

made to determine the effect of the cross-continent hike on the heart, on body fluid volumes, body heat balance, and sensory perception. Second, fluid samples—blood and urine especially—will be taken from subjects, frozen, and returned to Berkeley for analysis. The analyses are expected to reflect the extent to which the environmental stresses derange body metabolism. In addition, saliva samples will be frozen for shipment to Berkeley, where studies of associations between certain types of oral flora and upper respiratory disease in cold environments will be made.

These studies will be important in the large program conducted by Pace and his colleagues to study human stress of many kinds. Many of these studies are carried out in the university's White Mountain Laboratory (14,250 feet) under the conditions of stress at extreme altitude.

### British Group Signs Manifesto

Forty-three British scientists have issued a manifesto urging all scientists to join them in using science for peaceful purposes only. The 43 are all members of the Religious Society of Friends. The British scientists take note of the recent statement by 18 German scientists [*Science* 125, 876 (3 May 1957)] and the Pauling petition [*Science* 125, 1190 (14 June 1957)]. Then they say: "We go further in refusing to cooperate in the production of any weapons of war."

### First Geological Map of Asia

A group of senior geologists, mainly from Asian countries, convened by the United Nations Economic Commission for Asia and the Far East, began a series of meetings last month in Calcutta, India, in order to complete the compilation of the first regional geological map of Asia and the Far East for publication next year. On the basis of this map, other maps will be prepared showing the distribution of mineral resources in the Asian region. At the first meeting, the group elected Sultan Ahman Popal of Afghanistan as chairman and U. B. Singh of Burma as vice chairman.

### Federal Funds for Medical Research

In contrast to the \$33,147,224,106 voted by Congress in fiscal year 1956 for military defense, only \$102,224,000 was voted for research against the major diseases in this country. This comparison is made in the 1957 edition of a study of heart diseases, cancer, mental illness, arthritis, blindness, nerve disorders, and

other health problems compiled by the National Education Committee, Inc., New York. The Federal allocation of \$102,224,000 which was made through the five National Institutes of Health, was compared by the committee with these Congressional appropriations: \$267,139,000 for design and testing of atomic weapons; \$116,000,000 for agricultural research service; \$51,000,000 for development assistance to Asia; \$62,980,000 for survey and construction of the Inter-American highway; and \$45,029,300 for the National Park Service.

### Paris Fuel Element Conference

Scientists from a number of countries recently participated in an unclassified conference on the technology of reactor fuel elements sponsored jointly by the atomic energy commissions of France and the United States. In addition to the host French scientists and a team of 20 U.S. specialists, representatives attended from the 17 nations comprising the Organization for European Economic Cooperation and also from Canada and Israel. The primary purpose of the Paris meeting was to assist the European participants in their current and projected nuclear power and research programs.

The agenda provided for a review of practices of fuel-element fabrication and of the behavior of fuel elements in reactor operation. Major topics included the manufacture of various types of elements, corrosion and irradiation problems, and recent advances in applied metallurgical research. All conference papers are unclassified; the proceedings will represent a compilation of the latest data and experience in fuel element technology.

### NSF Report on Research by Agricultural Experiment Stations

The National Science Foundation reports that expenditures for research by agricultural experiment stations increased tenfold from \$7 million in 1920 to more than \$74 million in 1953-54—\$17 million for basic research and \$57 million for applied research. Research funds for the stations came, for the most part, from the state governments and supplemented the core of support provided by the Federal Government. The states accounted for \$45 million; the Federal Government for \$13.5 million; and other sources, such as sales and royalties, for \$16 million. These findings are from an NSF survey of 53 agricultural experiment stations and are contained in a recent bulletin entitled "Funds for Research in Agricultural Ex-

periment Stations, 1953-54," No. 8 in the series *Reviews of Data on Research and Development*.

The 53 stations, practically all administered by the land-grant colleges and universities, are the fountainhead of this country's agricultural research. The largest amounts were devoted to animal production and field crops; the smallest, to genetics and farm forestry.

The stations accounted for 55 percent of the \$134 million research budget of the associated land-grant colleges and universities. As determined from the 41 stations that reported on faculty, the stations employed 45 percent of the total faculty engaged in research, or, in terms of full-time equivalents, 56 percent. Copies of the report may be obtained by writing to the National Science Foundation, Washington 25, D.C.

### News Briefs

A committee of the faculty of the department of biology, University of Notre Dame, will edit *The American Midland Naturalist*. George R. Bernard has been appointed chairman of the editorial committee.

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The National Committee on Aging of the National Social Welfare Assembly has announced that it will make a study to find out how the United States can insure the best use of the later years of its scientists. The study also will determine how retirement policies affect scientists. The 2-year project will be financed by a grant from the Dorr Foundation and will be directed by Edward N. Saveth, a social scientist and writer.

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The National Health Council has established a special fund in honor of the late Alan Gregg, formerly vice-president of the Rockefeller Foundation and a valued adviser to the council. Contributions to the Alan Gregg Fund will be used to support the council's Health Careers Program, designed to help meet the acute shortage of qualified health personnel in the United States.

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The Foundations' Fund for Research in Psychiatry has announced that 1 February 1958 is the next deadline for the submission of applications for research fellowships in psychiatry, psychology, sociology, neuropsychology, and other sciences relevant to mental health. Interested persons and departments are invited to write for details to: Foundations' Fund for Research in Psychiatry, 251 Edwards St., New Haven 11, Conn.

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The Public Health Service has announced that reported new cases of syphilis increased by 7.1 percent during

1956, reversing a downward trend that had been recorded each year since 1946. There were 131,763 cases of syphilis in all stages reported in the continental United States last year, compared with 123,044 in 1955. The 1947 total was 355,592.

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The Marine Biological Laboratory, Woods Hole, Mass., is offering a training program in neurophysiology under the direction of S. W. Kuffler, C. L. Prosser, and J. M. Tobias. Financial aid will be provided to nine pre- and post-doctoral fellows between 15 June and 31 August 1958. Applications should be made to the director of the laboratory not later than 1 January 1958.

## Scientists in the News

Primary responsibility for planning and directing United States technical participation in the second International Conference on the Peaceful Uses of Atomic Energy at Geneva, Switzerland, 1-13 September 1958, has been assigned by the Department of State to the U.S. Atomic Energy Commission. The commission has established a special office to carry out this responsibility. EDWARD R. GARDNER, director of the AEC's Office of Special Projects, has been appointed executive director of the new office, and L. D. PERCIVAL KING is on loan to the AEC from the University of California's Los Alamos Scientific Laboratory to serve as technical director.

ALBERT SCHWEITZER has received the newly established peace prize of the Bavarian Association of War Victims, Munich, Germany. He was given the \$2300 award for his achievements in bringing about "peaceful coexistence among men."

Seven physicists from outside the U.S.S.R. participated in the Soviet Conference on Nuclear Reactions in Moscow, 19-27 November. They were: HENRY H. BARSCHALL of the University of Wisconsin; RICHARD F. TASCHEK of the University of California and Los Alamos; M. DEUTSCH of Massachusetts Institute of Technology; L. KATZ of Canada; D. WILKINSON and J. H. BREMLIN of England; and S. A. E. JOHANSSON of Sweden.

EMERY A. ROVENSTINE, chairman of the department of anesthesiology at New York University's College of Medicine, has been awarded the Distinguished Service Award of the American Society of Anesthesiologists. Rovenstine is the director of anesthesia at Bellevue Hospital, Gouverneur Hospital, and Goldwater Memorial Hospital.

Two new members have been appointed to the department of psychology at the University of California, Berkeley. They are JACK BLOCK, associate professor, formerly associate research psychologist at the Institute of Personality Assessment and Research, Berkeley, and RICHARD S. LAZARUS, associate professor, formerly associate professor at Clark University.

The department also reports several visiting appointments for the present academic year: FLOYD H. ALLPORT, professor emeritus at the University of Oregon; and FRED ATTNEAVE and DANIEL E. BERLYNE, both of whom spent last year at the Center for Advanced Research in the Behavioral Sciences, Palo Alto. In addition, ARTHUR A. LUMSDAINE will hold a visiting appointment during the spring semester, 1958. Lumsdaine is chief of the Flight Systems Branch and the Training Branch, Air Force Personnel and Training Research Center, Lowry Air Force Base.

COUNT D. GIBSON, Jr., associate professor of medicine at the Medical College of Virginia, has been named professor of preventive medicine at the Tufts University School of Medicine, effective in January 1958. He succeeds DWIGHT O'HARA, who has retired.

ROBERT ELY, associate professor of pediatrics at the University of Utah College of Medicine, has received the \$1000 Ross Award for Pediatric Research of the Western Society for Pediatric Research. Ely's prize-winning work dealt with corticosterone metabolism in rheumatic fever.

CHARLES N. KIMBERLIN, JR., assistant director of the Esso Research Laboratories, Baton Rouge, La., has won the 1957 Southern Chemist Award of the American Chemical Society's Memphis Section. The medalist was chosen "in recognition of 24 years' outstanding research in the fields of catalysis and petroleum chemistry."

WILLIAM J. KROLL, consulting electrochemist and metallurgist of Corvallis, Ore., and developer of the basic Kroll process used for producing metallic titanium and zirconium, has been chosen to receive the 1958 Perkin Medal of the American Section of the Society of Chemical Industry. Presentation of the medal to Kroll is scheduled to follow a dinner in his honor to be held at the Waldorf-Astoria, New York, on 10 January 1958.

JAMES CUFFEY of the Indiana University astronomy department has been appointed assistant director of the

university's Goethe Link Observatory, which is located 24 miles southwest of Indianapolis.

ALBERT G. WILSON, formerly director of the Lowell Observatory, has joined The Rand Corporation, Santa Monica, Calif., as a member of the senior staff in geophysics. He will be concerned with general problems of space flight and space physics.

## Recent Deaths

ASADOUR ALTOUNIAN, Newark, N.J.; 72; physician and medical pioneer in Asia Minor; 15 November.

CLARENCE G. BANDLER, New York, N.Y.; 77; urologist and former professor and chairman of the department of urology at the New York Post-Graduate Medical School; 15 November.

DWIGHT F. BARNES, Fresno, Calif.; 67; economic entomologist and specialist in dried-fruit insects for the U.S. Department of Agriculture; 11 October.

JOHN M. BURNHAM, New Haven, Conn.; 40; design manager of the Electric Boat Division of the General Dynamics Corporation, Groton, Conn.; responsible for the design of the nuclear submarines *Nautilus*, *Seawolf*, and *Skate*; 15 November.

ANNETTE GARRETT, Northampton, Mass.; 59; associate director of the Smith College School for Social Work for 22 years; 17 November.

RAY E. HEIKS, Columbus, Ohio; 42; research chemist for Battelle Memorial Institute; 31 October.

JAY McLEAN, Savannah, Ga.; 67; director of the Savannah Tumor Clinic and discoverer of heparin; former associate professor of research surgery at Ohio State University Medical College and director of the Bureau of Cancer Control, District of Columbia Health Department; 15 November.

SAMUEL PEARSON, Plainfield, N.J.; 72; meteorologist and amateur observer for the U.S. Weather Bureau; 19 November.

E. ALEXANDER POWELL, Canaan, Conn.; 78; explorer, lecturer, and author; former member of the Consular Service and a former war correspondent; 13 November.

JOHN W. ROBERTS, Winter Park, Fla.; 75; plant pathologist, formerly project leader in the U.S. Bureau of Plant Industry; specialist in the fungus, bacterial, and deficiency diseases of deciduous fruit trees and fruits, and also a specialist in fungicides; 15 November.

ALBERTO VILLAMIL, Buenos Aires, Argentina; cardiologist and president of the Argentine Cardiology Society; 18 November.