Necrology

WALTER N. BROWN, JR., University Park, Pa.; 37; physicist, director of Bone density Research and Evaluation Center at Pennsylvania State University; 12 Sept.

JOHN PIM CARTER, Philadelphia, Pa.; 75; anthropologist, staff member of the Academy of Natural Sciences of Philadelphia; 22 Oct.

JACOB LANGTHORN, Mount Dora, Fla.; 88; retired consulting engineer; 23 Oct.

IVAN MCDOUGLE, Baltimore, Md.; 63; professor of sociology at Goucher College; 25 Oct.

ROSS MARRIOTT, Swarthmore, Pa.; 72; astronomer, professor emeritus of mathematics at Swarthmore College; 19 Oct.

MORRIS NEWMAN, Teaneck, N.J.; 28; assistant professor of chemical engineering at New York University; 21 Oct.

RICHARD PAGET, London, England; 86; authority on speech and artificial speech production and specialist in the languages of the deaf and dumb; 23 Oct.

J. SPEED ROGERS, Ann Arbor, Mich.; 62; professor of zoology and director of the museum of zoology at the University of Michigan; 17 May.

JAMES W. SMITH, New York, N.Y.; 62; eye surgeon and clinical professor of ophthalmology at the Post-Graduate Medical School of New York University-Bellevue Medical Center; 24 Oct.

Education

■ Donald L. Benedict, director of Stanford Research Institute's physical sciences division, has announced the formation of a new department of chemical physics under his supervision. The department takes over functions of the former basic engineering sciences group that was until recently a part of the engineering division. Named to head the new department is Clinton M. Kelley, former head of the group in engineering.

■ Meharry Medical College, Nashville, Tenn., and North Texas State College, Denton, Tex., have been elected to membership in the Oak Ridge Institute of Nuclear Studies, which is now owned by 34 southern universities.

Other action during recent meetings of the ORINS council and board of directors included the election of Marten ten Hoor, dean of the College of Arts, University of Alabama, to a 3-year term as chairman of the council, which is composed of one representative from each of the member universities. W. M. Nielsen, chairman of the department of physics, Duke University, was named to a 1-year term as council vice chairman.

As council chairman, Ten Hoor automatically becomes a member of the 15-man board of directors, other new members of which are J. M. Dalla Valle, professor of chemical engineering, Georgia Institute of Technology; W. V. Houston, president of Rice Institute; Charles E. Dunlap, chairman of the department of pathology, Tulane University School of Medicine; C. C. Pfeiffer, chairman of the department of pharmacology, Emory University School of Medicine; Alvin M. Weinberg, director of Oak Ridge National Laboratory.

Reelected to 1-year terms are Paul M. Gross, vice president of Duke University, president of the corporation; Clifford K. Beck, professor and head of the department of physics, North Carolina State College, vice president; and William G. Pollard, ORINS executive director, corporation treasurer.

■ The School of Engineering at North Carolina State College now offers a degree of bachelor of metallurgical engineering. The new curriculum will complement others in ceramic and geological engineering in the college's department of mineral industries.

■ A new department of geography has been created at Michigan State University; it will offer an undergraduate and a master's degree.

■ The U.S. Civil Service Commission has announced a college student work-study program for scientific and technical personnel within the Potomac River Naval Command and other Federal establishments in Washington, D.C., and the nearby area. In this cooperative education plan, a student alternates at designated intervals during the year between academic college instruction while in residence at a participating college, and work-experience training at one of the Federal establishments.

Salaries range from $2690 to $3415 per year. Applicants who wish to be scheduled for the first written test to be held on 5 Dec. 1955 must have their Form 5000-AB on file *by 15 Nov.*

■ High-school seniors throughout the country have been invited to compete for prizes and honors offered by the sponsors of the 15th annual Science Talent Search. Winners, selected from entrants from participating public, private, and denominational schools, will share $11,000 in Westinghouse Science Scholarships.

Awards will be made in Washington, D.C., early next spring at a 5-day Science Talent Institute which the 40 finalists in the competition will attend as guests of the sponsors. The young scientists will have the opportunity to exhibit their work at the institute and to participate in discussions with some of the nation's leading scientists.

The boy or girl whose all-around Science Talent Search performance and whose personal qualities are judged the most outstanding will receive a $2800 grand science scholarship. Other scholarships ranging from $100 to $2000 will be awarded to the remaining 39 finalists. In addition, 260 other students who show "excellent promise of becoming creative scientists" will receive honorable-mention citations.

The awards are made by Westinghouse Educational Foundation, which is supported by Westinghouse Electric Corporation. The talent search is conducted by Science Clubs of America, which is administered by Science Service.

Entrants must report on an original science project and take an aptitude examination. Their schools then submit scholastic records and teachers' estimates of the entrants' ability. To be eligible, entries must be received in Washington *by midnight, 27 Dec.*

■ Bennington College has announced three new science courses specifically designed for students with no special interest in the natural sciences. A course entitled "Science and symbols" will deal with a sequence of problems in chemistry whose solution historically necessitated the development of a scientific language and method. A physics course will deal with the modern physicist's understanding of the universe, and conceptual structure of physics and its experimental bases, and the potentialities and limitations of the scientific method. The third course is "Mathematics in Western culture."

Grants, Fellowships, and Awards

The trustees of Colonial Williamsburg, Williamsburg, Va., have issued the following announcement:

"As part of its program to bring new strength in our time to the belief in human liberty and the dignity of the individual which made Williamsburg and its leaders a moving force in 18th century America, Colonial Williamsburg has established The Williamsburg Award. The Award will be made, as occasion warrants, to a person who in the course of contemporary events has made an outstanding contribution to the historic struggle of men to live free and self-respecting in a just society. If circumstances require, it may be made jointly to two or more persons. It will carry an honorarium of $10,000 and an appropriate emblem.

"The only limitation on eligibility for the Award will be clear and eminent achievement. Recipients may be natives

of any land, reside in any country, work at any occupation, be members of any race.

"The Trustees of Colonial Williamsburg hope that The Williamsburg Award will serve not only as an honor to the recipients, but also as an encouragement to men and women everywhere to seek liberty and justice for themselves and all men. The purpose of the Award is to serve as a continual reminder that there are today, as there were yesterday, vigorous, courageous and eloquent leaders."

■ The National Foundation for Infantile Paralysis announces that 56 students have been awarded scholarships for the current year to complete their education in medical social work. The total number of medical social work scholarships awarded by the foundation since 1944 is now 681, for which almost $1 million has been authorized to date. The present scholarship recipients are residents of 24 states and are studying in 19 of the schools of social work that offer an approved curriculum in medical social work.

■ The Fellowship Office of the National Academy of Sciences–National Research Council is now accepting applications for two postdoctoral fellowship programs in the natural sciences for the academic year 1956–57.

American Chemical Society petroleum research fund postdoctoral fellowships. Supported by the American Chemical Society, these fellowships are designed to be used exclusively for advanced scientific education and fundamental research in the petroleum field. The term *petroleum field* as used comprises (i) exploration for, and the production, transportation, and refining of, petroleum, petroleum products, and natural gas, and (ii) the production and refining of substitutes for petroleum and petroleum products from natural gas, coal, shale, tar sands, and like materials. Applicants must produce evidence of training in one of the natural sciences equivalent to that represented by the Ph.D. or Sc.D. degree and must have demonstrated superior ability for creative research. These fellowships are open only to citizens of the United States.

Merck senior postdoctoral fellowships in the natural sciences. These senior fellowships are supported by Merck and Co., Inc., and are awarded for the purpose of giving advanced education, training, and development to individuals who have demonstrated marked ability in research in the physical, chemical, or biological sciences and who wish to broaden their fields of investigational activity by acquiring some familiarity with another area. Applicants must produce evidence of training in physics, chemistry, or biology equivalent to that represented by the Ph.D. degree, and must have had at least 3 years of postdoctoral experience in their major field, only one of which may have been fellowship work. These senior fellowships, with no age restrictions, are open only to citizens of the United States.

Detailed information and application forms may be secured for either of these programs by writing to the Fellowship Office, National Academy of Sciences–National Research Council, 2101 Constitution Ave., N.W., Washington 25, D.C. Fellowships are awarded about the middle of March. All applications must be *postmarked on or before 1 Dec.*

■ The department of geology and geophysics of Massachusetts Institute of Technology and the Geophysical Laboratory of the Carnegie Institution of Washington are cooperating in the award of predoctoral fellowships in theoretical and experimental geology. The awards are to be known as the Vannevar Bush fellowships in earth sciences, in honor of Bush, who long served as professor, and later as dean and vice president, at M.I.T. and more recently as president of the Carnegie Institution of Washington. Candidates for an award must have advanced training in mathematics, physics, and chemistry, and a broad knowledge of the earth sciences. Recipients will have unusually favorable opportunities to do thesis work on challenging new problems in the most active and rapidly moving fields of earth science.

Applicants for the award must have completed all M.I.T. requirements for the Ph.D. degree except thesis; they will be registered as full-time doctoral candidates at M.I.T. during that part of their graduate study in which they are in residence at the Geophysical Laboratory. The fellowship will be awarded for the period required by the recipient to complete his laboratory work at the Geophysical Laboratory, and the subsequent time required at M.I.T. for analyzing and correlating the data and completing the dissertation. In general, fellows should expect to spend at least three or four terms in Washington and one or two terms in Cambridge.

While at the Geophysical Laboratory, the fellow will receive $200 per month (plus appropriate tuition) for the first 12 months and $225 per month (plus tuition) for the duration of the fellowship. Upon returning to M.I.T., the recipient will continue to receive the same monthly stipend as he last received from the Geophysical Laboratory, in addition to tuition. At all stages of his work, the fellow will be registered at M.I.T. as a full-time doctoral candidate and will work under the close supervision of at least one faculty member of the M.I.T. department of geology and geophysics.

Any graduate student interested in preparing for competition for the awards should write to the Chairman, Department of Geology and Geophysics, 24–302 M.I.T., Cambridge 39, Mass., for information about entrance requirements and possible financial assistance while meeting M.I.T. requirements.

■ The department of meteorology of Florida State University has announced the availability of graduate assistantships for the academic year 1956–57. Any candidate for the M.S. and Ph.D. degree in meteorology and climatology is eligible to apply. No previous meteorological education is necessary, but the applicant's undergraduate education must have included at least 1 year of calculus and 1 year of physics.

A graduate assistantship carries a stipend of $1680 per calendar year for a student holding a bachelor's degree and a stipend of $1980 for a student holding a master's degree in meteorology. The student is permitted to carry 10 hours of course work. Assistants pay resident fees of about $75 per semester. Out-of-state tuition is waived.

Most assistants will be expected to participate in research projects being pursued under sponsorship of the Air Force Cambridge Research Center, the Office of Naval Research, and the Weather Bureau. Primary research fields are synoptic meteorology, theoretical meteorology, tropical meteorology and theoretical climatology.

Applications for assistantships should be filed *before 15 April 1956.* Later applications will be considered if funds are available. For further information and application blanks, write Dr. Werner A. Baum, Department of Meteorology, Florida State University, Tallahassee, Fla.

■ A graduate program in biophysics that leads to either the M.S. or Ph.D. degree has been established by the Sloan-Kettering Division of the Cornell University Medical College. The M.S. program is devoted specifically to radiation physics and includes training in clinical radiological physics, medical and research applications of radioisotopes, and health physics.

Extensive facilities in the Sloan-Kettering Institute and Memorial Hospital are available for research on thesis problems in various physical, chemical, or biological effects of different qualities of radiation. Related courses can also be scheduled at neighboring universities. A limited number of fellowships is available. Further information may be obtained by writing to Dr. J. S. Laughlin, Department of Biophysics, 410 E. 68 St., New York 21.