News and Notes

Symposium on Radiobiology¹

James J. Nickson Memorial Hospital, New York

A SYMPOSIUM on radiobiology, sponsored by the National Research Council, assisted by the Atomic Energy Commission and the Office of Naval Research, was held June 14–18 at Warner Hall, Oberlin College, Oberlin, Ohio. H. L. Friedell, chairman of the committee that planned and arranged the program, was in general charge of the meeting. He was assisted by G. Failla, S. C. Lind, A. M. Brues, K. Sax, and A. H. Dowdy, who served as presiding chairmen.

In an address of welcome W. E. Stevenson, president of Oberlin, related some significant incidents in the early life of the college and sketched its later development. An address on the work of the National Research Council, by D. W. Bronk, Chairman, outlined the nature and scope of its operations and called attention to the responsibilities of scientists, as set forth in its charter, to serve in an advisory capacity to agencies of the government in matters pertaining to science.

The principal speakers at the various sessions were P. Morrison, U. Fano, R. R. Wilson, A. K. Solomon, C. A. Tobias, R. Livingston, R. L. Platzman, H. Eyring, M. Burton, W. M. Dale, G. Hevesy, E. S. G. Barron, M. D. Kamen, R. Latarjet, N. J. Giles, Jr., H. J. Muller, A. Hollaender, R. E. Zirkle, T. C. Evans, S. Warren, H. B. Jones, W. R. Russell, and A. M. Brues.

The first session was devoted to the physical processes leading to the absorption of energy from a beam of ionizing radiation. The present state of our knowledge on this subject was summarized. The physical properties of beams of high-energy particles and of neutrons were considered in detail. The discussion from the floor dealt largely with the uncertainties in the physical interpretation of the interaction of ionizing radiation in matter, and there was also lively discussion on the anticipated advantages and difficulties in the clinical use of high-energy electron and proton beams.

The session on chemistry opened with a general consideration of the kinds of chemical reactions induced by ionizing radiation. Because of the uncertainties of our knowledge in this field, primary emphasis was given to chemical reactions in the gaseous phase, with particular stress on systems sufficiently complex to point the way toward a correct interpretation of biological systems but also sufficiently simple so that an application of approximate quantum mechanical and statistical calculations is possible. Second-order events

in the absorption of energy in liquids were critically presented. The session closed with a thorough consideration of the chemical events associated with the absorption of ionizing radiations. The discussion was vigorous, and centered around the issue of the relative importance of secondary events produced by the passage of an ionizing beam and the likelihood of the correctness of the picture of ionizing events in water.

The biochemical session first summarized the state of our knowledge in this field; it was followed by a presentation of work on the effects of ionizing radiations on isolated enzyme systems, as well as on tissue metabolism. Recent work leading to a chemical theoretical explanation of the effects of ionizing radiation on substances of biological importance, and particularly on thiol compounds, was also presented. Special emphasis was laid upon the effects of molecular oxygen, and O₂H and OH radicals. The evidence for preferential absorption of energy in definite amounts by large molecules was examined. The discussion focused attention on the apparent inconsistencies of our data at the cellular level and appraised the merits of the proposed theoretical explanation for the chemical interpretation of the effects of ionizing radiation.

The session on cellular radiobiology included the presentation of recent evidence on the mechanisms of chromosome aberration production by ionizing radiations. An over-all review of the current status of the induction of radiation mutations by ionizing radiations was given, with particular stress on the implications of these effects on human activities. Secondary factors affecting sensitivity of microorganisms to radiation and a theoretical system to explain the various interactions, both primary and secondary, of radiation and biological material concluded the formal presentation for the day.

Mammalian radiobiology was opened by a review of the data bearing on the influence of quality and quantity of radiation on the biologic effect. The acute effects of ionizing radiation on man, data largely derived from studies done on patients at Hiroshima and Nagasaki, were described. A critical interpretation of the probable effects of genic and chromosome mutation rates in man as a result of occupational or wartime exposures was presented. The session was closed by a consideration of the effects of nongenic late changes in mammals.

Approximately 300 people were in attendance at the meeting. The papers presented, together with the relevant discussion, will be published as a monograph which, it is hoped, will be available this summer.

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Scientists in the News

On March 9, more than 4 months after the 24-man board was named, the President announced that Alan T. Waterman had been selected to serve as the first director of the National Science Foundation. Dr. Waterman brings to his new assignment a long academic experience at Yale and an intensive training as a government scientist. Starting his government service on the National Research Defense Committee in 1942, he continued war work with the Office of Scientific Research and Development. After a short tour of duty with the Office of Research and Inventions, Dr. Waterman went with the Office of Naval Research and will relinquish his position as technical director of ONR to take over the directorship of the National Science Foundation. Presumably his appointment will enable the Foundation to start a program of activity and to establish media of communication that will inform the public regarding Foundation objectives under the limited appropriation of \$225,000 currently available for its work.

The Sir Robert Hadfield Medal for 1951 has been awarded to W. Barr, chief metallurgist and executive director of Colville's, Ltd.

Frank P. Brown has joined the staff of the National Bureau of Standards as chief of the Technical Services Section, Ordnance Development Division. Mr. Brown has been active in various engineering fields since 1927 and for the past two years has been head of the electrical engineering and air-conditioning departments of The Pullman Standard Car Mfg. Co.

Victor H. Calahan, chief biologist of the National Park Service of the U. S., is on a four-month tour of the Union of South Africa as a guest of the National Parks Board of Trustees.

Harry J. Carman, for 7 years dean of Columbia College, and James Kip Finch, who directed the School of Engineering for 9 years, have been accorded emeritus status. Both continue active as teachers and in other professional capacities. Dr. Carman has recently been elected chairman of the board of Bard College and chairman of the trustees of the Institute of International Education. He has also been directing an important study of preprofessional education for the Survey on Medical Education. On February 15 he received the fifth annual Alexander Hamilton Medal of the college alumni, given each year to an outstanding alumnus or faculty member. Dean Emeritus Finch has also returned to the classroom as Renwick professor of civil engineering. Both deans recently received the "Great Teacher Award" from Columbia's Society of Older Graduates.

Starting January 1, Jose Cuatrecasas, curator of Colombian Botany, Chicago Natural History Museum, assumed the status of a John Simon Guggenheim Fellow, in recognition of his distinguished work on the botany of Colombia. While a Guggenheim Fellow,

Dr. Cuatrecasas will prepare a critical catalogue of all plants known to occur in Colombia, using his own extensive collections as the basis for this work.

The Institute of Metals, London, has made the following awards for 1951: The Institute of Metals (Platinum) Medal to Randolphe William Diamond, vice president and general manager of the Consolidated Mining and Smelting Company of Canada, Trail, B. C., in recognition of his outstanding services to the nonferrous metal industries; the W. H. A. Robertson Medal to Christopher Smith, chief metallurgist, James Booth and Company, Birmingham, Eng., for his paper on "The Extrusion of Aluminium Alloys;" and the Walter Rosenhain Medal (first award) to Geoffrey Vincent Raynor, professor of metal physics at the University of Birmingham, for his outstanding contributions to our knowledge of the constitution and formation of alloys.

Newton B. Drury has resigned as director of the National Park Service, effective April 1, and will be succeeded by Arthur E. Demaray, associate director. Conrad L. Wirth, assistant director, will succeed Mr. Demaray as associate director, and Ronald F. Lee, chief of the Park Service History Division, will become assistant director. Mr. Drury has been director of the Park Service since August 1940.

Bruce W. Gonser has been named assistant director to guide development of Battelle Institute's enlarged program in unexplored fields of metallurgy and the chemistry of the less common metals. A veteran member of the Battelle staff, he will continue also to direct much research in nonferrous metallurgy.

At a joint session of the Newcomen Society and The Franklin Institute, the Newcomen Medal for achievement in the field of steam power was awarded to Isaac Harter, chairman of the board of the Babcock & Wilcox Tube Company. The medal was first presented in January 1944, to Rear Admiral Harold G. Bowen, USN, who had contributed to the increased steam pressures and temperatures now used in equipment aboard ships.

Werner Heisenberg, of the University of Göttingen, has been appointed president of the newly created Forschungsrat (Research Council) of the German Federal Republic. The council acts in an advisory capacity to the government on all matters relating to science and is also the official representative of Germany in its foreign scientific relations.

The Society of American Foresters has awarded the Sir William Schlich Medal for distinguished service to forestry to Ralph Sheldon Hosmer, of Ithaca, N. Y., professor emeritus of forestry at Cornell. At the same time, the first award of the Gifford Pinchot Medal for meritorious service to forestry in the public interest was made in absentia to Henry Solon Graves, of New Haven, Conn., dean emeritus of forestry at Yale.

Edward C. Kendall, who shared the 1950 Nobel prize

in medicine for his work with cortisone and ACTH in the treatment of arthritis, will retire from the Mayo Foundation May 1. Dr. Kendall is professor of physiologic chemistry at the foundation and, since July 1, 1945, has been head of the Mayo Clinic's biochemistry laboratory.

Jean Lecomte, of the Sorbonne, is planning a visit to the United States during May and June. He will visit laboratories engaged in infrared research and attend the Infrared Conference at Ohio State University.

Irwin I. Lubowe has been appointed associate visiting dermatologist at the Metropolitan Hospital, New York.

Randolph T. Major, vice president and scientific director of Merck & Co., Inc., has been named to receive the 1951 Medal of the Industrial Research Institute, "for his skill in building an outstanding research organization and his vision in guiding it toward the solution of important problems in the field of human health and nutrition." Presentation of the medal will be made at the annual meeting in May 1951, in Washington, D. C. The medal, established in 1945, is awarded annually for "outstanding accomplishment in leadership or management of industrial research which contributes broadly to the development of industry or the public welfare."

Gordon H. Michler, in charge of foreign government relations for Standard Oil Company (New Jersey), has been elected president of the Argentine-American Chamber of Commerce. Elected vice presidents were Ralph H. Thomson, of National City Bank of New York, George H. Meckes, of United States Steel Export Company, and H. W. Balgooyen, of American and Foreign Power Company. Allen N. Jones, of Morgan Stanley & Co., was named treasurer.

F. J. Murray has been appointed head of the Bacteriology Department of the Wm. S. Merrell Company, Cincinnati pharmaceutical manufacturers. He has been associated with Merrell for the past three years; prior to this he was engaged in penicillin research and served as an instructor in bacteriology, immunology, and serology at Purdue University.

Isolation of a key chemical compound that appears to play a major role in the fundamental mechanisms by which both plants and animals live and grow was reported by Servo Ochoa, chairman of the Department of Pharmacology of the New York University College of Medicine. He addressed the annual meeting of the American Society of European Chemists and Pharmacists, describing the new compound called triphospho-pyridine nucleotide, abbreviated T.P.N. Dr. Ochoa received the Neuberg Medal Award of the society at the meeting.

Bruce S. Old has been made vice president of Arthur D. Little, Inc. Dr. Old has been with the company since 1946, in charge of process metallurgy, and has

been a director since 1949. He resigned recently as part-time consultant to the Atomic Energy Commission, where he was chief of the Metallurgy and Materials Branch, Division of Research.

James A. Reid has been granted a leave of absence from his position as assistant director of research for Phillips Petroleum Company to accept appointment by the RFC as assistant manager in the office of production, which handles the government synthetic rubber, tin, and abaca programs. Mr. Reid joined the Phillips organization in 1933 as a research chemist and advised on technical problems in the production of butadiene and other raw materials used in the government synthetic rubber program.

George Rieveschl, Jr., director of chemical research for Parke, Davis & Co., received the Distinguished Service Award of the Detroit Junior Board of Commerce, based on outstanding community service, leadership, and character. Dr. Rieveschl's main research interests are in the fields of antihistamines and antispasmodics.

Adolph H. Schultz has resigned his position as associate professor of physical anthropology at The Johns Hopkins University to become professor of anthropology and director of the Anthropological Institute, University of Zurich, beginning April 15.

Thomas F. Thompson, formerly chief, Geology and Explorations, Walla Walla District, Corps of Engineers, is now division geologist, South Pacific Division, Department of the Army, at San Francisco.

A. M. Zarem, director of Stanford Research Institute's Los Angeles Division and chairman of its Applied Physics Research Department, and Philip M. West, of Los Angeles, physician and medical researcher, have been included in the U. S. Junior Chamber of Commerce list of "America's Ten Outstanding Young Men of 1950."

Colleges and Universities

The Statistical Laboratory of the University of California at Berkeley will offer this summer four of the usual undergraduate courses and two graduate courses. The latter will include lectures on rank correlation methods, time series analysis, and a seminar on time series and related problems. Both graduate courses will be given June 18-July 28 by Maurice G. Kendall, of the London School of Economics and Political Science. Other visiting professors will be Grace E. Bates, Colin R. Blyth, and Gottfried E. Noether.

The Tissue Culture Association is sponsoring (August 1–25) a course of lectures and laboratory instruction in principles and techniques, designed specifically for M.D. or Ph.D. postgraduates. As in the past, it will be given in the laboratories of the Mary Imogene Bassett Hospital, Cooperstown, N. Y., under the direction of John H. Hanks, of the Leonard Wood Memorial, Harvard Medical School. Application forms (returnable by April 15) may be obtained

from Dr. Mary S. Parshley, College of Physicians and Surgeons, 630 W. 168th St., New York 32.

The George Cyril Graves Lectures at Indiana University Medical School, April 10–12, will be given by Alan C. Burton, professor of biophysics, University of Western Ontario Medical School. His general subject will be "The Application of Fundamental Laws of Physics to Physiology and Medicine."

Summer courses at MIT will include Corrosion, June 18-23, under H. H. Uhlig; Lubrication Engineering, June 11-12, under the direction of John T. Burwell; Metal Cutting, June 25-July 6, in charge of Milton C. Shaw and P. A. Smith; and Hydraulic Power Control, July 9-20, under the direction of John A. Hrones. For further information write to Professor Walter H. Gale, Room 3-107, MIT, Cambridge 39.

The University of Michigan School of Public Health will hold a Discussional on "Medical-Personal Relations in Industry" May 17-19 for physicians, psychiatrists, psychologists, and other staff members in industrial medical departments. Public Health faculty members will be in charge of the program and will be assisted by appropriate specialists from eight other faculties of the university. For further information write to Harry E. Miller, Director of Continued Education, School of Public Health.

Oregon State College will hold its annual Biology Colloquium April 21 on "The Effects of Atomic Radiations on Living Organisms." Curt Stern, professor of zoology, University of California, Berkeley, will lead the discussion; other off-campus participants will be Luther Smith, Lauren R. Donaldson, and Simon T. Cantril.

Pennsylvania State College will celebrate the silver anniversary of the Priestley Lecture series May 7-11 by the participation of five speakers. The program will include Grover C. Chandlee, M. R. Fenske, Pauline Beery Mack, H. E. Longenecker, and Woldemar A. Weyl.

The American Quarterly, formerly published at the University of Minnesota, will be published at the University of Pennsylvania, beginning with the spring 1951 issue. Anthony N. B. Garvan has been appointed editor, William Van O'Connor associate editor, and Robert E. Spiller chairman of the Board of Editors.

Mexico will be the locale of the Geography Field School in Latin America of the University of Texas June 17-August 25. Emphasis will be on the western Volcanic Axis and the adjacent Tierra Caliente of the Balsas Basin and coastlands in the states of Michoacan, Colima, Jalisco, and Nayarit. Apply before May 1 to Professor Donald D. Brand, Department of Geography, The University of Texas, Austin 12. Teaching fellowships in geography at the university are available to graduate students with undergraduate majors in geography. Applications must be received by Professor Brand before April 1.

Fellowships

Through a five-year grant to the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine, the Carnegic Corporation of New York has made possible two summer research fellowships in the social and biological sciences, each for \$600 and research expenses. Applicants should have the Ph.D. degree or its equivalent and may address inquiries to J. P. Scott, Division of Behavior Studies. The awards will be announced on May 15.

The Arthritis and Rheumatism Foundation has awarded the first national research fellowships for investigation into the causes of arthritis. Five physicians, a chemist, and a bacteriologist, nominated by teaching institutions, were selected to receive the awards, which range from \$4,000 to \$6,000 and will go into effect July 1.

International Nickel Company has established two new fellowships in metallurgical engineering at Illinois Institute of Technology. Each provides for two years' study and pays \$1,500 and tuition. The program will begin next September. A bachelor's degree in metallurgical engineering from an accredited engineering college is required.

One of the five winners of the 1951-52 Frank B. Jewett Postdoctoral Fellowships in the physical sciences was Ilse Lisl Novak, who will continue her research in relation algebras at the Institute for Advanced Study at Princeton. The other winners were Murray Gerstenhaber, mathematician; Donald R. F. Cochran, chemist; Stephen Prager, chemist; and Donald R. Yennie, physicist.

Eleven investigators have received 1951 Lalor Foundation Fellowships at Woods Hole Marine Biological Laboratory. New appointees are Jay Barton II, R. Benesch, L. S. Ciereszko, M. L. Karnovsky, and M. P. Schulman, in addition to Katsuma Dan, Misaki Marine Biological Station, Japan, and C. Barker-Jørgensen, University of Copenhagen, from overseas. S. S. Cohen, W. P. Jacobs, and A. H. Mehler will continue studies begun in 1950.

Seven predoctoral Alumni Fellowships, ranging in value from \$1,800 to \$1,200, plus tuition fees, have been established at Michigan State College. Graduate students, either resident or nonresident, should apply to the Dean of the Graduate School before May 15. One \$3,000 Alumni Fellowship is also available for special research for which the college has appropriate facilities.

Monsanto Chemical Company has established a \$1,500 fellowship, to begin June 1, in Saint Louis University's Chemical Department for research in the field of x-ray crystal analysis, under the direction of Lyman J. Wood. Tuition and expenses will also be paid.

The Sears-Roebuck Foundation has given a \$10,000

Subsidiary Scholarship to the Chicago Medical School. This will subsidize the school for the difference between what a student pays in tuition for a four-year course and the sum the school expends in the same period to provide training.

Applications for the Stanolind Oil and Gas Company Research Fellowship in Geophysics for 1951-52 are being accepted by Caltech's Division of the Geological Sciences. Application forms, which must be returned before *May 1*, may be obtained from the Dean of Graduate Studies, Pasadena 4.

Predoctoral research fellowships to provide an opportunity to conduct basic research in applied sciences relating to welding and its closely allied fields are being administered by the Welding Research Council, through its University Research Committee. Stipends may range up to \$3,500. Two pre- or post-doctoral fellowships are being offered by the council's Plasticity Committee. Inquiries and applications should be sent to W. Spraragen, Welding Research Council, 29 W. 39th St., New York 18, not later than June 1.

Grants

Fourteen new unclassified research contracts in biology and medicine and five renewals bring to 212 the number of unclassified projects in these fields being supported by the Atomic Energy Commission in colleges, universities, hospitals, and private laboratories. Among the universities are Indiana (Felix Haurowitz); State College of Washington (Luther Smith, H. Bayard Milne); Maryland (Theodore E. Woodward); Utah (M. M. Wintrobe and G. E. Cartwright); Duke School of Medicine (R. W. Rundles); North Carolina (D. P. Costello); Western Reserve (Harland G. Wood and Lester O. Krampitz); Idaho (Ernest Wohletz); Fordham (Ellis V. Brown); and Louisiana State (H. E. Wheeler).

The Herman Frasch Foundation is offering grants up to \$10,000 a year for five years (subject to annual review) to aid research in agricultural chemistry. Interested institutions should submit applications before July 1 to the Foundation, care of United States Trust Company, 45 Wall St., New York 5.

An invitational conference on "The Effects of Early Experience on Mental Health" will be held September 6-9, at Bar Harbor, Maine, in the Division of Behavior Studies of the Roscoe B. Jackson Memorial Laboratory under a grant from the National Institute of Mental Health.

Among the recipients of cancer teaching grants from the Public Health Service were the College of Osteopathic Physicians and Surgeons, Los Angeles (\$20,000), and Des Moines Still College of Osteopathy (\$25,000). Eighteen medical and 10 dental schools shared in the total allocation of \$500,000. Surgeon General Scheele explained that, in thus awarding teaching grants to schools of osteopathy, "we are

recognizing the plain fact that a great many cancer cases are seen for the first time by osteopaths."

The Public Health Service has granted more than \$900,000 to all 48 states, to interstate agencies, and to Puerto Rico and the territories of Alaska and Hawaii for the current fiscal year for studies relating to the prevention and control of water pollution. Congress, in authorizing an appropriation of \$1,000,000 for each of the five fiscal years from July 1, 1948, to June 30, 1953, provided that balances may be carried over for future allotment until the funds are expended.

The United Negro College Fund has received a gift of \$5,000,000 from John D. Rockefeller, Jr., toward its \$25,000,000 plant improvement program for 32 private Negro colleges. The gift is based on the provision that the sum be matched by contributions from other donors and will initiate the 1951 endowment fund campaign.

Meetings and Elections

The American Academy of Dermatology and Syphilology elected the following officers at its Chicago meeting: president, Donald M. Pillsbury; vice president, James Lewis Pipkin; secretary-treasurer, John E. Rauschkolb (reelected).

With the theme "The Heritage of the U.S.A. in Times of Crisis," libraries throughout America will participate all during 1951 in observance of the 75th anniversary of the American Library Association. The 75th Anniversary Committee, headed by Ralph E. Ellsworth, director of libraries at the State University of Iowa, will also sponsor two books. The first, to be written by Gerald W. Johnson and published by Harper, will state, define, and show "in a reasonable, honest and objective manner, just what our heritage of experience and ideas contributes to a citizen's understanding of these problems." The second book is to be an intensive source book on the topics covered by the Johnson book. The committee also announced a contest with \$1,000 in awards for the best statements (under 2,000 words) which illustrate the power of books to influence the lives of men and women; and for the best statement from librarians concerning the problems worrying the citizens whom they encounter in their work.

At the annual meeting of The Society for Research in Child Development, held in Detroit, February 20–21, Lester W. Sontag, of Fels Research Institute was elected president; Icie Macy Hoebler, Children's Fund of Michigan, and Esther McGinnis, Merrill-Palmer School, were elected to the Governing Council. Charlotte del Solar, of the Child Study Center, Yale, continues as secretary, and Thomas W. Richards, of Northwestern, as treasurer and editor of child development publications.

The Wildlife Society has recently elected the following officers: president, Warren W. Chase, School of Forestry and Conservation, University of Michigan;

vice president, Daniel L. Leedy, U. S. Fish and Wildlife Service; secretary, W. C. Glazener, Texas Game, Fish and Oyster Commission; and treasurer, Walter A. Gresh, Atlanta, Ga. (1952).

The Board of Directors of the American Geological Institute, at its semiannual meeting in St. Louis, February 18, announced that the Association of American State Geologists had become a member of the institute. Appointments from the association to the institute's board are Wilson Laird (1951), and E. P. Rothrock (1951–52). The board also confirmed J. V. Howell, consulting geologist of Tulsa, Okla., as chairman of the Publications Committee, and G. O. Raasch, of the Illinois State Geological Survey, as chairman of the Committee on Public Relations. The 1951 annual meeting of the board will be held in Detroit, Mich., in November.

At the annual meeting of the Radiological Society of North America, Joseph C. Bell was chosen president-elect; John H. Gilmore, Ivan M. Woolley, and Edward A. Petrie, vice presidents. Donald S. Childs, secretary-treasurer, Howard P. Doub, librarian, were reelected, and Ira H. Lockwood became chairman of the Board of Directors. Two Gold Medal Awards were made at the meeting—one to James T. Case, professor emeritus of the Department of Radiology at Northwestern, and to Dr. Doub, who, in addition to being editor of Radiology, is radiologist-in-chief of the Henry Ford Hospital, Detroit. Wendell G. Scott, of Washington University School of Medicine, delivered the Carman lecture on "Developments in Cardiovascular Radiology."

The American Type Culture Collection, of Washington, D. C., has expanded its Board of Trustees to include representatives of the American Institute of Biological Sciences (Nathan R. Smith), the National Research Council (Robert D. Coghill and George W. Irving, Jr.), and the Mycological Society of America (Ross W. Davidson). Continuing on the enlarged board are: Society of American Bacteriologists (R. E. Buchanan and Carl Lamanna), American Phytopathological Society (H. H. McKinney), American Association of Pathologists and Bacteriologists (M. H. Soule), and American Society of Zoologists (D. H. Wenrich). Freeman A. Weiss has recently become curator, and R. Lloyd Phillips assistant curator, of the Collection.

Miscellaneous

The American Forestry Association, 919 17th St., N.W., Washington, D. C., has announced 13 Trail Riders of the Wilderness trips for 1951. Organized in 1933 on a nonprofit basis, the expeditions range in cost from \$170 to \$205 for about ten days and cover various wilderness areas in Idaho, Montana, New Mexico, Washington, Colorado, California, and Minnesota and the Canadian border. Anyone in good health and with a reasonable amount of riding experience, capable of adapting himself to living under wilderness conditions and at high altitudes, is eligible to become a Trail

Rider. The trips begin June 4 and extend through September 10.

Antibiotics and Chemotherapy, a new medical journal, is being published by the Washington Institute of Medicine, with an editorial board composed of five Nobel prize winners: E. Chain, Alexander Fleming, Howard F. Florey, Bernardo Houssay, and E. C. Kendall. Henry Welch is editor-in-chief, and Felix Marti Ibañez is editor of the Spanish edition.

Canada will begin construction of a new atomic pile, much larger and many times more powerful than the present NRX pile at Chalk River, this year. The new pile will assure continuity to the work at Chalk River and will offer excellent opportunities for nuclear studies and increased facilities for peacetime applications of radioactive materials. Cost of the new reactor is expected to be about 30 million dollars.

Forty Swedish farmers and agricultural workers will come to the U. S. toward the end of March to make a six-month study of the American farming industry. They have been invited by the Marshall organization through the Swedish Department of Agriculture.

A. W. Zingg, Kansas State College, T. de Karman, Pasadena, and R. T. Knapp, Caltech, have been invited by the Centre National de la Recherche Scientifique, of Paris, to participate in the symposium on "Wind Action, Surface Hydrology, and Evaporation Phenomena in Arid Regions," being held in Algiers, March 26-31.

The Commandant Charcot, of the French Polar Research Expeditions, landed 14 French scientists and an Australian glaciologist at Port-Martin (66° 50' S by 141° 25′ E), Adélie Land, on January 9, to relieve the party of 11 which has just completed a year of research. Two members of the first over-winter party will remain a second year. In addition to meteorological and hydrographic studies, the French scientists are exploring the interior of Adélie Land with dogsleds and vehicles equipped with caterpillar treads. Meanwhile, in the center of the Greenland Ice Cap, 9 other members of the Polar Research Expeditions are continuing their weather research at the Central Ice Cap Research Station (70° 54' N by 40° 42' W) at an altitude of 9,900 feet. Four daily weather observations are incorporated into the International Weather Network. Paul E. Victor is director of both the arctic and antarctic expeditions.

Brookhaven National Laboratory will now supply radioisotopes with very short half-lives, or of higher specific activity than can be produced in the Oak Ridge National Laboratory reactor. The Oak Ridge reactor will continue to be the nation's principal radioisotopes source. Requests for radioisotopes must still be made directly to the Isotopes Division, U. S. Atomic Energy Commission, Oak Ridge, Tenn. Service irradiations will not be performed at Brookhaven unless authorized by the Isotopes Division.