# Meeting on AIDS Drugs Turns into Open Forum

*Political as well as scientific issues dominated a recent Institute of Medicine meeting on drug development for AIDS*

JAMES Watson announced that when he applied for federal funding to do AIDS research recently, he was turned down. David Baltimore wondered whether scientists can really say that they are coordinating AIDS research as efficiently as possible. And Howard Temin openly acknowledged that he finds it hard to figure just what the scope of the government's program in AIDS research is. He is not alone.

The dissatisfaction expressed by these three Nobel laureates captures the ferment that marked a recent Institute of Medicine (IOM) meeting that was called to discuss drug development for AIDS. The stated purpose of the conference was to bring together representatives of government, academia, and industry to find ways to facilitate collaboration. But it quickly became a forum for airing concerns, which stemmed from obvious misconceptions that some researchers have about existing federal AIDS programs.

One recurring issue was how to include more basic research scientists in AIDS research. Baltimore, director of the Whitehead Institute in Cambridge, noted that there are clearly identified questions that are not yet being pursued in a directed way. For this, he said, the cadre of AIDS researchers must grow. But opinions varied widely about why more basic researchers are not studying AIDS. Part of the problem arises from the lack of information about programs that fund AIDS-related research.

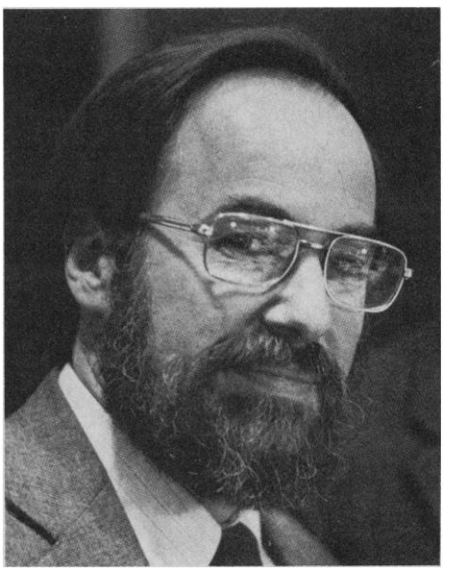
Many researchers, including Temin of the University of Wisconsin at Madison,appeared suprised when Anthony Fauci, coordinator of AIDS research at the National Institutes of Health (NIH), explained a wide range of topics currently being funded by the government. It includes studies on how the AIDS virus suppresses immune system function and damages the nervous system, as well as investigations about its molecular biology and actions on individual cells. Fauci said that the government is trying to achieve a balance between targeting specific areas for AIDS research under federal contracts and encouraging investigators to generate their own research ideas. But he also conceded that there are more good ideas than there is money to fund them.

The proposed budget of $422 million in fiscal year 1988 for AIDS research will not be adequate, most participants agreed. Watson, director of the Cold Spring Harbor Laboratory on Long Island said he was surprised that the President was not asking for sufficient funding and expressed frustration about obtaining his own grant. "We applied for a small amount of money to get involved in AIDS research," he said. "We were turned down. The review said that we were only interested in studying adenoviruses [DNA-containing viruses that cause tumors in animals]."

Baltimore thinks an aggressive recruitment program is in order. He observes that there are many scientists who could contribute to AIDS research but who would be unlikely to respond to the usual NIH requests for grant proposals and applications. These potential contributors need to be drawn into AIDS research in an active manner, he says. While the government thinks it is doing just that by issuing all kinds of requests for [grant] applications (RFAs) and requests for [contract]proposals (RFPs), word of various programs has not penetrated the research community.

Motivation was cited as another possible barrier. "The problem is not only having the opportunity but having the motivation to do AIDS research," said William Haseltine, of Harvard's Dana-Farber Cancer Institute. Another fundamental concern is that many basic research scientists simply do not want to work with this infectious, lethal virus. The problem is exacerbated by the lack of laboratory facilities that can safely house cell cultures infected with the AIDS virus. And it likely will not improve in light of a preliminary report, issued on 4 September, about an investigator at NIH who apparently has become infected by the AIDS virus through laboratory work.

Patrick Gage of Hoffmann—La Roche in Nutley, New Jersey, addressed another concern evident at the IOM meeting, namely whether the existing federal structure for identifying and testing potential AIDS drugs helps or hinders private industry's efforts. He urged a reduction in NIH's present role in designing and coordinating clinical trials of potential AIDS drugs.



**David Baltimore** *thinks that more basic research scientists should be actively encouraged to study AIDS.*

Within the past 14 months, the National Institute of Allergy and Infectious Diseases (NIAID) has funded a total of 19 AIDS treatment evaluation units at 35 different locations, entered approximately 1500 patients into clinical trials, and is in the process of either screening or testing nearly 20 drugs for either HIV infection or other kinds of infections that are common in patients with AIDS, according to Maureen Myers of NIAID. Many, but not all, of the clinical protocols for the treatment units now include AZT (3′-azido-3′-deoxythymidine), the only antiviral drug for AIDS approved by FDA. Other antiviral drugs, including AL-721, a combination of tumor necrosis factor and interferon gamma, and dideoxycytidine are now in clinical trials to measure toxicity and appropriate drug dose. Nevertheless, patients are understandably impatient with the pace of drug development.

Yet another contentious issue in AIDS research is the drive for personal recognition and an unwillingness to share research materials. "Scientific egos must be satisfied," says Baltimore. "And with a lot of sharing, people fear they will not receive adequate credit. So they are reluctant to share cloned products, viral isolates, and other materials." This has become a common theme but there is little more than anecdotal evidence to support it, making the issue hard to attack.

*The "Conference on Promoting Drug Development Against AIDS and HIV Infection" was held on 31 August and 1 September at the Institute of Medicine in Washington, D.C.

Edmund Pellegrino, a bioethicist from Georgetown University in Washington, D.C., said unambiguously that "Medical knowledge is not a commodity that belongs to the investigator"—a view that is easy to share in principle.

Edward Scolnick of Merck Sharp & Dohme in West Point, Pennsylvania, recommended that as soon as any investigator, including those in private industry, describes results publicly, experimental reagents should be made available to other researchers.

The participants in the IOM conference were, if not AIDS researchers themselves, the kind of prominent people who would be expected to know the system and be able to work it. That there was so much dissatisfaction and lack of information may be one of the more important revelations to come out of the conference. It led quite naturally to a call for national coordination through a non-federal body.

Paul Rogers, a former congressman who continues to be an influential figure in health policy, called on the IOM to organize such a coordinating committee, saying it would have high credibility with members of Congress. A year ago the IOM completed a thorough AIDS research and policy study and already has a good track record. IOM president Samuel O. Thier told *Science* that Rogers' proposal is clearly worth thinking about.– ■ **DEBORAH M. BARNES**

# The Supercollider Sweepstakes

Twenty-five states joined in a frenzied competition last week to be chosen as the home of the superconducting supercollider (SSC), proposed as the biggest and most powerful accelerator on earth. Research on subatomic fragments has never been more popular.

According to the Department of Energy (DOE), organizer of the contest, 43 proposals were received by the deadline on 2 September. Obviously some states entered more than once. Texas led the box-stuffers with seven entries.

New York showed its eagerness by arriving first to drop off its four proposals at 4 a.m. California, a major contender, arrived minutes before the deadline with less than all of its homework done. It was delayed by the refusal of the legislature to endorse a $560-million site development package that was part of its proposal.

In order to make the sweepstakes as fair as possible, Congress ordered DOE not to consider financial inducements offered by wealthier states. At the same time, it said DOE may consider proposed site improvements, such as new roads, water, and sewer lines. In a controversial ruling, DOE decided that the benefits of Fermilab, the existing high-energy research center in Illinois, may be considered as part of Illinois' SSC proposal. But DOE ruled that offers by other states to create Fermilab-like facilities could not be considered. This and other squabbles involving the rules may surface in Congress this fall.

Many of the proposed sites will meet the criteria established by DOE. Thus, the final selection may depend on subjective judgments of climate, cultural resources, and general quality of life.

The horde of contenders will be winnowed to a select list by a 20-member panel at the National Academy of Sciences and the National Academy of Engineering, chaired by Edward A. Frieman of the Scripps Institute of Oceanography. Their work should be done in January. From this short list DOE will recommend one site in July 1988, and, if it passes environmental review, President Reagan will announce the winner before he leaves office in January 1989. The government will then begin to build the largest scientific instrument in history.

The excitement over this $6-billion project has grown by leaps and bounds since 30 January when the President gave his approval. The enthusiasm has less to do with an interest in the "fundamental building blocks of matter," which the SSC is supposed to illuminate, than the building blocks of regional wealth: road construction, engineering contracts, federal jobs, and technical prestige. The SSC, with its 53-mile tunnel full of supercooled magnets, will require 4500 construction workers, 2500 permanent employees, and an annual budget of around $275 million. One need not know a hadron from a Higgs particle to know that this is a project worth fighting for. It carries all the economic advantages of a military base and none of the controversy.

Congress, however, has not authorized or appropriated funds for building the SSC, a hitch that will become apparent in debate this fall. Even though it may seem backwards, it has become standard procedure to choose a site before obtaining congressional funds. A House staffer explains that members like to know where a project, especially a fat one like this, is going to be built before they commit themselves. The trick for the SSC's backers is to keep the suspense alive and win congressional votes before a final siting decision is made. Once a site is chosen, many congressmen will be less interested in high-energy physics.

The House voted in June not to fund the SSC. The Senate has not acted yet. The question may not be settled until late fall, when differences between the House and Senate are worked out in a 1988 "continuing resolution" bill. Congress has become so inured to slapping together continuing resolutions at the last moment that it has virtually ceased using the more stately authorization-and-appropriation process. For example, nothing within DOE has been officially authorized since DOE was created. Authority to start building the SSC will probably be granted, like everything these days, in a continuing resolution.

One bill (HR 3228) sponsored by more than 200 House members and several committee chairmen would provide the $10 million in contruction money and $25 million in R&D funds sought by the Administration.

However, a staffer on the House subcommittee on energy research and development warns that "a lot of members are concerned about the impact of SSC funding on other projects." They may demand new assurances this fall that the SSC not leech funds away from other programs. The Senate is already grappling with budget controls that call for a $690-million cut in independent agency funding this year (*Science* 14 August, p. 717), likely to hurt space programs and the National Science Foundation. The pressure is expected to be more severe next year. Given the chronic shortage of funds, the aide asks, where will the money for SSC come from in 1989? He sees another big question: is Congress willing to make a long-term investment in the SSC? Or will it bless the SSC—like the Clinch River breeder reactor and the synfuels program—with just a moment of glory? ■ **ELIOT MARSHALL**