

GILBEART H. COLLINGS, professor of soils at Clemson College, has been appointed head of the department of agronomy.

Recent Deaths

P. B. CANDELA, Wofford Heights, Calif.; 49; surgeon who developed a method to determine the blood types of ancient peoples; 5 Jan.

RALPH S. DAMON, Garden City, N.Y.; 58; aeronautical expert; president of Trans World Airlines, New York, N.Y.; member of the National Advisory Committee for Aeronautics; 4 Jan.

EDGAR S. McFADDEN, College Station, Tex; 64; agronomist at A. and M. College of Texas; recipient of the John Scott award at the 1955 AAAS annual meeting in Atlanta, Ga.; 5 Jan.

W. ALLEN MESSLER, Rutherford, N.J.; 83; professor of psychology at Fairleigh Dickinson College; 8 Jan.

ZENO P. METCALF, Raleigh, N.C.; 70; professor of zoology at North Carolina State College, Raleigh, from 1912-50; since 1950 resident professor of zoology and entomology; 1950 representative of the Ecological Society of America on the AAAS Council; 7 Jan.

GREENLEAF W. PACKARD, Newton, Mass.; 78; inventor and radio engineer; 8 Jan.

CHARLES PRATT, New York, N.Y.; 63; president emeritus of Pratt Institute, Brooklyn, N.Y.; 7 Jan.

EPHRAIM SHORR, New York, N.Y.; 58; associate professor of medicine at Cornell University Medical School, New York, N.Y.; authority on treatment of shock; 1951-53 representative of the Gerontological Society on the AAAS Council; 6 Jan.

ASA O. WEESE, Norman, Okla.; 70; professor of zoology at the University of Oklahoma; internationally known bioecologist; for many years representative of the Oklahoma Academy of Science on the AAAS Council; 20 Nov.

Grants, Fellowships, and Awards

■ Ten new grants, totaling \$65,807, to American universities and medical centers will augment the program of clinical and laboratory research on vitamins and nutrition of the National Vitamin Foundation, Inc. The foundation gives grants-in-aid for research semiannually throughout the United States and abroad. The new grants became effective on 1 Jan.

■ The Dexter Chemical Corporation has established an award in the history of chemistry amounting initially to \$250. The sum will be accompanied by a scroll.

The division of history of chemistry of the American Chemical Society will administer the new annual award; nominations should be sent to the secretary of the division *not later than 10 Mar.*

The award is to be made on the basis of services that have advanced the history of chemistry in any of the following ways: by publication of an important book or article; by the furtherance of the teaching of the history of chemistry; by contributions to the bibliography of the history of chemistry; or by services over a long period of time that result in the advancement of the history of chemistry.

■ The National Foundation for Infantile Paralysis will continue to offer a limited number of fellowships to provide educational opportunities for health educators who are employed in state departments of education or of health. Applicants must have obtained their bachelor's or higher degree from an accredited institution and have had substantial training in biological science and education or other social sciences. Only those who have had a minimum of 2 years of experience as educators in the field of health will be eligible. United States citizenship and sound health are prerequisites for application.

Work may be undertaken at any school of public health in the United States that offers a graduate program in health education and is approved by the American Public Health Association. It is the responsibility of the candidate to make his own arrangements with the institution for a program of study and field training to supplement his previous background and to prepare him more adequately for the responsibilities of a health educator.

The foundation has also instituted a new fellowship program for surgeons interested in advanced study to prepare themselves for teaching or research in orthopedics. Applicants must have completed requirements for certification by the American Board of Orthopedic Surgery or have had equivalent training. Only United States citizens licensed to practice medicine in this country, in sound health, and under 36 years of age are eligible.

Each candidate must arrange his own program for full-time study and investigation at a center which has been approved by the Council on Medical Education and Hospitals of the American Medical Association for residency training in orthopedic surgery and which is associated with an approved medical school.

In both fellowship programs, appointments will be made for 1 year. Financial benefits will be determined on the basis of individual need as related to marital status and number of dependents. Selec-

tion of candidates to be appointed as fellows will be made on a competitive basis by the National Foundation's Clinical Fellowship Committee.

For consideration in May, applications must be filed *by 1 Mar.*; for review in November, applications must be received by 1 Sept.; and for action in February, by 1 Dec. For further information and application forms, address: Division of Professional Education, National Foundation for Infantile Paralysis, 120 Broadway, New York 5.

■ The John A. Hartford Foundation, Inc., has announced the establishment of the John A. Hartford Memorial Fund in the School of Public Health of Harvard University to support a long-range research program in atherosclerosis and other diseases of the blood vessels and heart. The foundation has agreed to provide \$200,000 annually for a period of several years to "institute, maintain and carry out a program of basic scientific and medical research to determine the causes and the medical or other treatment which will prevent or cure or alleviate human suffering from atherosclerosis and related diseases of the human heart and blood vessels," and for graduate education in this field. The new program of research and graduate education will be carried out primarily in the school's department of nutrition, which is headed by Frederick J. Stare.

■ The Nature Conservancy offers an award of \$500 as an aid to graduate study during the next school year. To be eligible to apply, a student must plan to center his thesis on some aspect of the interrelationship between conservation of nature and the increasing pressure of human population.

Applications must be submitted *by 1 Apr.* Interested persons should consult the detailed announcement that may be obtained by writing to the Nature Conservancy, 4200 22 St. NE, Washington 18, D.C.

■ The Damon Runyon Memorial Fund for Cancer Research ended 1955 with grants totaling \$92,205. The awards for December brought money distributed to date to \$9,540,279. The allocations have been made in 609 grants and 327 fellowships in 205 institutions in 48 states, the District of Columbia, and 16 foreign countries.

In the Laboratories

■ The Atomic Energy Commission has announced that it is planning to ask private industry to submit proposals to supply reactor-grade beryllium metal. These requirements are now met from the pro-

duction of a Government-owned plant at Luckey, Ohio, operated for the AEC by the Brush Beryllium Company.

This month the AEC will invite proposals for supplying up to 100,000 pounds annually over a 5-year period. A 3-month period will be allowed in which to prepare proposals. If acceptable proposals are received from private industry, the Luckey plant will be placed in a standby status.

Prospective suppliers should familiarize themselves with the current status of beryllium metal technology and the present and future market for the metal. In addition to the metal required by the AEC, quantities of beryllium may be required for privately financed projects. The AEC does not intend to provide beryllium for such projects. Further information is contained in a prospectus which may be obtained from the Lockland Area Office, U.S. Atomic Energy Commission, P.O. Box 23, Lockland Branch, Cincinnati 15, Ohio.

■ Under a program that is designed to meet the increasing need for up-to-date information about research and development in Europe, the Armour Research Foundation of Illinois Institute of Technology will establish a European office to provide ideas and techniques of potential value in the American market to a group of 16 participating companies.

■ In 1956 the Armour Research Foundation of Illinois Institute of Technology will mark its 20th year of research activity. As part of this observance, the foundation will focus attention on the role of industrial research in the nation's economy. Highlight of the year will be the sponsorship of the first annual National Industrial Research Conference at the Hotel Sherman in Chicago, Ill., on 18-19 Apr. Some of the nation's leading industrial executives and research leaders will participate in the program.

Miscellaneous

■ The Australian Commonwealth Scientific and Industrial Research Organisation, which is responsible for the initiation and carrying out of research, both fundamental and applied, for the promotion of the industries of Australia, is seeking research scientists. CSIRO has expanded greatly since the war, and now consists of some 30 divisions and sections. Its staff and responsibilities have increased and its annual budget now amounts to more than £4 million (\$9 million).

Its laboratories are well equipped and its work in various fields such as radio astronomy, rain and cloud physics, ion-exchange resins, trace elements, and de-

ficiencies in soil is extensive. Recently it organized an International Wool Textile Research Conference that was attended by some 53 research scientists from overseas countries, including 11 from the United States. At present a number of new projects are being planned.

In the Division of Food Preservation, where work has been going on for many years in biochemistry, bacteriology, and food technology, the necessity has arisen for a new research unit in the biochemistry of muscle. The existing Meat Research Laboratory in Brisbane, Queensland, with which the new unit will be associated, has an extensive program on fundamental and technological problems associated with the chilling and freezing of meat for export purposes, but it is obvious that more basic information is required on the physiological basis of the quality of meat. The unit is to be provided with a new laboratory and the necessary research and technical staff and a suitable leader of the group is being sought.

In the irrigation area of New South Wales, CSIRO has supported a research station at Griffith for many years. The fields of research include soils, hydrology, plant physiology, and nutrition. The agricultural crops produced cover a wide variety of fruits and vegetables, rice, wheat, and animal products. Associated with these agricultural industries are canneries, wineries, and rice mills. The officer-in-charge is resigning shortly and a new appointment of a scientist with experience in one of the fields of research of the Irrigation Research Station at Griffith is planned.

The results of agricultural research, like most research, need interpreting to insure their proper and effective use. For this purpose CSIRO a few years ago established an Agricultural Research Liaison Section. This section publishes a quarterly periodical, *Rural Research in C.S.I.R.O.*, that contains reviews of research by the organization for use by agricultural extension workers. Press articles are prepared, conferences are organized and attended, displays are prepared, and frequent visits are made to research centers to insure that the staff maintains close contact with current work. The liaison section has its own layout and artist specialists, and it has excellent facilities for printing and production in the head office of CSIRO in Melbourne.

Australia's development is requiring more research workers and in connection with this expansion, extra staff members are being sought. The Personnel Placement Section of this issue of *Science* gives some further details.

■ Opportunities for physical scientists, engineers, and technicians, exist in the

Antarctic program planned by the U.S. National Committee for the International Geophysical Year. The U.S. Antarctic program emphasizes the following fields: aurora and airglow, cosmic rays, geomagnetism, glaciology, gravity, ionospheric physics, meteorology, and seismology.

Major geophysical research stations will be established at Little America, in Marie Byrd Land, at the South Geographic Pole, on the Knox Coast, and along the Weddell Sea. Initiation of this program began last year with the site-reconnaissance voyage of the *U.S.S. Atka*. Operation Deepfreeze, currently under way, will establish the Little America station, cache supplies for the interior stations to be set up in the fall of 1956, and explore site possibilities for stations on the Knox Coast and the Weddell Sea.

The scientific program will cover slightly more than 2 years from January 1956 to April 1959. Scientists and technicians will leave the United States about 1 Nov. 1956. Positions are open for either the full period of investigations or for the two periods November 1956-April 1958 and November 1957-April 1959. Approximately 2 months of advance training will be provided prior to departure in problems of research, instrumentation, and operations in the polar regions.

Opportunities are available to candidates at the bachelors, masters, and doctoral levels of training and experience. Scientists, engineers, and technicians with training in physics, geophysics, electronics, or closely allied areas and interests in the fields of study listed here are invited to address inquiries to the National Academy of Sciences, U.S. National Committee for the International Geophysical Year, 2101 Constitution Ave. NW, Washington 25, D.C.

■ The U.S. Civil Service Commission has announced that many vacancies in electronic, mechanical, and aeronautical engineering, electronic science, and physics exist in the naval laboratories and evaluation centers in California. The positions pay from \$5440 to \$11,160 a year.

Professional engineers and scientists are needed for urgent and vital projects in electronic technology, rocketry, guided missiles, underwater ordnance, and many other areas of weapons research and development. Further information may be obtained at many post offices throughout the country by requesting a copy of announcement 12-14-1(55) or by writing directly to the Executive Secretary, Board of U.S. Civil Service Examiners for Scientists and Engineers, 1030 E. Green St., Pasadena 1, Calif. Information may also be obtained from the U.S. Civil Service Commission, Washington 25, D.C.