acid or analogous compounds may play a part in defense mechanisms when the ground substance is attacked during infection. The experiments reported are being extended to other viruses and to bacteria.

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News and Notes

The Cooperative Research Foundation

MANY programs have been developed in the past decade in the hope of increasing international understanding and cooperation in many different fields of common interest. Among these is an interesting experiment undertaken by a San Francisco group in 1950 which led to the establishment of the Cooperative Research Foundation, or CORE as it is commonly called. CORE is a true cooperative whose membership at present includes administrators, professors, scientists, and engineers from universities, research institutes, government agencies, and industry, both in the U. S. and abroad. The organization, with research offices in San Mateo and Washington, D. C., provides services through which scientists can exchange information, knowledge, and skills, through consultation and education, and can use available trained personnel and facilities to the greatest advantage in solving mutual scientific and technical problems. Members offer consultation, time, and facilities to other members, to government agencies, to universities, to research institutes and to industry.

During the past two years, CORE has been particularly active in building a cooperative program with the Conselho Nacional de Pesquisas of Brazil, an organization similar to the National Science Foundation in the United States. CORE's South American membership has grown rapidly through the leadership of such members as Admiral Alvaro Alberto, President of the Conselho, Dr. Cortes Pla, Head of the Science and Technology Section, Pan American Union, and Prof. Olympio da Fonseca, Director of the Instituto Oswaldo Cruz, in Rio de Janeiro. In the United States new members having interests similar to those of the Latin American members joined CORE to cooperate in the programs of the Foundation. To illustrate the type of direct working relationship developing between CORE members, a cooperative project in oil shale technology was initiated by one of CORE's board of directors, Prof. B. E. Lauer, Head of the Department of Chemical Engineering at the University of Colorado. For several years Prof. Lauer's department has been doing research on oil shale retorts which utilize fluidized solids techniques. Since Brazil is interested in making use of its extensive deposits of oil shale, CORE members in Brazilian universities became interested in the work at Boulder, and through travel grants awarded by the Conselho have spent short periods with Prof. Lauer in Colorado. Reports on the Colorado experiments have been sent to CORE members in several Brazilian research centers. The ground has thus been broken, through CORE's efforts, for a direct working level exchange of knowledge and mutual cooperation in oil shale technology.

Since its inception, CORE members have assisted the Conselho in placing the recipients of Brazilian fellowships and scholarships for graduate study in universities. In July of this year, with the cooperation of the California Academy of Sciences, CORE will open a San Francisco Liaison Office for the Conselho in the Academy buildings at Golden Gate Park. A committee of CORE members from the San Francisco Bay region has been formed to integrate the operation of this office with the scientific activities of the area. This committee includes Mr. Belford Brown, Vice President, The San Francisco Bank; Dean Morris Steward, Graduate School, University of California; Mr. George Tenney, President, McGraw-Hill Company of California; Dr. Robert Miller, Director of the California Academy of Sciences; Mr. R. L. Champion, U. S. Liaison Officer, Conselho Nacional de Pesquisas; Mr. John Alison, President, The Transit Van Corporation, and the writer. The committee plans to assist in obtaining fellowships for graduate study for Brazilian scientists who wish to attend universities in the area, to obtain subsistence grants and travel fellowships.

Later this year, with the cooperation of the National Academy of Sciences, the program of the office will be broadened to include a number of projects involving scientists from many different countries. By the end of the year a San Francisco International Relations Center for Scientists and Engineers will be in operation. The main functions of the center will be: (1) to facilitate contacts between the visiting scientists and appropriate scientific personnel in the area; (2) to serve as a liaison office between the National Research Council and the local scientific organizations and societies, and as a general coordinating agency for international scientific activities in the area; (3) to offer such other assistance to visiting scientists as other institutions of the area may not be equipped to give.

CORE serves as a structure through which members may participate in research projects requiring a rather highly specialized team of investigators. At the present time one team is in Korea studying a problem for the military and two other teams are engaged in operations research.

Because of their mutual interests in the availability of existing facilities, a team of fourteen CORE members last year assisted the National Academy of Sciences in a study of applied research in United States universities, research institutes, and foundations. The results were published as part of the National Academy of Sciences—National Research Council Publication 210, which was prepared for the use of the Mutual Security Agency.

As the Cooperative Research Foundation grows, its membership is becoming more broadly international. Although its largest membership is in the U. S. and Brazil, it now has members in England, Pakistan, Thailand, Peru, Mexico, and Argentina. Membership is open to all whose professional qualifications meet the standards set by CORE's membership committee. CORE's rapid expansion has been, in large part, due to the fact that it serves as a central agency through which its members from different countries can obtain help with special problems. This may be accomplished through consultation with colleagues who have specialized skills and knowledge of similar problems, through exchange of informative materials—books and films, through fellowships, scholarships, and study programs.

K. F. MEYER, *Director*
George Williams Hooper Foundation
University of California Medical Center

Scientists in the News

George B. Belloff has been appointed assistant to the medical director of Eaton Laboratories, Inc., N.Y., where he will supervise a research program in problems of veterinary medicine. He succeeds **Harold D. B. Roberts,** who is departing on military leave.

Reinhard H. Beutner, Visiting Professor of Physiology at the University of Arkansas School of Medicine and formerly Head of the Department of Pharmacology at Hahnemann Medical College, will join the staff of the Department of Physiology and Pharmacology of Still College of Osteopathy and Surgery, Des Moines, effective September 1.

Isaac A. Bigger, Professor of Surgery at the Medical College of Virginia, has been made President of the Southern Surgical Association.

Robert George Breckenridge, Chief of the Solid State Physics Section at the National Bureau of Standards, has been appointed Head of the Physics Branch of the Physical Sciences Division, Office of Naval Research, Washington, D.C.

Arthur Cherkin, Vice President and Director of Research, Don Baxter, Inc., Research and Production Laboratories, Glendale, Calif., has been awarded a Ph.D. in biochemistry by the University of California at Los Angeles.

Carey Croneis has been made Provost and Harry Carothers Wiess Professor of Geology at The Rice Institute, Houston, Tex. The appointment will become effective in Jan., 1954. From 1928 to 1944 Dr. Croneis was on the geology faculty of the University of Chicago, and since 1944 he has been President of Beloit College.

Gordon Dean, former Chairman of the U.S. Atomic Energy Commission, has become associated with the investment banking firm of Lehman Brothers, New York City. Mr. Dean has been an advocate of greater publicity of the destructive power of our atomic weapons. He has been a contributor to various legal and scientific publications and is the author of a forthcoming book entitled *Report on the Atom.*

Robert Reed Denison, former contact metallurgist with the Sheffield Steel Co., Houston, Tex., has been named a full research metallurgist at the Armour Research Foundation of the Illinois Institute of Technology.

Albert W. Dent, President of Dillard University, New Orleans, has been elected President of the National Health Council, New York City. He is the 14th president of the 32-year-old Council. He fills the unexpired term of **Robin C. Buerki,** whose resignation was accepted with regret. Dr. Dent has a long record of service in voluntary health and educational fields.

Donald W. Fisher, formerly Assistant Professor of Geology with Union College, Schenectady, N.Y., has been appointed Senior Paleontologist with the N.Y. State Museum and State Science Service at Albany.

Wallace E. Frank, formerly Senior Staff Engineer in the Chemistry and Physics Division of The Franklin Institute Laboratories for Research and Development, has been appointed Chief of the Bioengineering Section of that division. Mr. Frank will direct a group of engineers and physicists in applying the techniques of their professions to problems in such fields as surgical instruments, prosthetic devices, and, in general, to problems in medicine and biology.

Ford Kalil, Lafe F. Larsh, and **John F. McKown** have been added to the staff of the Los Alamos Scientific Laboratory of the University of California. Mr. Kalil, who has an Electrical Engineering degree and an M.S. in physics, is in the Laboratory's Health Division. Mr. Larsh and Mr. McKown are in the GMX Division.

Wilbur A. Lazier has been elected a Vice President and Technical Director of the Sprague Electric Co., North Adams, Mass. For nearly 20 years he was at the DuPont Experimental Station where he was in

charge of work on the high pressure synthesis of methanol and higher alcohols, the catalytic reduction of long-chain fatty acids, and the development of nylon intermediates. Later he became the first Director of the Southern Research Institute, Birmingham, Ala., and then Director of Chemical Research and Development for Chas. Pfizer & Co. of Brooklyn, N. Y. He has published numerous scientific papers and has been awarded over 100 U.S. patents on his inventions.

Benjamin H. Lyndon has been appointed Professor of Social Service and Educational Director of the new social work training program at New York University's Graduate School of Public Administration and Social Service. He has done research in public welfare administration and is a specialist in the field of child development and parent education.

Brig. Gen. Sam F. Seeley, MC, USA, Chief of Surgery at Walter Reed Army Medical Center, Washington, D.C., will leave this month for assignment to the Office of the Chief Surgeon, Headquarters of U.S. Army, Europe. General Seeley has been Chief of the Surgical Service at Walter Reed Army Hospital and Director of the Surgery Division in the Center's Army Medical Service Graduate School since July, 1949.

Captain C. W. Shilling, MC, USN, who has just completed a tour of duty in Washington, D.C., as Director of the Research Division of the Navy's Bureau of Medicine and Surgery and as Special Assistant for Bio Science in the Office of Naval Research, assumed new duties this month when he became the Senior Medical Officer at the U.S. Naval Academy, Annapolis. Dr. Shilling was recently awarded the Founder's Medal of the Association of Military Surgeons of the United States by former President Harry S. Truman for his outstanding contribution to military medicine.

Milton V. Veldee is serving as a consultant to the Stanford Research Institute of Palo Alto and to the Michael Reese Research Foundation of Chicago. Dr. Veldee, formerly a medical director in the U.S. Public Health Service and Chief of the Laboratory of Biologics Control, has resigned as Vice President and Medical Director of the Hyland Biological Laboratories of Los Angeles.

A. Wormall of England is making a three-month visit to Brazil where he is giving lectures and presenting a regular course at the University of São Paulo on the uses of radioactive isotopes in biological research. **E. S. Guzman-Barron** of the University of Chicago is also visiting the University of São Paulo and giving lectures and conferences.

At the Annual Meeting of the American Psychiatric Association **Gregory Zilboorg** received the Association's $1000 Isaac Ray award for his professional contributions to the field of legal problems connected with mental disorders.

Grants and Fellowships

A research team of University of Tennessee chemical engineers has received a $12,700 contract from the **Atomic Energy Commission** to continue its investigations on the effects of wetting on heat-transfer characteristics of liquid metals. The group, working under Robert M. Boarts, Head of the University's Chemical Engineering Department, is now entering its second year of work on the project. The newly authorized studies provide for investigations of effects of various liquid pressures upon heat-transfer characteristics and for studies of the chemical-metallurgical effects of mercury upon different metals.

Eli Lilly and Co. has recently awarded two grants, one to A. Sidney Harris, Professor of Physiology, Louisiana State University School of Medicine, and one to Ralph L. Shriner, Professor of Chemistry, State University of Iowa. Dr. Harris is directing a study of the action of cardiac drugs, and Dr. Shriner is conducting research on the synthesis of polymers from alpha-amino acids.

The Ford Foundation has made grants totalling $249,500 to 5 leading Americans universities to enable them to undertake self-surveys of their training and research programs for the scientific study of human behavior. A grant of $49,500 was made to Stanford University and $50,000 each to the University of Chicago, Harvard University, the University of Michigan, and the University of North Carolina. The grants are for the academic year 1953–1954.

Five new grants-in-aid have been approved by the **Muscular Dystrophy Associations of America, Inc.** They are: $4860 to Paul J. Vignos at Western Reserve University, Cleveland, for the study of "Muscle Enzymes in Progressive Muscular Dystrophy"; $8856 to John Taylor Ellis, Cornell University Medical School, New York, for the project "Studies on the Nature and Pathogenesis of Muscular Degeneration in Cortisone-treated Rabbits"; $8316 to T. S. Danowski, Children's Hospital of Pittsburgh, for the project "Muscular Dystrophy Survey Studies Preliminary to Trials of Purified Growth Hormones"; $3240 to Teru Hayashi, Columbia University, New York, for the project "Studies of Surface-spread Actomyesin Fibers"; and, $2330 to Robert E. Olsen, University of Pittsburgh, for the study of "Synthesis and Metabolism of Glycocyamine."

The University of Vermont College of Medicine has been awarded a grant of $13,867 by the **National Heart Institute** to expand the College teaching program in heart diseases. Third-year students will spend a period of time in each of two hospitals learning the various aspects of diagnosis and treatment in heart disease. E. L. Amidon, Professor of Medicine, will act as program director.

In the Laboratories

Fisher Scientific Co. has opened a New England office at 10 Brattle St., Cambridge, Mass.

The **General Electric Co.** has announced that in the next few years it plans to increase its scientific staff working on fundamental research by 50%, hence the present force of 1000 will reach 1500. Included in the expansion will be the addition of 180 scientists to the 270 now employed. The company has engaged in a post World War II program for expansion and modernization that will reach $1,100,000,000 by 1955. Already $120 million has been spent for improved facilities for research and advanced engineering development work.

The **Institute of Visual Research,** with Herman F. Brandt as Director, is now a division of the **C. H. Stoelting Co.,** Chicago. Dr. Brandt, a Fellow of the AAAS, is a former professor of psychology and is the inventor of various psychological instruments. The Institute serves as a clearing house for all information and instrumentation related to visual research and provides a consultation service especially for those carrying on research in the fields of ocular photographic and photo-electric recording.

Lab World, national news magazine of the clinical-scientific laboratory field, received two awards for editorial achievement in the fifth annual awards of achievement contest of the Western Society of Business Publications. The honors were: the Grand prize for publications under 48 pages for the "most outstanding editorial accomplishment"; and a special award for its Journal-Ease section as "the most outstanding regular department."

Meetings and Elections

The following societies are meeting under the sponsorship of the **American Institute of Biological Sciences** at Madison, Wis., September 6–10: American Bryological Society; American Fern Society; American Microscopical Society; American Phytopathological Society; American Society for Horticultural Science; American Society for Limnology and Oceanography; American Society of Parasitologists; American Society of Plant Physiologists; American Society of Plant Taxonomists; Biometric Society (ENAR); Botanical Society of America; Ecological Society of America; Mycological Society of America; National Association of Biology Teachers; Phycological Society of America; Potato Association of America; Society of Protozoologists; Society for Industrial Microbiology; Society for the Study of Evolution; Sigma Delta Epsilon.

Monday, Sept. 7.

General Meeting for all participating societies, sponsored by the Sigma Xi and the AIBS, commemorating the **Fiftieth Anniversary of the American Society for Horticultural Science.** Address by E. J. Kraus, Dept. of Horticulture, Oregon State College, Corvallis, Oregon. "Significance of Growth Regulating Substances in Agricultural Practice."

Tuesday, Sept. 8.

Joint Symposium, sponsored by the AIBS and the Society of Industrial Microbiologists.

BIOLOGY AND INDUSTRY

a. Francis J. Curtis, Vice President, Monsanto Chemical Company.
   The Impact of Chemistry on Modern Agriculture.
b. C. J. Nusbaum, North Carolina State College.
   Biological Aspects of the Tobacco Industry.
c. Asger F. Langlykke, Director of Research, The Squibb Institute for Medical Research.
   Industrial Applications of Microbiology.

Wednesday, Sept. 9.

Joint symposium of the American Phytopathological Society and the AIBS.

COOPERATIVE AGRICULTURAL RESEARCH IN THE WESTERN HEMISPHERE

I. Modern Maize in the Western Hemisphere.
   a. P. C. Mangelsdorf, Harvard University.
      Corn Races: Their Origin, Distribution and Implications.
   b. E. J. Wellhausen, Rockefeller Foundation, Mexico.
      Modern Corn Breeding and Production in Mexico.
   c. A. F. G. Brieger, University of São Paulo, Brazil.
      Development of Maize as a Modern Food Crop of South America.
   d. M. T. Jenkins, USDA, Beltsville, Md.
      Cooperative Uniform Testing of Corn Inbreds and Hybrids.
II. Wheat Rust Control, an International Problem.
   a. N. E. Borlaug, Rockefeller Foundation, Mexico.
      The Mexican Wheat Program Basic to North American Rust Control.
   b. W. F. Hanna, Canadian Dept. of Agriculture, Ottawa.
      Progress in the Control of Wheat Stem Rust in Canada.
   c. Jose Vallega, Institute de Fitotecnia, Argentina.
      Wheat Rust Races in South America.
   d. H. A. Rodenhiser and B. B. Bayles, USDA, Beltsville, Md.
      Cooperative Uniform Nurseries and Disease Testing.
III. Potato and Tomato Viruses and Late Blight in the Americas.
   a. John Niederhauser, Rockefeller Foundation, Mexico.
      Late Blight in Mexico and Its Implications.

b. L. E. Heiderick, Rockefeller Foundation, Bogota, Colombia.
Late Blight Resistance, Present Status.
c. Carlos Ochoa, Dept. of Agriculture, Peru.
South American Species and Races of Solanaceae and Disease Control.
d. S. P. Doolittle, USDA, Beltsville, Md.
Disease Control in the Tomato.
e. K. Silberschmidt, Dept. of Agriculture, São Paulo, Brazil.
Potato Viruses in the Americas.

IV. People, Pathogens and Progress in International Disease Control.
E. C. Stakman, University of Minnesota, St. Paul, Minn.

The following societies are planning field trips prior to the opening of the convention:

American Society of Limnology and Oceanography. Sept. 5 and 6.
Ecological Society of America. Sept. 5 and 6.
American Society of Plant Taxonomists. Sept. 5.
Mycological Society of America. Sept. 4 and 5.
American Bryological Society. Sept. 4, 5 and 6.

On June 16 the **American Society of Mammalogists** met in New York City and elected the following officers: president, William H. Burt; vice presidents, George H. H. Tate and Robert T. Orr; recording secretary, Randolph L. Peterson; corresponding secretary, Keith R. Kelson; treasurer, Caroline A. Heppenstall.

A three-day interdisciplinary conference under the sponsorship of the **Institute for the Unity of Science,** Boston, Mass., was held recently on the Berkeley campus of the University of California. Embracing the fields of psychology, philosophy, physics, and mathematics, the conference was organized by Egon Brunswik, Professor of Psychology at Berkeley; Herbert Feigl, Professor of Philosophy, University of Minnesota; Philipp Frank, Professor of Physics, Harvard University; and the late Hans Reichenbach, Professor of Philosophy at UCLA.

The Eleventh Annual **Pittsburgh Diffraction Conference** will be held at Mellon Institute, Pittsburgh, Pa., on November 5–6. Technical sessions are being arranged on instrumentation and methods, metals recrystallization and preferred orientation, and structure of polymers. Papers on general diffraction subjects will also be accepted. Contributed papers will be considered in the order in which they are received. Titles should be submitted to the Program Chairman, Mr. E. E. Wicker, U.S. Steel Corp., Research and Development Laboratory, 234 Atwood Street, Pittsburgh 13, Pa., *before Sept. 1.* Abstracts should be submitted by Sept. 21. For further information, and for a copy of the preliminary program when available, write to Dr. H. R. Letner, Mellon Institute, Pittsburgh 13, Pa.

Miscellaneous

The **American Dermatological Association** is again offering a series of prizes for the best essays submitted for original work, not previously published, relative to some fundamental aspect of dermatology or syphilology. Cash prizes will be awarded as follows: $500, $300, and $200 for first, second, and third place, respectively. Manuscripts, prepared as though for publication, must be submitted in triplicate *not later than December 1* to J. Lamar Callaway, Secretary, American Dermatological Association, Duke Hospital, Durham, N.C. Competition in this contest is open to scientists generally, not necessarily to physicians.

Nine countries have signed a Convention providing for the establishment of a **European Nuclear Research Center,** according to an announcement of the **United Nations Educational, Scientific and Cultural Organization.** These include Belgium, France, Britain, West Germany, Greece, Italy, the Netherlands, Sweden, and Yugoslavia. Denmark, Norway, and Switzerland have approved the plan and announced their intentions to sign the Convention soon. It will enter into force when seven States have ratified or adhered to it.

The basic program of the European Organization for Nuclear Research provides for the construction near Geneva, Switzerland, of an international laboratory designed for research on particles of high energy and on cosmic rays. The laboratory is to house what may be the most powerful atom-smashing cosmotron in the world, a huge accelerator that will be rated at thirty thousand million electron volts. There will also be a synchro-cyclotron with a rating of six hundred million electron volts. The plan is to pool the resources of European countries to create a research base for modern physics comparable to those in the U.S., something no Western European country could possibly finance alone.

The laboratory will take about seven years to build and equip, and the cost, to be borne by the participating countries, will amount to an annual total of approximately four million dollars. It is to be used exclusively for pure scientific research and not in the military use of atomic energy. All results will be published and made freely available. The Nuclear Physics Center will mark the first occasion that European States have set up a body responsible for organizing active scientific research in common.

Ceremonies held July 2 at the **Naval Research Laboratory** in Washington, D.C., commemorated thirty years of scientific endeavor. Since 1923 the laboratory has grown from four buildings and 100 employees to 50 major buildings and more than 3000 employees, plus a field test station on the shore of Chesapeake Bay. NRL is often referred to as "the birthplace of radar" and has made significant contributions to basic knowledge of metallurgy, atomic energy, the solar spectrum, the upper atmosphere, undersea warfare, firefighting, high- and low-temperature lubrication, and protective coatings for men and metal.