eral support for basic science, but should not occupy a dominant role, since the mission-oriented agencies should retain a significant presence in support of basic science. Characteristically, the witness roster stuck to the center of the ideological road in its selections. As was the case throughout Daddario's tenure, no place was given to those who feel that serious questions can be raised about the values and objectives of contemporary research. This, however, is not surprising. Daddario never represented himself as other than a friend of the existing order. He might admonish it to respond to the needs of political reality, but he was not prescribing a fundamental shakeup.

As for what, if any, science policy the United States should adopt, there was a good deal of agreement at the hearings that it is difficult to accommodate scientific activities within a set of words that will both stimulate research and meet social and political preferences. Many worthy things were said on and around this subject. Among them was an observation by Myron Tribus, Assistant Secretary of Commerce for Science and Technology.

"Many people appear to be concerned with establishing a science policy because there has been a recent decrease in the rate of growth of science funding. I believe that many people are espousing a need for a better definition of science policy, when in fact they want more money. This type of thinking should be disabused. Science policy is not the same as more money in support of science. Rather, today we need a national science policy as a tool to enable us to make better use of limited funds. Further," Tribus continued. "the enunciation of a national science policy should not be equated with a commitment to fund it. The process of funding must be fought over and over with each budget cycle. What is important is to have a science policy which makes that struggle more rational."

Daddario's other principal achievement in his chairmanship was to bring the murky subject of technology assessment to some prominence in Congress. The field is obviously so important but so immature, so poorly formulated, and so studded with well-intentioned confusion spreaders and not a few self-serving charlatans, that a good public

discussion, prior to pouring concrete, is precisely what is called for. Through extensive hearings, Daddario's subcommittee provided just that, and now, at least, there is a good public record available for those concerned with the problem.

All in all, Daddario's 7 years as chairman were mainly concerned with providing such a record on critical matters that the rest of Congress and most of the public tended to ignore. The remarkable thing is that he did so much with so little, and the pity is that the peculiarities of congressional power kept him from a position where he might have done more.

Daddario's successor in the chairmanship will be John W. Davis, of Georgia, an attorney by training who has served in Congress since 1961. He has not been an especially active member of the subcommittee, but ascendency to a chairmanship often provides a spur to interest and activity. One measure of the feeling of friendlessness that prevails today in Washington among research leaders is that some of them see a favorable sign in the fact that Davis is an amateur astronomer.—D. S. GREENBERG

Peace Corps Physicians: Reflections on the Future

Put more than 200 physicians who have served overseas in the Peace Corps into the posh, pastoral setting of the Airlie House conference center south of Washington for a weekend, ask them to consider the theme "Health Care in the Seventies: Crisis and Opportunity," and the results are fairly predictable. The 2-day meeting on 12 and 13 September mixed varying proportions of reunion, recruiting, and discussion of reform of the health care system. The conference produced no cosmic conclusions, but it did offer some interesting reflections by doctors who in age and attitude represent a group who will play a pivotal role if there are to be major changes in health services in the seventies.

Assembled, the Peace Corps physicians (PCP's) or "Peace Corps docs,"

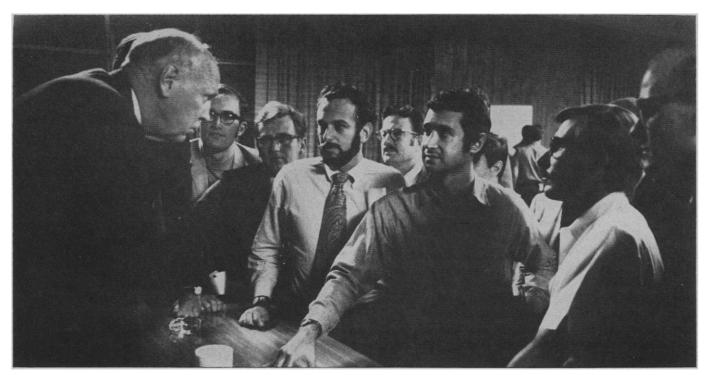
as they are likelier to call themselves, would surprise anybody expecting a homogeneous group. At the conference they displayed a full range of regional accents and of political, tonsorial, and sartorial styles, although in all sectors the moderates predominated.

The returned PCP's divide historically into two groups. From the establishment of the Peace Corps early in the Kennedy Administration until 1967, service in the Peace Corps satisfied a physician's military obligation. Many PCP's of that era are frank in saying that this fact influenced their choice of the Peace Corps. In that period most PCP's served directly after completing their internships. Since the draft law was changed in 1967, increasing numbers of PCP's have been recruited from among doctors already in

practice. There is no upper age limit for recruiting, and the median age of PCP's abroad has risen to about 40.

Overseas, the PCP's primary responsibility is the care of Peace Corps Volunteers in the host country to which the doctor is assigned. Often the PCP's are also responsible for the technical direction of public health programs operated by Peace Corps workers. In addition, however, practically all PCP's become extensively involved in voluntary work in which they use their medical skills. Patterns vary greatly but most typically, it seems, Peace Corps doctors work in local hospitals and collaborate with local physicians in disease control and other public health projects. The wives of PCP'sthere have been only a few women among the roughly 300 PCP's so far -are usually much involved both in dealing with volunteers and in other

The PCP signs up for 2 to 4 months of training and no less than 30 months overseas. Annual pay ranges between \$13,000 and \$23,000 according to stage of career, plus the sort of fringe benefits and perquisites accorded State



After speech, HEW assistant secretary Roger O. Egeberg (left) answers questions of Peace Corps physicians.

Department and other official Americans overseas, and so the PCP's scale of life is hardly as austere as is the ordinary Peace Corps volunteer's.

There are no complete statistics to document it but, as one physician put it, for PCP's "the change in career goals during Peace Corps service is fantastic." A sizable number seek training in public health and community medicine when they return, and a fair number are turning up in innovative medical programs such as the neighborhood health centers sponsored by the Office of Economic Opportunity. An official Peace Corps estimate of the proportion who have pursued national or international health work since returning is 25 percent.

One result is that a lot of the ex-PCP's are involved in administration, teaching, and research. One participant at the conference said that he had made a partial count and found that less than half in his sample were actually treating patients. Many of the conference participants were recently back from abroad or still involved in their own training—thus there are explanations for the nonpracticing physicians. Others are doing community work that gives them some contact with patients, but those attending the conference were acutely aware that many of them seemed destined for the growing medical bureaucracies—national, regional, and local.

Written into the Peace Corps legisla-

tion is a provision that ways be found for the country to make use of the experience of returned volunteers. To an outsider at the conference, it appeared that the former PCP's were at a loss to know how to make general use of their special qualification. A great many agreed that their Peace Corps service was the most important experience of their lives. But the experience seems to be expressed most universally in a general feeling that the United States was using 40 percent of the world's resources profligately and that this situation is unfair and should be rectified. This shared feeling inspired two or three critical resolutions directed to the Administration, on which signatures were gathered at the conference.

Focus on Care of Poor

Inevitably, much of the discussion focused on the inadequacy of health services provided to low income and minority groups. One of the keynote speakers, John L. S. Holloman, a former president of the National Medical Association and a general practitioner in Harlem, set the terms for later discussion. The following representative quotes from this reporter's notes indicate the nature of his remarks.

On the health care system: "The question is whether to attempt to cure the patient or hasten its demise."

"If health care is to be an equal right, it cannot be a commodity which

can be monopolized by our affluent members of society at the expense of the less affluent ones."

"The idea of a personal physician for each member of society is impractical."

"The do-gooders have decided we can't really do anything to disturb the traditional methods of medical practice."

"(Don't hide under your M.D.[iety] degree."

"Peer review has been a joke, a conspiracy against patients."

"Stop getting high on rhetoric."

"Stop copping out on specialization."

"You couldn't have picked a better place to have a meeting unless it was the ghetto." (Laughter, applause.)

Much of the discussion took the form of a dialogue between, on the one hand, a few black and activist white ex-PCP's, most with experience in the ghettos, and, on the other hand, the majority of participants. A central issue was the role of white, middle-class physicians working with poor people.

A chief reference point was the situation at New York's Lincoln Hospital, where the intervention of young Puerto Rican militants had resulted in disruption of the hospital's operations and dissension within the staff. The Lincoln Hospital situation not only provided a relevant case history but also, fortuitously, involved Dr. Joseph T. English, an original organizer of the Peace Corps physicians' program, who was at

the conference as a speaker. English served in both the Peace Corps and Office of Economic Opportunity during Sargent Shriver's tenure. He had moved on to a top administrator's spot in one of the major subdivisions of the Department of Health, Education, and Welfare (HEW). (English, in fact, helped to originate the idea for the conference, which was financed jointly by the Carnegie Corporation, Peace Corps, Office of Economic Opportunity, and HEW.) Early this summer English left the federal government to head up the New York Health and Hospital Corporation, which oversees New York City's health facilities, including Lincoln Hospital. English had brought some colleagues from the corporation to the meeting and was obviously intent on doing some recruiting.

There was ample irony in the situation. In his speech, English said that the main issue "is to take the excellence of American medicine and translate it into equity," and went on to say he foresaw "the community creating new institutions of planning and corporate management."

It was clear, however, that some activists at the conference viewed English as a representative of the establishment and the Lincoln Hospital situation as a typical result of "repression." A point reiterated by the activists was expressed by a black physician who said that a main failing of white liberals today is their failure to recognize the "right of oppressed people to do their own thing, to succeed or fail."

For his part, English was critical of "white liberals who want to get people to confront the power forces—then duck out themselves. Poor people always lose."

In the workshop and small-group sessions, the listener heard several variations of one group leader's assertion that white liberal physicians working in a ghetto "find it difficult to give up power—status and privilege." One got the impression that almost all those at the conference acknowledged the value of "community participation" in innovative health programs but had trouble accepting unqualified "community control."

In view of the breadth of the health care crisis, the PCP's may have dwelt excessively on the problem of reforming the health care of minority groups. But their Peace Corps experience probably does give them a special edge in dealing with people of other cultures within this country. As one PCP who

Egeberg Says Health Plan in Works

About 100 people have been detached from their regular jobs at the Department of Health, Education, and Welfare (HEW) to carry out an order by President Nixon to work on a plan covering all major health areas. The effort was first alluded to publicly by HEW's assistant secretary for health and scientific affairs Roger O. Egeberg on 12 September at a meeting of returned Peace Corps physicians. Egeberg said that many in the HEW task force have been working nights and weekends "looking at the options" in health policy. He expects the first recommendations to go to the President before the end of the month.

The former dean of the University of Southern California medical school gave few hints of what the plan would cover, but he indicated that it would not be designed simply to provide an Administration alternative to national health insurance proposals now being discussed in Congress. The HEW proposals may provide the basis for a major Administration health message next year.

In one sense the President's action represented a delayed follow-up to his pronouncement of a "health crisis" a year ago. Egeberg said he felt that HEW Secretary Elliot Richardson had "seized the opportunity" represented by the President's request and that the Administration would give a higher priority to health problems than it has given in the past.

At the beginning of his talk at the conference Egeberg appeared wary of criticism from his audience of young professionals and acted like a bureaucrat at bay. By speaking candidly about his own situation and discussing some of his own priorities and prejudices, however, he won a generally sympathetic hearing and, in fact, a standing round of applause at the end. Egeberg admitted that until quite recently he had been "extremely frustrated" by the Administration's inaction on health problems. When former HEW Secretary Robert Finch was replaced by Richardson and moved to the White House as a counselor to the President, however, "things began to happen," said Egeberg.

Ceiling on the Health Care Budget

Egeberg tempered his optimism by noting the special difficulties that affect the financing of federal health programs. He said that federal programs that guarantee payment of medical costs, notably Medicare and Medicaid, represent "uncontrollable costs" which are increasing rapidly. At the same time, said Egeberg, "we are told there will be a ceiling on the health budget." So pressure may be intense to make cuts in the funds for regulatory and research agencies such as the Food and Drug Administration and National Institutes of Health.

To deal with the health crisis Egeberg quoted estimates that it would be necessary to train an additional 50,000 physicians, 200,000 nurses, and 100,000 medical subprofessionals. In discussing ways and means, he revealed a certain ambivalence in his attitude toward research.

To train 50,000 additional doctors, said Egeberg, it would be necessary to "double the size of medical school classes . . . and enable the faculty to teach." Earlier Egeberg said, "A country as rich as this one has an obligation to continue basic biological research if we're going to solve the serious problems. But I don't think we need 10 pounds of research for 2 pounds of doctor."

In answer to a question from the audience he said he felt there had been "fat in research. But it has been squeezed out." In some medical schools, he said, research was "a place you could hide people who were not particularly motivated or particularly able." The remark drew one of the biggest hands of the evening.

Asked how he thought it would be possible to make the American Medical Association (AMA) more democratic, Egeberg said the board of AMA is "not so narrow as you think." He left the audience to draw its own conclusions about the AMA House of Delegates. For his own part, said Egeberg, he has been telling AMA officials that democratizing "is a good idea or they will see another organization get started."—J.W.

is now working in the Washington headquarters said, "It gives an insight into how to deal with someone who doesn't have a damn thing. Will you learn another language? Will you adopt their way of life? Will you step out of your professional role, your cultural role, to be effective?"

Many of the former PCP's have settled into conventional professional roles. As one of the conference organizers observed, "I was surprised at what a lot of conservative guys there were. You know, they say 'the Peace Corps was a great experience but now I want to do my own thing.' That really means country club, Cadillac, and kids in college."

As a group, however, the PCP's give the impression of openness to change. One PCP now working in a public health service program in Alaska said it was worth coming to the conference "just to find that there was a nucleus of people working for change." Among their colleagues, the PCP's seem to feel that they are a minority. One man at a group session asked why a representative of the American Medical Association wasn't on the program. The assumption was that organized medicine was for the status quo. And the PCP's seem representative of a group which, whatever their good intentions, can still be described as disorganized medicine.

—John Walsh

Nerve Gas Disposal: How the AEC Refused to Take Army off the Hook

Largely obscured in the controversy over the deep-sea dumping of nerve gas this past summer was an extraordinary episode involving the U.S. Army and the Atomic Energy Commission. At issue was a proposal by which the AEC would relieve the Army of its dangerous stock of gas by disposing of it in an underground nuclear blast—a method thought to promise safer and more predictable results than disposal at sea.

The AEC, which frequently must fend off critics of its underground test program, apparently was horrified at the idea of taking over the Army's nerve gas problem. The Army, partly for good bureaucratic reasons of its own, chose not to press the issue. Some members of Congress think it is too bad that, with respect to this controversy, the fledgling White House Council on Environmental Quality was established too late to have a chance to knock heads in the public interest.

The man who has done the most to smoke out the details of the Army-AEC incident is Representative Alton Lennon of North Carolina, chairman of the House Subcommittee on Oceanography and a member of the Subcommittee on Fisheries and Wildlife Conservation. On 12 August, while this latter subcommittee was having a friendly session with the new White House council, which had just issued its first environmental quality report, Lennon commented sarcastically: "I suppose the appropriate way to commemorate and celebrate this first report is to dump 416 coffins containing nerve gas and

active rocket propellant and fuses off our coast."

Lennon had special reason to be upset and aroused. First, the Military Ocean Terminal at Sunny Point, North Carolina, is in his congressional district-and this was where the vaults containing the nerve gas weapons had been put aboard the hulk of the Le Baron Russell Briggs, the surplus Liberty ship which was to be towed to a point about 250 miles off the continental shelf and scuttled. Second, as chairman of the House Subcommittee on Oceanography, his long-standing interest had been in promoting greater use of marine resources, a purpose he felt was poorly served by using the ocean as a disposal ground for lethal chemicals.

Lennon's oceanography subcommittee already had held 4 days of hearings on the dumping of the nerve gas. During these hearings Lennon and other congressmen from coastal states had grilled Army and AEC witnesses intensively and sometimes had not bothered to suppress their outrage. At this point, however, it will be useful to review briefly the history of Operation CHASE—the acronym for "Cut Holes and Sink 'Em"-that finally ended when, on the afternoon of 18 August, the Le Baron hit bottom at a depth of 16,000 feet, with just what consequences for its cargo nobody yet knows.

In 1967 and 1968 the Army, acting in secrecy, had dumped more than 21,000 M-55 rockets, each armed with an explosive charge and 10.8 pounds of GB liquid nerve gas, off the New Jersey

coast. Fearing that the rockets were defective and that the gas might begin leaking out, the Army had first imbedded them in concrete inside steel vaults or "coffins."

In the spring of 1969 the Army, again acting on the quiet, was planning to complete its disposal of chemical weapons which had become either obsolete or unsafe by dumping another 26,000 tons of them. Included in this batch were nearly 12,500 M-55 nerve gas rockets encased in concrete and steel in precisely the same manner as the rockets disposed of earlier. This time, however, word got out about these plans. Suddenly the Army found itself under heavy criticism from members of Congress worried about the hazards involved in shipping the munitions across country from various Army depots to the ocean terminal as well as about the environmental implications of dumping them at sea.

The Pentagon was having second thoughts about Operation CHASE and, in May of 1969, the director of Defense Research and Engineering, John S. Foster, Jr., asked the National Academy of Sciences about how best to dispose of the weapons. Several weeks later, an ad hoc committee of the academy chaired by George B. Kistiakowsky of Harvard concluded that most of the munitions could be detoxified on land. But the nerve gas rockets, irretrievably committed to their vaults, posed a baffling problem. The committee could only recommend that a panel of technically qualified experts be asked to determine whether there was a feasible alternative to dumping the vaults at

Subsequently, a committee named by the Army, with Paul M. Gross of Duke University as chairman, reported that there was such an alternative—the destruction of the vaults by an underground nuclear explosion. "Disposal by