ed 618 fellowships in mathematics and statistics, 561 in physics, and 529 in chemistry); and engineering, 1125.

The OE announcement on the 6000 fellowships for the coming year carried an estimate that 19 percent will be awarded in the humanities, 18 percent in the social sciences, 23 percent in the biological sciences, 20 percent in the physical sciences, and 14 percent in engineering.

Because other federal agencies have large science education programs, the NDEA fellowship program will provide nonscientific disciplines with a much more substantial number of fellowships than are available from other federal sources, but this will still be a comparatively small share of the total federal assistance to graduate students.

NSF, for example, will be awarding about 2200 fellowships in the sciences (about half of them renewals) and perhaps twice that many "traineeships," which have many of the characteristics of the NDEA fellowship.

The National Institutes of Health awarded only 117 new predoctoral fellowships this year but supported many more graduate students on traineeships and research assistantships.

The impact on graduate education in

general in the next few years of the expanded NDEA fellowship program, obviously, should be very considerable—provided large-scale military involvement does not occur.

It is significant that, over the years, a number of important modifications to the NDEA fellowship program have been made at the instance of both logic and the program's clients, the universities.

Perhaps the most important change is the new policy of awarding fellowships in blocks to the institutions for distribution among programs which have won approval for NDEA fellowship aid. Formerly the awards were made for specific programs. The change gives the institution more latitude and, incidentally, reinforces the authority of the graduate dean, which many critics say has been infringed by departmental chairmen and grant-winning faculty members as a result of federal programs.

For the past year and a half, students awarded the 3-year fellowships have been permitted to use them in any 3 of 5 consecutive years. This enables fellows to take teaching assistantships for 1 or 2 years. Formerly, support was limited to a 4-year period and require-

ments for full-time study prevented many fellows from gaining teaching experience. This, it was argued, actually worked against the purposes of the fellowships.

Vacated fellowships may also be reassigned to other qualified graduate students, although for only 1 or 2 years.

No close analysis has been made of the performance of NDEA fellows as compared with that of other graduate students. Office of Education officials say, however, that the trend of attrition among NDEA fellows is downward, and they ascribe this to the greater experience of the NDEA review groups in picking programs and of the institutions in picking fellows.

Only now is the OE computerizing data on the fellowship programs, and the hope is that soon it will be possible to answer such obvious questions as, How many of the fellows actually win their doctorates and go into teaching?

One thing, however, is clear. The NDEA fellowship program, which was enacted as part of an aid-to-education bill with an emergency label on it, is now viewed as a permanent sustainer of graduate education by the universities, by the agency policy-makers, and, apparently, by Congress.—John Walsh

## **HEW: Running the Great Society**

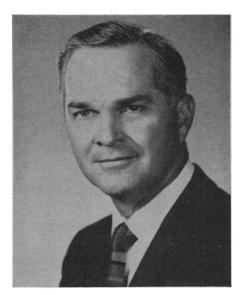
Reportedly determined to prevent the Great Society legislation from lying fallow in the Great Bureaucracy, Lyndon Johnson and his subordinates have been studying how to administer the health, education, urban affairs, and other programs passed by the last Congress, as well as what to do for an encore. In the Department of Health, Education, and Welfare, which will run many of the new programs, almost every agency is in flux, and the pace of change is so rapid that even high Department officials are a bit confused about who is holding what job at any given moment, which committees are scheduled to report when, and

what the ultimate shape of the reorganized Department will be. So far the changes are chiefly on the level of personnel, and the new people have not yet met the test of developing the new programs, but for the most part the atmosphere is one of optimistic enthusiasm.

Engineering and participating in the upheaval is the new HEW Secretary, John Gardner. In a speech delivered last month at the Lasker Awards luncheon in New York, Gardner staked out his position vis-à-vis critics, including former HEW Secretary Abraham Ribicoff, who believe the Department ought to be divided, by stressing his convic-

tion that it has a "distinctive mission . . . to concern itself with people and with the conditions of life that prevent them from realizing their full potential. The whole movement of events in recent years," Gardner continued, "has been not toward the separation but toward the interweaving of the Department's various objectives. With the enactment of Medicare legislation, health and social security are inextricably linked. It is impossible to conceive of a modern welfare program without a strong educational component. Programs concerned with juvenile delinquency, mental retardation, and aging cut across the old categories. An adequate attack on poverty defies bureaucratic lines."

Gardner's efforts to unify a department which employs 90,000 people, consists of eight major agencies, and spends about \$30 billion annually (\$10 billion from general revenues and \$20 billion from Social Security Trust funds) strike official Washington as calling for a McNamara-scale solution, and it is in fact to the Defense Department



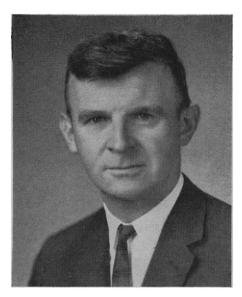
Robert Q. Marston

that HEW has been turning for both the model of reorganization and the people to carry it out. A comptroller's office, established last month with the approval of President Johnson, will be authorized to keep a closer watch on how efficiently the Department's money is being spent, and will be able to order systems analyses and other studies that are expected to force a change in the way HEW officials view and defend their programs. In addition, the President has taken a young Assistant Secretary of Defense for Manpower, William Gorham, and given him the new job of HEW Assistant Secretary for Program Coordination, reportedly with instructions to help organize and computerize the Department's farreaching activities.

The appointment of another new assistant secretary—this one for health and scientific affairs—is also expected to have an impact on departmental activities. The new appointee is Philip R. Lee, a 41-year-old California internist who practiced medicine in the wellknown Palo Alto Clinic (founded by his father, Russell V. Lee) before coming to Washington in 1963 to head the health programs of the Agency for International Development. Lee, who has a reputation as a liberal voice in medical affairs, was a key figure in promoting the policy that led AID to support birth control projects in underdeveloped countries. His new job will give him considerable authority over HEW medical affairs, including the Public Health Service and the Food and Drug Administration. He succeeds Edward Dempsey, who is returning to Washington University, St. Louis, as chairman of the department of anatomy, after having played a major role in developing the heart disease, cancer, and stroke program.

While all these appointments are expected to facilitate departmental administration, the focal point of the reform spirit appears to be the Public Health Service under the new Surgeon-General, William H. Stewart. Stewart's appointment came as a surprise to the many observers who had predicted that Johnson would snare a publicly prominent physician for what is probably the most important of the federal jobs customarily held by someone in the medical profession. Stewart, though he is a commissioned officer who has held several key jobs in the PHS (including, most recently, a brief term as head of the National Heart Institute), was comparatively little known outside it. But even in the short time that has passed since his elevation to Surgeon General, the logic of the appointment has become clear. Stewart is expected to oversee a major reconstruction of the PHS, and—in a matter that will undoubtedly call for stepping on some sensitive toes-will be able to call on a reservoir of affection and trust within the PHS that would probably have been denied an outsider called in to take the job.

Advising Stewart and Gardner in their review of the PHS's functions and activities is an expert committee, headed by John J. Corson, a management consultant and professor of public affairs at Princeton.\* What form the reorganization will take, whether it will be radical or gradual, and when it will be accomplished are by no means clear. Nor is it clear how any experts can solve some fundamental problems—such as low salaries for high-level jobs-which have always plagued the PHS in its attempts to recruit talented professionals to administer its programs. But it seems probable that the committee's advice will center on strengthening the community medical services and environmental health programs which have been among Stewart's chief interests and that its work (which is not expected



Philip R. Lee

to culminate in a written report) will be completed by the time Department officials have to take to Capitol Hill for a new legislative year.

## Heart, Cancer, Stroke

One result of the reorganization fever has been a slow start for the new heart, cancer, and stroke program. "People who've set up new programs before tell me we're not doing badly on this one," one NIH official said, "but I have the feeling that papers are being shuffled to nonexistent jobs downtown and it seems to be a slow process. Nonetheless it's a small price to pay for a revitalized department." Even on that front, however, things are beginning to move. The 100 new staff jobs created by the legislation are still unfilled, but a program director has been appointed: he is Robert O. Marston, dean of the medical school and director of the medical center at the University of Mississippi. Marston is a Virginian who attended Virginia Military Institute, the Medical College of Virginia, and Oxford, the latter as a Rhodes Scholar. In the interim he has taught both clinical and scientific courses at medical schools in Virginia and Minnesota, and has authored several scientific papers in the field of immunology.

Marston will hold the title of Associate Director of the National Institutes of Health for Regional Medical Programs and will also be chief of the Division of Regional Medical Programs, whenever it is formally established, which is expected to be soon. The joint arrangement has been planned to insure that the new program

<sup>\*</sup>Other members of the committee are Robert Aldrich, former director of the National Institute of Child Health and Human Development; W. Palmer Dearing, executive director of Group Health Association and a former Deputy Surgeon General; James P. Dixon, president of Antioch College; Harold Enarson, vice-president of the University of New Mexico; Herman M. Somers, a professor of political science at Princeton and an authority on health insurance; and David T. Stanley, a senior staff member of the Brookings Institution.

maintains the closest possible contact with top NIH personnel. The medical program got its money in a speedy supplemental appropriation from Congress and will have \$25 million to dispense between now and 31 December 1966. Program guidelines and regulations are just beginning to be developed, but officials hope that, by the beginning of January, applications will be ready and the money-for planning grants and feasibility studies—can begin to flow out. In the meantime they are pleased by what they already take to be the constructive impact of the program. "There are few places in the country we haven't heard from," one NIH staff member remarked last week, and officials feel that the new program has already begun to hit its mark in encouraging sometimes competing local health agencies to begin talking and planning with each other.

One HEW agency where the winds of change are blowing with only moderate force is the controversial Food and Drug Administration. With the resignation of long-time Commissioner George Larrick (*Science*, 19 November) and the appointment of a committee to study both the operations of

the agency and the "desirable professional qualifications of a successor," the agency is more or less in limbo. Meanwhile, however, it has managed to stay in the headlines by acknowledging that it has requested a review of recent medical literature pointing to "visual hazards" associated with the popular contraceptive pills. The safety of the pills has been a smoldering issue both inside the FDA and in various segments of the medical profession, at least since the summer of 1963 (Science, 16 August and 6 September). But FDA's announcement that no action can be expected until March 1966 will reinforce the legion of critics who believe that, in matters potentially affecting large segments of the public, the FDA should shoot first, or at least

Another part of the Department still awaiting the impact of the new guard in the top echelons is the new Water Pollution Control Administration (Science, 8 October). At the moment the PHS officers who currently fill important jobs with the predecessor branch are making their decisions on whether to transfer to the new agency (and lose their officer status) or remain as

officers and transfer to other PHS programs. The administrator of the agency has yet to be appointed, as has the new assistant secretary for environmental health. Another post, that of assistant secretary for individual and family services, is also unfilled. In the Office of Education, the Commissioner of Education, Francis Keppel, has assumed the role of assistant secretary for education as well.

HEW is not the only "Great Society" department being studied and reevaluated. The new Department of Housing and Urban Development is being approached with great caution, with the appointment of a Secretary evidently awaiting the completion of a special task force report dealing with the reorganization of federal programs in housing, transportation, and poverty. And, to cap it all, there is also a special task force studying what may be the central problem of administering the varied new legislation—how to coordinate federal, state, and local efforts. These reports, along with the ones affecting HEW, are slated for completion in late December. The hope is clearly that you can teach old bureaucrats new tricks.—Elinor Langer

## **Interstate Compact: Educators** and Governors To Join Forces

So many people have criticized the states for neglecting their responsibilities in education and other fields that new statements on the subject seldom generate much excitement. Last April Terry Sanford, who had just stepped down as governor of North Carolina, aroused only mild anticipation at a Washington press conference when he announced that, with grants from the Ford Foundation and the Carnegie Corporation, he would conduct a study at Duke University of ways to strengthen the role of the states.

Sanford said that the role of the states is enormous, but "little critical attention has been given them and what they are doing. The tendency has been to dismiss them as undependable or too weak. Because of their timidity and lack of initiative, it has become the pattern to turn to the federal government for the solution of our problems."

Now, 8 months later, Sanford's project appears to be on the verge of yielding results. In his news conference, Sanford had given only the barest intimation of what he had in mind: "The states ought to lace themselves together by compact, association, or by whatever name, and begin to work for a truly nationwide effort to improve education." The interstate compact of which he spoke may become a reality by early 1966. Arkansas already has ratified it, and a number of other states are ex-

pected to do so, in most cases by executive decree pending action by the legislature.

The Carnegie Corporation of New York and the Danforth Foundation of St. Louis last week announced grants of \$150,000 each to meet the "Compact for Education's" initial operating expenses. Ultimately the Compact will be supported by the states, whose fees are to vary according to the size of the state's population and per capita income.

The initial membership fee will range from \$3000 for the smallest states (such as Vermont) to \$7000 for the largest (New York and California). Annual fees are to vary from \$7500 to \$22,000; these, with all states participating, would support a budget of \$626,000 a year. The financial pattern will not be established before 1967, the year most state assemblies hold their next general legislative session. Studies suggest that eventually the staff may total nearly 60 persons.

The Compact's interim steering committee will meet in New York next Tuesday and Wednesday, 7-8 Decem-

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