visory Committee on Science and Technology would soon be able to promote harmony in the government's programs.

What really motivates the Senators, however, is not a sense of disorder but a sense of exclusion. They feel that too often they are asked to act on faith in appropriating funds for scientific programs and that, as the committee stated in 1959, "unless legislative action is taken by the Congress to establish some medium through which reliable information and supporting technical data is made available to Congress by officials who are responsive to its needs, the committees of Congress will continue to be denied access to facts and reliable information necessary to the legislative process in establishing policies in the fields of science and technology."

The creation of the Office of Science and Technology has not lessened the Senators' anxieties on this score, and their concern has generated concern of a different sort within OST. Although Senator McClellan, in introducing the legislation again last week, took pains to cite recent testimony of Jerome Wiesner, Director of the Office of Science and Technology, that "the OST is neither a substitute for nor in competition with a Federal Department of Science," executive reaction to the Senate's proposal is somewhat ambivalent. While agreeing that Congress is inadequately organized to deal with the government's scientific programs and that an effective congressional operation would be desirable, presidential advisors nonetheless fear the possibly damaging recommendations that might issue from a hastily convoked, inadequately staffed, or insufficiently talented investigating commission. Reports from such commissions have plagued the executive too often in the past for them to welcome another unequivocally.

The real brake on action in Congress, however, will be the House Committee on Science and Astronautics, which shares none of the Senate's modesty about its own abilities. This committee, under its chairman, Representative George P. Miller (Dem., Calif.), has been embarked since 1961 on an ambitious campaign both to strengthen its hold over the scientific agencies specifically within its jurisdiction (National Aeronautics and Space Administration, National Bureau of Standards, and National Science Foundation) and to implement the "across the board jurisdiction over basic science research and science scholarships" to which it is formally entitled. Already impeded in this latter effort by other committees with conflicting specific jurisdictions [such as Representative John Fogarty's (Dem.-R.I.) Appropriations Committee Subcommittee for Medical Research] the House Committee on Science and Astronautics has been in no mood to undercut its authority any further by sanctioning an outside investigation into the government's scientific affairs.—ELINOR LANGER

Fellowships: White House Prods Federal Agencies to Increase, and Harmonize Graduate Support

When a student looks into federally financed fellowships for graduate science study, he finds a fairly bewildering array. For example, an unmarried student taking a first-year predoctoral chemistry course could receive $1800 annually under one National Science Foundation program, or $2400 under another. A fellow student of the same marital status might receive up to $3500 a year under the new fellowship program of the National Aeronautics and Space Administration, but he would receive $2000 under the National Defense Education Act, whose stipends are the only ones specifically set by Congress. The others are set at the discretion of the agencies, although NSF and the National Institutes of Health have an informal agreement to maintain similar stipend levels.

Until recently, it was generally felt that these variations did violence to nothing but an urge for consistency, but now that the administration is acutely interested in expanding and accelerating graduate training, it is beginning to suspect that the stipend market may be having a significant effect on the flow of students into specific fields and the pace of their studies.

NASA fellowships, which are about the most lucrative, are for studies in the "space-oriented" sciences, and since all the agencies are fishing in the same manpower pool, it is not unlikely that NASA's buying power is going to attract students who might otherwise have looked to other fields. In addition, stipend disparities on the same campus tend to create ill will, and for those receiving the smaller stipends, the difference may create the need for a part-time job that results in stretched-out training time. Accordingly, the White House's Office of Science and Technology is now prodding federal agencies to (i) raise their stipends to encourage more students to undertake graduate study, and (ii) arrive at some generally agreed-upon figures which would eliminate wide disparities. Though no figure has been decided upon yet, it appears that NASA's program, which provides a $2400 stipend, with another $1000 available at the discretion of the institution, is in the range that the administration thinks desirable.

On the face of it, the problem would seem to be a fairly easy one, but OST officials have noted that the agencies that have long-standing relationships with universities are reluctant to rush into setting new stipend levels. Some universities are not eager to see any substantial increase in the size of stipends: the smaller the stipends, the larger the pool of teaching assistants, or "slave laborers," as they have come to be known.

At present, following OST's urgings, NSF and NIH are reviewing stipends, and it is expected that they will announce increases, although there is no certainty that they will come up to NASA's level. OST is in a position to cajole and suggest, but the major fellowship-awarding agencies, particularly NIH, are so well established with the congressional committees that vote their funds that OST is in no position to dictate to them on matters that they consider critical to their operations. —D.S.G.

Announcements

The Smithsonian Institution, in Washington, D.C., last month opened a new hall, **Life in the Sea.** It includes exhibits showing the physical characteristics of marine life, and their adaptations for survival, protection, and reproduction. The hall features a 92-foot, 4-ton fiberglass reproduction of a blue whale, suspended 30 feet above the floor.

The U.S. Department of the Interior has established a new field office at Flagstaff, Arizona. The station will be the headquarters for training astronauts in field **geology** and for testing instruments for use in lunar exploration. The station will also be used by the U.S. Geological Survey in its lunar investigation and geological mapping program.

Northwestern University has established a **biomedical engineering** research center, under a series of U.S. Public Health Service grants. The program was organized to provide a "deeper understanding of bodily processes" and to design "sophisticated new medical instruments." The project is a combined effort of the university's medical and technical schools, and is coordinated by a nine-member, interdepartmental committee headed by Richard W. Jones, electrical engineering professor. The executive director is John E. Jacobs, also a professor of electrical engineering. The center, the first of its kind in the nation to be established by P.H.S. funds, will provide for a total of 40-to-50 graduate fellowships, additional faculty members, and increased teaching and research facilities.

Courses

An intensive course in **neuromuscular diseases of children**, emphasizing cerebral palsy, will be conducted 3–14 June at the Cook County (Ill.) Graduate School of Medicine. The course is designed for pediatricians, orthopedists, neurologists, psychiatrists, and physiatrists. It will feature the practical clinical aspects of treatment and rehabilitation procedures, and will include trips to demonstration clinics and treatment centers. Fee for the course is $285. (Registrar, Cook County Graduate School of Medicine, 707 South Wood St., Chicago 12)

NATO will sponsor a course in **molecular biology** 2–15 September in Ravello, Italy. Topics covered will include physicochemical methods of studying biological macromolecules; structure, function and biosynthesis of nucleic acids and proteins; mechanism of enzymatic reactions; and quantum theory of biochemical structures and reactions. Lecturers will include scientists from the U.S., Italy, France, and England.

Following the course will be a symposium on "Electronic Aspects of Biochemistry," 16–18 September. (B. Pullman, Institute of Physicochemical Biology, 13 rue Pierre Curie, Paris 5)

A **comparative physiology** training course will be offered this summer at the Marine Biological Laboratory, Woods Hole, Mass. The course will stress comparative cardiovascular and muscular physiology, comparative endocrinology, and physiological adaptation. Postdoctoral and advanced predoctoral students are eligible. Deadline for applications: *15 March.* (MBL, Woods Hole, Mass.)

Scientists in the News

The Department of the Interior has named **John C. Calhoun, Jr.**, as science adviser, effective 1 May. He will be on a 1-year leave of absence from his post as vice chancellor for research, Texas A&M College. Calhoun succeeds **Roger Revelle**, who will return to the University of California, La Jolla, after an 18-month leave of absence as director of the Scripps Institute of Oceanography. He will also become dean of research for the University.

William F. Meggers, past chief of the spectroscopy section, National Bureau of Standards, has been named to receive the 1963 award of the Spectroscopy Society of Pittsburgh.

Gerhardt E. Rast, director of the New Lincoln Schools, New York, has been appointed education professor and director of curriculum and research, University of Bridgeport, Conn. He is scheduled to assume his post in the college of education in September.

George Dousmanis, research physicist on leave from RCA Laboratories, has received the Golden Cross of the Company of King George I, from King Paul of Greece. Dousmanis has been conducting research and lecturing on atomic physics at Democritus, a new nuclear research center in Athens.

Irving Gordon, professor of medical microbiology at the University of Southern California School of Medicine, has become associate dean for medical education at the university. He retains his post as head of the medical microbiology department.

Martin Young, associate director at the National Institute of Allergy and Infectious Diseases, has been named to receive the eighth Darling Foundation award for anti-malaria work. The prize consists of a bronze medal and an honorarium of 1000 Swiss francs ($230). Young was cited for his work in the parisitology, immunology, epidemiology, and treatment of malaria.

James B. Evans, bacteriology professor at North Carolina State College, has become head of the school's department of bacteriology.

Bruno H. Zimm, University of California chemistry professor, has been named to receive the American Physical Society High-Polymer Physics prize, sponsored by the Ford Motor Co. The $1000 award honors Zimm for "his contributions toward a rigorous understanding of the light scattering, thermodynamic, and viscoelastic properties of polymer solutions, and of the transition properties of biological macromolecules."

Recent Deaths

Edwin F. Carpenter, 64; head of the astronomy department, University of Arizona and chairman-elect of the astronomy section, AAAS; 11 Feb.

Friedrich Dessauer, 81; retired professor of biophysics at Frankfurt University, Germany; 16 Feb.

William H. Engels, 78; retired director of research and development, Merck & Co., Rahway, N.J.; 14 Feb.

William D. George, 56; Central Radio Propagation Laboratory, Boulder, Colo.; 12 Feb.

John G. Hardenbergh, 70; former secretary of the American Veterinary Medical Association; 11 Feb.

Benjamin R. Jacobs, 83; retired director of the National Cereal Products Laboratory, New York; 3 Feb.

Harry H. Moore, 74; retired engineer, Naval Ordnance Laboratory, White Oak, Md.; 11 Feb.

George H. Nibbe, 42; president of Canoga Electronics Corp., Van Nuys, Calif.; 12 Feb.

Alexander A. Nikolsky, 60; professor of aeronautical engineering, Princeton University; 15 Feb.

Glenn F. Rouse, 67; senior physicist in the electron devices section, National Bureau of Standards; 21 Jan.

William F. Simpson, 71; retired professor of bacteriology, Catholic University of America, 7 Feb.

Alan Woods, 73; professor emeritus of ophthalmology, Johns Hopkins Medical School; 15 Feb.

Erratum: In the report "Tuberculin hypersensitivity: studies with radioactive antigen and mononuclear cells" by K. Kay and W. O. Rieke [*Science* **139**, 487 (8 Feb. 1963)] the last sentence in the next-to-last paragraph (column 3, page 489) should have read: "*Thus* we have two observations which indicate that there is *no* obligate specific attraction of sensitive cells to cutaneous test sites." In the published version, *Thus* read *There* and *no* read *now*.