to "allow the Salk poliomyelitis vaccine to be produced, distributed, and administered in accordance with past procedures on any new drug or vaccine." The third resolution commended Salk, expressing "profound gratitude" to him and "admiration for his monumental contribution to medical science."—E. M. L.

## Scientists in the News

The Foreign Operations Administration has appointed E. E. LEUALLEN, dean of Columbia University College of Pharmacy, to serve 3 mo in Formosa as a consultant in pharmacy. He will study local needs and aid in developing a program for the newly established School of Pharmacy at the National University of Taiwan.

AUSTIN L. RAND, curator of birds at the Chicago Natural History Museum since 1947, has been appointed chief curator of the department of zoology to succeed Karl P. Schmidt, who retired 1 July. Rand was previously associated with the American Museum of Natural History, New York, and the National Museum of Canada, Ottawa. He has conducted zoological expeditions in Madagascar, the southwest Pacific, the United States, Canada, and Central America.

EMMET R. BLAKE succeeds Rand as curator of birds. Blake, who had led expeditions to the West Indies and to Central and South America for the Carnegie Museum of Pittsburgh and the National Geographic Society, first joined the museum staff in 1935 as assistant curator of birds, and since 1947 has been associate curator of birds.

CLAY WAGGONER, head of the analytic section of the research department at American Potash and Chemical Corp., Trona, Calif., has been appointed chief chemist at the new San Antonio, Tex., plant of American Lithium Chemicals, Inc.

ERNEST W. GOODPASTURE, former professor of pathology and acting dean of the School of Medicine, Vanderbilt University, has been appointed scientific director of the department of pathology of the Armed Forces Institute of Pathology. He will be responsible for the supervision and correlation of the professional functions of the department, which include diagnostic consultative services in pathology, an advanced teaching program, and experimental studies in pathology and the ancillary sciences.

JOHN K. MAJOR, of Yale University, has been appointed associate professor and chairman of the department of physics at Western Reserve University. BRYAN PATTERSON, former curator of fossil mammals at the Chicago Natural History Museum, has been appointed Alexander Agassiz professor of vertebrate paleontology at Harvard University.

ALFRED O. WOODFORD, chairman of the geology department at Pomona College, retired in June. Woodford received training at Pomona and the University of California at Berkeley. His fields of special study have included the rocks and minerals of Southern California and Lower California, stream hydraulics, submarine canyons, and the history of geology. In recent years he has directed the geology department's research on the surface and subsurface region between Claremont and Laguna Beach. He has also studied the structure of margins of the San Gabriel Mountains and has worked closely with the U.S. Geological Survey, for which he has been a senior geologist since 1943.

Woodford was author of the report on the National Science Foundation's conference on geological research in colleges in 1953. He was in charge of the Southern California section for the National Research Council in preparation of a tectonic map of the United States, a nine-year project that was completed during World War II.

JOHN H. DINGLE, professor of preventive medicine at Western Reserve University School of Medicine, was elected president of the Armed Forces Epidemiological Board on 1 July. He succeeds Colin M. MacLeod, of New York University School of Medicine. Robert W. Babione, Capt. MC, USN, became executive secretary of the board on the same date.

CLIFFORD W. DUNCAN, professor of agricultural chemistry at Michigan State University, received the Borden award— \$1000 and a gold medal—during the American Dairy Science Association meeting in East Lansing in June.

Duncan was cited for research accomplishments pertaining to the biochemical and physiological character of the protein and other constituents of blood, milk, and semen of the bovine; investigations related to the vitamin and mineral requirements, especially the trace minerals of the cow and calf; the composition, digestibility and nutritional value of feeds; and the nutritional effects of crops grown on soils of different fertility level on the health, production, and reproduction of dairy cows.

JAMES G. WILSON, professor of anatomy at the University of Cincinnati, has been appointed to head the anatomy department of the University of Florida's College of Medicine, effective 1 Sept. JOHN S. RUGG and GEORGE W. SCOTT, chemists of E. I. du Pont de Nemours and Co., Inc., Wilmington, Del., were the winners of a new award of the American Chemical Society's Division of Rubber Chemistry. The award is for the best scientific paper presented before the division at its 3-day spring meeting in Detroit in May.

Rugg and Scott were cited for the technical importance of their paper and for the high quality of the oral and visual presentation. The report, which was entitled "'Adiprene' B urethane rubber factors influencing its processibility," described methods for processing the tough, temperature-resistant new synthetic.

The Eli Lilly Co. has announced several recent staff changes. THOMAS P. CAR-NEY has been elected vice president of research, development, and control. Succeeding him as director of the organic chemical division is REUBEN G. JONES, former head of the company's general organic chemistry division. A. H. FISKE, vice president and member of the executive committee, will relinquish his responsibilities in the development and control division in order to devote full time to the study of special projects as an assistant to the president. R. M. RICE has become executive diector of medical research, and J. A. LEIGHTY executive director of chemical, biological, and pharmacological research.

PORTER H. BRACE, consulting metallurgist to the Westinghouse Research Laboratories, has retired after 42 years of service. His work has been concerned with rare-metals technology and the production of versatile metal alloys.

He has studied specialized melting techniques such as cage zone refining, a technique that is becoming increasingly important in obtaining almost totally pure metals, for example, titanium. About 1920 he devised the Brace process for the production of pure calcium. This process subsequently became a factor in the mass production of uranium.

JOHN CHIPMAN, professor of metallurgy and head of the department at Massachusetts Institute of Technology, was presented the Brinell gold medal for 1954 in a ceremony at the Swedish Academy of Engineering Sciences in Stockholm on 25 May. He was awarded the medal by the academy "in recognition of his outstanding achievements in metallurgy and metallography." This is the first time that a non-Swedish scientist has received the award, which was instituted in commemoration of J. A. Brinell, inventor of the Brinell test. Chipman gave a lecture on metallurgical research activities being carried on at M.I.T.

ALBERT J. HOSKINSON, chief of the geodesy division of the U.S. Coast and Geodetic Survey since 1952, retired 1 July. He was trained in civil engineering at the University of California and joined the Coast and Geodetic Survey in 1921. Hoskinson devoted the early part of his career to geodetic and hydrographic assignments in Alaska, the Philippines, and various areas of the United States. In 1936 he was one of three geophysicists who used the Vening-Meinesz pendulum apparatus with the United States Navy-American Geophysical Union Gravity-at-Sea Expedition aboard the submarine Baracuda in the West Indies.

Hoskinson has made several improvements in methods and techniques for making gravity observations. Among these are the development of a method of setting up the Brown gravity instrument at CGS field stations to minimize the variations in the flexure; a method of observing and recording that shortened the time of swing required at a gravity station from 12 to 6 hr; and a determination of the effects of buoyancy and damping of the pendulum at extremely low pressures.

Hoskinson served in the Army during both world wars. During World War II he served as an artillery survey supervisor and chief instructor at Fort Sill, Okla.

In 1952 he was a member of the United States delegation to the sixth consultation of the Commission on Cartography, Pan American Institute of Geography and History, which was held at Ciudad Trujillo, Dominican Republic. During September 1954 he served as delegate to the 10th general assembly of the International Union of Geodesy and Geophysics in Rome, Italy.

JULIUS L. WILSON, professor of medicine at the University of Pennsylvania and director of clinics at the university's Henry Phipps Institute for the Study, Treatment and Prevention of Tuberculosis, has been appointed director of the Phipps Institute. He succeeds ES-MOND R. LONG, who retired 30 June after having headed the institute since 1935.

STEPHEN ROTHMAN, professor of dermatology at the University of Chicago, has received the special award for 1955 of the Society of Cosmetic Chemists.

FRED W. SCHUELER, professor of pharmacology at the State University of Iowa, has been awarded the Ebert prize of the American Pharmaceutical Association "for his basic research on pharmaceutical inhibiting agents and compounds which may lead to new and useful drugs for combatting and controlling severe high blood pressure." WERNER KARL WEIHE, former head of the electrotechnical laboratory of the Karl Zeiss Co., Jena, Germany, who is now serving with the Corps of Engineers at Fort Belvoir, Va., was admitted to United States citizenship 2 July.

ARTHUR W. GALSTON, of California Institute of Technology, was appointed professor of plant physiology at Yale University, effective 1 July.

HENRIK DOUWE KLOOSTERMAN of the University of Michigan has been appointed Netherlands visiting professor of mathematics for 1955–56. He is serving on the faculty of the University of Leyden as professor of mathematical analysis.

## Necrology

I. WESLEY ANDERS, Philadelphia, 89, former professor of diseases of the ear, nose and throat at Temple University School of Medicine, 17 June; EDWARD M. BERNECKER, New York, 63, hospital administrator of New York University-Bellevue Medical Center, former commissioner of hospitals in New York, 27 June; PETER J. CONROY, Crestwood, N.Y., 60, head of the department of chemistry at Fordham University College of Pharmacy, 17 June; CLYDE L. EVERSON, University Park, Md., 49 professor of veterinary science at the University of Maryland and former president of the Maryland Veterinary Medical Association, 6 July.

EDWARD P. FENIMORE, Philadelphia, former assistant professor of chemical engineering at the University of Pennsylvania, 23 June; FRANKLIN FISKE, New York, 75, osteopath, lecturer, former editor of the Journal of Osteopathy, 22 June; ALEXANDROVICH GAMBURTSEV, Moscow, 52, director of the Geophysical Institute of the Academy of Sciences, chairman of the academy's council on seismology, 28 June.

GEORGE HARTNELL, Wyoming, N.Y., 84, former research geologist with the U.S. Coast and Geodetic Survey, author, 20 May; DAVID W. HEUSINKVELD, Cincinnati, 57, assistant clinical professor of medicine at the University of Cincinnati, 25 June.

S. DAVID KRAMER, St. Petersburg, Fla., 63, former instructor at the Harvard and University of Michigan Medical Schools, former director of research of the Infantile Paralysis Commission of the Long Island Medical College, author, 24 June; PEYTON B. LOCKER, Bronxville, N.Y., 82, mineralogist, director of the American International Minerals Corp., 3 July.

EDGAR G. MILLER, JR., New York, 62, dean of graduate faculties at Columbia

University, former professor of biochemistry at the university, 28 June; ANDRE P. E. PLANIOL, New York, 61, aeronautical engineer and consultant at the Stratos Division of Fairchild Engine and Airplane Corp., 30 June; SAMUEL H. RON-KIN, New York, 59, dentist, associate professor of anatomy at Temple University in Philadelphia, 27 June; NA-THAN ROSENTHAL, New York, 65, hematologist, authority on leukemia, former professor of clinical medicine at the College of Physicians and Surgeons, author, 29 June.

LEO SHARTSIS, Bethesda, Md., 49, glass expert at the National Bureau of Standards, author, inventor, 26 June; GEORGE R. SHELTON, Washington, D.C., 66, retired ceramics technologist at the National Bureau of Standards, former instructor of ceramics engineering at North Carolina State College, 28 June; KEL-LOG SPEED, Chicago, 76, former professor of surgery at the University of Illinois, author, 2 July; EPGAR J. TOWNSEND, Champaign, Ill., 91, retired professor of mathematics and dean of the college of science at the University of Illinois, 8 July.

## Education

• Four Massachusetts secondary-school systems, 10 Massachusetts colleges, and the Harvard Graduate School of Education have established a new program intended to obtain able liberal arts and science graduates as elementary- and high-school teachers.

The core of the program is a summer school at Weeks Junior High School, Newton, where 20 master teachers will guide 60 selected student-teachers and 40 student-observers in the teaching of science, social studies, music, art, mathematics, shop, English, and French to 300 boys and girls. After the completion of summer-school training, a few of the student-teachers will be hired to teach, with guidance, at the same time that they carry on their advanced studies at Harvard.

The student-teachers who attend the summer school will be selected by a faculty committee at each of the 10 cooperating colleges. The college students who have taken certain college courses in preparation for teaching may qualify as teachers by taking the summer course in Newton. Others may use the summer course as a means of qualifying for employment as interns in one of the cooperating school systems while they complete their graduate studies.

Each school system will hire two intern teachers who will work under an experienced teacher in the school and together will fill one full-time teaching assignment. One student teacher will teach