

coagulants"; Speaker to be announced, "The Clinical Use of Anticoagulants."

CANCER

W. H. Summerson, Chairman; W. U. Gardner, Vice-Chairman

August 29 O. Warburg and A. L. Lehniger, "Cancer and Fermentation Enzymes"; G. A. LePage, "Studies of Glycolytic Enzymes of Tumors"; J. Greenstein, "Proteolytic Enzymes and Cancer"; D. M. Greenberg, "Effect of Amino Acid Analogs on Protein Formation: Relation to Cancer."

August 30 E. S. Guzman Barron, "Mechanism of Action of Ionizing Radiations"; E. Lorenz, "Some Biological Effects of Ionizing Radiations on Laboratory Animals"; G. O. Gey, "Evidences of Biologic Variation in Tissue Cultured Strains of Normal and Malignant Cells"; W. Earle, "Certain Recent Advances in Tissue Culture in Relation to Cancer Research."

August 31 G. H. Twombly and E. F. Schoenewaldt, "Metabolism of Estrogenic Hormones Labeled with Radioactive Isotopes"; C. R. Moore, "Role of Hormones in the Differentiation and Determination of Tissues"; A. Cantarow and K. E. Paschke, "Certain Aspects of Hormone Imbalance in Experimental Carcinogenesis"; R. K. Boutwell, "Studies on the Rate of Tumor Formation and the Activity of the Adrenal Cortex."

September 1 F. S. Philips and J. B. Thiersch, "Effects of 4-Amino Pteroylglutamic Acid and Congeners in Mammals"; E. B. Schoenbach, "Status and Potentialities of Folic Acid Antagonists as Carcinolytic Agents"; S. Farber, "Action of Folic Acid Conjugates and Antagonists on Leukemia and other Forms of Disseminated Cancer."

September 2 J. G. Kidd and H. M. Toolan, "Studies on the Mechanisms of Resistance and Immunity to Transplanted Cancer Cells"; J. J. Bittner, R. A. Huseby, and C. P. Barnum, Jr., "Studies on the Factors Associated with the Development of Mammary Cancer in Mice."

NEWS and Notes

W. C. Fernelius, chairman of the Department of Chemistry at Syracuse University, has been appointed professor and head of the Department at Penn State College, State College, Pennsylvania.

Francis E. Ray, formerly of the Laboratory of Radiochemistry, University of Cincinnati, has been appointed director of the University of Florida Cancer Research Laboratory, effective July 1.

B. I. Burns, administrator of hospitals at the University of Texas Medical Branch, Galveston, has accepted appointment as director of Municipal Hospitals for Kansas City, Missouri, effective in March.

Charles E. Lankford, formerly associate professor in Bacteriology at the University of Texas Medical School, Galveston, has been appointed associate professor in bacteriology at the main university in Austin.

Sven Hedin, 83-year old Swedish explorer and scientist who was partially blinded during an exploring expedition into Asia 55 years ago, has regained the sight of one eye through

a recent operation by K. G. Ploman, Swedish eye specialist.

William G. McDaniel, chemical engineer, has joined the Operations Branch, Plants Division, Technical Command, Army Chemical Center, Maryland.

Alice Eastwood, botanist at the California Academy of Sciences since 1892 and curator of the Department of Botany since 1896, retired on January 19 on the occasion of her ninetieth birthday. At the January meeting of the Academy Council, Miss Eastwood was made curator emeritus of botany.

John Thomas Howell was named curator, and **Elizabeth McClintock**, assistant curator.

Abel Wolman, of Johns Hopkins University, has been appointed lecturer and research consultant in Sanitary Engineering at the University of Illinois.

Margaret Fuller Boos, consultant geologist in Denver, is serving as visiting professor in the University of Illinois' Department of Geology during the spring semester.

Jaroslav Dedek, chemical engineer and former director of the research station for the sugar industry in Czechoslovakia, has taken up temporary residence in Belgium. He is interested in coming to the United States to establish an international society of beet

sugar technology. Persons wishing to communicate with him may address him in care of Robert C. Hockett, 52 Wall Street, New York City 5.

Thomas K. Sherwood, dean of engineering at Massachusetts Institute of Technology, and **Bruce S. Old**, of the Arthur D. Little staff, have been elected to the Board of Directors of Arthur D. Little, Inc., Cambridge, Massachusetts.

Hyman I. Goldstein, of Camden, New Jersey, has been elected an honorary member of the Belgian Gastroenterological Society, and a corresponding member of the Cuban Society of Cancerology.

The appointment of **Harold H. Berman** as director of Willowbrook State School, Staten Island, New York City, was recently announced. Dr. Berman was formerly on the medical staff at St. Lawrence State Hospital, Ogdensburg.

Walter P. Taylor, wildlife research supervisor, U. S. Fish and Wildlife Service, and leader of the Oklahoma Cooperative Wildlife Research Unit, has been elected honorary Life Fellow of the Texas Academy of Science.

John B. Calkin, of New York City, has been appointed director of the Department of Industrial Cooperation, and associate professor of chemical engineering at the University of Maine. **Lyle Jenness**, who has been

acting director of the Department will become head of the Department of Chemical Engineering.

E. D. Merrill, Arnold professor emeritus of Botany, Harvard University, has been appointed president of the Taxonomic Section of the Seventh International Botanical Congress, which is to convene in Stockholm the summer of 1950.

Harry Eagle has resigned as scientific director of the Research Branch of the National Cancer Institute, to head a new Section on Experimental Therapeutics in the Microbiological Institute, National Institutes of Health, Bethesda, Maryland.

Daniel Melnick, formerly chief of the Food Development Division, Quartermaster Food and Container Institute for the Armed Forces, has been appointed chief technologist at The Best Foods, Inc., Bayonne, New Jersey.

Paulis P. Bijlaard, **Arthur J. McNair**, and **Floyd O. Slate** have been appointed associate professors in the School of Civil Engineering at Cornell University.

Grants and Awards

The **Robert Gould Research Foundation**, Cincinnati, has made a grant-in-aid of \$4,000 for research in nutrition to **C. A. Elvehjem**, dean of the Graduate School and chairman of the Biochemistry Department, University of Wisconsin. Dr. Elvehjem will study the use of amino acids as the sole source of protein in the diet.

On fellowships granted by the **Westinghouse Educational Foundation**, 50 secondary school teachers will receive a six-week refresher course in science at the Massachusetts Institute of Technology this summer. A total grant of \$62,500 will make it possible for 50 teachers to receive grants of \$250 each summer for the next five years.

The **University of Cincinnati** has received a \$2,500 fellowship from the **Crosley Broadcasting Corporation** to study the relationship between education and television.

The **University of Buffalo Medical School** will receive \$432,000 from the

estate of Mrs. S. Margaret Berriek Meyer for a new research laboratory in memory of her husband. It will be known as the **Edward J. Meyer Laboratory**.

The **Charles Hayden Foundation of Boston** has created a \$100,000 endowment fund at Columbia University, the income from which will be used to enable students from New York City and Boston to attend Columbia College. Since 1939, the Foundation has provided scholarship funds for more than 250 students.

The **American Psychological Association** has received a grant of \$3,000 from the Carnegie Corporation of New York toward support of an analysis of the state of progress in each of the principal areas of psychological research.

The **Photographic Society of Sweden** has awarded the **Adelsköld Gold Medal** to **C. E. K. Mees**, vice president in charge of research for the Eastman Kodak Company, for his contributions to the progress of photography. Dr. Mees acknowledged the award from Rochester, New York, in a shortwave broadcast beamed to Sweden and other European countries.

The **James Watt Medal** of the Institution of Mechanical Engineers in London has been awarded **Fredrik Ljungström**, Swedish inventor, who designed the rotary air preheater.

The **Kungliga Fysiografiska Sällskapet** in Lund, Sweden, recently awarded its silver medal to **William Randolph Taylor**, University of Michigan, in recognition of his research in marine algae.

Peter J. W. Debye, of Cornell University, will receive the **1949 Willard Gibbs Medal** at the meeting of the Chicago Section of the American Chemical Society on May 20.

The **University of Southern California's Department of Chemistry** has begun two new research projects, sponsored by the Office of Naval Research. Investigation of surface areas and structure of proteins will be under the supervision of **Sydney W. Benson**, and a study of the properties of ionic solutions at the critical temperature of the solvent under the joint super-

vision of Dr. Benson and **Charles S. Copeland**.

Richard L. Potter has been granted a postdoctorate research fellowship by the Atomic Energy commission to work with **David Green** in the new **Enzyme Institute** at the University of Wisconsin. The purpose of the fellowship is to provide advanced research training in the physical, biological, and medical sciences related to atomic energy. Dr. Potter will use radioactive tracers in his work on the synthesis of enzymes.

Edgar Reynolds Smith, chief of the Physical Chemistry Section, National Bureau of Standards, has been awarded the **1949 Hillebrand prize** of the Washington Section, American Chemical Society. Dr. Smith, who prepared the first samples of heavy water, was cited particularly for his contributions to electrochemistry and ebulliometry.

Under the **1949-50 Shell Fellowship Program**, 44 fellowships in chemistry, geology, geophysics, physics, and related fields have been established at 36 colleges and universities throughout the country. Each fellowship provides tuition and fees as well as payment of \$1,200 to the student and \$300 to the department of study for his expenses.

Fellowships

Butler University, Indianapolis, Indiana, announces that two new **Holcomb Research Fellowships** are now available to graduate students in chemistry. The fellowships are valued at \$1,500 per year and are tenable for two years. Applications may be addressed to the Department of Chemistry.

The **New York Zoological Society** offers summer research fellowships providing \$500 for three months, June 15 through September 15, to advanced research workers who hold a Ph.D. degree in physiology, zoology, biology, ecology, psychology, or a related field and who have special interest and experience in the study of animal behavior. Further information may be obtained by writing to the **New York Zoological Society, Behavior Research Program**, Bronx Zoo, New York 60, N. Y. The Society is also offering limited grants-in-aid for participation in the **third**

summer research program at the **Jackson Hole Wildlife Park**, Moran, Wyoming. Qualified graduate students and professionally established persons who wish to conduct research in ecology, conservation and land use, wildlife, life history studies, behavior, botany, ornithology, entomology, pathology and parasitology, and aquatic biology are invited to apply to program committee members: J. R. Simon, Moran, Wyoming, chairman; C. R. Carpenter, Pennsylvania State College; W. W. Chase, University of Michigan.

Colleges and Universities

An expedition from the **Instituto Lillo of Tucumán University**, Argentina, has been exploring the Tierra del Fuego-South Patagonia region for the past two months to study its zoological and geographical relationship to surrounding island groups, and to Australia and New Zealand. The expedition is headed by Claes Christian Olrog, young Swedish zoologist.

Six colleges are participating in "Project Squid," a fundamental research program on jet propulsion sponsored by the Office of Naval Research. Headquarters for the project are at **Princeton University**. Cooperating institutions are **New York University**, **Purdue University**, **Cornell Aeronautical Laboratory**, **Brooklyn Polytechnic Institute**, and the **University of Delaware**. The project will include a year's work on "Heat Transfer in Passages with Free Convection and Counter Flow," directed by S. A. Guerrieri, of the University of Delaware, with the assistance of Robert Connell and Charles V. Foster.

The **University of Wisconsin** has begun construction on the first \$2,500,000 wing of its engineering building, the beginning of an \$82,000,000 10-year building project.

The **Woman's Medical College**, Philadelphia, Pennsylvania has announced the following appointments to its faculty: Edward H. Vick, clinical assistant in pediatrics; William Ellis and S. Micelli, clinical assistants in urology; Harry B. Adams, Jr., clinical assistant in proctology; Mary Helen Cameron, fellow in radiology; Marian Abbott Boyd, clinical instructor

in medicine; Alice M. Anderson, Frances A. Harkins, Mildred R. Mitchell, clinical assistants in medicine.

Meetings and Elections

The **Texas Academy of Science** elected the following officers at its December meeting in San Antonio, Texas: president, J. Brian Eby; vice president, C. M. Pomerat; editor, J. L. Baughman; president of the Conservation Council, J. G. Sinclair; secretary-treasurer, Gladys H. Baird. The theme of the meeting was "Conservation of Natural Resources and of Population." A quarterly publication, *Texas Journal of Science*, will be initiated by the Academy next month. The Collegiate and Junior Academies have a membership approaching that of the Senior Academy and each puts on a full program of its own.

The **Biological Photographic Association's New York Chapter** has elected Percy Brooks, head of the medical illustration Department of Cornell University Medical School, chairman of its acting executive committee. Margaret Smith Frankow, of the Department of Dermatology, Columbia University, was elected secretary-treasurer of the group.

The **Washington Academy of Sciences** elected the following officers at its January meeting: president, Frank H. H. Roberts, Jr.; president-elect, Francis B. Silsbee; secretary, Frank M. Setzler; treasurer, Howard S. Rappleye; elected to the Board of Managers, William F. Foshag and C. Lewis Gazin.

The **British Association for the Advancement of Science** will hold its annual meeting at Newcastle-upon-Tyne, August 31-September 7. Preliminary programs will be available in early May, upon application to the secretary, David M. Lowe, BAAS, Burlington House, London W1.

The **World Engineering Conference** will hold its second International Technical Congress in Cairo, March 20-26. Three U. S. engineers who will present papers at the Congress are: W. H. Carson, dean of the School of Engineering, University of Oklahoma; Morris L. Cooke, Philadelphia management engineer and government con-

sultant; and James S. Thompson, vice chairman of the board, McGraw-Hill Book Company. Max Thornburg of the Engineers Joint Council Middle East Commission has also been invited to attend as a Council delegate.

The **Anthraccite Conference**, sponsored by the Anthracite Institute and Lehigh University, Pennsylvania, will be held at the University May 5-6. A. Copeland Callen, head of Lehigh's department of mining engineering, is chairman of the committee planning the sessions.

The **International Union of Biological Sciences** will hold a conference on "Development, Growth and Regeneration of the Nervous System" at the University of Chicago, March 21-25, under the chairmanship of Paul Weiss. Foreign scientists participating are J. Boeke, Utrecht; Holger Hyden, Stockholm; Rita Levi-Montalcini, Torino; Albert Stefanelli, Rome; Sydney Sunderland, Melbourne; and J. Z. Young, London.

The annual conference of the **British Textile Institute** will be held in Dublin, Ireland, May 24-27. Walter J. Hamburger, director of Fabric Research Laboratories, Inc., Boston, Massachusetts, will present a paper on "Industrial Applications of Stress-Strain Relationships."

The **Midwest Power Conference**, sponsored by the Illinois Institute of Technology, will be held at the Sherman Hotel, Chicago, April 18-20. Invitations are extended to those interested in the nation's power problems. Programs may be obtained from the conference secretary, Edwin R. Whitehead, Illinois Institute of Technology, 3300 Federal Street, Chicago, 16.

The **American Physical Society's Division of Solid State Physics** will hold a symposium in Cleveland, March 10-12. The program will include the following invited papers to be presented on Thursday afternoon and Friday morning and afternoon:

George E. Pake, Washington University, "Nuclear Magnetic Resonance in Studies of Solids"; E. Guth, University of Notre Dame (title to be announced); Charles Kittel, Bell Telephone Laboratory, "Recent Develop-

ments in Ferromagnetism"; F. S. Goucher, Bell Telephone Laboratory, "Photoelectric Effects in PN Rectifying Barriers"; R. Smoluchowski, Carnegie Institute of Technology, "Recent Developments in Order-Disorder Phenomena"; E. Orowan, Cambridge, England, "Brittle Fracture of Triaxial Stresses"; F. Seitz, C. I. T., "The Multiplication of Electrons in Crystals by High Electrostatic Field"; I. Esterman, C.I.T., "Resistivity of Germanium Samples at Liquid Helium Temperatures"; J. E. Goldman, Westinghouse Research Laboratories, "Influence of Atomic Order on Magnetic Properties"; Cyril S. Smith, University of Chicago, "Grain and Interphase Boundaries in Metals"; A. W. Lawson, University of Chicago, "New Techniques in High Pressure Research."

In addition, regular sessions of papers concerning the solid state will be held on Friday and Saturday.

Unesco News

A Unesco Mission arrived in the Philippines early last month to study problems of civic information and education and to help in developing a program of adult and primary education. Floyd Reeves, specialist in educational administration on leave from the University of Chicago, will direct the work of the Mission, assisted by Paul Hanna, of Stanford University, and Dean Cliff A. Lewis, Ontario College of Education, Toronto. The Philippine Government will meet part of the expenses of the mission, which will last about three months. This is the second contract of its kind concluded by Unesco with a member state. The first calls for a similar mission to Afghanistan.

The *Unesco Courier*, a monthly newspaper which is published in Paris and which reports global activities of the Organization, will soon be available to U. S. readers on a subscription basis. Orders may be placed with the Columbia University Press, New York City 27.

Deaths

Ladislav Farkas, 44, professor of physical chemistry at Hebrew Univer-

sity, Jerusalem, died December 31 in an airplane crash while en route to the U. S. He was well known among physical chemists for his research in reaction kinetics and photochemistry, and especially for his fundamental investigations of the orthohydrogen-parahydrogen conversion.

Townes Randolph Leigh, 68, dean emeritus of the College of Arts and Sciences and head of the Chemistry Department of the University of Florida, died in Gainesville on February 15. Appointed acting vice president of the University in 1934, Dr. Leigh became vice president in 1946 and, in 1948, was given the title of honorary vice president.

Bailey Willis, 91, professor emeritus of geology at Stanford University, and former president of the Seismological Society of America, died in Palo Alto, California February 19. From 1884 to 1916, Dr. Willis had served with the U. S. Geological Survey. The second volume of his autobiography is in process of publication.

W. A. Anderson, 49, curator of the Phanerogamic Herbarium and associate professor of botany at the State University of Iowa, died February 20.

Russell W. Porter, 77, artist-astronomer who made the detailed sketches of the 200-inch Palomar telescope, died in Pasadena, California February 22. Dr. Porter accompanied Admiral Peary to the Arctic, and joined several other expeditions to Greenland, Baffin Land and Franz Josef Land.

Keith L. Maurer, 53, electrical engineer with the Bell Telephone Laboratories, died February 25 at his home in Rockville Centre, New York.

W. J. Conway, professor of chemistry at Fordham University, died February 28 in Teaneck, New Jersey.

The Lepidopterists' Society is now sponsoring or preparing to initiate cooperative projects on phenology and butterfly migration and on a systematic-biological monograph of Neartic butterflies. The society was formed in 1947 for the purpose of

maintaining close contacts between all persons, in all nations, interested in any aspects of the study of Lepidoptera. It now publishes a monthly periodical, *The Lepidopterists' News*, which contains reviews of biological and taxonomic subjects, abstracts of recent papers on Lepidoptera from the world literature, and short communications from members. Research papers are excluded. The only condition for membership is payment of dues, which are \$2.00 for 1949. Each member receives a subscription to *The Lepidopterists' News*. Remittances may be sent to the editor, C. L. Remington, Osborn Zoological Laboratory, Yale Station, New Haven, Connecticut.

A method for the quantitative determination of phenol and cresol in complex biochemical samples by counter-current distribution has been developed by Army investigators at Camp Frederick, Maryland. The counter-current distribution method, the basis of which is the partition of a soluble substance between two mutually immiscible phases, has been used in antibiotic and antimalarial investigations, but has had only limited use in the field of analytical chemistry. The new application of the method is described in a report, "The Determination of Phenol and Cresol in Complex Biochemical Mixtures" (PB 95891), which can be obtained from the Photoduplication Service, Library of Congress, Washington 25, D. C. The price is \$3.75 for photostat and \$2.00 for microfilm. Orders should be accompanied by check or money order payable to the Librarian of Congress.

Publication of "Pharmacological Reviews," a supplement to be included with the last issue of each of the three annual volumes of the *Journal of Pharmacology and Experimental Therapeutics*, will begin with the *Journal's* April issue. About 160 pages will be devoted to each issue of the supplement, which will be edited by Louis Goodman, with the assistance of J. H. Comroe, C. A. Dragsted, H. A. Eagle, A. McG. Harvey, O. Kraymer, C. C. Pfeiffer, and M. L. Tainter. The first issue will contain articles on the anticholinesterases, drug-protein

interactions, ganglionic blocking agents, adrenergic blocking agents, and salicylates. The supplements may be ordered from the *Journal* separately at the rate of \$2.00 each, in advance, or by increasing the payment for the *Journal* subscription from \$15.00 to \$18.00 per year.

The National Research Council of Canada is extending its wartime research on snow problems related to the operation of tracked vehicles to cover the general problem of snow mechanics. The Dominion spends at least \$20,000,000 every year in snow removal. Transport over snow also presents special difficulties and provision must be made for the pressure exerted by ice against dams. Problems like these are under study by the Research Council's Associate Committee on Soil and Snow Mechanics, which sponsored a recent survey of snow centers in the western U. S. and Canada by Marcel de Quervain, Swiss snow scientist on loan to Canada, and D. C. Pearcee.

Motion pictures made with X-rays are being produced at the University of Washington Medical School with apparatus designed by Robert F. Rushmer, assistant professor of physiology. The subject is placed against a fluoroscope screen, which glows when struck by X-rays, and thus produces an image. Because X-rays would fog the camera film, the lens of the movie camera is faced away from the screen and the image is projected to the lens by a series of mirrors. The camera is protected by a lead shield. A speedy technique for processing the film makes it possible to show the movies the same day they are taken. Dr. Rushmer is working on a way to synchronize the X-ray current with the camera shutter so as to minimize the subject's exposure. The Seattle Orthopedic Hospital is using the X-ray movies to study the heart in action.

A study of Peruvian culture, part of Cornell University's broad program of cultural anthropology, was started last month under the direction of Allan Holmberg in Callejon de Huaylas, a mountain valley along the north coast of Peru. This region is undergoing a transition to modern industrialization and Dr. Holmberg will analyze the human and social problems

involved. The Institute of Ethnology of the University of San Marcos is collaborating with him in the work. The Peruvian study is conducted in co-ordination with the other projects of the Cornell program, which is supported by the Carnegie Corporation. Alexander Leighton has been working with American Indians in the Southwest and Lauriston Sharp has been in Siam since last summer. M. E. Opler plans a research trip to India this fall.

The University of Illinois' College of Dentistry plans to offer a course of six round table discussions on "**Current Advances in Dentistry**" this fall, to be transmitted by telephone from coast to coast. Telephone connections from Chicago are made by ordinary toll call to the various cities and loud speakers amplify the speeches in local meeting rooms. Lantern slides, brochures, and other material are furnished to the participating groups. The University's telephone extension courses were begun two years ago by Saul Levy, chairman of the program.

Recently Received—

The Cavendish Laboratory, by Sir Lawrence Bragg. (19th Autumn lecture to The Institute of Metals, delivered 16 September 1948.) Published by the Institute, 4 Grosvenor Gardens, London, S.W.1, England.

The First World Health Assembly, by James A. Doull and Morton Kramer. (Reprint No. 2894 from the Public Health Reports.) Washington 25, D. C.: Supt. of Documents, U. S. Government Printing Office. \$.10.

Intellectual abilities in the adolescent period: their growth and development, by David Segel. (Federal Security Agency Bull. 1948.) Washington 25, D. C.: Supt. of Documents, U. S. Government Printing Office. \$.15.

Bulletin Scientifique de l'Association des Ingénieurs Electriciens Sortis de l'Institut Electrotechnique Montefiore, January 1949, No. 1. Siege Social, Rue Saint-Gilles, 31, Liège, Belgium. 50 fr.

Education in Panama (Bull. 1948, No. 12) and Education in Venezuela (Bull. 1948, No. 14) by Delia Goetz. Office of Education, Federal Security Agency bulletins. Washington 25, D. C.: Supt. of Documents, U. S. Government Printing Office. \$.25 and \$.30, respectively.

Report of Activities, April 1945–March 1948, and Summaries of Research prepared by the Board for Scientific and Industrial Research, Government of Palestine. Copies obtainable from the B.S.I.R., P.O. Box 607, Jerusalem at 3/.

Annual Reports for 1945–47 (Nos. 58–60) of the Marine Biological Station at Port Erin, Isle of Man, prepared by J. H. Orton. Liverpool, England: University Press. 5/.

British Marine Gas Turbines (the 13th Parsons Memorial Lecture) by T. W. F. Brown. North-East Coast Institution of Engineers and Shipbuilders, Bolbec Hall, Newcastle upon Tyne, England.

Make Plans for—

14th North American Wild Life Conference, March 7–9, Statler Hotel, Washington, D. C.

American Chemical Society, 115th national meeting, March 28–April 1, San Francisco, California.

American College of Physicians, 30th annual session, March 28–April 1, New York City.

American Orthopsychiatric Association, annual meeting, April 4–7, Stevens Hotel, Chicago.

Erratum: The International and Fourth American Congress on Obstetrics and Gynecology is scheduled to take place May 14–19, 1950 in New York City rather than in 1949 as originally reported in *Science*, (February 25, pg. 217).