

not discuss his plans in great detail until after he takes over on 1 April, Sadusk has already disclosed that from now on physicians in the Bureau of Medicine will be encouraged to spend 1 day out of the regular work week in teaching or research at local medical schools. (Sadusk himself plans to retain his affiliation with George Washington University Hospital.) The new policy, Sadusk hopes, will get FDA physicians back into the mainstream of scientific inquiry, hitherto forbidden by a clock-punching office routine and discouraged in a variety of more subtle ways as well. "We've got to get the men out into an intellectually stimulating atmosphere", Sadusk said last week. "All government agencies that value their scientific reputations have always promoted outside activities, and the FDA has got to do it too." This is good news, not only for the present staff of the Bureau of Medicine, but for possible future recruits. For the first time in 2 years, there is some reason to hope that more good news will follow.

—ELINOR LANGER

## Announcements

The metabolism study section of NIH's division of research grants is considering publishing **bile acid and phospholipid standards for chromatography**. To estimate the demand, NIH requests interested scientists to submit lists of the standards they believe would be valuable in their research. Correspondence should be sent to John C. Dalton, Metabolism Study Section, NIH, Bethesda, Md., by 1 June.

The University of Miami has a graduate program leading to a master of science degree in **electrical or mechanical engineering**, with a specialization in **marine technology**. Courses will be offered in cooperation with the university's Institute of Marine Science, and will emphasize the engineering aspects of applied research in oceanography; work to be carried out on research vessels at sea will be included.

## Meeting Notes

The **Canadian Federation of Biological Societies** will meet 9–12 June at Dalhousie University, Halifax, Nova Scotia. Only members and persons spon-

sored by members may participate. Papers on the various areas of biology are invited for presentation, and, if possible, at least two alternate topics for sessions should be submitted. Deadline for receipt of titles and abstracts: *23 March*. (A. H. Neufeld, The Federation, University of Western Ontario, London, Ont., Canada)

Papers are being solicited for the 1964 **cryogenic engineering** conference, scheduled 17–21 August at the University of Pennsylvania, Philadelphia. The meeting will stress design, reliability, field service, and equipment selection in cryogenic installations. Abstracts should not exceed 200 words; preliminary manuscripts are required and should include, if possible, final data. Deadline: *1 May*. (K. D. Timmerhaus, Engineering Research Center, Ketchum 129, University of Colorado, Boulder)

The Instrument Society of America plans its fifth symposium on **chemical and petroleum instrumentation**, 4–5 May in Wilmington, Delaware. Papers are invited on the theme of progress and trends in petroleum instrumentation. (G. H. Robinson, E. I. duPont de Nemours and Co., Engineering Department, Louviers Bldg., Wilmington 98)

The role of **simulation in space technology** will be the topic of a conference 17–21 August at Virginia Polytechnic Institute, Blacksburg, sponsored by the National Science Foundation and the National Aeronautics and Space Administration, through the Virginia Associated Research Center. Sessions will be held on space environment, structural dynamics, real-time dynamic simulation, hypersonic flight simulation, and simulator studies of physiological processes. NSF will provide travel and per diem allowances for up to 125 participants from educational institutions; deadline for applications: *15 April*. Representatives from industry, research, and government organizations are also invited. (F. J. Maher, V.P.I., Blacksburg, Va.)

The Petroleum Research Foundation and the National Science Foundation will sponsor two conferences on **electronic transitions in molecules**, for industrial chemistry and college chemistry teachers. The meeting at the University of Vermont is scheduled for 15–26 June; the one at the University of Utah, 22 June to 3 July. Application dead-

line: *1 April*. (C. M. Criss, Department of Chemistry, University of Vermont, Burlington; or A. L. Wahrhaftig, Department of Chemistry, University of Utah, Salt Lake City 12)

The 11th international congress of **cell biology** will be held 30 August to 5 September at Brown University, Providence, R.I. The topics to be covered will include reviews of research in coding, cell variance, nuclear functions, fibrogenesis, intracellular transport, structural requirements for biosynthesis, neurosecretion, protozoa, chromosomes, and cytotechniques.

Priority for attending the congress will be given members of the International Society for Cell Biology and one introduced guest per member. A limited number of nonmembers also may be admitted; those who wish to attend must apply by *31 March*. A \$15 registration fee is required for participating members; \$7.50 for wives not attending scientific sessions. (J. W. Wilson, Department of Biology, Brown University, Providence 12, R.I.)

Papers are invited for a conference on the **mechanisms of dental caries**, scheduled 1–2 December in New York. The meeting, sponsored by the New York Academy of Sciences, will include sessions on molecular structure of enamel, acid and chelation mechanisms of caries, and chemistry of tooth environment. Deadline: *1 May*. (J. F. Fredrick, New York Research Laboratories, 3425 Boston Post Road, New York, N.Y. 10469)

The 1964 **AAAS Laurentian Hormone Conference** will take place 7–12 September at Bolton Landing, Lake George, N.Y. The topics to be covered include thyroid chemistry and physiology, hormones in normal and pathological physiology, pituitary hormones, steroid sex hormones, comparative endocrinology, and neurohumors. A fee of \$17 per day is required for participants; the number of reservations is limited. Deadline for applications to attend: *10 May*. (G. Pincus, 222 Maple Ave., Shrewsbury, Mass.)

## Grants, Fellowships, and Awards

Columbia University will present a NASA-sponsored institute in **space physics**, 6 July to 14 August, in New York. Separate programs will be offered in

physics and engineering. Financial aid for participants will include tuition, \$60 a week subsistence allowance, round-trip transportation to New York, and a week-long field trip to national space research centers. Applicants for the program must be college undergraduates with 3 years' training in mathematics or physical sciences; participation will be limited to 30 persons in physics and 15 in engineering. Application letters should include a list of college courses and grades and a statement of the applicant's professional interests and goals. References from three professors should be sent directly to the institute's director. Deadline: *18 March*. (R. Jastrow, Summer Institute in Space Physics, Columbia University, New York, N.Y. 10027)

Yale University's psychiatry department is offering fellowships for research in **mental health**. Most recipients must have the M.D. or Ph.D. degree, although some predoctoral candidates will be accepted. They will receive laboratory and clinical training and work in specialized research fields. Stipends are \$6000 the first year and \$7000 the second; the program is supported by a U.S. Public Health Service grant. (K. A. Chandler, Department of Psychiatry, Yale University Medical School, 333 Cedar St., New Haven, Conn.)

Grants of up to \$2500 are available for research on the **marine and land environments** of the Bahamas. The program is part of a survey project conducted by the American Museum of Natural History's Lerner Marine Laboratory and the Bahamian government; it is supported by the biology branch of the U.S. Office of Naval Research. The survey is designed to increase the knowledge of the environmental complexes and the related organisms of the Bahamas, and to establish synoptic collections as bases for studies on conservation practices, ecological differences, and biogeography of the Bahamas. Applicants for the grants must submit four copies of their proposals. (R. F. Mathewson, Lerner Marine Laboratory, 1211 Dupont Bldg., Miami 32, Fla.)

Nominations are invited for the Harvey W. Wiley award of the Association of Official **Agricultural Chemists**. The award carries a \$500 honorarium, in recognition of "achievements in analytical methodology of interest to agricultural and public health scientists." Deadline for receipt of nomi-

nations: *1 April*. (L. G. Ensminger, AOAC, Box 540, Benjamin Franklin Station, Washington, D.C. 20044)

Research fellowships in **audiology-speech pathology** and the behavioral science approaches to **communications research** are available at the University of Pittsburgh. Stipends for predoctoral recipients are \$2400 to \$3400; for postdoctoral fellows stipends start at \$5000; a \$400 annual allowance for each dependent is also provided. (J. Matthews, Graduate Program in Audiology-Speech Pathology, University of Pittsburgh, Pittsburgh, Pa.)

The University of Virginia announces graduate courses in **field biology** at the Mountain Lake Biological Station, Pembroke, Va., 11 June to 15 July and 16 July to 20 August. Three types of National Science Foundation awards are available for work at the station: postdoctoral, for research, stipend \$900; predoctoral, for supervised research, stipend \$400; and postgraduate, for training in field biology, stipend \$300. Preference will be given for studies on the biota of the region. Deadline for applications: *12 April*. (J. J. Murray, Jr., Department of Biology, University of Virginia, Charlottesville)

The University of Colorado medical school is offering postdoctoral fellowships for research training in **cancer and virology**. Research opportunities are available in viral oncology, biochemical and biophysical virology, lipid and membrane biochemistry, electron microscopy, cellular biology and biochemistry, immunochemistry and immunopathology, biochemistry of the liver, and biochemistry of extracellular spaces. The fellowships are sponsored by the Public Health Service. (D. W. King, Department of Pathology, University of Colorado School of Medicine, Denver)

### Courses

A **medical genetics** course, intended primarily for medical school faculties, will be held 3-14 August, in Bar Harbor, Maine. It is sponsored by the National Foundation as part of its program on birth defects, and will be conducted jointly by staff members of Johns Hopkins University and the Roscoe B. Jackson Memorial Laboratory. (V. A. McKusick, Johns Hopkins Hospital, Baltimore, Md. 21205)

A course in **comparative pathobiology** is scheduled 6-18 July, in Aspen, Colorado. Persons in college medical and biological science departments, including graduate students and senior investigators, may apply; participation is limited to 75. Deadline for receipt of applications: *1 May*. (D. W. King, Department of Pathology, University of Colorado Medical Center, 4200 E. Ninth Ave., Denver 80220)

The U.S. Public Health Service's Division of Radiological Health is sponsoring a training program for **radiological health specialists**, at Oregon State University. Fellowships are available for graduates in biology, chemistry, physics, engineering, and related fields, for work leading to a master's degree in radiological health or radiation physics. Stipends are \$250 per month, plus \$30 monthly dependency allowance; tuition and fees are also provided. Deadline for receipt of applications: *15 April*. (E. D. Trout, Radiation Center, Oregon State University, Corvallis)

### Films

**Perch Anatomy** (16 minutes, sound, color or black and white). Functions of external perch anatomy in relation to the environment; and dissection of the fish, illustrating digestive, excretory, circulatory, reproductive, and central nervous systems. (Audio Visual Center, Indiana University, Bloomington, Ind.)

**Galvani and Volta: An Early Debate in Science** (15 minutes, sound, black and white; purchase, \$75). The 25-year controversy between the two scientists over the nature of electricity. (E. Alt-schul, Journal Films, Inc., 909 W. Diversey Parkway, Chicago, Ill., 60614)

**Gametogenesis and Fertilization in Trichonympha** (33 minutes; \$32). Fertilization from conversion of asexual cells into gametocytes, to fusion of pronuclei.

**Sexuality and Other Features of the Flagellates of Cryptocercus** (43 minutes; \$72). Meiosis, centrioles, centrosomes, centromeres, development of achromatic figure, birefringence of central spindle, chromosomal movement, fertilization, several genera of asexual organisms, and host.

**Flagellates of Termites** (Part 1, American, 48 minutes, \$62; Part 2, Australian, 50 minutes, \$45; Part 3, 55 minutes, \$49); Shows approximate-

ly 100 species, their locomotion and other unusual features which cause biological problems. (Available through arrangement with NIH. L. R. Cleveland, Department of Zoology, University of Georgia, Athens)

**Kinetics and Orthotics for Function** (25 minutes; loan; purchase, \$50). The rehabilitation program: analysis of activities for necessary motions; evaluation of patients for remaining function; selection of proper orthosis, and training in the use of orthosis. (For loan: New York University Film Library, Medical Center, New York 16. For purchase: Aegis Productions, 319 East 44th St., New York 17)

### Publications

**"A guide to Public Health Service Grants and Awards"** is available through the Government Printing Office. It presents general information about the various forms of financial aid available through the PHS for research, training, construction, and special programs; it also discusses formula and project grants and international support. An appendix lists sources of more detailed information. (Superintendent of Documents, GPO, Washington, D.C. 20402. 20 pages. 15¢)

Business Publishers, Inc., announces a newsletter, **Air/Water Pollution Report**. It discusses research developments, technical papers, conferences, new products, pollution incidents, and activities of federal, state, and local legislative and judicial bodies. Subscriptions are \$48 per year. Subscription information and sample copies are available from the editor, 906 Spring Street, Silver Spring, Md.

The Public Health Service announces a new publication, **Bibliography of World Literature on Mental Retardation**. The 564-page book lists approximately 16,000 scientific and technical articles, covering the years 1940 through March 1963. It is in two sections, an index of authors and publications, and a joint author-subject list. (Superintendent of Documents, GPO, Washington, D.C. 20402. \$4)

The result of a 2-year project to report the nation's **water resources** has been published by the U.S. Geological Survey. In a state-by-state summary, it shows how, although the U.S. as a

whole has an adequate water supply—including large untapped reserves of underground water—the intensity of water development throughout the nation has led to severe local shortages. (The Role of Ground Water in the National Water Situation. Water Supply Paper 1800. Superintendent of Documents, GPO, Washington 20402. 1121 pages. \$4.50)

### Scientists in the News

**Seymour Fisher**, formerly chief of the special studies unit in the Psychopharmacology Service Center, NIMH, has become research professor of psychology at Boston University. He will also be director of the recently established Psychopharmacology Laboratory in the school's division of psychiatry.

**Lawrence R. Hafstead**, vice president of the General Motors Corporation research laboratories, has been elected chairman of the General Advisory Committee to the U.S. Atomic Energy Commission.

The American Meteorological Society recently presented its Carl-Gustaf Rossby research medal to **Julie G. Charney**, professor of meteorology at MIT. The medal is the society's highest honor.

**Brian J. McCarthy**, of the department of terrestrial magnetism, Carnegie Institution of Washington, D.C., has been appointed associate professor of microbiology at the University of Washington, Seattle, effective 1 April.

**M. King Hubbert**, recently retired chief consultant in geology at Shell Development Company, has been appointed research geophysicist for the U.S. Geological Survey, Washington, D.C.

**W. Lewis Hyde**, professor of optics at the University of Rochester, will become associate dean of the school's college of engineering, effective in September.

**Morton J. Rubin**, chief of the Office of Special Programs in the U.S. Weather Bureau's meteorological research division, has been elected president of the International Commission on Polar Meteorology, of the International Association of Meteorology and Atmospheric Physics. The commission was established last August.

**Naim H. Kent**, associate professor of pathobiology at Johns Hopkins University, has taken a 2-year leave of absence to serve with the World Health Organization's division of communicable diseases, in Geneva, Switzerland.

**Martin Barr**, chairman of the department of pharmaceuticals at Wayne State University, has been named dean of the University's college of pharmacy.

The new president of the Western Society of Naturalists is **Frank A. Pitelka**, chairman of the zoology department at the University of California, Berkeley.

**Esmond R. Long**, professor emeritus of pathology at the Henry Phipps Institute of the University of Pennsylvania, has become editor of the International Journal of Leprosy.

**Lloyd M. Kozloff**, professor of biochemistry at the University of Chicago, on leave at the University of California, La Jolla, has been appointed professor of microbiology at the University of Colorado medical school, Denver, effective 1 July.

The new chief of the Laboratory of Virology and Rickettsiology at NIH's division of biological standards, is **Alexis Shelokov**, formerly chief of the Laboratory of Tropical Virology and Infectious Diseases.

### Recent Deaths

**Warren K. Green**, 73; professor emeritus of astronomy and former director of the Observatory, Amherst College; 4 February.

**Kenneth G. McKenzie**, 71; Canada's first neurosurgeon and retired head of the neurosurgery department at Toronto General Hospital; 11 February.

**Frederick Mills**, 71; professor emeritus of economics, Columbia University; 9 February.

**O. Sidney Orth**, 57; chairman of the anesthesiology department, University of Wisconsin; 2 February.

**Eugen Sänger**, 58; professor of space flight technology at the West Berlin Technological University; 9 February.

**John D. VanNuys**, 56; dean of the Indiana University school of medicine; 15 February.

**Edward Young**, 76; professor emeritus of geodesy and surveying at the University of Michigan; 6 February.