Recent Deaths

DAVID B. BALLIN, New York, N.Y.; 64; assistant professor of dermatology at New York University; 15 Apr.

HARRY A. BOGAEV, Philadelphia, Pa.; 63; assistant clinical professor of urology at Jefferson Medical College; 20 Apr.

FREDERIK BØRGESEN; 91; Danish phycologist; authority on the marine algae of the Faeroes, the Danish West Indies, the Canary Islands, Ceylon, India, and Mauritius; 22 Mar.

JAMES H. BRACE, Westmount, Canada; 85; civil engineer; 10 Apr.

FREDERICK CLARK, Fairfield, Conn.; 79; mining engineer; 20 Apr.

HARVEY L. CURTIS, Chevy Chase, Md.; 81; retired principal physicist at the National Bureau of Standards; 17 Apr.

NATHAN S. DAVIS, 3d, Winnetka, Ill.; 66; emeritus associate professor of internal medicine at Northwestern University Medical School; 20 Apr.

GEORGE A. DEAN, Manhattan, Kan.; 83; professor emeritus of entomology at Kansas State College; 23 Apr.

HARRY J. DEUEL, JR., Pasadena, Calif.; 58; biochemist; dean of the Graduate School of the University of Southern California; representative of the American Society of Biological Chemists on the AAAS Council in 1954 and a member of the AAAS Symposium committee of the Berkeley meeting; recently elected president of the American Institute of Nutrition; 17 Apr.

LAVINIA L. DOCK, Fayetteville, Pa.; 99; leader in establishing nursing as a scientific profession; author of *Materia Medica for Nurses* published in 1890 and a standard textbook since publication; 17 Apr.

CECIL K. DRINKER, Falmouth, Mass.; 69; physiologist; former dean of the Harvard University School of Public Health; authority on lymphatics and blood circulation; 14 Apr.

LEON FLEISCHMANN, New York, N.Y.; 77; civil engineer; expert on structural standards; 16 Apr.

ALEXANDER FRIEDEN, Milwaukee, Wis.; 60; vice president in charge of research for the Pabst Brewing Company; 21 Apr.

WILLIAM H. HARRISON, Garden City, N.Y.; 63; electrical engineer and president of the International Telephone and Telegraph Corporation; past president of the American Institute of Electrical Engineers; 21 Apr.

NORMAN F. LE JEUNE, Bayonne, N.J.; 59; chemical engineer; 15 Apr.

EDWARD J. McCARTHY, Westfield, N.J.; 45; electrical engineer for the Bell Telephone Laboratories; 13 Apr.

ROBERT V. PEGAU, Rahway, N.J.; 59; chemical engineer in the research division of the Foster Wheeler Corporation; 18 Apr.

JOHN P. H. PERRY, New York, N.Y.; 74; civil engineer; former head of the construction and facilities division of the Munitions Board; 14 Apr.

JAMES L. RICHARDS, Wynnewood, Pa.; 63; gynecologist; member of the Jefferson Medical College faculty, 1917–47; 3 Apr.

EDOUARD RIST, Paris, France; 85; bacteriologist; former president of the French Academy of Medicine; internationally known authority on tuberculosis; 14 Apr.

MELVIN A. SAYLOR, Philadelphia, Pa.; 81; former professor of chemistry at Temple University; 11 Apr.

ADOLPH SCHROR; East Orange, N.J.; 82; inventor of turbine and chemical boiler cleaning processes; 21 Apr.

MARY SOROKA, Washington, D.C.; 51; civil engineer; 16 Apr.

JAMES M. TALBOT, Dongan Hills, N.Y.; 73; mechanical engineer and executive vice president of the S. S. White Dental Manufacturing Company; past executive officer of the American Society of Mechanical Engineers; 23 Apr.

FRED E. TIBBETTS, Monument Beach, Mass.; 78; retired civil engineer; 12 Apr.

ADRIAAN P. H. TRIVELLI, Rochester, N.Y.; 76; research chemist at the Eastman Kodak Company; 12 Apr.

Education

■ Winners in the largest private scholarship program in the nation's history have been announced by 19 American corporations and the National Merit Scholarship Corporation of Evanston, Ill. More than $3 million in scholarships is being awarded to 525 high-school seniors from every state in the nation under the Merit Scholar program. Recipients were selected from among 60,000 students who originally competed for the awards. This year this country has 1 million high-school seniors.

Average worth of each scholarship—some of which goes directly to the college the winner selects—is $6000. Each company's Merit Scholar will receive the amount he needs to complete 4 years of college, depending on his financial resources.

Although the Merit Scholar program was initially set up in September 1955 with grants from two leading foundations, the amount of money available for scholarships has increased from $1 million to the present total because of the participation of private industry. For every dollar contributed to the program by corporations, N.M.S.C. has added a dollar.

These corporate donors of the Merit Scholarships are as follows: Sears-Roebuck Foundation, General Dynamics Corporation, Pittsburgh Plate Glass Foundation, McGraw–Hill Publishing Company, General Foods Fund, B. F. Goodrich Company, Boeing Airplane Company, the Gillette Company, Time, Inc., Stewart–Warner Corporation, Food Machinery and Chemical Foundation, Universal Cyclops Steel Corporation, American Cyanamid, Johnson Motor Lines, Standard Rate and Data Service, Inc., Mead Corporation, Standard Oil Foundation, Bryant Chucking Grinder Company, and the Sidney J. Weinberg Foundation.

■ A department of biochemistry will be established on 1 Sept. in the Stanford University School of Medicine. The department, which will be located at the university's Palo Alto campus, will be headed by Edward L. Tatum, at present professor of biological sciences.

■ Columbia University has announced a teacher-training program, the Scientific Manpower Project, which will be under the direction of Frederick L. Fitzpatrick, head of the department of natural sciences at Teachers College. The Scientific Manpower Project will conduct year-long workshops for those selected from teacher-training institutions and for some high-school teachers. The first of the workshops begins in the next academic year.

Participants in the program will attend Teachers College on fellowships made possible by the college and by 25 industries that have contributed $45,000 toward the $59,000 that the first workshop will cost.

■ Forty-nine high school teachers in 10 states and the District of Columbia have been selected by the University of Wisconsin to participate in an experimental program to train science and mathematics teachers. The teachers, all of whom are experienced high-school science and mathematics instructors, will be candidates for master's degrees at the university during 1956–57.

This supplementary training program is sponsored by the National Science Foundation, and is part of a national effort to increase the number of well-qualified science mathematics teachers. Participants will receive a stipend of $3000 for the academic year, $300 for each dependent, and free tuition and travel expenses.

The program was established as a 1-year experiment. Two schools were picked by the foundation to initiate the program—Wisconsin and Oklahoma Agricultural and Mechanical College. Wisconsin received 200 letters of application

for the program. Because of this response, NSF is expected to continue the project in 1957–58.

■ Massachusetts Institute of Technology has planned a special summer program on orbital and satellite vehicles 6–17 Aug. The program will be directed by Paul E. Sandorff, associate professor of aeronautical engineering; its purpose will be to provide an over-all assessment of the technology of orbital vehicles of the present.

In addition to members of the M.I.T. faculty the following guest lecturers will participate in the program: Donald H. Menzel, director of the Harvard Observatory, Harvard University; Milton Rosen, head of the Rocket Development Branch, Naval Research Laboratory; William Purdy, project engineer, Glenn L. Martin Company, Baltimore, Md.; Thorp B. Walker, senior engineer, Liquid Engine Division, Aerojet-General Corporation, Azusa, Calif.; Orien L. Hogan, engineer, North American Aviation, Inc., Rocketdyne Facility, Los Angeles, Calif.; James A. Van Allen, chairman, Upper Atmosphere Rocket Research Panel, and head of the department of physics, State University of Iowa; and Hubertus Strughold, head of the department of space medicine, U.S.A.F. School of Aviation Medicine, Randolph Field, Texas.

■ The U.S. Atomic Energy Commission has announced that the commission has approved the construction of two high-energy particle accelerators, one of which will be a joint Harvard University–Massachusetts Institute of Technology project located at Harvard, and the other a joint Princeton University–University of Pennsylvania project located at Princeton. The Harvard–MIT accelerator will be a 6-Bev machine that will cost the Government approximately $6.5 million. The Princeton–Pennsylvania machine will have an energy of 3 Bev and will be built at an estimated cost to the Government of $5.8 million. It has been proposed that the machines be made available to scientists from other institutions in addition to those on the staffs of the four participating universities. The facilities will be operated under AEC contracts.

The Harvard–MIT machine will be a circular alternating gradient electron synchrotron, with a 118-foot radius. It will be constructed in about 3½ years on a site adjacent to the Harvard Cyclotron Laboratory. The Princeton–Pennsylvania accelerator will be a uniform gradient proton synchrotron, to be completed in about 3⅔ years at the Forrestal Research Center. It will resemble the cosmotron at Brookhaven National Laboratory but is expected to have a higher beam intensity.

■ The regents of the University of Oklahoma have officially designated the Oklahoma City campus as the "University of Oklahoma Medical Center." A $400,000 modernization program is now under way there. In addition to being dean of the School of Medicine, Mark R. Everett is now director of the medical center.

■ To help teachers cultivate a greater interest in science among elementary and high-school students, New York University will hold a Science Teachers' Workshop, 3 July–10 Aug. The program will be presented by the School of Education, with the assistance of the Graduate School of Arts and Science and the Washington Square College of Arts and Science. The course will include guest lecturers, trips to nearby laboratories, demonstrations and experiments, small-group conferences with specialists in science teaching, and individual consultation on effective science teaching at the various school levels.

Grants, Fellowships, and Awards

■ Fellowship awards totaling more than $1.1 million, granted to 275 scholars and artists, have been announced by the John Simon Guggenheim Memorial Foundation. This is the largest number of fellowships with the largest total of grants ever announced by the foundation in 1 year. Awards are made to citizens of all the American republics, the Republic of the Philippines, Canada, and the British Caribbean area. A list of the fellows in science follows.

Mathematics and statistics: Clifford A. Truesdell III, professor of mathematics, Indiana University; Edwin E. Moise, associate professor of mathematics, University of Michigan; Joseph L. Hodges, Jr., associate professor of statistics, University of California, Berkeley; Wolfgang H. Fuchs, associate professor of mathematics, Cornell University; Edward W. Barankin, associate professor of statistics, University of California, Berkeley.

Research engineering: Julian D. Cole, associate professor of aeronautics and applied mechanics, California Institute of Technology; Milton C. Shaw, professor of mechanical engineering, Massachusetts Institute of Technology; George Winter, professor of structural engineering, Cornell University; Leonid M. Tichvinsky, professor of mechanical engineering, University of California, Berkeley; Thomas P. Goodman, assistant professor of mechanical engineering, Massachusetts Institute of Technology; Joseph Marin, professor of engineering mechanics, Pennsylvania State University; Israel I. Cornet, associate professor of process engineering, University of California, Berkeley.

Physics: Malvin A. Ruderman, assistant professor of physics, University of California, Berkeley; William S. Rodney, physicist, National Bureau of Standards, Washington, D.C.; Felix M. Villars, associate professor of physics, Massachusetts Institute of Technology; Georges M. Temmer, research physicist, department of terrestrial magnetism, Carnegie Institution of Washington; Jack Steinberger, professor of physics, Columbia University; William F. Fry, associate professor of physics, University of Wisconsin; John H. Reynolds, assistant professor of physics, University of California, Berkeley; Sherman Frankel, assistant professor of physics, University of Pennsylvania; Russell A. Peck, Jr., associate professor of physics, Brown University; Harry W. Fulbright, associate professor of physics, University of Rochester; Gerald C. Phillips, associate professor of physics, Rice Institute, Houston, Texas; Clemens C. J. Roothaan, assistant professor of physics, University of Chicago; David S. Saxon, associate professor of physics, University of California, Los Angeles; Leonard I. Schiff, professor of physics, Stanford University; Harvey Brooks, professor of applied physics, Harvard University; Joseph W. Straley, associate professor of physics, University of North Carolina; James S. Koehler, professor of physics, University of Illinois; Fred H. Schmidt, associate professor of physics, University of Washington, Seattle; Myron A. Jeppesen, professor of physics, Bowdoin College, Brunswick, Maine; M. Avramy Melvin, professor of physics, Florida State University; Charles Kittel, professor of physics, University of California, Berkeley.

Astronomy: John G. Phillips, assistant professor of astronomy, University of California, Berkeley.

Chemistry: Elias J. Corey, assistant professor of chemistry, University of Illinois; Frank A. Cotton, instructor in chemistry, Massachusetts Institute of Technology; Kurt M. Mislow, assistant professor of chemistry, New York University; Paul D. Bartlett, Erving professor of chemistry, Harvard University; Gene B. Carpenter, assistant professor of chemistry, Brown University; Christian S. Rondestvedt, Jr., assistant professor of chemistry, University of Michigan; William L. Marshall, Jr., senior research chemist, Oak Ridge National Laboratory; Robert L. Letsinger, associate professor of chemistry, Northwestern University; Walter J. Kauzmann, associate professor of chemistry, Princeton University; John E. Kilpatrick, professor of chemistry, Rice Institute; John W. Williams, professor of chemistry, University of Wisconsin; Donald S. Noyce, associate