authority as the government, because they cannot "vouch for the truth" of a publication. "All we do is we say it has been critically reviewed by the best brains available."

On 11 September, NIAID got word that the *Journal* would accept the consensus statement for publication, along with the papers by Bozzette and Gagnon. But the agency still had to decide how to let doctors know. Although at least one member of the panel felt that a press conference was appropriate, NIAID decided on the more conservative route of sending a letter with news of the results to the 2600 physicians on a mailing list maintained by LyphoMed, the company that sells a commonly used prophylactic therapy for PCP. The agency also informed all members of its AIDS Clinical Trials Group by electronic mail, and sent an "Update" to a list of AIDS constituency newsletters. Why no press conference? Insiders say the agency was confident the news had already reached the people who needed to hear it and was reluctant to make a big splash with a potentially controversial therapy before it was published.

The consensus statement appeared in its completed form as a special report in the 22 November issue of *The New England Journal of Medicine*, along with reports of the studies by Bozzette and Gagnon. J. Allen McCutchan, an infectious disease specialist at the University of California at San Diego and one of the conveners of the consensus conference, expects some physicians will change their practice in light of the panel's recommendations, but "it's a matter of opinion on how to get clinicians to change," he says. Mills agrees, adding that researchers must take an active role in keeping abreast of new information, especially when dealing with the fast-changing world of AIDS treatment.

"I don't think there was substantially more that could or should have been done," says Fauci. "This furor obviously makes one say maybe we should have done more. But this is a furor that was fueled by the placement of an article on the front page of *The New York Times*."

Nicholas Wade, science editor of the *Times*, thinks his paper made the right decision: "I can't think of anything that would suggest we should have played the story differently. It definitely deserved the front page."

On 15 January NIAID will hold a conference that was scheduled long before the *Times* article, but one with a remarkably prescient topic: When should research results be made public, to whom, and after what kind of scientific scrutiny? The example of steroids will still be fresh in the participants' minds. ■ JOSEPH PALCA

NIH Readies Plan for Cost Containment

In response to a congressional directive, the agency is working on a long-term strategy for funding grants

"WE ARE ENTERING A TIME WHEN WE NO longer can conduct business as usual," says John Diggs, the man in charge of developing a "cost management" plan for the National Institutes of Health. The plan was mandated by Congress in response to a chorus of alarums from biomedical scientists who perceive a "crisis" in research funding as the fraction of grants approved by NIH has sunk to an all-time low.

With Representative William H. Natcher (D–KY), chairman of the House appropriations subcommittee for NIH, taking the lead, Congress gave NIH nearly $1 billion more for fiscal year 1991 than the Administration requested. But, in return, Natcher directed NIH officials to respond to a 10-point plan of his own for ways of redistributing and controlling research costs. Included in Natcher's formula were suggestions that NIH reduce the average length of awards and consider the total cost of individual grants—including indirect costs—in deciding which proposals to fund (*Science*, 28 September, p. 1496).

NIH's response will be debated at a public meeting on 17 December, but already elements of the scientific community are taking sides. Although some details of the plan have yet to be worked out, *Science* has learned that NIH leaders have agreed on key points.

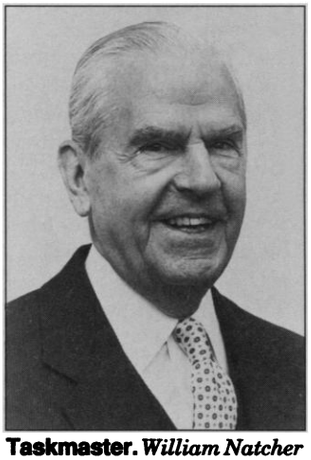
As *Science* goes to press, these points seem likely to be incorporated in the final draft:

■ The plan will adhere to congressional advice to contain the cost of grants overall by setting the average length of grants at 4 years. During the past decade, the cost of individual grants has been rising and the average length of grants in NIH's portfolio has inched up to 4.3 years. In addition, the indirect cost rate per grant has risen substantially. After much debate about how to achieve a 4-year average, NIH officials are leaning toward giving individual institutes discretion on the matter. Some institutes may develop a portfolio that mixes 5-year, 4-year, and 3-year awards to get a 4-year average. One is thinking of cutting its support of indirect costs by 10% across the board. Another is considering a "sliding scale" by which only the most meritorious grants would get full funding; other grants would be funded in somewhat smaller amounts, with the total portfolio equalling the equivalent of a 4-year grant average.

■ At Congress's insistence, NIH will either eliminate or put strict controls on the current process of "downward negotiation" for funding grants once they have been awarded. Instead of cutting grants across the board by 15% to 18%, which has become common practice, cuts will be limited to 3% to 4% at most—a figure that is now called the "historic norm" because it was an unstated limit at the beginning of the 1980s.

■ NIH may scrap the system by which grant applications are given a designation of "approved" if there is little chance that they will actually be funded.

■ In order to simulta-



Taskmaster. *William Natcher asked NIH for a plan.*

neously honor congressional orders to ban downward negotiations while moving toward a congressionally mandated goal of funding 6000 new and renewable grants a year, NIH officials say they will probably be able to fund some 5800 grants in fiscal year 1991—an increase of approximately 1200 over the current year.

Some science leaders have accused Congress of micromanaging research by handing NIH the outline of this cost containment plan, a charge that leaves Congress unmoved. As one key staffer told *Science*, "We would have been perfectly happy if researchers had come to us with a plan for resolving this 'crisis,' but they didn't. They just shouted fire.' "

Congress did take some of the sting out of its recommendations by giving NIH a record-breaking $8-billion budget for fiscal year 1991. Nevertheless, the idea of a plan for cost containment is hard for research leaders and lobbyists to take. "We're hysterical," reports one Washington research advocate who does not want to be quoted by name. "We see the unraveling of federal policy in support of biomedical research."

What biomedical lobbyists would like to see is an even bigger budget increase that would take care of what they see as the central problem: the fact that 95% of all NIH grant applications are "approved," but for the past 2 years less than 28% of approved grants were actually funded (see table). But Congress, instead, has questioned whether the "approved but unfunded" designation has any real significance.

Says Diggs, who is scientific director for extramural research, "We think the 'approved but unfunded' issue is, in part, a psychological problem." The reason? Approval denotes technical competence, not overall merit. NIH gives its stamp of approval to any grant that is technically valid. "To get a straight disapproval means that a grant really is flawed," Diggs told *Science*. "For the past decade, we have been giving regional seminars on how to write a grant. It is very rare that we get an application that is devoid of technical merit."

NIH officials may solve the psychological blow to an investigator whose grant is "approved" but never funded by simply dropping the language—as Diggs says, "No more first runner ups." Or, as one congressional aide puts it, "NIH needs to end the artificial practice of 'approving' grants it knows will not be funded." Historically, 1 in 3 applications submitted to NIH have been funded. That figure dropped to 1 in 4 in the past 2 years but Diggs predicts that the "success rate" will return to 33% in fiscal year 1991.

FASEB "Rejects" IOM Study

The Federation of American Societies for Experimental Biology (FASEB), reflecting a growing polarization among segments of the research community over funds, has mounted a no-holds-barred public assault on a recent study by the Institute of Medicine. The study called for a modest increase in expenditures for training and construction over the next decade *if* the budget for the National Institutes of Health experiences zero growth above inflation. FASEB officials object to any diversion of funds—IOM estimates $182 million over 10 years—at the expense of individual investigators who make up FASEB's main constituency.

This week FASEB officials called a press conference to "reject" the premise of the IOM report: that in an era of tight budgets, biomedical funds should be "balanced" so that a decade from now the United States is not faced with a crumbling research infrastructure and a dearth of new scientists. FASEB says there is no imbalance.

"The IOM panel's perspective reflects the fact that a majority of its members were academic administrators concerned with the financial health of their institutions," FASEB said in a written statement. FASEB president Thomas Edgington claims only three of the IOM panel's 17 members are working scientists. Arguing that increased funds for training and construction will do little to increase research "productivity in the foreseeable future," FASEB's position is that individual investigators should continue to get the lion's share of NIH money. FASEB says implementation of the IOM's recommendations would "diminish advances of value to the public."

FASEB chose not to give the IOM a copy of its statement and, as *Science* goes to press the institute was unable to respond. ■ B.J.C.

Despite the fact that NIH is anxious to keep the specific details of its cost control plan under wraps until it is complete and ready for unveiling in a couple of weeks, institute officials have sought advice along the way from six mystery advisers, described only as prominent members of the research community. One of these suggested that NIH refuse to pay 100% of an investigator's salary, requiring instead at least a minimum percentage from his or her university. Someone proposed cost-containment by putting a $1-million cap on funds for any single investigator. Another said NIH must get control of indirect costs by limiting how much it will pay. And still another said it was foolish to accept the premise that the research budget cannot enjoy infinite expansion.

That last point is particularly contentious. With the exception of Congress's demand for an overall funding plan, the Institute of Medicine (IOM) is the only national organization that has recognized that funding limits may call for a reprogramming of money. As part of an exercise in tough decision-making, an IOM study panel recently concluded that, in a no-growth world, some money should be shifted from investigator-initiated grants to training and construction (*Science*, 5 October, p. 22). For this, the IOM has drawn the wrath of the Federation of American Societies for Experimental Biology, which champions the cause of the individual researcher (see box).

The debate about funding policy challenges the conventional wisdom that there is such a thing as a biomedical "community." Rather, the prospect of the end of "business as usual" seems to have polarized various special interests within the community. If they all show up to plead their case on the 17th when NIH opens its plan to public discussion, there ought to be quite a fight.

■ BARBARA J. CULLITON

NIH GRANTS: MEASURES OF "SUCCESS"

FISCAL YEAR	TOTAL # COMPETING AWARDS*	AWARD RATE**	SUCCESS RATE**
1975	4,663	60.6	45.3
1976	3,464	48.3	34.4
1977	3,839	38.7	28.7
1978	5,200	45.3	35.3
1979	5,937	51.6	40.2
1980	4,785	42.3	33.6
1981	5,107	39.2	32.3
1982	5,025	34.7	29.4
1983	5,388	37.2	32.0
1984	5,492	37.3	32.6
1985	6,245	37.3	33.3
1986	6,149	35.8	32.1
1987	6,446	38.3	34.8
1988	6,212	35.3	32.3
1989	5,383	29.4	27.5
1990 est.	4,577	24.1	23.0

* Includes new and competing renewal

** Award Rate is the proportion of applicants funded of the total number recommended for funding. Success Rate is the proportion of applicants funded of the total number reviewed.