and sciences." The institute carries on its program through (i) demonstration of modern agricultural techniques, (ii) research and field projects carried on by resident and visiting scientists, (iii) instruction at the graduate level of students who are selected with a view to their returning to their own countries to occupy scientific and administrative positions, and (iv) inter-American technical meetings.

OWEN H. WAGENSTEEN, professor of surgery at the University of Minnesota, will deliver the ninth annual Rudolph Matas lecture at Tulane University on 12 Mar. The lecture is presented each year by the Beta Iota chapter of Nu Sigma Nu.

PAUL WEISS of the Rockefeller Institute for Medical Research delivered the 20th annual Adam M. Miller memorial lecture at the State University of New York College of Medicine on 2 Feb. He discussed "Prospecting in the field of growth and differentiation."

HERBERT J. STACK, director of the Center for Safety Education at New York University, delivered the 31st Hermann M. Biggs memorial lecture of the New York Academy of Medicine on 2 Feb. He discussed the "Psychology of drivers."

BERNARD DAVIDOW, former chief of the acute toxicity branch in the Division of Pharmacology of the U.S. Food and Drug Administration, has been appointed director of pharmacology for the newly established laboratories of the New Drug Institute, 130 E. 59 St., New York. The institute serves industry in all phases of drug research and development. Davidow will direct pharmacological and toxicity investigations on new drugs, food additives, and cosmetic ingredients.

The following are among those who have recently received honorary doctoral degrees.

Wayne University: JACK A. MORTON, director of Device Development, Bell Telephone Laboratories.

University of Pennsylvania: HUGO THEORELL, head of the Biochemistry Department of the Nobel Institute in Stockholm.

Birmingham Southern College: ERN-EST V. JONES, consultant to Oak Ridge National Laboratory.

ELMER W. ENGSTROM, senior executive vice president of the Radio Corporation of America who is in charge of the concern's research laboratories at Princeton, N.J., received the 1956 John Ericsson gold medal on 11 Feb. at the

68th annual dinner of the American Society of Swedish Engineers in New York. The medal is awarded every other year to a Swedish citizen, or to an American citizen of Swedish descent, in recognition of technological or scientific contributions.

LORIN E. HARRIS, professor of animal husbandry and chairman of the Institute of Nutrition at Utah State Agricultural College, left this month for Australia, where he will conduct research on sheep nutrition under a Fulbright fellowship.

Another Utah Fulbright scholar is DATUS M. HAMMOND, chairman of the department of zoology, entomology, and physiology, who is at present in Germany at the University of Munich studying trichomoniasis in cattle. He is scheduled to return to the United States early next fall.

LESTER E. KLIMM, professor of geography at the University of Pennsylvania, received the Henry Grier Bryant gold medal of the Geographical Society of Philadelphia at the society's annual dinner on 14 Feb. The medal is given for distinguished service to geography.

HAROLD CHATLAND, now dean of the College of Arts and Sciences and professor of mathematics at Montana State University, became acting dean of the faculty on 1 Feb. A. S. MERRILL, who has been both dean of the faculty and vice president, will continue as vice president.

F. W. BLAIR, director of research and development for the Procter and Gamble Company, retired on 1 Jan. after 38 years of service. Blair received his undergraduate training in chemistry at Amherst College and his graduate training at Princeton University.

He began his career with Procter and Gamble at the Ivorydale factory in Cincinnati in 1917, and 3 years later went to Kansas City as plant superintendent. In 1921, he returned to Cincinnati to take charge of the work of standardizing factory operations and laboratory control; later he directed process development, and started and directed the products service department in the newly created chemical division.

He was made chemical director in 1928 and served in that capacity until 1953, when the chemical division was absorbed into the new research and development department, at which time he became director of research and development. Under Blair's direction Procter and Gamble's research and development program has grown from a comparatively small operation into a major division of the company.

## Recent Deaths

HENRY BEEUWKES, St. Petersburg, Fla.; 74; director of the West Africa Yellow Fever Commission, 1924–34; formerly conducted research on tuberculosis at Cornell University Medical College; World War II organizer and commander of the Valley Forge General Hospital; 31 Jan.

EMILE BOREL, Paris, France; 85; professor of mathematics at the University of Paris 1909–41; vice-president of the International Council of Scientific Unions, 1946; 4 Feb.

HENRI CHRETIEN, Washington, D.C.; 77; optical engineer; codesigner of the telescope for the United States Naval Observatory in Washington, D.C.; inventor of the anamorphic lens used as a basis for the CinemaScope film process; 6 Feb.

WALTER C. COFFEY, St. Paul, Minn.; 80; authority on animal husbandry; president emeritus of the University of Minnesota; vice president AAAS Section O in 1930; 31 Jan.

REUBEN FRIEDMAN; Philadelphia; 63; internationally known dermatologist and author; professor of clinical dermatology at Temple University Hospital; 4 Feb.

FRANK C. HOCKEMA, Lafayette, Ind.; 63; mechanical engineer; vice president of Purdue University; 3 Feb.

DAVID LAZARUS, St. Petersburg, Fla.; 72; former professor of obstetrics and gynecology at New York Polyclinic Medical School; 6 Feb.

MALCOLM T. MacEACHERN, Chicago, Ill.; 74; associate professor of medicine at Northwestern University, Medical School, 1943–48, and founder of the program in hospital administration at the school; 3 Feb.

ERICH A. MARX, Troy, N.Y.; 81; professor of physics at Rensselaer Polytechnic Institute; former professor of science at the University of Leipzig; 31 Lan

GEORGE OENSLAGER, Akron, Ohio; 82; research authority on rubber chemistry; 5 Feb.

LLOYD M. SALISBURY, Montville, N.J.; 66; civil engineer; 1 Feb.

GROVER C. SAYER, Hillside, N.J.; 69; former engineer for Esso Research and Engineering Company; 5 Feb.

## Education

■ The University of Rochester is establishing a computing center. Its facilities will include one of the new Burroughs E 101 machines, which is to be installed soon, and an IBM 650 electronic computer, to be received next summer. The university is organizing a new computing group and training program. The project

was authorized after a 5-year study of computer equipment and techniques by representatives of the university and of local companies in the optical, banking, retail, machine tool, and electronic fields.

- Gifts totaling \$1 million have recently been received by Washington University (St. Louis) to endow a neurology institute in the School of Medicine. Half of the money was from the Louis D. Beaumont Foundation of Cleveland, Ohio. The rest was contributed by Morton J. May, chairman of the board of the May Department Stores Company, and by Mrs. Charles M. Rice, who made the gift in memory of her late husband. The new unit, the Beaumont-May Institute of Neurology, will be devoted to study of chronic brain disorders.
- A \$100,000 ornithology center is to be built next spring in Cornell University's Sapsucker Woods, 3 miles from the campus center. An observation room, with picture windows overlooking a pond, woods, and feeding stations, will connect with a new ranch-type building containing offices, laboratories, and workrooms.

Although ornithology students have used Sapsucker Woods for many years, the university acquired it only last year through gifts by the families of Lyman K. Stuart of Newark, N.Y., and Walter Heasley of Ithaca.

The Laboratory of Ornithology, for 40 years a unit under the entomology, zoology, and conservation departments, successively, is now an independent department of the university. It will continue to direct ornithological expeditions throughout the world. This year the Cornell Trust for Ornithology is sponsoring Mr. and Mrs. Donald McChesney of Syracuse, N.Y., and Mr. and Mrs. James Pass of Cazenovia, N.Y., on an expedition to Kenya, where they will make films and recordings of East African birds.

■ Texas business and industry is helping the University of Texas to organize a summer course for junior and senior high-school teachers. The program is to be offered in the first term of the 1956 summer session. Professors in the natural sciences and mathematics and specialists in teaching methods will join with special lecturers from business and industry for the program. Many companies will provide scholarships for local teachers, and others will make available exhibits and special materials. Visits to industrial plants and research installations will supplement classroom sessions.

Two types of teacher are intended to be served by the program: experienced science and mathematics instructors who wish to be brought up-to-date on developments in their fields, and teachers with limited formal training who would like to take courses to prepare them for more effective teaching. Robbin Anderson, of the university's department of chemistry and chairman of the Committee on Science Teaching which evolved the plan, has announced that a wide variety of courses and seminars will be offered.

■ The Biology Council of the National Academy of Sciences—National Research Council has prepared a booklet entitled Career Opportunities in Biology. Row, Peterson and Company, publisher in this nonprofit enterprise, will send a copy of the booklet to every junior high school, high school, and college in the country during March.

Russell B. Stevens, executive secretary of the Biology Council, is author of the new booklet. He estimates that for every full-time research biologist, teacher, civil servant, or administrator, there is a need for three to five persons as technicians, clerical workers, laboratory aides, student assistants, animal caretakers, and so forth. There is also a place in biology for mathematicians, agriculturists, businessmen, artists, writers, librarians, and persons with mechanical aptitudes and skills. The foreword for the publication is by Paul A. Weiss, head of the Laboratory of Developmental Biology at the Rockefeller Institute for Medical Research, under whose chairmanship the booklet was prepared.

■ The French National School for Geographic Sciences (Ecole Nationale des Sciences Géographiques) will again offer a theoretical and technical course in aerial photogrammetry. This program is particularly suited to non-French students and photogrammetrists who desire to familiarize themselves with the instruments and methods currently used in France. The course will be held at Saint-Mande (near Paris) from 4 June to 13 July, making it possible for participants to attend the eighth International Congress for Photogrammetry in Stockholm. Although lectures will be delivered in French, explanations will be provided in English and in Spanish.

The number of participants is limited to 25. Applications for registration must be sent *before 15 May* to Monsieur le Directeur, l'Ecole Nationale des Sciences Géographiques, 2, Avenue Pasteur, Saint-Mande (Seine), France.

■ An electron microscope has been presented by the Japanese Government to the University of California at Los Angeles. The microscope, which was made by Hitachi, Ltd., of Tokyo, was given to the department of infectious diseases to foster friendly relations between American and Japanese scientists, and to honor Japanese scientists who have been asso-

ciated with the department. The instrument is being installed in a special laboratory made possible primarily through gifts from the Nina Anderton Foundation and Myron Prinzmetal.

■ The School of Agriculture of the William H. Miner Agricultural Research Institute at Chazy, New York, is scheduled to open on 4 Sept. A 1-year course in general agriculture will be offered to students of the area.

Enrollment is limited and candidates will be accepted on the basis of interest and adaptability. There is no tuition fee. Books, meals, and dormitory housing will be furnished without charge.

Practical agriculture will be stressed. It is the aim of the institute to train students so that, through application of their learning, the productivity of the land will be increased, the work can be done with less labor, and the economic status of the farmers of the area will be improved.

Staff positions for vocational agricultural teachers or specialists are available. Address communications to Edward J. Czarnetzky, Dean of Agricultural Education, School of Agriculture, Chazy, N.Y.

■ Forty high-school seniors have been named finalists in the 15th annual Science Talent Search. Winners were selected from a group of 20,828 aspirants, highest number in the history of the scholarship competition. The eight girls and 32 boys are being awarded all-expense trips to Washington, D.C. They will arrive in Washington on 1 Mar. to take part in the 5-day Science Talent Institute, during which top winners will be selected and the Westinghouse science scholarships awarded.

This year New York continued to lead all states in the number of winners produced—five boys and two girls. Five of the seven come from New York City and vicinity. California won second place with four finalists, all boys, one of whom attends school in Exeter, N.H. Illinois, Indiana, and Minnesota tied for third place with three winners each. Four states will send two winners each, and eleven are represented by one winner each.

Begun in 1942, the Science Talent Search is conducted by Science Clubs of America through Science Service. Awards are made by the Westinghouse Educational Foundation, which is supported by the Westinghouse Electric Corporation.

■ The Cold Spring Harbor Biological Laboratory will offer three specialized courses during the summer of 1956: bacterial viruses, 18 June-7 July; genetics of fungi, 11-31 July; and bacterial generation

netics, 2–22 Aug. The course on genetics of fungi is being offered for the first time this year, and G. Pontecorvo of the University of Glasgow will be in charge.

A limited number of fellowships covering part of the tuition fees will be available for graduate students. In addition, research facilities for work on microbial genetics throughout the summer will be available to a limited number of independent research workers. Information may be obtained from the Biological Laboratory, Cold Spring Harbor, New York.

## Grants, Fellowships, and Awards

■ Rand McNally and Company will offer 25 full-tuition scholarships to teachers and supervisors in elementary and secondary schools for a workshop in geography at the Northwestern University summer session. The scholarships are part of the Rand McNally centennial, which is being observed throughout 1956.

Offered in cooperation with Northwestern's School of Education and department of geography, the scholarship program is intended to enable teachers to explore new concepts in the field of geography. Applications must be filed by 1 Apr. The Geography Workshop will be held on the Evanston campus from 25 July to 3 Aug. Applications and additional information may be obtained from the Dean, School of Education, Northwestern University, Evanston, Ill.

- The New York Botanical Garden has announced the Gertrude S. Burlingham fellowship in mycology for advanced predoctoral or postdoctoral summer study at the garden. The stipend is \$700; work under this appointment may begin at any time after 1 June and should continue for approximately 3 months. Nominations or applications should reach the director by 15 Apr.
- The Cancer Research and Hospital Foundation has announced its annual Sherman Pratt fellowship for clinical cancer chemotherapy. The award will be made to graduates of accredited United States or foreign medical schools who are interested in gaining experience and training in new methods of clinical cancer chemotherapy developed by the Institute of Applied Biology.

The award comprises \$7000 for a 1-year fellowship, or \$3500 for 6 months. Applicants should submit name, address, age, medical school, year of graduation, postgraduate experience, and background to the Sherman Pratt Fellowship Award Committee, Cancer Research and Hospital Foundation, 161 E. 90 St., New York 28.

■ The Gravity Research Foundation, New Boston, N.H., has announced the 1956 awards for essays on gravity. Five winners will be named on 1 June. They will be selected for the best 1500-word papers on the possibilities of discovering (i) some partial insulator, reflector, or absorber of gravity; (ii) some alloy, or other substance, the atoms of which can be agitated or rearranged by gravity to throw off heat; or (iii) some other reasonable method of harnessing, controlling, or neutralizing gravity. The awards will be for \$1000, \$300, \$200, \$150, and \$100, respectively.

Essays, with two carbon copies, must be received before 16 Apr. They will be accepted from anyone who is seriously interested in the application of gravity to practical uses for the benefit of humanity. All essays must be typewritten in English on 8½ by 11-inch paper. A title covering the area of thought expressed in the essay and a summary paragraph of 100 words or less should be included, as well as a short biographical sketch.

- National Mass Media awards for children's books were presented on 6 Feb. by the Thomas Alva Edison Foundation. The Boy Scientist, by John Lewellen and published by Simon and Schuster, won the Best Children's Science Book award (for younger children).
- The James F. Lincoln Arc Welding Foundation of Cleveland, Ohio, is offering \$20,000 in cash awards for ideas or suggestions that will accelerate progress in arc welding. Residents of the United States or its possessions are invited to submit ideas to the foundation on any aspect of arc welding that can be used to advance welded design, welding engineering, or the general application of the arc-welding process. No restrictions are placed on either the nature or the extent of ideas that may be submitted for award.

The \$20,000 will be distributed in 20 awards with a top one of \$5000; others will amount to \$4000, \$3000, \$2000, and \$1000. There will be additional smaller prizes. Ideas must be submitted by 30 July. Complete information and rules are available from the James F. Lincoln Arc Welding Foundation, Cleveland 17, Ohio.

## In the Laboratories

■ Parke, Davis and Company has announced that it will build a new medical research center that is to cost approximately \$10 million. This year will be devoted to planning; actual construction is expected to take two additional years. The exact location of the new facility has not yet been decided.

■ The American Cyanamid Company has effected the consolidation of its research activities into a single division under the direction of Kenneth H. Klipstein. Geographic regrouping has brought related activities together at the appropriate research laboratory. This consolidation is part of a divisional realignment of the company that started 2 years ago.

The research division, which has equal status with the nine operating divisions and carries out research for them, is grouping related activities in the laboratories at Bound Brook, N.J.; Pearl River, N.Y.; and Stamford, Conn.

At Bound Brook a new administration-laboratory building will house research activities primarily related to the organic chemicals and pigments divisions.

At Pearl River new construction will make it possible to centralize all research in the pharmaceutical and biological fields. The laboratories at Stamford, Conn., will carry on researches in plastics, agricultural chemicals, industrial chemicals, and mineral dressings, as well as process development and basic research in new fields.

- The Naugatuck Chemical Division of the United States Rubber Company has acquired a 150-acre tract of land in the Scott's Bluff region of Baton Rouge, La., on which it plans to construct a new chemical plant for the manufacture of Kralastic plastic materials. Kralastic is a copolymer based on styrene, butadiene, and acrylonitrile that is used for pipe, automotive parts, and a variety of other industrial products.
- The Southern California Edison Company will be the first utility in California to produce electricity from atomic energy. The Atomic Energy Commission has authorized Atomics International, a division of North American Aviation, Inc., and the Edison Company to negotiate a contract in connection with the Atomics International experimental reactor near Santa Susana. The company's investment in the nuclear installation will be slightly more than \$1 million.

California Edison has announced that it will share the information and experience it derives from building and operating the station. To the extent permitted by the AEC, a number of representatives of both public and privately owned utilities will be allowed access to the station to obtain information on engineering features and data and to observe operating and maintenance phases of the project. Electricity from the experimental nuclear electric plant will be available for commercial use in the Santa Susana area some time during the coming summer.