

## SCIENTIFIC NOTES AND NEWS

DR. PERRIN H. LONG, professor of preventive medicine at the School of Medicine of the Johns Hopkins University, is now a lieutenant colonel serving as medical director in the North African war theater.

DR. DONALD C. BALFOUR, director of the Mayo Foundation, has been elected an honorary fellow of the Royal Society of Medicine, London.

DR. ALEXEY NIKOLAEVICH BACH, biochemist of the University of Kiev, and Dr. Te-Pan'g Hou, Chinese industrial chemist, will be awarded honorary membership in the Society of Chemical Industry at a dinner meeting of the society to be held at the Waldorf-Astoria on October 22.

THE Clarke Memorial Medal for 1942 of the Royal Society of New South Wales has been awarded to Dr. W. L. Waterhouse, of the University of Sydney, "in recognition of outstanding contributions in the sphere of natural science, particularly in plant pathology."

At a recent meeting of the Academy of Medicine of Cleveland, Dr. Howard Dittrick, for many years a member or chairman of the publications committee, was presented with the distinguished service award of the academy for 1943. The award consisted of a silver plate and went to Dr. Dittrick in recognition of his service to the academy over a long period of time.

THE doctorate of laws of the University of Leeds will be conferred on Professor H. S. Raper, Brackenbury professor of physiology at the University of Manchester, and the doctorate of science on E. V. Evans, chairman of the British Gas Research Board.

A DINNER in honor of Dr. Esther Rosencrantz, associate professor of medicine and lecturer in medical history and bibliography at the Medical Center in San Francisco, was given by fifty of her colleagues at the Palace Hotel on July 9 on the occasion of her retirement from the Medical School of the University of California after a service of thirty years. From 1920 to 1937, Dr. Rosencrantz was chief of the Tuberculosis Service at the San Francisco City and County Hospital.

THE American Society of Naturalists has elected the following officers to serve for the year 1943: H. J. Muller, Amherst College, *President*; B. M. Duggar, University of Wisconsin, *Vice-president*; A. C. Kinsley, Indiana University, *Secretary*; and M. R. Irwin, University of Wisconsin, *Treasurer*. The following were elected members of the society: Ernest C. Abbe, LeRoy Abrams, F. A. Beach, J. P. Bennett, James Bonner, Ralph Buchsbaum, Earl O. Butcher, Fred K. Butters, Wanda K. Farr, David R. Goddard, Karl C.

Hamner, Edwin R. Helwig, Hope Hibbard, Theodore L. Jahn, John S. Karling, Stewart A. Koser, Alfred M. Lucas, Gordon Marsh, H. M. Parshley, Frederick V. Rand, P. L. Risley, Ralph Singleton, J. M. Webber and S. H. Yarnell.

THE interim Commission on Food and Agriculture, which was established by the United Nations conference at Hot Springs, Va., has elected as its permanent chairman L. B. Pearson, minister-counsellor of the Canadian Legation, and as vice-chairmen M. Pavel Tchegula, of the Soviet Purchasing Commission, and Tsou Ping-wan, of the Chinese Food Ministry.

COLONEL SIR A. STANLEY ANGWIN has been elected president of the British Institution of Electrical Engineers; T. G. N. Haldane and Dr. E. B. Moullin have been elected vice-presidents; and E. S. Byng has been elected honorary treasurer.

DR. EARL O. BUTCHER, professor of biology at Hamilton College, a member of the faculty for fifteen years, has resigned to join the department of anatomy of the New York University College of Medicine and Dentistry.

DR. HENRY N. HARKINS, of the Henry Ford Hospital, Detroit, has become associate professor of surgery at the School of Medicine of the Johns Hopkins University.

DR. ERIC OGDEN, associate professor of physiology at the University of California at Berkeley, has been appointed professor of physiology at the School of Medicine of the University of Texas, Galveston, and clinical physiologist to the John Sealy Hospital. He has been associated with the division of physiology of the University of California since 1929.

DR. STEWART C. THOMSON, assistant professor of anatomy at the Loyola University School of Medicine, Chicago, Ill., has been appointed assistant dean of the school. He succeeds Dr. John G. Powers, who will enter private practice. Dr. Francis J. Braceland, dean of the Medical School, is now in the Navy. Dr. Amedeo S. Marrazzi, assistant professor of pharmacology at the New York University College of Medicine, has been appointed professor and head of the new department of pharmacology.

ETHELWYN B. WILCOX has been appointed assistant professor of nutrition at the Utah State Agricultural College at Logan.

DR. O. N. ALLEN, professor of bacteriology and a former chairman of the department of botany of the University of Hawaii, has recently been named chairman of the newly established department of bacteriology.

THE U. S. Public Health Service has made a grant to Washington University to finance a cooperative study by Drs. M. Trotter and V. Lanier, of the department of anatomy, and Dr. Howard McKnight, of the department of obstetrics and gynecology, of the spinal dura mater and of the posterior surface of the sacrum in connection with the new method of continuous caudal anesthesia in childbirth.

DR. CHARLES S. HANES, chairman of the British Advisory Committee on Dehydration of the Combined Food Board, has been appointed director of food investigation in the Department of Scientific and Industrial Research.

DR. A. J. AMOR has been appointed chief medical officer of the British Ministry of Supply in succession to Air Vice-Marshal Sir David Munro, who has resigned to become medical adviser to the Ministry.

*The Times*, London, reports that Dr. C. M. Wenyon, F.R.S., will retire shortly under the age limit from the position of director-in-chief of the Wellcome Research Institution and director of the Wellcome Bureau of Scientific Research. His association with the laboratories, founded by the late Sir Henry Wellcome, has extended over thirty-six years. Dr. Charles H. Kellaway, F.R.S., director of the Walter and Eliza Hall Institute for Medical Research, Melbourne, will assume the directorship-in-chief of the institution and the foundation's other research laboratories as early in 1944 as possible. Dr. Wenyon has agreed to postpone his retirement until Dr. Kellaway reaches Britain. Dr. N. Hamilton Fairley, F.R.S., a director of medicine to the Australian Army in the Pacific, will eventually take over the directorship of the Wellcome Bureau of Scientific Research.

DR. IVOR GRIFFITH has been appointed research director of the Frank H. Lee Company, hat manufacturers, of Danbury, Conn. He will continue as dean of pharmacy at the Philadelphia College of Pharmacy and Science.

DONALD E. SHARP, formerly assistant to the vice-president and director of research of Hartford-Empire Company, of Hartford, Conn., has joined the Libbey-Owens-Ford Glass Company as assistant director in charge of glass technology.

DR. H. J. CHANNON, Johnston professor of biochemistry at the University of Liverpool, known for his work on fats and fat metabolism, has resigned to become associated with Unilever, Ltd.

MAJOR GENERAL JAMES C. MAGEE, a former Surgeon General of the Army, who has recently returned from a visit to the troops in England and North Africa, delivered on August 9 to the faculty and students of New York University College of Medicine a

lecture on military medicine with special reference to tropical diseases.

THE Parsons Memorial lecture for 1943, given under the auspices of the Physical Society, London, will be delivered early in the autumn by Lord Rayleigh.

THE annual meeting of the American Psychological Association will be held at Northwestern University from August 31 to September 1. Owing to the serious crisis in the field of transportation it has been voted that council members only be encouraged to travel any distance to the annual meeting. Those in the immediate vicinity are invited to attend a "token" annual meeting. It is expected that most problems can be presented to the council by mail and that business requiring action can be handled by the emergency powers granted to the council at the last annual meeting if a quorum is not available. Other matters may need to be referred by mail to the broader base of associates and members. Headquarters will be maintained at Scott Hall. The council will be in session beginning on August 31 in the Hardy Lounge in Scott Hall. The "token" annual meeting is scheduled for Thursday, September 2, beginning at 1:30 p.m. in the auditorium of Lutkin Hall. It is expected that this meeting will be local and unrepresentative and that only those in the immediate vicinity whose presence will not tax the transportation system will attend.

*The Times*, London, reports that many leaders of British agriculture and representatives of twenty-eight nations gathered at Harpenden on July 27 to celebrate the centenary of Rothamsted Experimental Station. Welcoming the visitors at luncheon, Lord Radnor, chairman of the Lawes Agricultural Trust, said it was a matter of great pride to them that this was the first agricultural research station to celebrate its centenary. Lord Radnor paid a tribute to Sir John Russell, the retiring director. Mr. Hudson, congratulating Rothamsted on attaining its centenary, said "that phosphates had become the touchstone of agricultural production, and we owed the discovery of superphosphate to Sir John Lawes. Fortunately we were now receiving substantial imports of phosphate rock from North Africa, and this would be of great value in securing full crop output. Research was necessarily a long-term problem, and separate organization was needed to disseminate the fruits of research in practical knowledge among farmers." Sir John Russell expressed Rothamsted's pride in the worldwide recognition of the work of the past century.

AN expanded program of research through fellowship grants for the 1943-44 academic year has been announced by the Wm. S. Merrell Company, pharmaceutical manufacturers of Cincinnati. Research in

organic chemistry, bacteriology, pharmacology and biochemistry will be conducted at Cincinnati, Cornell, Illinois, Indiana, Louisville, Michigan, North Carolina, Ohio State, Pennsylvania and Temple Universities, and at Kansas State Teachers College. Grants for clinical research fellowships have been made to the Chicago Maternity Center, the University of Cincinnati, Harvard University, the University of Louisville, the University of Nebraska, the Pennsylvania Post-Graduate Hospital, Wayne University and Washington University.

*Nature* reports that the National Research Council of Canada will award for the academic year 1943-44 fourteen fellowships of the value of \$750 each, thirty

studentships of \$650 each and twenty-one bursaries of \$250 each. The sixty-five successful candidates for these post-graduate scholarships comprise graduates of fifteen Canadian universities, and they will carry out research work in the coming year at eleven of these institutions. As a result of war conditions, the fields of science in which the scholarship holders will work are reduced in number as compared with a few years ago. By far the greatest number will work in various branches of chemistry related to the war effort. According to a general classification adopted in announcing the awards, forty-nine will study chemistry, six physics (including one radiology), four biochemistry, two genetics, and one each biology, mineralogy, mechanical engineering and electrical engineering.

## DISCUSSION

### THE MOSSES OF LURAY CAVERN, VIRGINIA

THE writer returned<sup>1</sup> to the Caverns of Luray in the Shenandoah Valley of Virginia in September of 1941 for a more complete sampling of the mosses that are now growing upon the floor, walls and ceiling of the cavern wherever artificial light has been cast in time and amount sufficient to cause germination of the moss spores. Through the courteous assistance of the cavern management a thorough examination of the cavern was made, and all specimens which to the unpracticed eye appeared to be different in any form or color were collected. Though it can not be claimed that the collection is complete, it should present, however, a fair cross section of the kind of mosses in the Caverns of Luray. The specimens were sent to Dr. W. C. Steere, of the University of Michigan, who has kindly provided the identifications given in the column in Table 1 under "plant."

TABLE 1

Station	Plant	Description
Ramble	<i>Leptobryum pyriforme</i> (Hedw.) Schimp.	One-inch long thin stems, sparse of leaves
Cross of 8	<i>Bryum pseudotriquetrum</i> (Hedw.) Schwaegr.	½-inch long stems, well covered with leaves
Cross of 8, ground light	Moss—sp.?	2-inch long stems, luxuriant leaf development
Mirror Lake	<i>Ceratodon purpureus</i> (Hedw.) Brid.	½-inch fine stems, small fine leaves
Entrance wall, 12 feet above floor	<i>Eurhynchium serrulatum</i> (Hedw.) Kindb.	Stems an inch or more long, quite leafy
Dream Lake	<i>Bryum pseudotriquetrum</i> (Hedw.) Schwaegr.	Long stems, leafy
	<i>Weisia viridula</i> (Hedw.)	Very short tight bunches of stems, leafy
	<i>Thuidium</i> sp.	Long stems full of tightly packed leaves
Ramble—ceiling	Algae	Minute filaments, fraction of mm long

<sup>1</sup> Walter B. Lang, *SCIENCE*, 94-2444, p. 414, October 31, 1941.

It is interesting to note that algae were found tenaciously growing to the limestone ceiling as a thin, compact, dark-green mat and under the same conditions as the mosses.

Supplemental samples of the moss specimens were spread between blotters and packed away at the time they were collected. When the containers were opened after the specimens had been more than a year without light or moisture they were found to be as green as ever.

Some two years ago the new Skyline Caverns near Front Royal, Va., were opened to the public after having been equipped with a modern lighting system. I was privileged at the time to make a thorough examination of the cavern for evidence of moss but found none except in the entrance corridor in the immediate vicinity of lights that are allowed to burn more or less continuously. This new moss growth appeared like a faint green fuzz upon the limestone. In time, it is expected that mosses will germinate within the cavern where the large projectors have been placed.

Dr. Frans Verdoorn has recently brought to my attention a paper by Jacques Maheu on American cavern flora<sup>2</sup> in which he presents some interesting conclusions regarding a comparison of American and European cave flora. Maheu states that the flora of Kentucky caves and those of Europe are the same and deduces therefrom that it is possible to establish one classification of cavern flora which will be universally applicable regardless of country or climate. He notes that American forms are more reduced and less varied, but that the variations are absolutely parallel with those of Europe; sterility, lengthening of the leaves, wider spacing of the leaves on the stems, elongation of the cells and disappearance or thinning of the nerve. The two most important factors in bringing about this

<sup>2</sup> La flore cavernicole américaine (Grottes de Mammoth-cave et de City-cave, état de Kentucky), *Bull. Soc. Bot. de France*, 63: 39-57, 1926.