JR., chairman of the Stevens board of trustees.

National University of Ireland: GER-HARD HERZBERG, director of the division of pure physics, National Research Council of Canada.

PAUL B. SEARS, president of the American Association for the Advancement of Science and chairman of Yale University's conservation program, will be principal speaker at the annual field day of the Connecticut Agricultural Experiment Station, 15 Aug. His talk will be on the "Natural history of floods."

DAVID RITTENBERG has been named executive officer of the department of biochemistry at the College of Physicians and Surgeons, Columbia University. Rittenberg succeeds HANS T. CLARKE, who recently retired.

The following administrative and faculty changes have been made at the Medical College of Virginia: WIL-LIAM T. SANGER, formerly president of the institution, is chancellor; R. BLACKWELL SMITH, JR., of the department of pharmacology is president; and WARREN E. WEAVER, formerly chairman of the department of chemistry and pharmaceutical chemistry, is dean of the school of pharmacy. DAVID M. HUME, formerly assistant professor of surgery and director of surgical research at the Harvard Medical School, has been appointed professor and head of the department of surgery.

MARION S. OFFUTT has been appointed associate professor of agronomy in the college of agriculture and home economics of the University of Arkansas.

ROBERT M. BURNS, scientific adviser to Stanford Research Institute and to Sprague Electric Company, has been selected to receive the biennial Edward Goodrich Acheson gold medal and prize of the Electrochemical Society.

OTTO OLDENBERG, professor of physics at Harvard since 1930 and emeritus professor since 1955, has joined the staff of the Air Force Cambridge Research Center. At AFCRC he is working in the geophysics research directorate's atmospheric physics laboratory, where Air Force scientists are studying photochemical reactions in the high atmosphere.

C. ROGERS McCULLOUGH, assistant director of Monsanto Chemical Company's development department in the research and engineering division, has been appointed deputy director for hazards evaluation in the U.S. Atomic Energy Commission's division of civilian application.

3 AUGUST 1956

MERRITT A. WILLIAMSON, manager of the research division of the Burroughs Corporation in Paoli, Pa., and lecturer on research administration at the University of Pennsylvania, has become dean of the College of Engineering and Architecture, Pennsylvania State University. On 1 Aug. he succeeded ERIC A. WALKER, who became president of the university.

JAMES H. WILLIAMS has been named assistant to the director of the Pearl River Laboratories of the research division of American Cyanamid Company. Williams was formerly director of the company's medicinal chemical research department.

JOHN E. MARTIN, associate professor of physiology and pharmacology in the School of Veterinary medicine of the University of Pennsylvania, has been appointed supervisor of research in experimental therapeutics in veterinary medicine at the university.

ROBERT O. FEHR has been appointed manager of the General Electric Company's Mechanical Engineering Laboratory, one of the four major units of the company's General Engineering Laboratory.

BRIAN L. HUTCHINGS has been named director of biochemical research in the research division of American Cyanamid Company. He was formerly assistant director of medicinal chemical research.

JOHN F. KRAMER, formerly on the faculty of the Yale University School of Medicine, has been named associate professor of psychiatry at the University of Chicago.

JULES FREUND, chief of the division of applied immunology at the Public Health Research Institute, New York, has been appointed a consultant to the National Institute of Allergy and Infectious Diseases, Bethesda, Md., to assist in establishing its new allergy-immunology program.

Recent Deaths

ELMER GRANT CAMPBELL, Orlando, Fla.; 80; professor emeritus of biology at the University of Georgia, University Extension, Atlanta; 7 June.

LEWIS R. CARY, Princeton, N.J.; 75; assistant professor emeritus in the department of biology at Princeton University; former member of the research staff of the Carnegie Institution of Washington; 11 July.

WALTER S. FORD, Yeadon, Pa.; 82; retired professor of electrical engineering at Drexel Institute of Technology; 11 July.

OSCAR E. HARDER, Columbus, Ohio; 73; authority on metallurgy; a founder and assistant director of Battelle Memorial Institute; 10 July.

DAVID MITCHELL, New Milford, Conn.; 71; retired professor of psychology for the Child Education Foundation; former staff member at Rutgers University, Teachers College of Columbia University, and the University of Pennsylvania; 7 July.

WILLIAM B. PEIRCE, Pittsburgh, Pa.; 78; retired vice president of research and development for the Flannery Bolt Co.; 4 July.

OTTO REINMUTH, Chicago, Ill.; 56; organic chemist; chemical research associate at the University of Chicago 1935–54; supervisor of the chemical literature section at the Armour Research Foundation of Illinois Institute of technology 1954–55; former managing editor of the Journal of Organic Chemistry and former editor of the Journal of Chemical Education; 23 June.

KARL SINGER, Chicago, Ill.; 54; director since 1947 of the department of hematologic research at Michael Reese Hospital; former research fellow at Beth Israel Hospital and Pratt Diagnostic Hospital and a former member of the Tufts University medical faculty; 12 July.

Education

The University of Texas this summer gave 28 high-school students a 5-week science program designed to accelerate their progress in college. The project, which was under the direction of Robert E. Eakin of the University of Texas, is being studied by an advisory committee from other Texas colleges to determine whether it should be widely adopted.

■ American Education Week will be observed this year 11–17 Nov. under the sponsorship of the National Education Association, the American Legion, the National Congress of Parents and Teachers, and the U.S. Office of Education. For more than 30 years the activities associated with this annual observance have encouraged a wider public understanding of, and support for, education at elementary and secondary levels. For the past 2 years a cordial invitation to participate has been extended to institutions of higher learning.

Physics students at Los Angeles High School will attend weekly lecture demonstrations given by scientists from the laboratories of the Hughes Aircraft Company. Under the same program, ten teachers, selected by members of the Los Angeles City School System, will work on projects in the Hughes laboratories and attend special lectures on the uses of science in industry. The teachers' salaries, which will be comparable to those earned on teaching assignments, will be paid by the company. Employment is for the summer only.

• Employment of retired scientists and engineers to meet the shortage in New York City of science and mathematics teachers may be recommended by the Advisory Committee on Science Manpower, appointed by the New York City board of education. A recent survey showed a current lack of 47 full-time science teachers. They are needed to staff 235 science classes in the high schools this September.

William Jansen, superintendent of schools, pointed out that the New York State education law requires teachers to have had a minimum of eight semester hours of education courses. But, he added, if a considerable number of retired scientists and enginers under the age of 70 are interested in teaching in secondary schools, he will urge modification of the present regulations.

Interested scientists should write to Samuel Schenberg, Board of Education, 110 Livingston St., Brooklyn 1, N.Y., enclosing a brief biographical sketch of their educational qualifications and scientific and industrial experience.

The special training division of the Oak Ridge Institute of Nuclear Studies has announced a partial list of courses to be offered through March 1957. A basic 4-week course in the techniques of using radioisotopes will open on 6 Aug., 3 Sept., and 22 Oct. 1956, 7 Jan. and 4 Feb. 1957. Two-week courses in veterinary radiological health for members of the armed forces veterinary corps will open on 17 Sept., 1 Oct., and 3 Dec. 1956; 4 Mar. and 18 Mar. 1957. For information and application blanks write to the Special Training Division, Oak Ridge Institute of Nuclear Studies, P. O. Box 117, Oak Ridge, Tenn.

• Massachusetts Institute of Technology and City College, New York, will each be loaned 5500 pounds of natural uranium by the U.S. Atomic Energy Commission (2500 kilograms). The metal, in the form of 8-inch rods enclosed in aluminum, will be used in subcritical assemblies in which nuclear fission can be produced but which will not sustain a chain reaction.

The facilities require no unusual safety controls, expensive shielding, or heatremoval equipment and may be used for many laboratory exercises in nuclear engineering training.

The subcritical assembly consists of an arrangement of the uranium rods in a moderator such as graphite or ordinary water. When a neutron source is introduced, a neutron flux can be obtained from nuclear fissions in the arrangement, but the reaction cannot be sustained without the presence of the neutron source.

This brings to five the number of loans of this type to educational institutions. Previous recipients were New York University, the University of Florida, and Virginia Polytechnic Institute.

• The American Dental Association has announced that all five dental schools of Canada have been given full recognition by the association's accrediting agency. For the first time, dental schools of another country will be placed on the list of accredited schools issued by the association's council on dental education. The newly accredited dental schools are at McGill University, Dalhousie University, the University of Toronto, the University of Alberta, and the University of Montreal.

Grants, Fellowships, and Awards

• Drugs to prevent or dissolve kidney stones will be studied at Georgetown University under a grant of \$22,949 from the National Foundation for Infantile Paralysis. The group, under the direction of Martin Rubin, executive head of the chemistry department, is undertaking a systematic study of chemical agents capable of dissolving calcium salts from the urinary tract. The study will include both known agents and others of the same class to be newly synthesized. The object is to select agents that seem to offer the greatest promise for direct tests in human patients.

The Vanderbilt University School of Medicine has received a \$200,000 grant from the China Medical Board, a foundation established originally to support medical education and research in China.

The poliomyelitis respiratory center at Vanderbilt University Hospital will continue its work during the coming year under a grant of \$54,724.74 from the National Foundation for Infantile Paralysis.

The Foundations' Fund for Research in Psychiatry has been awarded a grant of \$3,682,000 by the Ford Foundation. These funds are to be expended or committed during a 5-year period for the support of a program for the development of research personnel in mental health.

This new program will be maintained concurrently with the FFRP's present program of research grants in the field of psychiatry and related sciences. The selection of fellows and the awarding of research teaching grants will be the responsibility of a professional committee, which will work closely with FFRP's board of directors. Membership of FFRP's committee on fellowships is as follows: Douglas Bond, chairman; George Engel, Robert Holt, Robert Knight, H. W. Magoun, Neal Miller, and Ralph Tyler.

A brochure describing stipends, fellowships, and research teaching grants is in preparation and will be distributed during the summer of 1956. Copies of the brochure may be requested by writing to the Foundations' Fund for Research in Psychiatry, 251 Edwards St., New Haven 11, Conn.

• The department of medicine of the Johns Hopkins Hospital and School of Medicine has entered into a contract with the Army Chemical Corps, Fort Detrick, Md., to conduct a broad program of laboratory and clinical investigation in the field of infectious disease.

The initial contract calls for a total of \$267,330 to finance the research program for 2 years. However, the program will not be limited to the terms contained in this first agreement. Both funds and time will be increased and extended as the progress and findings of the studies may require. The program will be carried out under the direction of Ivan L. Bennett, Jr., associate professor of medicine and chief of the biological division of the Hopkins institutions.

Twelve research grants have been made recently by Eli Lilly and Company. The grants support one fellowship in bacteriology and projects including a study of drugs in leprosy; translations of Russian medical literature; carbohydrate metabolism studies; three programs on organic synthesis; programs on chemistry of natural products; connective tissue regeneration; blood coagulant mechanism; research on glucagon and insulin; and a study of acute rheumatic diseases.

Thirty-one research grants in 15 areas of study have been awarded by the Arctic Institute of North America for investigations in arctic science in 1956. This is an increase of nine over the number of projects sponsored last year and brings to more than 200 the field studies conducted by this organization to date.

Financial support is provided by the Office of Naval Research of the U.S. Navy, by the Sir Frederick Banting Fund, which is administered by the National Research Council of Canada, and by industrial and individual contributors. The grants-in-aid program is part of the institute's over-all effort to advance scientific understanding of northern North America through field and library research, publication, and the integration of research interests concerned with this area.