of surgery and head of the department at Jefferson Medical College; 27 Dec.

MARTIN SINGER, East Meadow, N.Y.; 42; associate professor of psychology at Adelphi College; 21 Dec.

ERNEST G. THEROUX, Brooklyn, N.Y.; 72; retired chairman of the department of physics at St. John's College (Brooklyn); 26 Dec.

Education

■ Establishment of a School for Advanced Study at Massachusetts Institute of Technology was announced on 4 Jan. The new school will provide means by which postdoctoral scholars from all over the world can join with the M.I.T. faculty in theoretical studies and research. Martin J. Buerger, professor of mineralogy and crystallography, has been appointed director.

The new school will formalize opportunities for advanced study that are already available at M.I.T. Initially the unit will be simply an organizational entity, but ultimately it is hoped to provide a center and adequate housing for fellows and guests.

Scholars who are invited to M.I.T. for advanced study will have the status of fellows in the School for Advanced Study. During this academic year there have been approximately 100 such people from 15 countries studying at the institute and they have been registered either as guests or as visiting fellows. By establishing a school, the institute will be able to bring the scholars closer together and closer to members of the faculty. Special programs can be organized and arrangements can be made for the visitors to meet in informal conferences.

The school will be similar in its objectives to the Institute for Advanced Studies at Princeton, but the Princeton center has a permanent staff of some size. Unlike the Princeton school, the M.I.T. School for Advanced Study will be an integral part of the institute and will constitute an extension of the level of the programs of the undergraduate and graduate schools.

Professors participating in the activities of the advanced study division will remain on the faculties of the five present schools—those of science, engineering, architecture and planning, industrial management, and humanities and social studies. Initially, the special staff of the school for Advanced Study will consist only of the director and a secretary. Buerger will assume the office of director on 1 July.

■ The American Society for Metals is sponsoring a nationwide science achievement award program in which junior and senior high-school students will compete for U.S. Savings Bonds. The contest is to be divided into eight geographical regions. There will be 40 winners in three grade classifications in each region and 20 special national awards to students whose entries deal with metals and metallurgy. Entries or projects may be on any subject of science and mathematics.

The program is underwritten by a grant of $10,000 from ASM; the cost of the program's operations is also covered by ASM. Administration of the contest and awards will be carried out by the National Science Teachers Association, Washington, D.C., through its Future Scientists of America Division.

■ The National Heart Institute of the U.S. Public Health Service is conducting a research training program in enzyme chemistry at the Institute for Enzyme Research of the University of Wisconsin under the direction of D. E. Green. Candidates must possess a Ph.D. or M.D. degree. Stipends conform to those in effect for postdoctorate research fellows of the Public Health Service. Application forms and further information may be obtained from the Institute for Enzyme Research in Madison.

■ The department of zoology, Duke University, has announced that a course in radiation biology for seniors and graduates will be offered in the second semester, which begins on 1 Feb. The course will stress the fundamental physical, chemical, and biological principles underlying the biological actions of radiation, and will include a general survey of the more important biological effects of ionizing and ultraviolet radiation. The course will be organized and taught by J. S. Kirby-Smith, biophysicist and visiting professor at Duke University on leave from the biology division of Oak Ridge National Laboratory.

■ The Oak Ridge Institute of Nuclear Studies has announced a partial schedule of 4-week courses in radioisotope techniques to be offered this year. The first of the basic courses, which are offered by the special training division, began 9 Jan.; others are scheduled to begin 6 Feb., 16 Apr., 14 May, 6 Aug., and 3 Sept.

The ORINS special training division, in cooperation with the medical division, also will hold special advanced courses in the use of radioisotopes in hematological studies and procedures, 14–18 May, and in general medical research and procedures, 21–25 May. These two advanced courses are designed for medical personnel who have had previous experience in the use of radioisotopes.

In addition, during 1956 ORINS will conduct four courses in veterinary radiological health for veterinary officers of the Armed Forces. Starting dates for these 2-week courses are 27 Feb., 12 Mar., 3 Apr., and 4 June.

Dates for additional courses will be announced as they are scheduled. Further information may be obtained by writing the Special Training Division, Oak Ridge Institute of Nuclear Studies, Box 117, Oak Ridge, Tenn.

■ Columbia University has announced a new program of night studies in industrial and management engineering. All who are able to pass qualifying tests will be accepted in the new program.

A pilot study, with a limited group of special students, has been in progress since the fall of 1954. This experimental evening work demonstrated that the program should be made available to all interested students.

Under the new arrangement, which goes into effect in February with the opening of the spring session, persons having no college background, or those who have had some college work but lack engineering credits, may study toward the B.S. degree at the School of General Studies during the later hours of the day. Their courses will be identical to those offered in the full-time pre-engineering program and will be taught by the same faculty.

■ The University of California's newest College of Letters and Science in Riverside now has a staff of 11 in its division of life sciences. The division is headed by Herman T. Spieth, professor of zoology, and for 20 years a member of the faculty of City College of New York.

■ A tuition-aid policy directed toward promoting the teaching of science and mathematics in secondary schools will by inaugurated in the University of Pennsylvania's 1956 Summer School. The Summer School will offer twice as large a volume of tuition grants as was offered in 1955 to school teachers and administrators who took graduate studies in the arts and sciences generally. In allocating this aid, preference will be given to those choosing courses in the physical and biological sciences and in mathematics. Such applicants will be eligible for twice as much aid as those taking courses in other fields.

The grants will be made mainly to school teachers in the Philadelphia area. Candidates are to be nominated by their principals or superintendents.

Grants, Fellowships, and Awards

■ The Institute of Personality Assessment and Research, which is under the direction of Donald W. MacKinnon of the University of California, Berkeley, has

received a grant of $150,000 from the Carnegie Corporation of New York for a study of creativity to be conducted over the next 5½ years. It is proposed, under the grant, to consider three aspects of creativity: (i) the traits of personality and temperament that are correlated with high-level creativity of thought and action; (ii) the intrinsic psychological nature of creative acts and creative thinking; and (iii) the determination of the characteristics of the life situation, the educational experiences, and the social and cultural conditions that tend to facilitate or inhibit the appearance of creativity. Members of the institute's staff who will participate in this research are Frank Barron, Jack Block, Richard S. Crutchfield, Harrison G. Gough, Robert E. Harris, and Donald W. MacKinnon.

■ The Division of Biological and Medical Sciences of the National Science Foundation has announced that the next closing date for receipt of research proposals in the life sciences will be *1 Feb.*

■ The Mycological Society of America has announced the availability of a graduate fellowship in mycology. The fellowship carries a stipend of $750.

Eligible candidates must be predoctoral students in residence at the institution where they are registered for the Ph.D. degree. A fellow may hold additional appointments, not to exceed half-time. Forms for application may be obtained from the secretary-treasurer of the society, Dr. C. J. Alexopoulos, Department of Botany and Plant Pathology, Michigan State University, East Lansing, Mich. Applications are due *by 15 Feb.*

■ The General Foods Fund, Inc., an independent foundation sponsored by General Foods Corporation, has announced an aid-to-education program for 1956, with grants totaling $278,000. The program is broader in scope than the Fund's first aid-to-education program that was announced in 1954. Three colleges, Amherst, Hamilton, and Oberlin, have been selected to receive grants of $25,000 each. Grants totaling $117,500 are being made to 16 state and regional associations of private liberal arts colleges. Grants are also being made to three foundations: $25,000 to the National Fund for Medical Education, $20,000 to the United Negro College Fund, and $2500 to the Future Scientists of America Foundation of the National Science Teachers Association. These grants, totaling $240,000, will provide unrestricted operating funds for 360 participating institutions.

Five 4-year scholarships in the physical sciences to be administered by the National Merit Scholarship Corporation and two graduate-study fellowships in food technology to be administered by the Institute of Food Technologists complete the program.

■ Graduate opportunities in botany at Columbia University for 1956–57 are as follows:

Research assistantships

Biochemistry: industrial fellowship in plant products and their biochemistry. R. F. Dawson.

Cellular morphology and growth: research assistantship in cellular and experimental morphology, growth, and development, in plants and animals. E. B. Matzke.

Cytogenetics and cell physiology: AEC grant in nucleic acid and nucleoprotein metabolism in cells, using radioisotopes and autoradiographs. Stipend, approximately $2000. J. H. Taylor.

Mycology: research assistantship in cytology, genetics, or sexuality of fungi. L. S. Olive.

Physiology: research assistantship in mineral nutrition. S. F. Trelease.

Higgins and University fellowships

Any field of botany: stipend, $1500 to $2000. Applications are *due 20 Feb.* Forms may be obtained from the Office of Admissions, 322 University Hall, Columbia University, New York 27.

Teaching assistantships (stipends, $1300 with free tuition)

General botany (Columbia College): E. B. Matzke.

General botany (Barnard College): D. D. Ritchie.

Microbiology (Barnard College): Helen B. Funk.

Morphology and cellular morphology: E. B. Matzke.

Mycology: L. S. Olive.

Biochemistry of fungi or higher plants: R. F. Dawson.

Physiology: S. F. Trelease.

Inquiries for further information or for application forms (except for Higgins and University fellowships) should be addressed to the professor concerned at the Department of Botany, Columbia University, New York 27. Fellowships and assistantships for Columbia University are also available at the New York Botanical Garden and at the Boyce Thompson Institute for Plant Research.

■ The Albert and Mary Lasker Foundation has announced the seventh annual Albert Lasker medical journalism awards competition. All newspapermen and magazine writers who have written medical or health articles during 1955 are eligible. The deadline for entries is *27 Jan.*

Inaugurated in 1949, the medical journalism awards consist of $1000 each, a citation, and a silver statuette of the Winged Victory of Samothrace, symbolizing victory over death and disease. They will be presented to the newspaper writer and the magazine writer who have written the year's best articles, series of articles, editorials, or columns dealing with the improvement of public health or the prolongation of life through medical research or public health programs.

In addition to the newspaper and magazine categories, the judging committee will consider noteworthy medical journalism contributions in other mass media during 1955, including radio and television.

Entries may be made by individual writers, by editors, or by readers of newspapers and magazines. As many entries as desired may be submitted, provided that articles have been published in a newspaper or magazine dated during the calendar year 1955. Entries should be forwarded to the Nieman Foundation for Journalism, 44 Holyoke House, Cambridge 38, Mass. Entry blanks and other information may be obtained from the Nieman Foundation.

■ The Harvard University School of Public Health has announced that public health scholarships for 1956–57 will be granted to individuals of high professional promise in awards ranging from part tuition to tuition plus a stipend, depending on the qualifications and financial needs of the applicants. The scholarship funds are limited and are intended primarily for citizens of the United States. In general, preference will be given to applicants under 35 years of age.

A scholarship applicant must be eligible for admission to the school as a candidate for one of the following degrees: master of public health, doctor of public health, master of science in hygiene, doctor of science in hygiene, or master of individual health.

A catalog of the school, admission and scholarship applications, and further information may be obtained by writing to the Secretary, Harvard School of Public Health, 55 Shattuck St., Boston 15, Mass. Completed admission and scholarship applications must be submitted *by 1 Mar.*

■ Award of 44 unclassified life-science research contracts in the fields of biology, medicine, biophysics, and radiation instrumentation has been announced by the Atomic Energy Commission. Seven of the awards, each of which is for 1 year, are new projects. Three are in biology and four are in the medical sciences. Thirty-seven contract renewals for 1 year were awarded to allow for continuation of research already in progress. Eighteen of these are in biology, fourteen in medicine, three in biophysics, and two in radiation instrumentation.