New AIDS Chief Takes Charge

William Paul, appointed to spearhead the assault on AIDS at the National Institutes of Health last month, has unprecedented power to shape the research agenda

William Paul wasn't convinced, last year, that the job he now has should even exist. A year ago, a coalition of scientists, activists, and legislators led a campaign to restructure the way the National Institutes of Health (NIH) coordinates its AIDS research effort. Frustrated by what they saw as research gaps and redundancies, these reformers proposed revamping NIH's little-known Office of AIDS Research (OAR), giving it the power to forge an overarching agenda and enforce it. This, they believed, would bolster the scientific attack on HIV—and save lives.

WILLIAM WATERFALL/THE STOCK MARKET

$1.379 Billion

Paul, an immunologist at the National Institute of Allergy and Infectious Diseases (NIAID), had misgivings about making OAR a central force. "My first reaction was the same as other scientists: We don't want to see another level of complexity added on," he says. His sentiments were shared widely within NIH and without, including strong opposition to the plan from future NIH director Harold Varmus, then still an academic.

But a lot has changed in a year. Varmus is now in charge at NIH, which has, at Congress's behest, established a new OAR with unprecedented authority over $1.3 billion in AIDS research money. And as of 16 February, the man in charge of that office is William Paul. He says he's delighted to be there. "It's an opportunity to look at all AIDS research," says Paul. "In the end, my view has changed. I do believe a good bit of wisdom went into creating this approach."

The approach requires OAR to draft a strategic plan each year that all 21 NIH institutes, centers, and divisions funding AIDS research must adhere to—or risk having their budgets cut. In addition, the OAR director has a hefty discretionary fund that can be used to quickly exploit hot research advances or tackle crises (see box). With so much at stake, a lot of people are looking at Paul—a 28-year NIH veteran with an impeccable scientific reputation—very carefully.

Many like what they see. Gregg Gonsalves of Treatment Action Group (TAG), a New York-based activist coalition that led the push for the OAR legislation, says, "They've landed an amazing director," adding that the new OAR is "one of the biggest things the Clinton Administration has done for AIDS." Varmus and other influential NIH scientists, who now support the OAR, are equally effusive in their praise.

There are some, however, who don't like what they see at all. One is AIDS activist Larry Kramer, who contends Paul is the ultimate insider—a member, in fact, of the search committee assigned to pick a new OAR director—and so won't change anything. "The appointment of Bill Paul is just a sellout," charges Kramer, a man not known for understatement. "I don't care how good he is. He's not at all what we were promised." Still others have concerns about the office itself. They are worried that it may turn out to be a crimp in the funding pipeline—the opposite of what its advocates intended.

RICK KOZAK

Office of AIDS Research; William Paul, Director

The man with the money. According to the president's 1995 budget request, William Paul will control all federal AIDS research money going to the NIH institutes.

Paul's conversion

OAR owes its existence to an in-depth critique of the NIH's AIDS research efforts written in 1992 by Gonsalves and Mark Harrington of TAG, and a 1991 Institute of Medicine report. Both studies called for boosting the profile of OAR—then a small office with little power—to better coordinate AIDS research.

In late 1992, the studies formed the basis of a bill cosponsored by Sen. Edward Kennedy (D–MA) and Rep. Henry Waxman (D–CA) that was designed to give the OAR director new powers, a discretionary fund, and a mandate to draft a "comprehensive plan." This plan would set AIDS research priorities and serve as the basis for deciding what research the various NIH institutes could support (except for money already committed for multi-year grants). To make sure that the director's decisions had teeth, the bill gave OAR the power to withhold an institute's AIDS research money if that institute's research projects didn't fit with the master plan. Though it wasn't explicitly stated, the bill also served to unseat OAR director and NIAID chief Anthony Fauci, who the reformers believed was spreading himself too thin.

Objections to the bill were loud. The NIH institute directors signed an internal letter cautioning that the law "may inadvertently be detrimental to the main purpose to which the legislation was directed." Still, two dozen prominent AIDS researchers backed the bill, as did the Clinton Administration, and it raced through Congress last winter and spring.

National Institutes of Health

- Allergy and Infectious Diseases $578.11 M
- Cancer Institute $222.71 M
- Drug Abuse $151.73 M
- Mental Health $92.7 M
- Center for Research Resources $64.96 M
- Child Health and Human Development $64.15 M
- Heart, Lung, and Blood Institute $57.91 M
- Office of the NIH Director $26.66 M
- General Medical Sciences $25.41 M
- Neurological Disorders and Stroke $23.29 M
- 11 other institutes, each receiving less than $15 M $71.41 M

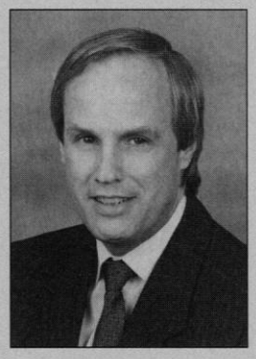
In October, NIH formed an 11-person search committee, including Paul, to hunt for a new OAR head. Their charge was to present the best candidates to the NIH director, who would make the final call. It wasn't an easy task. "We had tried our darndest to get [qualified] people to apply, but we didn't have the firepower to entice them," says search committee chair Judith Vaitukaitis, head of NIH's National Center for Research Resources. Several prominent scientists, *Science* has learned, were scared off by the possibility that they might have to do battle with entrenched NIH institute directors.

One candidate, Harvard virologist Bernard Fields, had the political impartiality and scientific stature that Varmus wanted but removed himself for health

Using Discretion, OAR Style

The new director of the Office of AIDS Research (OAR) doesn't just have power to coordinate how other parts of the National Institutes of Health spend their money on AIDS. He has a $10 million pot of his own that he can quickly pour into vital research projects. This so-called discretionary fund is designed to short-circuit traditional, slower funding mechanisms. Although there's general agreement that such a fund is a good idea, a critical debate has recently broken out between AIDS activists, policy makers, and the director of the National Institutes of Health (NIH) over its size and scope. And the debate highlights some of the forces sure to be tugging at the sleeves of William Paul as he settles in as OAR director.

Last fall, National AIDS Policy Coordinator Kristine Gebbie and Congresswoman Nancy Pelosi (D–CA) seized upon the OAR fund as a possible way to get an ambitious new AIDS research project off the ground. The project, known as the Accelerated AIDS Research Initiative, is essentially a new way of focusing funds: Pick a high-powered team of scientists, point them at a yet-to-be-determined AIDS research target—immune pathogenesis, for instance—and give them the money to go after it.



Emergency action. Should OAR fund activist Martin Delaney's crash program?

Although everyone affiliated with the initiative—which sprang from meetings involving scientists and activists—is loath to call it a Manhattan Project—the crash effort to develop the atom bomb—that's basically the idea on a miniature scale. The point, according to Martin Delaney, founding director of the San Francisco-based Project Inform, is to use money to foster cooperation among scientists. "Teamwork is at the heart of what I'm talking about, and teamwork is sadly lacking in current AIDS research," Delaney wrote NIH Director Harold Varmus on 15 December 1993, explaining the proposal. "It gives authority to the team, rather than the funder, the old-timers, or even the [OAR]."

At about that time, Gebbie and Pelosi began pressing for Clinton Administration support. Their tactic was to lobby for more money in the OAR discretionary fund in the Administration's budget request, which was then in the final stages of preparation. In a 7 January letter to Leon Panetta, director of the Office of Management and Budget, Pelosi asked the Administration to add $50 million to the discretionary fund (it's authorized to contain $100 million) to "allow the OAR the option to move forward on an accelerated AIDS research initiative without diverting funds from current NIH programs." Gebbie began to float the notion in the Executive Branch of boosting the fund's budget "in the $20 million range." The idea, says Gebbie, was not so much to fund the initiative but to have the money at the ready.

Both proposals sank, in part because they were introduced late in the budgetary process and in part because of strong resistance from other AIDS activists, some scientists, and Varmus. The NIH director stresses that one of his problems with Pelosi's proposal was that the OAR director had yet to be appointed, and it was therefore premature to commit the funds. But he also had reservations about the initiative proposal itself. "It's not a carefully worked out model. What kind of research? What's going to be done? Who's going to do the work?" he asks. And Varmus strongly disagrees with what he sees as Delaney's negative portrayal of competition. "Competition for funds is good," he says, adding that it tends to improve the quality of research proposals.

For now, this plan for the discretionary fund is dead in the water. But the fact that two policy makers tried to use the fund to influence AIDS research strategies has served notice to the new OAR director that he's now sailing in tempestuous seas.

–J.C.

reasons. At that point, Varmus started lobbying Paul and a few others to take the job.

Though Paul is not an AIDS researcher, he is a scientist's scientist. Head of NIAID's Laboratory of Immunology and a National Academy of Sciences member, Paul discovered interleukin-4, a key chemical messenger that stimulates B cell growth and helps immune system cells communicate. The 57-year-old scientist has been praised for his tact. "He has a way of criticizing people without making them feel inferior or stupid," says NIAID's Ronald Schwartz, a former postdoc in Paul's lab. And many note that Paul also knows how to use his ears. "One of Bill's talents is his ability to listen," says Varmus.

At first, Paul didn't want the job. "It was only when [Varmus] began to persuade me that I began to seriously think about it," says Paul. "One of my reasons for saying yes is that I have a great sense of loyalty to him and to the institution."

The fact that Paul is not an AIDS researcher ended up working in his favor. "He's got a chance to articulate a new vision without having to defend what he did," says search committee member and Nobel laureate Phillip Sharp, who heads the Center for Cancer Research at the Massachusetts Institute of Technology. Search committee member Arthur Ammann of the Pediatric AIDS Foundation sees yet another benefit to Paul's outsider status. "There's an advantage in that he'll come in and look at the science rather than the people doing the science," says Ammann. "He is a well-respected immunologist and he seems to be serious about AIDS issues," adds David Ho, head of the Aaron Diamond AIDS Research Center.

Some critics think Paul isn't enough of an outsider, however. Like Kramer, AIDS activist Martin Delaney of San Francisco's Project Inform argues that Paul is too closely allied to the AIDS establishment. He notes, for example, that Paul comes from the same institute as NIAID Director Fauci. "The notion that we're looking for new and independent thought and end up with an immunologist who worked under Fauci doesn't give me a lot of excitement," Delaney says.

Skeptics like Delaney wonder what will happen if Paul tries to reshape a program favored by Fauci or National Cancer Institute Director Samuel Broder, whose institutes receive the lion's share of the AIDS budget, and the directors resist. According to Paul, the answer is simple: The hypothetical program would be reshaped as OAR saw fit. "I've known both of them for several years and consider them both personal friends," says Paul. "On the other hand, I also value my independence." And Fauci says cooperation is the name of the game. "The office is here so we will make it work and put all our effort into it," he says.

While these reassurances may assuage some worries about Paul, what they don't address are lingering questions many people have about the OAR itself.

Law and order

Much of that concern centers around OAR's new budget authority. Activists like Gonsalves and scientists like Ammann have argued since they started lobbying for OAR's reform that the office must have the budget authority to enforce its strategic plan. Even Paul now sees the budget author-

ity as the cornerstone of the office. "Without it," he says, "there wouldn't be any purpose for the [restructured] OAR."

In practice, the budget authority means the OAR will be able to tilt an institute's balance of clinical and basic research, or readjust the amount of money given to behavioral research institutes versus institutes that focus on treatments or vaccines, or reapportion money to make clinical samples from epidemiological studies more accessible.

But some researchers who fought the OAR legislation as it went through Congress, including Varmus, continue to worry that the budget authority might add another layer of bureaucracy and slow the transfer of funds to intramural and extramural investigators. "I'm still a little uncomfortable about the way money is moved," Varmus says. "It's going to create some problems, and I know some of the appropriators [in Congress] are not happy about it."

Because of this, reformers are concerned there may be attempts to circumvent OAR's authority. On 11 February, Ammann, Gonsalves, Harrington, and six others wrote Health and Human Services Secretary Donna Shalala and urged her to "exert continued vigilance" on this point. "[S]ome of us received reports that both NIH staff and congressional appropriations staff opposed to changes in the status quo lobbied [the Office of Management and Budget], and may continue to maneuver during the FY 1995 budget process, to disburse AIDS monies directly to the institutes, as was done in the past," they wrote. If this and other parts of the new law are not enforced, they warned, "the Administration's only major AIDS research initiative will be in tatters."

Though the budget authority is still a touchy issue, there is one aspect to the new law that even has people who objected to the law change downright enthusiastic about the revamped OAR: the coordinating committees. These five committees—etiology and pathogenesis, epidemiology and natural history, therapeutics, vaccines, and behavioral research—will set the NIH's AIDS research agenda and oversee the whole program. "There's a considerable virtue to the coordinating committees," says Varmus, who hopes Paul attracts top-notch scientists to sit on them. "They could be great."

Paul stresses that OAR plans to move carefully. And it may, he says, even find that everything "is being exceedingly well done." If that's the case, says Paul, "I'm not here to make changes just to make changes." Then again, Paul also hopes to slow the epidemic, which makes settling for the status quo an unlikely outcome.

–Jon Cohen

GRAVITY ASTRONOMY

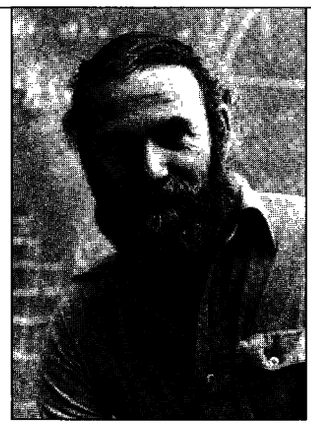
LIGO Director Out in Shakeup

Caltech physicist Rochus (Robbie) Vogt has spent much of his career thinking about gravity waves, the ripples from such cataclysmic phenomena as the merging of black holes that are predicted by Einstein's theory of relativity. And for 7 years he lobbied first his colleagues, then the National Science Foundation (NSF) and Congress, to do something no one had done before: build a facility sensitive enough to measure these tiny perturbations in matter. This month, in Hanford, Washington, Vogt's dream will take a big step closer to reality when bulldozers break ground on the Laser Interferometer Gravitational-Wave Observatory (LIGO), a $250 million experiment.

But the ceremony will be bittersweet for Vogt, for it will mark an unwilling passing of the scientific torch. Last month Caltech, which runs LIGO jointly with the Massachusetts Institute of Technology, named physicist Barry Barish to be the project's principal investigator, replacing Vogt. The move leaves Vogt with an as-yet undefined job under Barish, or even no role at all.

Why is Vogt no longer in charge? Scientists who know him say Vogt's brilliance and tenacity were exactly what was needed to create LIGO. But now that construction is about to begin, they say, his uncompromising and prickly nature (*Science*, 30 April 1993, p. 612) have become obstacles to the project's evolution into a user facility for the astrophysics community. "You need a situation where people feel welcome," says NSF's David Berley, who oversees the project.

Vogt's removal was the result of increasing concern at NSF about how the project was being managed. In December, NSF froze spending on a construction-related contract until Vogt came up with an acceptable management plan, including how to accommodate outside scientists. In January the congressional appropriations committees that approve NSF's budget, citing those concerns about management, told NSF to cut $8 million from this year's planned $43 million budget. The crisis apparently came to a head during a 17 January meeting at NSF, when NSF told Vogt that LIGO needed a "coherent plan" to develop a user community. Vogt was "less inclined to do" that than NSF wished, says Berley.



CALTECH

New man. Caltech's Barish takes charge at LIGO.

Vogt disputes that account, saying he had a plan "that was appropriate for the state of development of the project" but that "other people obviously felt they wanted something different. They tried to tell me, [but] I was not interested in perverting the project." In particular, he says he wanted to avoid the fate of the Superconducting Super Collider (SSC) and several ill-fated space projects that, he says, "were managed to death."

Once NSF decided that it wanted a change at the top, Caltech turned to Barish, a high-energy physicist at Caltech who has headed several large detector teams, including one planned for the SSC. The cancellation of the SSC last October made Barish available.

Barish says he's comfortable stepping into the project at this stage, although his experience is not in gravitational physics. Indeed, he will continue some of his other physics collaborations—including serving as U.S. spokesman for a magnetic-monopole detector being built under the Italian Apennine mountains at Gran Sasso (*Science*, 3 September 1993, p. 1276)—but promises to put in as much time as LIGO requires. Vogt has been offered the chance to remain as project director under Barish, says Hall Daily, Caltech's director of government relations. Vogt says he would have no qualms working for Barish, whom he called a "first-rate physicist," but that it remains to be seen if there is still a "meaningful" role for him to play in the project.

In the meantime, LIGO is moving ahead. The facility at Hanford will be the first of the two massive detectors, consisting of two 2.5 mile-long tubes at right angles. Land must still be acquired in Louisiana for the second one. (Twin detectors are needed to rule out false signals.) And Barish says he hopes Vogt will remain affiliated with LIGO.

"[Vogt] has brought this thing from a few crazy romantic scientists who had absolutely no concept of what a $2 million, let alone a $250 million, project might look like, into a state that they not only convinced NSF and [Congress] to fund it, but have created a solid set of engineering and scientific people working on the problems," he says. "Now it has to make a transition to something that is big and robust and has the controls in place....That's just not [Vogt's] strength. What I would hope for is a way to use the great talents that he has to do the things he does really well."

–Christopher Anderson