces. Says Beyrer, "If you think that the U.S. is not going to fund innovative prevention research for HIV or any other sexually transmitted or drug-use-transmitted pathogen, it's very hard to encourage junior people to follow this path. That keeps a lot of us up at night."

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Sommer worries about the same thing. "Our most important capital is young researchers," he says. "They are the ones whose minds are yet flexible enough to take up the newest technology,

these grant reviews. We were told that they'd been invited to the table 'from downtown,' meaning the highest levels of HHS," says David Celentano.

Photo by Claudio Vazquez

integrate ideas in ways that us old fogies can no longer do."

He continues, "I don't think that tomorrow NIH is going to be done under by these ideological assaults. But you know, we do have a uniquely non-politicized peer review scientific establishment in this country. My concern is that politicization is accretive in nature. If it goes on long enough it becomes the norm, and even a new administration eight or 12 years from now will just accept it."

In mid-September, the House again considered the annual Labor-HHS appropriations bill, and once more a representative proposed amendments that would defund specific NIH-approved studies. This time the representative was Neugebauer, from Texas, and there were two grants under the gun, one for research at the University of Texas, Austin, the other at the University of Missouri-Columbia. This time, the amendments actually passed, though only on a voice vote of members present, not a roll call vote of the greater House. Hopkins government affairs staffers who monitored the debate do not expect any such measure to pass the Senate. But they are watching. Concern over the Traditional Values Coalition's hit list seems to have abated, but TVC's Andrea Lafferty warns that the public hasn't heard the last from her organization: "There are many lists. There are other people who are in possession of other lists."

Says Waxman, "I think we have to take seriously the ability of ideological extremists to push their way into the Congress. They seem to have gained power within the Republican Party. This has given the fringes of the political spectrum the power to pursue their narrow interests and given them a voice within Congress and the administration. The good news is that scientists, scientific journals, doctors, and others with expertise in public health research came together almost immediately to condemn the hit list last fall, and thanks to this widespread condemnation of the list and its attack on peer-reviewed research, Zerhouni was able to defend the grants and preserve the scientific integrity of the NIH peer-review process. But the threat remains and all of us should be concerned. If our government can't count on good scientific advice, our policies will suffer, with the consequences borne by children, families, and communities across the country."

Dale Keiger is a senior writer at Johns Hopkins Magazine.

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