come close to dosages that are known to be hazardous.

Rauscher has said he will make a decision about what to do by the end of the month, perhaps in hope that the report of the third NCI committee will somehow provide a clear-cut answer, unlikely as that may be.

Rauscher is under considerable pressure to take a conservative position right now and call a halt to federally sponsored routine screening of women under 50. In fact, many critics believe that he should have made a clear-cut decision weeks ago. Within the NIH hierarchy, sentiment is running in favor of a conservative stance and the appropriate letters that must go out if the program is to be modified have already been drafted.

But opposition to a change in the program is also strong, and is particularly forceful from the ACS. Cancer Society officials, who do not like the way the whole thing has been handled and who do not share the conviction that there is a serious radiation risk from mammography, thus far are unwilling to go along with a major change in what, they emphasize, is a joint program. So the public waits.

It does seem that, for now at least, the only prudent thing to do is to stop recommending routine mammography, as a matter of public health policy, for women under 50 who have no physical symptoms of breast cancer (such as a lump) and who are not in any high risk group.

—BARBARA J. CULLITON

Stever: White House Appointment Will Create Vacancy at NSF

Unless the unexpected occurs, the Senate will shortly confirm the appointment of H. Guyford Stever and President Ford will gain a full-time science adviser, but lose a National Science Foundation director.

Stever underwent generally friendly questioning at a confirmation hearing on 28 July and a unanimous committee recommendation that he be confirmed was filed the next day. A vote on Stever's appointment was viewed as possible on 30 July, but conservative critics of the nomination secured a delay, apparently in order to prepare statements of opposition. When *Science* went to press on 3 August, supporters of the Stever appointment said that they have the votes necessary for favorable action and expect an early vote.

Stever has been serving as both NSF director and science adviser since 1973, when President Nixon relocated the top science advisory office in NSF. When confirmed, Stever will resign as NSF director.

This opens the directorship at an awkward time on the political calendar. With a President to be elected in November, the selection of a leader for NSF becomes difficult in several ways.

In principle, the director's job is apolitical. The legislation creating NSF in 1950 provided a six-year term for the director, differentiating him from other top appointees who serve at the pleasure of the President and are expected automatically to submit their resignations when a new President takes office.

The NSF directorship did become politically enmeshed in 1969 when President Nixon spiked the nomination as NSF director of Franklin A. Long (*Science*, 25 April 1969) apparently because of Long's opposition to an ABM program advocated by the Administration. The short-circuiting of the Long appointment caused a furor in the scientific community and Nixon publicly conceded the White House had erred. He offered the post again to Long, but Long declined.

The incident seemed, if anything, to reinforce the nonpolitical status of the post. William D. McElroy, the next director, was a veteran of the science advisory network and a reassuring choice to the scientific community. After the 1972 elections, Stever, who had succeeded McElroy as NSF director, was not among the many agency heads who were asked to submit their resignations for what proved to be a severe post-election purge. Nevertheless, few observers feel that a President would pick an NSF director with whom he felt incompatible in political outlook and policy attitudes.

The process of selecting a new director of NSF does require that the National Science Board (NSB), the policy-making board of NSF, recommend candidates for the director's post to the President—more insulation against partisan influence. But the President may pick a nominee not on the NSB list.

Perhaps the most important dampener now is that the best candidates for the job are likely to be least receptive during the political twilight of the next few months. And even if the White House sends a nomination to Capitol Hill, there is no guarantee that the Democratically controlled Congress would have the time or the inclination to act. In the interim before a new director is chosen, NSF deputy director Richard C. Atkinson is expected to serve as acting director.

The dominant themes at Stever's confirmation hearings on 28 July were bipartisan gratification at having restored the science advisory machinery to the White House and support for the Stever nomination. A decidedly dissonant note was struck offstage, however, by Senator Jesse Helms (R–N.C.) who did not attend the hearing but read a statement of opposition into the *Congressional Record* that day. Helms is one of four conservative Republican senators who urged President Ford not to name Stever as science adviser because of poor management by NSF in its science education program (*Science*, 2 July). In his statement, Helms largely elaborated on charges made in the past about NSF handling of curriculum revision programs and argued that Stever was involved in a "cover-up" of manipulations by NSF officials and should not be confirmed.

None of the senators at the hearing presided over by Senator Frank E. Moss (D–Utah) chairman of the Committee on Aeronautical and Space Sciences, alluded to difficulties with the education program. But the matter is the subject of studies by both the General Accounting Office and the staff of the House Committee on Science and Technology and there is a general awareness that the state of the NSF education program is a serious item of unfinished business for Congress and for the next director of NSF.

As for reestablishment of a science office in the White House, care has been taken to make the transition go smooth-

ly. Since the law was passed creating a new Office of Science and Technology Policy (*Science*, 11 June) staff members of NSF, the White House Domestic Council, and the Office of Management and Budget have been doing preparatory planning and, since his nomination, Stever has been spending a lot of time on the matter. The OSTP will have a staff of about 30, half of them professionals, plus a few persons "detailed" from other agencies.

A tactfully timed part of the transition will be the phasing out of two ad hoc advisory groups which have been operating under the chairmanship of William O. Baker, president of Bell Laboratories, and Simon Ramo, vice-chairman of TRW, Inc. (*Science*, 30 April). Both groups are scheduled to hold final meetings on 5 and 6 August in Los Angeles. At that time issue papers—probably 50 or 60 of them—will be turned over to the science adviser in the expectation that the work will be carried forward.

During his tenure as NSF director Stever, a practitioner of the axiom that a soft answer turneth away wrath, has had generally good relations with Congress. Geniality prevailed at the confirmation hearing, but a number of questions and comments by the senators were phrased in ways that clearly indicated how they hope and expect Stever will act when he ascends to the new post.

Science advisers in the past have often shied away from testifying on the Hill, pleading Executive privilege. Senator Edward M. Kennedy (D–Mass.), somewhat before the fact, said at the hearing that he was impressed by Stever's willingness to appear before Congress. He then went on to note changes in the science adviser's legal status which give him responsibility to advise the President on scientific and technological aspects of military affairs. Kennedy observed that Stever's scientific training and experience, including his stint as chief scientist of the Air Force in the 1950's, strongly qualified him for the task.

Stever replied that the limitations on staff would make it impractical for the OSTP to conduct weapons studies, but indicated that he and his staff would concern themselves with developments in military research and would follow the defense R & D budget and comment on them to the President.

Ever since the advent of the presidential science advisory machinery, Senators and Congressmen have sought to elicit the personal opinions as distinct from the official views of successive science advisers. The advisers have habitually sidestepped such invitations and Stever, too, displayed some skillful footwork at the hearings. But a new note of insistence in the questions put to him is perhaps an indication that Congress feels that the NSF director is an apolitical, protected species and the science adviser is not, and, therefore, fair game.

—JOHN WALSH

Swine Flu Vaccination Campaign: The Scientific Controversy Mounts

The national campaign to vaccinate some 200 million Americans against "swine flu," announced with presidential fanfare last March, has run into a tangle of controversies. As this article is being written, the government, the vaccine manufacturers, and the insurance companies are still haggling over who will provide insurance for the program, and at what cost. If that practical, financial issue is not resolved, the ambitious program may have to be modified or even scuttled—a victim of forces peripheral to the core of the campaign.

But while most recent attention has been focused on the insurance squabble, a dispute over more fundamental issues is simmering in scientific and medical circles. A handful of scientists and physicians has challenged both the rationale for the program and the likelihood that the vaccine will work well—two issues that go to the very heart of the immunization effort and bear relevance for future mass vaccination campaigns as well, whatever the fate of the current effort.

The tenor of the debate could change markedly if a further outbreak of swine flu occurs in this country or abroad. At this writing, health officials are investigating the mysterious deaths of some 18 persons who developed lung ailments after attending a state American Legion convention in Philadelphia last month. There has been press speculation that swine flu might be the culprit, but investigators have not yet identified the cause. An earlier televised report that hundreds of people had succumbed to swine flu in Australia proved to be inaccurate. Reports of possible cases in the Philippines and Taiwan are also being investigated by American health authorities, but no conclusions have yet been announced. Thus, at this writing, a worldwide surveillance network has failed to detect any outbreak of the disease since the episode at Fort Dix in January that triggered the national campaign. If a lethal outbreak should occur, then the efficacy of the vaccine would be a matter of crucial importance.

A few American scientists have questioned the desirability of the program from the start. They think the likelihood of a swine flu pandemic this season is too remote to justify a mass vaccination effort that will drain public health resources and inevitably produce adverse side effects in at least a small percentage of vaccinees, however mild the vaccine.

In recent months, foreign health specialists have added their voices to the criticism as well. Press reports indicate that a number of European health officials and scientists doubt the wisdom of the American campaign. The most developed of these foreign critiques was presented in three articles in *The Lancet*, a British medical journal, on 3 July. The articles weighed the pros and cons of the swine flu issue and seemed, on balance, to come down against the vaccination campaign. They noted that six British volunteers who were deliberately exposed to the swine flu virus developed only mild illness, that the virus did not seem predisposed to spread among people, and that the outbreak at Fort Dix might well have been an isolated event. One article called it "highly questionable whether the amount of vaccine required for all those between 20 and 50 years of age should be prepared at the present time for any country, including even the United States, until the shape of things to come can be seen more clearly."

However, public health officials in this