## Carter Took Lead in Recruiting NSF Nominee

Choice of John B. Slaughter to succeed Atkinson as director draws favorable reaction both inside and outside the agency

If, as seems a sure thing, John B. Slaughter is confirmed as director of the National Science Foundation (NSF), that presidential appointment will have been made in more than just the formal sense.

President Carter reportedly singled out Slaughter, 46, for the job and took a personal role in persuading him to accept it. Slaughter, provost and academic vice president of Washington State University, had withdrawn his name from consideration mainly because he was reluctant to leave Washington State only a year after he had gone there to take the job.

Sources in the White House Office of Science and Technology Policy say that Carter clearly favored Slaughter for the post. Carter telephoned to discuss Slaughter's reservations, and the call was a major factor in convincing him to accept. Slaughter confirms that Carter indicated that he was his personal choice and asked him to reconsider.

Slaughter, who is black, would be the first black to head a major federal science agency. Since this is a presidential election year, it has been noted that Slaughter's appointment would be well received by a significant voting constituency. White House sources reject the suggestion that the nomination was politically motivated. They insist that the choice was made strictly on merit, and point to Slaughter's qualifications.

A favorable reaction to the nomination does, in fact, reflect a high degree of approval both inside and outside NSF. Slaughter has solid credentials in his specialty of engineering and computer science. He acquired recent upper-echelon experience at NSF when he was its assistant director for Astronomical, Atmospheric, Earth and Ocean Sciences from 1977 to 1979. While there, he is said to have established good rapport with Congress, which is important for a director of NSF. He has a reputation as a capable manager, and he is regarded as having personal qualities that should make him effective as a leader at NSF and in relations with the scientific community.

If Slaughter sounds like an improbably perfect pick, that is the impression left by a quick journalistic check which turned up no detractors. Pressed on the point, the most negative thing that one National Science Board (NSB) member could find to say after giving Slaughter high marks was, "Of course, this doesn't say that the Peter Principle won't apply [The principle that executives ultimately rise to their level of incompetence]. An appointment to the next level above sets experiment in motion."

No serious snags are anticipated in obtaining the required Senate confirmation. The nomination was made, however, while Congress was in recess for the 4th of July break and the Republican Convention. No confirmation hearings had been scheduled and, when Congress reconvened on 21 July, the matter had to compete with other pressing budget and legislative business. Congress is also preoccupied with politics and looking forward to a recess for the Democratic Convention. But committee sources say there is a fair chance the confirmation process can go forward before the recess.

Slaughter's nomination comes late in Carter's term, and there is always the possibility that the President will not win a second term. Unlike most agency heads, who serve at the pleasure of the President, however, NSF directors are appointed to statutory 6-year terms, a concession to scientists' earnest insistence that the post be nonpolitical. This insulation has never been put to the test by a serious clash in temperament or policy between an NSF head and a President.

The selection process for the top NSF job involves suggestions to the White House of candidates by the NSB, the policy-making body of the NSF whose members are mostly prominent scientists and university administrators. Lewis M. Branscomb, IBM vice president and chief scientist, headed the search committee formed to advise the White House on filling the vacancy left by the departure of NSF Director Richard C. Atkinson to become president of the University of California at San Diego.

In a letter forwarded to the White House as a result of the search, Slaughter was among those described as qualified for the post, but his name was not on a short list of three persons put forward by the board. Rice University President Norman Hackerman, chairman of NSB at the time of the search, says he is certain that Slaughter would have been among the three had he not indicated he was unavailable. Slaughter's choice was also strongly endorsed by the President's science adviser Frank Press.

At NSF, Slaughter would be taking over an agency undergoing a major turnover at top policy levels. In addition to Atkinson's departure, the foundation's number-two man, Deputy Director George C. Pimentel, has returned to the University of California at Berkeley.



John B. Slaughter

And NSB chairman Hackerman has completed two, 2-year terms as chairman and has been succeeded by Branscomb.

A new deputy director has already been nominated and confirmed. He is Donald N. Langenberg, who came to the post from the University of Pennsylvania where he was vice provost for graduate studies and research.

The timing of departures resulted in appointment of a new deputy director before a new director could be selected and participate in the choice. This is regarded as hardly ideal, but Langenberg is also highly rated and, within NSF, where both men are well known, they are expected to make a good managerial team.

Langenberg, a physicist, has been chairman of the NSF advisory council since it was established in 1977. The council was given a serious advisory role by Atkinson, and Langenberg, therefore, acquired a familiarity with NSF operations and problems that will be useful in his new post.

Langenberg is an expert in the physics

of condensed matter at low temperatures. He earned his Ph.D. at Berkeley and has been on the faculty at Penn since 1960. He has been vice provost for graduate study and research since 1974.

Slaughter earned his Ph.D. in engineering physics from the University of California at San Diego. He worked at General Dynamics Astronautics in the late 1950's. From 1960 to 1975 he was at the Naval Electronics Laboratory Center in San Diego where he became head of the Information Systems Technology Department. Before going to NSF as assistant director in 1977, he was head of the applied physics laboratory at the University of Washington. He has been editor of the *International Journal of Computers and Electrical Engineering* since 1977.

NSF watchers will have noticed that both Slaughter and Langenberg have physics backgrounds and expertise in applied science. Do their appointments prefigure pressure on NSF to put greater emphasis on applied research and technology at the possible expense of basic research? Sources on both the NSB and in the White House discount the possibility. Breadth of background and relevant experience were the operative criteria for selection. But it is also true that creation of a national technology foundation is being mooted, and proposals to give more attention to engineering education are in the air. And when such discussions are in progress, and the chronic basic-versus-applied science argument is being rehashed, "It is not bad," as one NSB member observed of Slaughter, "to have a person with feet in both camps."—JOHN WALSH

## Heart Transplants: To Pay or Not to Pay

The reigning imperative of American medicine has been: *If it works, do it.* Or as many physicians might put it: *If it helps, how can it be withheld?* Up to now, the government has taken a similar stance, asking only three questions about a new medical technology before deciding whether to pay for it out of Medicare and Medicaid funds: Is it safe? Is it effective? Does it have wide acceptance in the medical community?

No longer. Using heart transplantation as a starting point, the government has embarked on a new and utterly uncharted course. Patricia Roberts Harris, Secretary of the Department of Health and Human Services (HHS), announced on 12 June that HHS will require new technologies to pass muster on the basis of their "social consequences" before "financing their wide distribution."

According to the secretary and top HHS officials, this assessment will be a sort of environmental impact statement for medical innovation, encompassing such boundless issues as a new procedure's cost-effectiveness and cost-benefit ratios, its ethical implications, and its "long-term effects on society." Voluminously detailed regulations embodying the requirement and setting forth its rationale are being drafted now. It will be the first time in the 15-year history of Medicare the government has attempted to define what is meant by the statutory requirement that the program pay only for "reasonable and necessary" medical care-including such controversyfraught issues as "necessary for whom?" and "reasonable under what circumstances?"

As she announced plans for developing the all-encompassing new reimbursement tests, Harris declared that heart transplantation-a technology that holds symbolic first place in any ranking of therapies for aggressiveness, intensity, and derring-do-will be "the prototype" for such an assessment. Beginning in the fall, the department plans to launch an unprecedentedly broad assessment of the operation and its ramifications. Harris said the study will embrace "the patient selection process, the long-term social, economic, and ethical consequences of the procedure, and the potential for national expansion of the heart transplantation procedure." She put the cost of the study at \$2 million "at the outside" and said it would take 2 years, but HHS staffers say it will probably cost more and take longer.

As part of its venture into technology assessment, HHS will examine closely the data on the 200 or so heart transplants that have taken place in the United States during the past 11 years. And it will look at data on patients who receive transplants during the next couple of years. Although HHS may decide ultimately not to pay for heart transplantation under Medicare, it will support certain qualified patients as part of the present study, which will, perforce, be centered at Stanford University Medical Center, the world's most active heart transplant unit. Other medical centers may also be part of the HHS study.

The study's legal foundation is an obscure provision of the original 1965 Medicare statute that had to be stretched in a new direction to enable the department to do what it wanted to: fund heart transplants only at a specific institution or two and for specified types of patients. According to HHS General Counsel Joan Z. Bernstein, there are no provisions in the law for selective reimbursement that would normally permit the department to pay for a procedure at one hospital but not another.

Cardiac replacement pushes HHS into drafting

policy about emerging medical technology

Harris, who says the study was her idea because "the deeper I got into this the larger the number of questions became," was nonetheless a bit hazy about the specific unknowns the study will address. "I cannot tell you the degree we will be going into the ethical and economic issues," she said in an interview. "It is not nearly as metaphysical as my [press conference] statement would suggest." For instance, she said, the department wants to know how much additional life a heart transplant buys, at what cost, but it also wants to analyze the quality of life posttransplantation.

Other "unanswered questions" that are likely to be reflected in the study design, according to several HHS officials, include:

► Characteristics of patients who have been selected for transplantation to see if there is any implicit discrimination by social class, education, economic resources, or age.

► What resources are necessary to perform heart transplants well, and

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