Wyngaarden Sets Policy Agenda for NIH

Review of "stabilization policy" and an independent study of NIH's organizational structure are at the top of the list

With the National Institutes of Health (NIH) facing a "budgetary steady state" for the foreseeable future, it is time for a broad reevaluation of policy, NIH director James B. Wyngaarden has declared. In his first major "state of the NIH" address since taking office last May, Wyngaarden outlined his agenda. Speaking at a meeting of the Director's Advisory Committee on 19 January, he reviewed a host of issues that NIH must deal with and carefully cited them in order of importance.

"Stabilization policy," which gives funding priority to the support of investigator-initiated grants, topped the list. Questions about the structure of NIHmainly the creation of new institutes came close behind, along with the issue of federal support of the "indirect" costs of doing research. Also included on this first agenda were (i) the diminishing number of M.D.'s entering careers in clinical research; (ii) proposals to stretch the biomedical dollar by, for instance, limiting the number of grants an investigator may have; (iii) the size and relative growth of NIH's intramural research program, which has grown about 7 percent compared to a 3 percent increase in extramural funding; (iv) alternatives to

the use of animals in research; and (v) the apparent increase of misconduct among scientists.

"Stabilization" is the term used to describe a strategy fostered by former NIH director Donald S. Fredrickson as a way to protect traditional research grants in the steadily eroding budget. During Fredrickson's tenure, NIH and Congress agreed that there should always be enough money to fund a minimum of 5000 "new and competing" grants each year. The 5000 figure quickly became a ceiling, not a floor, but was valued by a majority of NIH's constituents as a clear commitment to the grant system.

"The stabilization policy makes a powerful statement . . . that NIH is doing its utmost . . . to assure that the best research will be adequately funded, that young scientists will have opportunities in research, and that we will protect their entry into the research enterprise. . . ," Wyngaarden observed in his address. "But," he said in one of the first public challenges to the idea so far, "stabilization policy also has its down side." With a "steady state" budget, favoring investigator-initiated research grants means that funding in other areas has been

sacrificed. Thus, with these research grants claiming 63 percent of the total NIH budget in 1982, the squeeze has been put on money available for programs such as cancer centers, clinical trials, and research contracts.

Committee reaction to Wyngaarden's call for a reconsideration of stabilization was predictably mixed. William H. Danforth, chancellor of Washington University, pronounced himself "delighted that stabilization is being challenged," and said he never thought it wise policy from the beginning. Howard M. Temin, of the McArdle Laboratory at the University of Wisconsin, Madison, on the other hand, commented that, inasmuch as research grants are a complete surprise if the IOM were to take a position that matched Wyngaarden's own.

The training of young researchers, particularly physicians, has been a timehonored concern at NIH and a subject of long-standing particular interest to Wyngaarden. It came in for its fair share of attention at the director's meeting. The fact is that the number of M.D.'s with research grants is not very high. According to NIH figures, in 1968, 35 percent of all research grants went to principal investigators who were M.D.'s. In 1980, M.D.'s had only 23 percent of the total. During the same period, the percentage of grants held by Ph.D. principal investigators rose from 52 percent to 67 percent. Today, according to Doris Merritt of NIH, persons with a joint M.D.-Ph.D. degree are most likely to receive a grant, followed by Ph.D.'s, with plain M.D.'s way below.

Two questions, neither of which can be adequately answered are: Why is this the case? and Does it matter? Explanations for the decline of M.D.-researchers involve money and education. The stipend for a young NIH researcher is about \$6000 less than a resident's pay, Merritt noted. As far as competing successfully against Ph.D.'s for a grant goes, M.D.'s apparently are often not up to it. Merritt said that many M.D.'s are "not as rigorously trained in research." Paul R. Gross, director of the Marine Biological Laboratory at Woods Hole, put it more starkly. "Medical students are scientifically illiterate," said Gross, a Ph.D. "We need an utterly different approach to medical education."

Unsuccessful Proposals for Major Organizational Change at NIH

Proposed Institutes

National Institute for International Medical Research (L)

National Institute of Emphysema and Respiratory Disease (L)

National Kidney Institute (L)

National Institute of Marine Medicine and Pharmacology (L)

National Lung Institute (L)

National Sickle Cell Anemia Institute (L)

Institute for Research on Dysautonomia (L)

National Institute for Population Research

National Institute of Diabetes, Endocrinology and Metabolic Diseases (L)

National Institute on Arthritis and Metabolic Diseases (L)

L- Proposed Legislatively

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NIH officials, who claim no role for themselves in restructuring medical education, would, however, like to make training programs as attractive to qualified M.D.'s as possible. Existing programs for advanced research training are among those they cite as being "squeezed" by the stabilization policy.

Another troublesome—and perennial—issue for NIH is the endless stream of proposals from special interest groups for the creation of new categorical institutes. Nearly a dozen such proposals have been put forth in Congress in recent years, including one for an Institute for Research on Dysautonomia, a rare familial condition characterized by emotional

instability and motor incoordination. NIH's most recent brush with the special interest institute contingent came last year when legislation to create a National Arthritis Institute nearly made it through Congress (*Science*, 7 January, p. 39) Wyngaarden's opposition was unmistakable.

In an effort to handle issues regarding the most appropriate organizational structure for NIH, Wyngaarden has called for an 18-month study to be conducted by the Institute of Medicine (IOM). Given the research community's general opposition to creating institutes disease-by-disease, it would not come as the "engine" that drives the whole enterprise, it makes sense to treat them so favorably.

Wyngaarden, who for his part seems to want a modification rather than abandonment of stabilization, noted in its defense that it is "a politically facile concept that helps us generate support." Indeed, as Fredrickson once predicted would happen, Congress is attracted to the idea of protecting 5000 grants each year in the budget. The next meeting of the Director's Advisory Committee, in a departure from the previous practice of covering the waterfront, will deal exclusively with stabilization policy and closely related issues.

-BARBARA J. CULLITON

Reagan Refuses to Budge in Weapons Talks

The Administration endures a string of arms control embarrassments but its views remain intact

No one can accuse the Reagan Administration of hesitation on the topic of nuclear weapons. In January, the U.S. plan for deploying nuclear weapons in Europe was assailed by the Soviet Union, criticized by some influential West German politicians, and privately panned by associates of Eugene Rostow, the top U.S. arms control official, who was sacked for general obstreperousness. At the end of the month, however, President Reagan was determined to press forward with the controversial weapons plan.

According to his proposal, the United States is to deploy during the next few years more than 500 Pershing II and ground-launched cruise missiles in England, West Germany, Italy, Belgium, and the Netherlands. Unlike existing U.S. missiles in Europe, the Pershing II and the cruise missile are both mobile and highly accurate. The avowed purpose of their deployment is to counterbalance a similar Soviet missile, the SS-20, which the Soviets began to deploy in 1977. The Soviets have scattered more than 300 SS-20's, with three warheads each, among 37 different sites.

The Administration, along with its allies in the North Atlantic Treaty Organization (NATO), has advertised the SS-20 as a new threat, designed specifically to imperil Western forces from a great distance without fear of Western retaliation. According to a 1979 NATO communique, the SS-20 casts "doubt on the credibility of the Alliance's deterrent

strategy by highlighting the gap in the spectrum of NATO's available nuclear response to aggression." Loosely translated, this means that they've got some and we don't, and they can hit us, but we can't hit them.

But the Soviets and some Western scholars see things differently. They say that the situation in Europe is not new, because the SS-20 is no more threatening than two existing Soviet missiles, the SS-4 and the SS-5. Robert Berman and John Baker, the authors of a recent book entitled Soviet Strategic Forces,* state that the SS-20 is merely the long-awaited Soviet response to the U.S. deployment of Polaris missiles aboard nuclear submarines patroling the European coastline. The Polaris is capable of destroying the SS-4 and the SS-5, and the Soviets have been struggling since the mid-1960's to craft an appropriate strategic response.

In spite of these claims, the Administration believes that the presence of the SS-20 justifies the existence of the Pershing and the cruise missile. An official involved in the U.S. effort notes that "although we have other nuclear weapons of different kinds deployed in Europe, and in some categories more than the Soviets do, it is important to maintain deterrence across the spectrum of nuclear forces—to balance everything,

so that the enemy doesn't think he has superiority anywhere."

This is why the Administration proposed last year to cancel the Pershing and cruise missile deployments if the Soviets destroyed their SS-20's. As another top Administration official explains, "both sides have more warheads than they can possibly need. The major thrust of our proposal is to reduce to much lower equal levels." The snag is that such an agreement would not include French and British nuclear forces, which the Soviets find no less threatening. The British have approximately 250 warheads on submarines and aircraft, and the French have roughly 131 warheads on submarines, missiles, and aircraft. Both are planning to expand their forces in the near future.

Last summer in Geneva, Soviet arms negotiator Yuli Kvitsinsky proposed informally that the Soviets drastically reduce the number of their SS-20's in return for limited U.S. deployment of cruise missiles and no deployment of the Pershing. The Soviets worry about the Pershing in particular because of its great speed, which would permit its use in a effective preemptive attack against Soviet command posts and other strategic targets. Under the Kvitsinsky proposal, the number of warheads on both sides, including those held by the British and the French, would be about the same.

Paul Nitze, the top U.S. negotiator in the European weapons talks, thought

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