The protest movement seems to have developed almost entirely among the scientists invited to the nucleic acid symposium, leaving the leaf abscission symposium relatively untouched. Detrick scientists assert they know of no scientists who refused to speak at the leaf symposium as a sign of disapproval of Detrick's work. If there were any protests among those invited to the leaf abscission symposium, they were too muted to attract attention. The final program included papers by one Detrick scientist and seven outside investigators. The seven included F. T. Addicott, University of California, Davis; S. P. Burg, University of Miami; W. C. Cooper, USDA; W. P. Jacobs, Princeton; A. C. Leopold, Purdue; D. J. Morre, Purdue; and Barbara D. Webster, University of California, Davis. In all, 81 persons attended the conference.

The scientists who attended the Detrick conference, and the AIBS officials who supported the conference, cited a variety of reasons for their action, including the following:

► The symposiums were unclassified and relatively open. As AIBS president McElroy expressed it: "Open scientific meetings should be endorsed whether they be held in Cuba, Russia, Spain, China, or Johns Hopkins University."

► Participation does not imply endorsement of biological warfare.

► The work was basic, not applied, and would have been available to Detrick scientists through the open literature anyway. Moreover, the basic researcher can't control the applications others make of his work and can't be certain whether his work will relate to weapons development. "Can we place the blame for Hiroshima on Einstein?" asks McElroy.

► A boycott of the symposiums harms the very people at Detrick who are most deserving of support—namely, the civilian scientists who are engaged in basic research. If these people are undermined, Detrick will become even more secret and defensive.

► Outside scientists should maintain contact with Detrick in accord with the principle of civilian control over the military.

► Detrick has done work that most scientists would agree is "worthwhile," such as work on the detection of infectious diseases before the onset of clinical symptoms.

► Biological weapons are a necessary part of the nation's arsenal in today's world and someone has to work on them, so it's not fair to ostracize Detrick.

► Where do you draw the line in boycotting? If you boycott Detrick, why not boycott other defense agencies, universities, and institutions that perform defense work, scientists who hold defense grants, and so on?

On the other side, the boycotters also cited a variety of arguments, including the following:

► Biological weapons are immoral and destructive of life and should be opposed by life scientists.

► Even if scientists accept the need for biological weapons, they should not celebrate the anniversary of an institution devoted to destructive purposes.

► Participation in Detrick activities by outside scientists provides an aura of respectability for work on biological weapons.

► Participants who discuss their work at a Detrick conference may directly contribute to development of biological weapons. Detrick scientists profit more from a meeting, where they can question scientists and learn of work in progress, than they would by waiting for results to be published.

The boycott was surprising to almost everyone involved. The Army and the AIBS had not anticipated such sharp opposition to the program. And most of the protesters had not anticipated that such a sizable number of their colleagues would refuse to speak. The episode probably reflects the mood of a nation that is tired of warfare in Vietnam and in the cities. But whatever the underlying cause of the protest, it provides an intriguing glimpse into the dynamics of a moral crusade, and into the ways in which moral feelings are awakened—or bent into shape, as the case may be.—PHILIP M. BOFFEY

Federal Labs: Daddario Committee Holds Probe on Their Utilization

Representative Emilio Q. Daddario's subcommittee on Science, Research, and Development last month took up the question of how well the nation is served by the federal government's own laboratories. The question is an important one, for these laboratories, numbering several hundred, cost around $3.5 billion a year to operate, and it is widely contended that many of them uselessly survive long after the problems for which they were created have been discarded or solved.

This contention gives rise to the image of costly research centers tinkering with trivial or obsolete problems while the nation that pays the bills suffers misfortunes that easily could be routed with a good dose of science and technology. Obviously it would be worth knowing if such, in fact, is the case, but the hearings,* which ran for 6 days, unfortunately did not provide very much illumination. The witnesses, with few exceptions, were government officials who are directly or indirectly responsible for the federal laboratories, and they confidently assured the subcommittee that everything either is in good shape or is rapidly en route to becoming so, except for those cases in which the best is being made of a difficult situation. The subcommittee, never noted for skepticism toward the statesmen of science, asked few hard questions.

As outlined by Daddario in a statement in the 25 March *Congressional Record,* the object of the hearings was to determine "how we can make the best use of our existing Federal laboratories," with emphasis on such matters as finding new roles for laboratories that have completed their missions; the handling, by laboratories of one agency, of jobs for other agencies; the use of discretionary funds by laboratory directors; and the role that the laboratories might play in dealing with national problems such as crime, housing, and transportation.

* A transcript of the hearings, titled "Utilization of Federal Laboratories," will be published next month, and may be obtained without charge from the subcommittee's parent group, the House Committtee on Science and Astronautics, Rayburn Building, Washington, D.C.

The first witness was the President's science adviser, Donald F. Hornig, who among other things, informed the subcommittee that these and related questions "have received a great deal of consideration from my office through the years. I must tell you frankly that I am not satisfied with our performance; I cannot give you a solution myself, but I know of no one else who thinks he has final answers either. Of course, there are no final answers, but we can look for the best provisional answers in a constantly changing situation."

Hornig went on to say that various panels of the President's Science Advisory Committee (PSAC), which he chairs, have conducted studies of the quality of the national laboratories and their relevance to national needs. Daddario, referring to a PSAC panel study of the Defense Department laboratories, asked whether it was made public. There ensued a brief colloquy which nicely illustrates, first of all, the congenial relationship that exists between Daddario and the leaders of the scientific community and second, an aspect of the manner in which the White House science advisory operation conducts the public business.

HORNIG: No, the Committee has worked closely with me, and with the agencies concerned, but they produced no published reports. . . . The purpose was to secure some action. . . .

DADDARIO: And you feel it has produced action?

HORNIG: Yes. There is lots more needed, but on many of these things one can achieve much more by getting together and then going to the people who have to remedy them than to publish documents about them.

DADDARIO: Could we sometimes say when we bring together a commission of this kind that it will not necessarily come out with a report so when it doesn't come out with one, there will not be suspicion about that particular fact?

HORNIG: The formal state of affairs for the President's Advisory Committee is it does not publish a report. It is the case 95 percent of the time because that is the mode of operation.

Daddario observed that, under such circumstances there could be "dire statements made in the press about something of a cloudy nature being hidden, and I know that is not the case, but. . . I would guess that it would be a pretty good idea to spell it out in the first instance so there will be no question though you are satisfied this is the way you operate."

Hornig responded to this proposal by saying, "I think this is an excellent suggestion." Presumably this means that public notice will henceforth be given on at least all unclassified matters that are formally under PSAC review. As to what it was that the PSAC panel studied in the Defense laboratories, and what came out of the study, the subcommittee did not inquire, nor did Hornig offer any details.

Hornig said he believed that the flexibility and productivity of the laboratories was increased when their directors had significant sums of discretionary money at their disposal, and he recommended that perhaps as much as 10 percent of the total laboratory budget be in this category. But, at the same time, he indicated that he felt it was essential for the laboratories to be responsive to some central orchestration. "Granted crime and pollution are very important problems," Hornig said, "but we don't want every agency in the country to go off on its own private pollution problem, except where it has something special to contribute."

On the key issue of laboratories outliving their missions, Hornig told the subcommittee, "It is certainly true that the roles of some of the Federal laboratories have changed significantly or diminished with time, leaving a substantial combination of talent and capital investment without a clearly defined job." This frank admission of idleness or make-work on the federal payroll did not stir the subcommittee to seek any details. Hornig added that he favored a policy of closing down "old or ineffective" laboratories, but he noted, quite properly, that "the communities do not like to see them closed and it is not uncommon for Members of the distinguished body you gentlemen represent to take a lively interest in plans to close facilities located in their districts." Hornig proceeded to observe that it has been suggested that one central agency be established to operate all the federal laboratories. He added, however, that he had "serious misgivings about this approach. An effective R & D program involves a dynamic give and take between the laboratory and its parent agency. It must not only carry out assigned tasks but spell out the tasks which need to be performed. It must be a source of ideas for its parent agency and help the agency to put the laboratory's output into practice. All of this requires a very close identification between a laboratory and its sponsoring agency."

On the subject of policies to enable one agency to employ the research capabilities of another, Hornig said he was generally satisfied with the prevailing situation. Noting that the Atomic Energy Commission is performing research for the Interior Department's Office of Saline Water and that similar arrangements exist among other agencies, he said that he would like to see an increase in such interagency cooperation. However, he said, each case must be considered on its merits, and at the present time, he felt, there was no need for new legislation or policies to cover the matter.

Next in the witness chair was Alvin M. Weinberg, director of the Oak Ridge Laboratory, which Union Carbide operates under contract to the AEC. Weinberg, who is a leading voice against the university-dominated advisory councils that frequently disparage the federal laboratories while hungrily eyeing their budgets, opened his testimony with "an admonition against premature redeployment" of government research facilities: "simply because the problems are difficult, and progress is slow, does not mean that the instrumentalities devoted to these problems ought to be scrapped and the problems forgotten. I want to warn most earnestly," Weinberg declared, "against redeploying a laboratory before the problem around which the laboratory was originally mobilized has been resolved." Citing the need for reducing the costs of nuclear energy, which is a concern at Oak Ridge, Weinberg added, "Any talk of dismantling or massively redeploying the government laboratories responsible for getting on with this job is, in my opinion, irresponsible and mischievous."

Oak Ridge, he said, has been responsive to the need for taking on new assignments as old ones are completed or as national priorities change. Weinberg added that he shared Hornig's opinion that there is no need at present for new laws or policies for relating the laboratories to national needs. And this view was more or less echoed by other witnesses. William H. Pickering, director of the Jet Propulsion Laboratory, which Caltech operates for the National Aeronautics and Space Administration, reported that his laboratory has redeployed itself before and can do so again if necessary. Daddario

reminded him that Edward Teller and Weinberg had once testified to the effect that the United States is lagging in applied science. Pickering replied, "I am a little bit surprised . . . because it seems to me in this country over the past couple of decades we have demonstrated some remarkable achievements in the area of applied science."

Daddario cited pollution as a problem toward which available knowledge was not being rapidly applied. Pickering replied that it was a matter of priorities, and that, if the Congress wanted to expand work on pollution, the federal laboratories could handle the job.

Several days later, when AEC Commissioner Gerald F. Tape testified, this optimistic forecast seemed to have been forgotten. Tape related that, in November 1966, Representative Chet Holifield, then chairman of the Joint Committee on Atomic Energy, wrote to the Bureau of the Budget to urge that the AEC's laboratories be used for pollution research. Tape continued: "Early last year, AEC Chairman Seaborg wrote to the Secretaries of Commerce, Interior, and HEW expressing our desire to identify facilities and talents at AEC laboratories which might be used in support of pollution control efforts. We have as a result had a series of meetings with representatives of these departments and identified a number of areas of direct interest. To date, only two relatively small programs are being considered and discussed."

The subcommittee did not inquire as to why this purportedly flexible and responsive system of federal laboratories has been able to mount only two relatively small programs during the 18 months since Holifield made his request.

What was perhaps the most revealing testimony came from Joseph M. English, director of the Forensic Sciences Laboratory at the Georgetown University Law Center. Pointing out that various federal laboratories have done research that seems to have relevance to crime control, English noted, however, that the laboratories lack funds to develop these findings into useful hardware and techniques: "Discussion does not produce hardware. Nor does it educate and train police laboratory experts in its use," English stated. "In my investigation so far, I have yet to find any Federal laboratory facility, and I must interject at this point that I have just begun this phase, . . . which had funds it could commit to the work necessary to develop the promise of work already done so that it would be useful as a police aid. . . . Unfettered funds in significant amounts at the disposal of Federal laboratory facilities may help matters. But I am not at all certain that they will in view of the 'mission' orientation which is so evident in the Federal Government establishments . . . and in view of the almost total lack of awareness throughout the American community, public and private sectors alike, that there is such a thing as scientific crime detection and control as a legitimate area for research effort and support."

This testimony evoked a few questions from the subcommittee, but at that point the members were called to a vote on the floor of the House, and the hearings ended.

—DANIEL S. GREENBERG

Newark: Negroes Demand and Get Voice in Medical School Plans

Many medical schools are situated in or near inner-city slums, and indigent patients from these blighted areas traditionally have been important in the training of students. But no tradition has developed of allowing slum residents an effective voice in any aspect of the schools' plans. On the contrary, the tradition has been that, insofar as questions concerning the impact of these institutions on community health and other problems have been considered at all, the schools themselves have decided them. Officials of the New Jersey College of Medicine and Dentistry have discovered, however, that the rules of the game have been changed, particularly when a medical school moves into a Negro slum area.

When the college persisted last year in its plans to move from Jersey City to a large site in Newark's Negro community, it was accused by many of contributing to the tensions which led to the riots of last July. Moreover, the black community, strongly supported by state and federal officials, blocked the relocation plans until the college recently met most of its demands.

Among other things, the community wanted, and eventually got, a major reduction in the size of the site to be acquired (thus, fewer families would be displaced); a detailed commitment to mount programs for providing community health services and training health workers; and the college's cooperation in setting up a community health council, in which Negro neighborhoods would be strongly represented. Moreover, since the city administration wanted the college brought to Newark, the issue could be and was used as a weapon by the Negro leaders as they successfully pressed local and state officials for more and better housing and jobs and for a powerful, if not decisive, voice in various other matters affecting life in the black community.

The college's encounter with an aroused and militant Negro community arose from a very special conjunction of circumstances and events. The first of these was the college's critical need to establish a new home.

The college was originally established by Seton Hall University in 1954 and given quarters leased from the Jersey City Medical Center. It was taken over by the state of New Jersey in July 1965 after Seton Hall had found the college's large annual deficit too much to bear. Later that year, because of difficulties with the city administration, the trustees decided that the institution should leave Jersey City, and that the program in clinical medicine should be moved immediately to Newark's City Hospital and to the Veterans Administration Hospital in East Orange.

This awkward arrangement pleased no one, and a number of faculty members left, some of them taking their research funds with them. Severely short of space, with its basic science