lecturer, he would go to extreme pains in experimental preparation for his famous microchemical demonstrations, which never failed and of which the writer was repeatedly a fortunate witness. Thus the remarks made in the lecture in which Professor Emich demonstrated "the breathing of a rose petal" by means of the Schlierenprojectoscope, "... and now just imagine if we would wear glasses of similar optical design, a new world would open to us, a world unexcelled in phantastic aspects . . . ," revealed the qualities of an eminent scientist who also possessed the rare gift of being able to blend esthetics with science to a harmonious symphony.

JOSEPH B. NIEDERL

WASHINGTON SQUARE COLLEGE,

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### RECENT DEATHS AND MEMORIALS

DR. DAVID M. MOTTIER, emeritus professor of botany at Indiana University, died on March 24 at the age of seventy-five years.

DR. CHARLES L. REESE, formerly head of the depart-

# SCIENTIFIC EVENTS

# PUBLICATION OF A NEW PHYSIOLOGICAL JOURNAL IN SCANDINAVIA

THE following announcement dated March, 1940, has been received from Professor August Krogh, of Copenhagen, by Dr. A. J. Carlson, of the University of Chicago.

Last year we had some talk about the future of Skand. Arch. We have now tried to obtain an arrangement to take over the Journal (from the publishers), but failed, and it has been decided to discontinue the "Archiv" and start a new journal on a strictly Scandinavian basis with Liljestrand as editor-in-chief and with assistant editors in the single countries to secure a high standard for the papers accepted. The journal is to be called Acta Physiologica Scandinavica, and we expect to send out the first number before long to a large number of physiologists, pharmacologists, biochemists and libraries. The Acta will be open to papers from Scandinavian authors and people working in Scandinavian laboratories, and I trust that the number of papers in English will show a marked increase, the more so as we must face the probability that it will be officially or inofficially excluded from Germany. We shall be very grateful if you will draw the attention of our colleagues in the United States and Canada to our new venture and help us secure a sufficient number of subscribers.

We are well aware of the difficulties. Our countries are being impoverished by the war at an appalling rate and are under a constant menace, but we are determined (even our colleagues in Finland) to carry on the scientific work and to do our best to make this new venture a success.

ment of chemistry and a member of the board of directors of E. I. du Pont de Nemours and Company, died on April 12 at the age of seventy-seven years.

DR. GLENN E. CULLEN, professor of pediatrics at the College of Medicine of the University of Cincinnati and director of the laboratories of the Children's Hospital Research Foundation, died on April 10 at the age of fifty years.

THE Journal of the American Medical Association reports the formation of an organization to raise an endowment fund of \$150,000 to establish fellowships in neurology as a memorial to the late Dr. Frederick Tilney, formerly professor of neurology and neuroanatomy at Columbia University. According to the plans, the principal of the memorial fund will be in the custody of the trustees of Columbia University.

A GRINNELL NATURALISTS SOCIETY of the University of California at Berkeley has been organized to commemorate the work of the late Professor Joseph Grinnell, who was for thirty-one years the director of the museum of vertebrate zoology of the university.

# AWARD OF GUGGENHEIM FELLOWSHIPS

SEVENTY-THREE fellowships with stipends amounting to \$165,000 to assist research and creative work have been announced by the John Simon Guggenheim Memorial Foundation. The foundation, established in 1925 by former United States Senator and Mrs. Simon Guggenheim as a memorial to a son to assist original work by scholars and artists, in the past fifteen years has granted 913 fellowships and \$2,082,000 to assist its fellows to carry on their work.

This year, on account of the wars in Europe and the Far East all fellows, except one whose plans will take him to the Near East, will work in the Western Hemisphere. Twelve will go to Latin America, and the rest will work in the United States and in Canada. Among those who will work in the United States are six Canadians appointed under a recent extension of the fellowships to Canada. The annual Guggenheim fellowships for Latin American scholars and artists, another part of the foundation's plans for granting fellowships in this hemisphere, will be awarded in June.

The Guggenheim fellowships are granted to scholars and artists who by their previous work have shown themselves to be persons of unusual ability. Men and women, married and unmarried, of all races and creeds, who are citizens or permanent residents of the United States, citizens of Canada and of certain Latin American countries, are eligible on equal terms. The fellows

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are usually of ages between 25 and 40 years. This year their average age is thirty-seven years. The stipends are usually \$2,500 a year.

Of the fellows chosen this year thirty-seven are freelance scholars and artists. Twenty are not college trained. Five are women. They are residents of twenty-two states and of two Canadian provinces. McGill University leads with three members of its faculty. Clark University and the Universities of California, Michigan and Pennsylvania have two each. Twenty-five colleges, universities and research institutions have one fellow each drawn from their staffs. Two of the fellows are Negroes.

The seventy-three fellows were selected from among more than 1,700 applicants. Fellowships awarded in the sciences are:

DR. ALFRED MÉTRAUX, ethnologist, who, on his renewed fellowship, will write a book to be entitled "The Ethnology of the Gran Chaco." Dr. Métraux spent his first Guggenheim Fellowship in that area studying the culture of the primitive Indians there.

DR. ALFRED IRVING HALLOWELL, professor of anthropology in the University of Pennsylvania, will write a book on personality in primitive communities, based upon the results of his observations of an aboriginal hunting people.

DR. LUTHER SHEELEIGH CRESSMAN, professor of anthropology and director of the Museum of Natural History, University of Oregon, will study the relation of the prehistoric south-central Oregon cultures to those of the Southwest.

DR. ISABEL T. KELLY, a research associate of the University of California, who will make ethnographic and archeologic investigations in southwestern Mexico.

DR. GEORGE KATONA, research psychologist, New York City, will make studies in the field of the psychology of learning with special reference to the differences in learning by understanding and learning by memorization and drill.

DR. JESSE DOUGLAS, Brooklyn mathematician, for research in mathematical analysis and geometry with some applications to mathematical physics. Dr. Douglas was awarded the Fields Medal by the International Congress of Mathematicians meeting in Oslo, in 1936.

DR. RAYMOND L. WILDER, professor of mathematics in the University of Michigan, for researches in the field of topology, particularly in the theory of local connected spaces and of generalized manifolds.

DR. AUREL FRIEDRICH WINTNER, associate professor of mathematics in the Johns Hopkins University, for the preparation of a monograph, in collaboration with Dr. Norbert Wiener, a former fellow, in the field of mathematical theory of probability and statistics.

DR. GORDON PALL, assistant professor of mathematics in McGill University, who will write a book on the arithmetical properties of quadratic forms.

DR. HAROLD ERNEST VOKES, assistant curator of invertebrate paleontology in the American Museum of Natural History, New York City, will make a study, in cooperation with the American University at Beirut, Syria, of the stratigraphy and invertebrate paleontology of the Lebanon Mountains.

DR. RAYMOND E. CRIST, instructor in geography at the University of Illinois, will write a book on the human geography of the Venezuelan Andes.

DR. CHESTER STOCK, professor of paleontology at the California Institute of Technology, Pasadena, who will continue his vertebrate paleontological reconnaissance of Mexico, begun last year on his first Guggenheim fellowship.

DR. RAYMUND L. ZWEMER, assistant professor of anatomy at the Medical School of Columbia University, will work in South America with Dr. B. A. Houssay, professor of physiology in the University of Buenos Aires. Dr. Zwemer's project is a scientific study of the factors involved in the maintenance, by living cells, of a differential permeability to electrolytes.

DR. BERRY CAMPBELL, assistant professor of anatomy at the Medical School of the University of Oklahoma, who will make an investigation of the integrative mechanisms of the spinal cord with particular reference to the basic locomotor behavior patterns.

DR. GEORGE THOMAS JOHNSON, research assistant and lecturer in botany, Washington University, St. Louis, who will make a biologic and taxonomic study of the lichens of tropical America.

DR. HENRY K. SVENSON, curator of the Brooklyn Botanic Garden, who will investigate the relationship of the flora of western South America to that of the Galapagos Islands. Dr. Svenson has already worked in the Galapagos, and his fellowship will be used for plant exploration in the opposite mainland of South America.

DR. STANLEY ADAIR CAIN, associate professor of botany, University of Tennessee, for the preparation of a book on the concepts and methods of geobotany.

DR. KATHERINE ESAU, assistant professor of botany and assistant botanist at the College of Agriculture, University of California, for studies of the anatomy and physiology of vascular plants.

DR. FRANKLIN P. METCALF, professor of botany, Lingnan University, Canton, China, for the preparation of a monograph on the flora of the Province of Fukien, China. Dr. Metcalf will work at the Arnold Arboretum of Harvard University.

DR. GREGORY PINCUS, visiting professor of experimental zoology at Clark University, who will, on his renewed fellowship, continue his investigations of the developmental physiology of mammalian eggs and embryos.

DR. MVRON GORDON, research zoologist of New York City, who will continue his genetic studies of species and varieties found in nature and his studies of neoplastic diseases in vertebrate animals.

DR. DAVID LION DRABKIN, assistant professor of physiological chemistry at the Medical School of the University of Pennsylvania, who will carry on researches in the field of biological oxidation-reduction processes with Professor W. Mansfield Clark at the Johns Hopkins University.

DR. JOHN TILESTON EDSALL, associate professor of bio-

logical chemistry in the Harvard Medical School, for studies of the physical chemistry of amino acids, peptides, proteins and related compounds.

DR. DAVID DENNISON, professor of physics, University of Michigan, for researches into molecular structure.

DR. ARISTID V. GROSSE, chemist of Bronxville, N. Y., for investigations of catalytic reactions of organic compounds and investigations of the products of neutron bombardment of uranium, protactinium and thorium, at Columbia University.

DR. ARTHUR C. COPE, associate professor of chemistry, Bryn Mawr College, for studies of the phenomenon of tautomerism.

### THE FINNEY-HOWELL RESEARCH FOUNDATION, INC.

THE Finney-Howell Research Foundation, Inc., of Baltimore, Md., announces that, at the annual meeting held in March, 1940, fellowships for research into the cause or causes and the treatment of cancer were renewed for the following:

Paul Clarence Aebersold, working at the Radiation Laboratory of the University of California at Berkeley.

Geoffrey Malcolm Badger, working at the Royal Cancer Hospital (Free) at London, England.

Lloyd William Law, working at the Roscoe B. Jackson Memorial Laboratory at Bar Harbor, Maine.

Joseph Lewis Melnick, working at Yale University School of Medicine at New Haven, Conn.

John Frederick Menke, working at Stanford University Hospital, at San Francisco, California.

John Lewis Wood, working in the Division of Chemistry, Harvard University, at Cambridge, Mass.

Paul C. Zamecnik, working at the University of Carlsberg, at Copenhagen, Denmark.

New fellowships were awarded as follows:

Julius Charles Abels, working at the Memorial Hospital for Cancer at New York City.

Mark A. Graubard, working at Clark University, Worcester, Mass.

John Wade Howard, working at Thorndike Memorial Laboratory, Boston City Hospital.

Bernerd E. Kline, working at the Department of Physiology, University of Wisconsin.

Margaret Nast Lewis, working at Crocker Radiation Laboratory, the University of California at Berkeley.

Alfred Marshak, working at the Radiation Laboratory, the University of California at Berkeley.

Dr. George O. Gey was also awarded a grant of \$2,000 to carry on his work in cancer at the Johns Hopkins Medical School.

January 1, 1941, has been fixed upon as the closing date for filing application for 1941 awards.

# THE INDUSTRIAL RESEARCH INSTITUTE

THE Industrial Research Institute, New York City, will hold its second annual meeting at the laboratories of the Procter and Gamble Company and at the Queen City Club, Cincinnati, on April 26 and 27. Maurice Holland is executive officer of the institute. Newly elected officers for the current year will be installed at the meeting. Present relations between industries and universities on research and how such relations may be made more effective will be the main topic of discussion. Dean Edward L. Moreland, professor of electrical engineering and head of the department of the Massachusetts Institute of Technology, and Dean Charles Ellison McQuigg. of the College of Engineering of the Ohio State University, will lead the discussions from the university point of view. Two industrial executives whose names will be announced later will discuss the subject from the standpoint of industry. Other subjects on the agenda are "Selection of College Graduates" and "Project Selection and Evaluation," to be led, respectively, by Dr. R. S. Uhrbrock, of the Industrial Relations Division of the Procter and Gamble Company, and by W. N. Tuttle, research director of the General Radio Company, Cambridge, Mass. There will be a tour through the Procter and Gamble Research Laboratories and plant at Ivorydale. Delegates will also visit the plant and laboratories of the Champion Paper and Fiber Corporation at Hamilton, Ohio, following the adjournment of the meeting.

The Industrial Research Institute, which is affiliated with the National Research Council, was organized to promote, through the cooperation of its members, constant improvement of methods and more efficient and better management in industrial research. The institute comprises representatives of industrial concerns who are leaders in their respective fields of research.

## THE BICENTENNIAL WEEK CELEBRATION OF THE UNIVERSITY OF PENNSYLVANIA

THE program of the Bicentennial Celebration Week of the University of Pennsylvania will open on Sunday, September 15, and will continue through Saturday, September 21. It will include the following events:

General sessions, symposia and conferences, to which many of the world's most eminent scholars will contribute.

Cultural and scientific exhibits illustrative of the progress of civilization through the ages.

Laboratory and clinical demonstrations of new techniques employed in engineering, chemistry, medicine, physics and other fields.

Convocation for the conferring of honorary degrees.

Addresses by prominent alumni and undergraduates of Pennsylvania. Presentation of Bicentennial Fund.

Parade of graduates. Class reunions. Tours of the campus. Special events for undergraduates.

Concerts by University Band and the Glee Club. Receptions, dinners and luncheons. Water carnival and fireworks display.

After religious services on Sunday, there will be a series of scholarly addresses appropriate to a program which is designed not only to constitute a tribute to