

News and Notes

Symposia in Neurophysiology

THE SPINAL CORD was the subject of a conference under the auspices of the Ciba Foundation at its house at 41, Portland Place, London, Feb. 26-28. Under the chairmanship of E. D. Adrian, president of the Royal Society, and the vice-chairmanship of G. L. Brown, some 44 persons, 18 of them from overseas, attended by invitation.

The five sessions were planned to encourage reports of stimulative and frontier character, the airing of differences in interpretation, and free discussion. Most of the overseas members stayed at the foundation, and this, together with intermissions, luncheons, a reception, and a dinner on the premises, was conducive to informal exchange of ideas. All arrangements were made by G. E. W. Wolstenholme, executive secretary, and his staff, out of the experience of a series of similar conferences over the past three years. The 20 papers read began with comparative physiology of synaptic transmission by T. H. Bullock, of Los Angeles, and ended with clinical experiments in poliomyelitis by D. M. Brooks, of London, and they ranged through development, architecture, reflexology, analysis of potentials, and pharmacology.

D. H. Barron, of New Haven, interpreted new experiments as meaning that embryological dendrite growth of motoneurons is dependent on the prior event of axons reaching an appropriate muscle, though dendrite pattern depends on the position of the cell in the cord rather than destination of the axon. G. J. Romanes, of Edinburgh, described the groupings of motor cells in the cord in a wide variety of vertebrates with differently developed limb musculature and use, from frogs to whales. The evidence poses the question, without suggesting an answer: What accounts for, or correlates with, these patterns of motoneuron grouping? C. G. Bernhard, of Stockholm, C. McC. Brooks, of New York, F. Bremer, of Brussels, and J. L. Malcolm, of London, each reported on analyses of the potentials recorded from the cord or its roots.

C. B. B. Downman, of London, compared the motoneuron discharges, their distribution, and properties as elicited by stimulation of splanchnic and of intercostal nerves. W. Schlapp and A. A. Jefferson, of Manchester, discussed long and labile depression following repetitive stimulation of muscle afferents. J. C. Eccles, of Canberra, presented evidence from antidromic excitation of motoneurons with intracellular recording, which he interpreted as showing block at the distal end of the unmyelinated segment of the axon and at the origin of the axon. Yves Laporte, of Toulouse, announced the discovery of three neuron pathways so linked as to countermand the myotatic reflex and mediate the lengthening reaction. R. Lorente de Nó, of New York, reviewed synaptic transmission properties of oculomotor nuclei.

C. R. Skoglund, of Stockholm, opened a series of pharmacological papers with his results on close intra-arterial injection of the anticholinesterase "tabun" on cord responses, showing apparent selective action on different components of the cord. D. W. Kennard, of London, also applied drugs, but by a method of direct injection with micropipettes inserted in the cord; and W. S. Feldberg, J. A. B. Gray, and W. L. M. Perry, of London, used another close arterial injection route. D. Taverner, of Leeds, contrasted the effects on the monosynaptic and polysynaptic responses of intravenous *d*-tubocurarine and strychnine in variously prepared cats. P. A. Merton, of London, suggested how the proprioceptive control of muscle effort looks to a servo-control engineer. K. E. Hagbarth, of Stockholm, corrected frequent oversimplified accounts by showing that ipsilateral skin stimulation can evoke both flexion and extension, with reciprocal inhibition according to the area of skin and the balance between excitation and inhibition. The lateral cervical nucleus, studied by G. Ström and B. Rexed, of Stockholm, seems to relay from the skin of the ipsilateral forelimb to cerebellar cortex.

Other members of the conference participating in the discussion included H. J. Bein (Basel); Edith Bülbring, J. H. Burn, E. G. T. Liddell, and C. G. Phillips (Oxford); Rosamond M. Eccles (Canberra), A. Fessard (Paris); A. Gallego (Madrid); H. Hermann (Lyon); R. Jung (Freiburg); B. Katz, A. Schweitzer, G. P. Wright, and J. Z. Young (London); B. H. C. Matthews and W. A. H. Rushton (Cambridge); T. Roberts (Glasgow); D. Whitteridge (Edinburgh); and O. Wyss (Zurich).

Interest ran particularly high with reference to the recent announcement of J. C. Eccles of his abandonment of the so-called Golgi cell hypothesis of inhibition, put forward in 1947 jointly with C. McC. Brooks, and of his conversion to the hypothesis of chemical transmission in the central nervous system. These changes were prompted primarily by the finding, with an intracellular electrode in a motoneuron of the ventral horn, of a 3-mv potential having the shape and time course of familiar excitatory postsynaptic potentials but of opposite sign, upon arrival of an inhibitory presynaptic volley. This hyperpolarization he believes unaccountable by local circuit effects from presynaptic potentials and therefore necessarily due to chemical transmission, which also becomes most likely for excitation. This view was welcomed by Henry Dale, W. S. Feldberg, and others, and was opposed among others by Brooks and de Nó. Discussion was lively, friendly, and informative.

The conference took place immediately following two other events, to which members were also invited. A two-day meeting of the Physiological Society at the new laboratory of the National Institute for Medical Research, Mill Hill, London, included many papers and demonstrations in neurophysiology. At the

Royal Society in Burlington House a symposium on Excitation and Inhibition was held Feb. 21, with Professor Adrian in the chair. Papers were contributed by A. L. Hodgkin, Katz, Fessard, de Nô, R. Granit, Feldberg, and Eccles, with a brief but vigorous discussion.

Indicative of the degree of interest in neurophysiology everywhere, but possibly illustrating regional differences in the kind of interest, a group of 23 workers, chiefly American and Canadian, met in New York during the week following the Ciba conference for the third annual Macy Foundation Conference on the Nerve Impulse. Discussion centered principally on mechanisms at the unit level and on similarities and differences between axon and synapse. J. Z. Young, however, challenged neurocytologists and physiologists to formulate new questions designed to reveal the meaning and relationships of such extensive synaptic fields and complexly structured populations of units as occur in the cerebral cortex.

It is expected that each of these meetings will be recorded in a published volume that will include the discussions:

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Scientists in the News

J. Burns Amberson, visiting physician in charge of the Chest Service of Bellevue Hospital, New York, has received the 1952 Trudeau Medal for the "most meritorious contribution on the cause, prevention, or treatment of tuberculosis." The medal was established in 1926 in memory of Edward Livingston Trudeau, first president of the association, and is awarded annually by the National Tuberculosis Association. The first Will Ross Medal for distinguished contribution to the tuberculosis control movement in a nonmedical field was presented to **Homer Folks**, of Yonkers, N. Y., retired executive director of the New York State Charities Aid Association and a former president of the Tuberculosis Association. This medal was named in memory of a volunteer worker who devoted many years of service to tuberculosis work.

David A. Andrews, geologist with the Foreign Geology Branch of the U. S. Geological Survey, has returned to Washington, D. C., after more than 3 months in Thailand as consultant on the Thai Coal Program. He also visited Formosa and the Philippines for consultations regarding their future mineral programs.

J. Dabney Burfoot, Jr., of the Department of Geology at Cornell, has been appointed assistant dean of the College of Arts and Sciences. Professor Burfoot has been a member of the geology staff since 1929 and secretary of the University Faculty since 1950. He was assistant to the dean of the College of Arts and Sciences and chairman of its advisory board for underclassmen from 1946 to 1950.

Chieh-Chien Chang, winner of a Guggenheim fellowship, will leave for Europe in September to investigate the application of mathematics to aeronautical problems of high-speed aircraft and missiles. At present dividing his time between the U. S. Air Force Air Research and Development Command and Johns Hopkins University, Dr. Chang will study in British universities and lecture in England and other European countries during the one-year period of the Guggenheim grant.

Bob Considine, International News-Service columnist, and **Albert Q. Maisel**, free-lance writer, were the winners of the Lasker Medical Journalism Awards for outstanding reporting on medical research and public health in the newspaper and magazine fields, respectively, during 1951. The Albert and Mary Lasker Foundation announced also a special citation for **Selig Greenberg**, Providence, R. I., newspaperman. Mr. Considine won in the newspaper field for his series of six articles entitled "How Soon Will We Conquer Cancer?" Mr. Maisel was selected in the magazine field for his article "Scandal Results in Real Reforms," published in *Life* magazine in November 1951. Mr. Greenberg was given a special citation for his series of 22 articles on "Medicine in Crisis," published in the *Providence Journal and Evening Bulletin*. The awards are administered by the Nieman Foundation for Journalism, under the auspices of the National Association of Science Writers.

C. J. Gilgut, a staff member at the University of Massachusetts Field Station, Waltham, since 1934, has been appointed to fill the position of extension plant pathologist held by the late **Oran C. Boyd**.

Wayland J. Hayes, Jr., senior surgeon of the U. S. Public Health Service, and chief, Toxicology Section, Technical Development Branch, Communicable Disease Center, Savannah, Ga., participated in the International Congress of Comparative Pathology at Madrid. He is also visiting laboratories in England, France, Italy, and Switzerland.

William F. Hewitt, Jr., of the Department of Physiology, Howard University School of Medicine, has accepted appointment as professor and head of the Department of Physiology and Pharmacology in the Des Moines Still College of Osteopathy and Surgery.

Jack N. Hunt, senior lecturer in physiology at Guy's Hospital Medical School, London, is spending part of this year in New York City working in the Gastroenterology Research Laboratory of the Mount Sinai Hospital under the direction of Franklin Hollander. Dr. Hunt will be in this country for a protracted period under a fellowship from the Rockefeller Foundation.

Hudson Jost has been appointed professor of psychology and head of the department at the University of Georgia. Associate professor in the Department of Neurology and Psychiatry of the University of Ten-

nessee College of Medicine, he also serves as director of the Psychophysiological Laboratories at Gailor Psychiatric Hospital, teaching unit of the College of Medicine.

In recognition of his contributions to geological science, the Geological Society of London has elected **Esper S. Larsen, Jr.**, of the U. S. Geological Survey, as one of its foreign members.

Heinz A. Lowenstam, invertebrate paleontologist and paleoecologist, has been appointed to the geological sciences faculty at the California Institute of Technology. At present associate professor of geology at the University of Chicago, he will succeed **Charles W. Merriam**, who has returned to the U. S. Geological Survey. Professor Lowenstam has served as curator of paleontology at the Illinois State Museum and associate geologist of the Illinois State Geological Survey. He was a research associate in geology at the University of Chicago, 1948-49, and was appointed associate professor in 1950.

Joseph L. McDonald, professor of economics, will succeed **Lloyd K. Neidlinger** as dean of Dartmouth College. Professor McDonald has taught economics at Dartmouth since 1923.

Karl B. McEachron, General Electric engineer and authority on lightning, has received the 1952 award of the Engineering Societies of New England. The New England Award is conferred not oftener than once each year on a living engineer, resident of New England, whose outstanding work and character merit recognition by his fellow engineers of the New England area.

Millicent C. McIntosh, dean of Barnard College, will assume the new title of president of Barnard College on July 1 under the terms of a new agreement between the trustees of Columbia University, the parent institution, and the women's undergraduate college. She has served as dean since 1947. Mrs. McIntosh will retain her rank as dean of the university and will continue to sit on the University Council with other deans of Columbia.

Leo E. Melchers, who has been at Kansas State College 39 years and head of the Department of Botany and Plant Pathology for 35 years, will retire from administrative duties July 1. He will remain in the department as professor of botany and devote his time to teaching, research, and writing.

Adelmo Panella, of the Italian Institute of Scientific Research, who is interested in arid lands, and **Constantino A. Fasso**, assistant professor of hydraulics at the Polytechnique Institute of Milan, are in this country to complete studies which they hope will enable them to combat the effects of droughts and floods in their homeland.

S. Ralph Powers, head of the Department of Natural Sciences at Teachers College, Columbia University, for the past 24 years, is retiring from that position

and will become professor emeritus. In 1951 he was vice president and chairman of AAAS Section Q. He has also been chairman of a Unesco committee which studied science courses and equipment in U. S. schools and colleges.

Griffith E. Quinby, U. S. Public Health Service surgeon, was recently transferred from the Malaria and Typhus Appraisal Unit of the Communicable Disease Center in Atlanta, to the Toxicology Section of the Technical Development Branch, Savannah.

Recent visitors at the USDA Eastern Regional Research Laboratory, Philadelphia, included **Saifur Rahman**, of East Pakistan; **J. Boldingh**, Unilever Research Laboratory, Zwijndrecht, Holland; and **Louis Dejoie**, president, Etablissements Agricoles et Industriels, Haiti.

With more than 35 years of experience in anthracite and bituminous coal mines, **Seth T. Reese**, mining engineer in the Health and Safety Division of the Bureau of Mines, has been named chief of the Accident Analysis Branch. Mr. Reese, succeeding **Forest T. Moyer**, who has been transferred, will supervise the compiling of accident statistics from the mineral industries, including employment and production data used in studying labor problems and production records.

Nila Banton Smith has been appointed director of the New York University Reading Institute. Dr. Smith has been a teacher and supervisor of reading for the Detroit Public Schools, an associate professor at Indiana University, and a professor at the University of Southern California. In 1948, she was appointed a lecturer at the NYU School of Education, and last year she was named an adjunct professor of education, in charge of the graduate teacher training programs in remedial reading. The Reading Institute of New York University since 1936 has served elementary school children who are retarded in reading, secondary and college students who wish to read better and to develop more effective study skills, and business and professional men and industrial executives who wish to increase their speed and comprehension.

H. B. Squire, senior principal scientific officer of the Aerodynamic Division in the United Kingdom's National Physical Laboratory, has been appointed to the Zaharoff chair of aviation at the Imperial College of Science and Technology, London. He succeeds **A. A. Hall**, who, last year, was made director of the Royal Aircraft Establishment, Farnborough.

Bradley Stoughton, professor emeritus of metallurgy at Lehigh University, recently received a Department of the Army award for his contribution to the World War II effort in industrial intelligence. Dr. Stoughton is director and consulting metallurgist of the Lukens Steel Company, Coatesville, Pa. He served as London representative of the Technical Industrial Intelligence Committee, which worked closely with the Joint Chiefs of Staff during the war.

Education

A **Communicable Disease Workshop** is being held in Lima, Peru, June 30-Aug. 8 under the sponsorship of the Pan American Sanitary Bureau and WHO. Zella Bryant, chief nurse of the USPHS Division of Chronic Disease and Tuberculosis, will help in planning the program. Workshop teachers will be from PASB's nursing staff and from public health agencies and schools of nursing in Brazil, Chile, and Panama.

Lehigh University has named Allison Butts head of the Department of Metallurgy, effective Aug. 1. He will succeed Gilbert E. Doan, who is leaving to join the Koppers Company. The promotion of Hugh R. Gault to professor of geology has been announced; and Richard M. Davis, economics; Roger E. Kolm, civil engineering; Raymond H. Snyder, sanitary engineering; and Albert Wilansky, mathematics, have been promoted from assistant to associate professors. The Hillman Award, given annually to the member of the Lehigh faculty who is deemed to have "done most toward advancing the interests of the university," went to Adelbert Ford, head of the Department of Psychology. Lynn S. Beedle, assistant director of Fritz Laboratory, and Dr. Davis were joint recipients of the Alfred Noble Robinson Award for the faculty member judged to have given "outstanding performance in the service of the university."

J. Axel Höjer, former president of the Swedish Medical Board, and an expert on preventive medicine, will head a newly inaugurated **Medical College** in the Federated State of Travancore-Cochin, India. Dr. Höjer has been commissioned by WHO to set up the college, the only one in the state. Special emphasis will be placed on sanitation and hygiene, as well as on preventive medicine in general.

The **Medical College of Virginia** has invited Bo Norberg, head of the clinical laboratory of the Sabbatsberg Hospital, Stockholm, to establish an enzyme laboratory, devoted to research into conditions of survival of the blood corpuscles.

E. E. Lewis, of **Ohio State University's** College of Education, has left for Guam to serve until Jan. 31, 1953, as a coordinator of teacher education and higher education. A five-year cooperative program, entire cost of which will be paid by the government of Guam, has been worked out between the university and J. R. Palomo, former faculty member who is now director of education on the island. Dr. Lewis will be relieved by Leonard O. Andrews, who will remain until Sept. 1. Thereafter, the terms of service of OSU representatives will run for 15 months. The Guam Teachers' College will be officially opened this summer, and students completing a two-year post-high school course will be accepted for enrollment at Ohio State.

The **Pacific Science Board** is continuing for the third year the cooperative program of coral atoll

research in the South Pacific. A study of Raroia in the Tuamotus Archipelago will be made by a seven-man field party consisting of Norman D. Newell, geologist, head of the project; J. V. Byrne, of Columbia; Joseph P. E. Morrison, U. S. National Museum; Robert R. Harry, Academy of Natural Sciences, Philadelphia (financed by a special grant from George Vanderbilt); Maxwell S. Doty, University of Hawaii; W. J. Newhouse, University of New Hampshire; and Bengt Danielsson, anthropologist, of Johanneshov, Sweden. Collections made by the party will go to the National Museum, the American Museum of Natural History, the Bishop Museum, the Academy of Natural Sciences, and the California Academy of Sciences. Financial assistance has been given by the Office of Naval Research, and the French government of Oceania will provide transportation between Tahiti and Raroia.

Grants and Fellowships

The **American Heart Association** has established an annual award to be known as the Howard W. Blakeslee Award, in tribute to the Associated Press science editor who died May 2. The award will be presented each year to the individual whose creative efforts in any medium of mass communication—press, magazines, radio, television, films, and books—contribute most to public understanding of the cardiovascular diseases. Mr. Blakeslee was one of the founders of the National Association of Science Writers, and the NASW has appointed a committee to work with the AHA in developing plans for setting up the award.

Baxter Laboratories, Inc., of Morton Grove, Ill., is continuing its graduate fellowships in medical science which were initiated last year. Ten fellowships for 1952-53 have been awarded and in addition two short-term fellowships.

National Vitamin Foundation has approved nine grants, totaling \$39,000, for research on vitamins and nutrition. Largest amount (\$7950) went to the Harvard University School of Public Health for a study of the influence of nutritional factors on the metabolism of alcohol; L. D. Greenberg and J. F. Rinehart, of the University of California Medical School, received \$7500 for study of the fundamental biochemical and morphologic pathology of B-vitamin deficiencies in the rhesus monkey; and Roberto A. Funaro, Nutrition Clinics Fund, will complete studies in Italy on the effect of vitamin B₁₂ on the growth of undersized children on low protein diets.

Public Health Service research grants totaling 176 have been approved for 206 investigators in 100 institutions, located in 34 states, including the District of Columbia, and in three foreign countries. The amount approved was \$1,831,563. Fellowship awards totaling 97 and amounting to \$254,500 have also been awarded. For full information concerning the PHS program, address the Division of Research Grants, Bethesda 14, Md.

In the Laboratories

Beckman Instruments, Inc., has established a new Special Products Division, under the direction of J. F. Bishop, for the study of special instrumentation problems of industrial organizations. These may include partly developed instrument designs or completed prototype instruments.

Fabric Research Laboratories, Inc., has appointed Milton M. Platt associate director of research in charge of all physical and engineering investigations. George Thomson, of MIT, has been made assistant director of research, in charge of chemical investigations. Chauncey C. Chu and Henry M. Morgan have been promoted to the senior research staff, and Myron J. Coplan, of the Institute of Textile Technology, Charlottesville, Va., has been added to the staff.

National Research Laboratories, of Canada, are adding new buildings to their Montreal Road site in Ottawa and making an addition to the supersonics laboratory, which was constructed last year. The Division of Applied Chemistry will occupy new quarters this summer, and the divisions of Building Research and Radio Electrical Engineering have begun new buildings. At Halifax, a maritime regional laboratory to serve the general needs of the sea provinces was recently opened on the campus of Dalhousie University.

The **New York Botanical Garden** has appointed Richard S. Cowan and John W. Wurdack assistant curators on the staff of the Herbarium. Dr. Cowan will leave in August for a year's study in England and on the continent, having been awarded a National Science Foundation fellowship. Other new appointees are Arthur Cronquist, who has been working under ECA auspices at the Jardin Botanique de l'Etat, Brussels, and George M. Bunting, of Michigan State College. Arthur Holmgren, of Utah State Agricultural College, is spending the summer at the Garden to assist in the study of Western U. S. intermountain flora; the Garden will eventually publish a flora of the region. Brother Alain has returned for the summer under a Guggenheim Fellowship; he has been working in Cuba for the past 17 years with Brother León on *The Flora of Cuba* and teaching at Colégio de la Salle, Havana.

Meetings and Elections

The **American Pharmaceutical Association**, in celebrating its centennial this year, will hold a Centennial Convention in Philadelphia, Aug. 17-21. The meeting of the A.Ph.A. will be followed immediately by meetings of the American Association of Colleges of Pharmacy, the National Association of Boards of Pharmacy, the American Society of Hospital Pharmacists, the American College of Apothecaries, and other groups, whose meetings will continue through Aug. 23. Since the actual organization of the association took place on Oct. 7, 1852, the national organi-

zation is planning a special program for Oct. 7 this year, to be transmitted by radio to each local and student branch. As their contribution to the centennial, the members of the Women's Auxiliary have created a special award to be given to senior women pharmacy students. Sixty-three such awards will be presented at commencement exercises or other functions this year.

The **American Society of Mammalogists**, meeting at Charleston, S. C., in April, elected the following officers: president, William J. Hamilton, Jr.; vice presidents, William H. Burt and William B. Davis; secretaries, Randolph L. Peterson and R. Kelson; treasurer, Viola S. Shantz.

The annual meeting of the Eastern Section, **Association of Geology Teachers**, was held at Vassar College, Apr. 4-5. Officers for the coming year are: president, A. Scott Warthin, Jr.; vice president, Shepard W. Lowman; secretary-treasurer, Milton T. Heald; editor, Lawrence Whitecomb. Membership is open to all persons interested in disseminating geologic information, whether or not they are actively engaged in teaching. For additional information about the organization, address Milton T. Heald, Department of Geology, West Virginia University, Morgantown.

The **Chemical Society** elected C. K. Ingold, of University College, London, president for the next two years, at a joint annual meeting of the society and the Royal Institute of Chemistry in Dublin Apr. 15-18. Eric Rideal, of King's College, London, is the retiring president.

Colorado-Wyoming Academy of Science has elected James W. Broxon president and Ernest R. Schierz vice president. Hugo G. Rodeck is executive secretary. The 1953 annual meeting will be held at Colorado College.

The **Minnesota Academy of Science** elected Ernst Abbe, of the University of Minnesota, president, and R. W. Darland, of the university's Duluth Branch, vice president at its annual meeting in St. Cloud recently.

The **Society for General Microbiology** elected H. J. Bunker president at its annual general meeting at Oxford last April. J. G. Davis and E. F. Gale were elected secretaries, and R. Lovell treasurer. In addition to a paper-reading session there was a symposium on "The Nature of Virus Multiplication," which was attended by more than 300 microbiologists. The papers and discussion in this symposium will be published in book form under the editorship of Paul Fildes and W. E. van Heyningen.

The following officers were elected by the **Wisconsin Academy of Sciences, Arts and Letters** at its annual meeting in April: president, Katherine G. Nelson; vice presidents, William H. Barber, Berenice Cooper, and Ella M. Martin; secretary-treasurer, Robert J. Dicke; librarian, Halvor O. Teisberg.