

OBITUARIES

PROFESSOR E. G. D. MURRAY

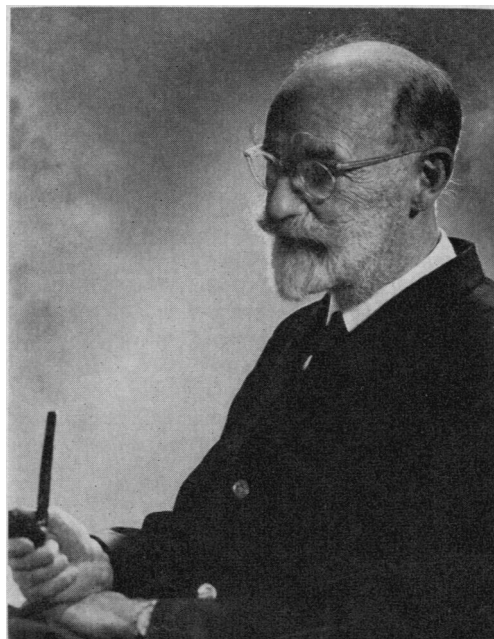
AN APPRECIATION

In the sudden passing of Professor Everitt George Dunne Murray on July 6 last his colleagues at the University of Western Ontario, where he had completed almost nine years of post-retirement as Guest Professor of Medical Research, were left with a sense of great shock and personal loss. He was very happy during these post-retirement years—as busy and productive as ever. It may be truly said that the world of bacteriology has lost one of the most distinguished international members of that profession.

Dr. Murray's *curriculum vitae* is most unusual and also most distinguished, the major items of which are herewith set down. He was born in Johannesburg, South Africa, on July 21, 1890. He went to England for his university and medical school education at Cambridge (Christ's College) and St. Bartholomew's Hospital, London. He qualified for his B.A. and M.A. in 1912 and 1918, and his Licentiate in Medicine and Surgery of the Society of Apothecaries in 1916. He also held a specialist's certificate as a pathologist and bacteriologist issued by the Royal College of Physicians and Surgeons of Canada (1946), and in 1955 he was awarded two honorary degrees—D.Med.Sc. from the University of Montreal, and D.Sc. from McGill.

During the First World War he served with the rank of Captain in the Royal Army Medical Corps, where he was one of the Research staff of the War Office Central Cerebro-Spinal Fever Laboratory. In 1915 and 1917 he was sent on War Office missions to the Pasteur Institute in Paris for investigations of meningococcus serum. During this time he worked on the then epidemic cerebrospinal fever with his distinguished teacher at Barts, Mervyn H. Gordon, who must have done much to interest him in bacteriology. This was a collaboration that produced many useful results, including the first serological typing of a bacterial species. Dr. Murray was detailed for special duty in 1916 to the 3 B.G.H. Laboratory in Mesopotamia to work on dysentery. He contracted the disease himself and spent a period of convalescence in India. He returned to England and his military service continued as he joined the staff of the War Office Vaccine Department of the Royal Army Medical College, not only making vaccines for the services but undertaking a pioneer study of the dysentery bacilli collected in the Middle East and plaguing the forces at that time. He was one of the British representatives to the Allies' Medical Services Conferences in Paris in 1917, and the following year he became a member of the War Office Committee on Dysentery. In recognition of his war work he was awarded the O.B.E. (Military Division) in 1918.

Dr. Murray began his academic career in London, England, at St. Bartholomew's Hospital as a Senior Demonstrator in Pathology in 1919. From 1920 to 1926 he was a research bacteriologist supported by the then infant Medical Research Council, first in the Field Laboratories at Milton, near Cambridge, and he became a member of the Committee on *Meningococcus* and *Pneumococcus* Serum. The results of his investigations were published in a monograph, "The Meningo-



Juliette, London, Ont.
Professor E. G. D. Murray

coccus", in the M.R.C. Special Report Series 4, 124, 1929. Meanwhile at Cambridge (where he was affectionately named "Joburg" by his many friends), he was appointed a Fellow of Christ's College, 1923-31, Lecturer in Pathology, 1926-30, and Director of Medical Studies, Christ's College, 1925-30. One of his most significant pieces of work while at Cambridge was perhaps his discovery and characterization (together with Webb and Swann) of the organism which became known as *Listeria monocytogenes*, in rabbits, and which he later found in a wide range of other animals. At Cambridge also he was a member of the Board of Biology and the Board of Medicine, of the Degrees Committee of Biology, the University Building Syndicate, and Examiner in the Natural Sciences Tripos and in Pathology in the Medical Board Examinations. On November 21, 1927, Dr. Murray represented the University of Cambridge at the installation of the Chancellor of the University of Toronto.

In 1930 Dr. Murray came to Canada to join the Faculty of Medicine of McGill University and was appointed Professor and Head of the Department of Bacteriology and Immunology, where he remained for 25 years. In addition he held appointments in the Faculties of Arts and Science, and Graduate Studies. During this time he was also Bacteriologist-in-Chief and member of the Medical Board of the Royal Victoria Hospital (1931-46), and of the Children's Memorial Hospital (1938-48), a member of the Medical Board of the Royal Edward Laurentian Hospital (1940-46) and of the Alexandra Hospital (1932-55), where he was also a member of the Board of Governors for eight years from 1947. He was affiliated with the Montreal General Hospital, the Jewish General Hospital, and the Victorian Order of Nurses for Canada. Professor Murray was the elected representative of the Faculty

of Medicine on the Senate of McGill University 1943-53. In 1947 he was appointed a member of the Board of Health of the City of Montreal and served on several of its committees.

Between 1940 and 1945, during the Second World War, Professor Murray assumed additional responsibilities in becoming a member of the Subcommittees of the National Research Council on Infections, on Shock and Blood Substitutes, and of the Wartime Prices & Trade Board Pharmaceutical Advisory Committee. He was the Chairman of the Biological Warfare Committee and the Superintendent of Research of the Directorate of Chemical Warfare and Smoke, National Defence Headquarters, Ottawa, and the Canadian Chairman of the Joint United States-Canadian Commission of the War Disease Control Station. His service continued after the war when from 1946 to 1948 he was a member of the Advisory Board and chairman of a panel under the Defence Research Board.

Following this period, Joburg was associated with the National Research Council in several capacities, serving as a member of several committees: the Scientific Advisory Sub-Committee on the Institute of Parasitology 1947-53, Medical Advisory Committee and its Executive Committee 1952-56, member of the National Research Council 1953-56, of the Standing Joint Committee on the Institute of Parasitology 1953-63, of the Canadian Committee on Culture Collections of Microorganisms from 1953, of the Associate Committee on Dental Research 1954-56, and Chairman of the Associate Committee on Control of Hospital Infections in 1957.

The many demands on Professor Murray were intensified through his membership in some 25 scientific societies, and the wide recognition of his respect and esteem is shown by the many awards and fellowships which he held. He was made a Fellow of the Royal Society of Canada in 1948. Following the war, in 1947, he was awarded the Medal of Freedom by the United States War Department, and in 1953 he was awarded two medals—the Flavelle Medal from the Royal Society of Canada, and the Coronation Medal of Queen Elizabeth II. He was made an Honorary Fellow of the Montreal Medico-Chirurgical Society in 1955, and was President of that Society in 1942. Further tributes to Dr. Murray's character are evidenced by the several learned societies and organizations who selected him for honorary membership during the last 10 years of his life: the Quebec Society for the Protection of Fish & Game, the Columbus Fish & Game Club, Canadian Society of Microbiology, Canadian Association of Medical Bacteriologists, the McGill University Faculty Club, Society for General Microbiology (U.K.) and the American Society for Microbiology.

In addition, he was the Recorder of the Bacteriology Section of the 5th International Botanical Congress held in 1930, a member of the American-Canadian Committee on Bacteriological Nomenclature, and he served on several committees with the Society of American Bacteriologists, including the Committee on Bergey's Manual of Determinative Bacteriology from 1932 to 1936, and then became a member of the Board of Editor-Trustees constituted in 1936. He was chairman, by invitation, of the Special Conference on Gas Gangrene in the United States held at Harvard University in April 1942, and associate editor 1940-55 of the *American Journal of the Medical Sciences*, Section of "Progress of Medical Science, Bacteriology", a charter

member since 1948 of the Arctic Institute of North America, and a member of the Permanent Commission of the International Federation of Culture Collections of Microorganisms. He served for many years (since 1939) in various committee and executive capacities with the International Association of Microbiological Societies which involved active participation in the International Conferences of that body. His Canadian colleagues elected him the President of the VIII International Congress of Microbiology which met in Montreal in 1962.

Professor Murray was prolific in his publications, and the titles of a few are noted here, giving a further indication of his wide interests and experience: *Some Aspects of Meningococcus Virulence*, *The Bacteriophage Phenomenon*, *Some Difficulties in Immunization with Vaccine*, *Therapeutic Immunization in Staphylococcus Infections*, *The Progress of Medicine*, *The Value and Function of Scientific Societies*, *Reflections on the Future of Veterinary Medicine*, *The Emergency for Research in Unexplored Fields of Public Health*, *Why be a Microbiologist? Nature's Place in Man's World*, *The Story of Listeria*, *A Plea for Constructive Speculation*, *Destiny and Determinism in Infectious Disease*, *In Quest of Obscurities in Bacterial Infections*.

Dr. Murray married Winnifred Woods, of Blunderston, Suffolk, England, in 1917 and they had a family of two—a daughter Susan (Mrs. C. W. Robinson) of Pointe Claire, P.Q., and a son Robert, who is Professor and Head of the Department of Bacteriology and Immunology at the University of Western Ontario, London, Ontario.

In May 1956 the *Canadian Journal of Microbiology* published a supplemental issue dedicated to Professor E. G. D. Murray in recognition of his contributions to science. The opening paragraphs of this issue contain an appreciation of Joburg by his McGill colleagues, and it is appropriate to quote verbatim several of the highly justified eulogistic remarks:

"... His academic and administrative achievements at Cambridge attest to his unusual abilities while still a young man. . . . His activities were great and varied, and as Professor H. R. Dean, who is Head of the Department of Pathology at the University of Cambridge, has written recently, 'In prosecution of research he was indefatigable, and we were proud to know that he expected from his friends a standard of industry equal almost to his own. He was always ready to help a colleague, and his comments and advice were awaited with an interest enhanced always by an unexpected phraseology. Murray played a big part in the development of our teaching program. His election to the Chair of Bacteriology in McGill University brought pride to the hearts of his Cambridge colleagues but sorrow at the loss of a much loved friend.'"

"E. G. D. Murray is a 'builder,' as we have said, and on leaving Cambridge in 1930 to come to Canada, he left behind him not only many friends and many memories but also a building. Before leaving he had the pleasure of seeing his love for structure and equipment materialize in the new Department of Pathology at Cambridge. To quote Professor H. R. Dean again, 'In the preparation of the plans for the new building, Murray threw himself with all his customary energy and enthusiasm, and now, after 27 years, there are still features and details of our laboratory which remind us of our old friend and colleague, a memorial not

unworthy of his skill and foresight, for Murray has never been satisfied with anything but the best.' We at McGill have heard in most colourful words of the various 'altercations' that arose during the planning and erection of the Pathology Laboratory in Cambridge. We have little doubt that there are still unexplored areas of the building where testimonials of his displeasure may be found. These may at any time be uncovered behind bits of molding or under an as yet undisturbed wall panel. It will surely create an astonishing impression in some unapprised soul who finds, when engaged in the changing of a fuse and unaware of the permanency of history, the yellowed but veritable mate of an earlier discovery: 'This damn thing is in the wrong place—E. G. D. Murray!'

" . . . One can perhaps appreciate some of his feelings when upon his arrival at McGill, he discovered that he was the sole member of his Department and that he was to have the assistance of one trained technician. He surveyed his new inheritance—a large bare laboratory with chemical benches and a half-dozen rooms with little or no equipment. The situation would have been most discouraging to any but a born pioneer. Before winter set in Professor Murray had made available adequate facilities for the teaching of medical students. Before winter yielded to spring, the 'Chief' and his new, full, bristling, and unusually well-trimmed beard, was marked as a man to be reckoned with in the years ahead at McGill.

"He was again a builder. During his 25 years at McGill, Professor Murray has rebuilt the department in more ways than one. The physical facilities have been remodeled, enlarged, rebuilt, and re-equipped. The staff of his Department grew to nearly 60 persons, and his Department of Bacteriology and Immunology became recognized as one of the leading centres in Canadian Microbiology. The Department developed along diverse but related lines—teaching, graduate study, research and diagnostic medical bacteriology. His dictum that teaching in Bacteriology should be provided wherever and whenever the need arose has led to a close liaison between his Department and many Faculties of the University during his tenure of office. With his personal participation in all courses, instruction has been given in the fields of Medicine, Public Health, Nursing, Dentistry, and Arts and Science with separate and appropriate courses for each. Graduate studies became a particular interest and at the time of his retirement there were 15 postgraduate students occupied in various stages of their research toward M.Sc. or Ph.D. degrees. Even during the brief period since the last war, some 44 postgraduate students from his Department have distributed themselves across Canada or the United States in university, government, hospital, or industrial laboratories. It is true to say that many of the major teaching hospitals in Montreal, in the rest of Canada, and some in the United States have been or are staffed by professional and technical personnel who have had the benefit of his teaching."

Dr. Murray's successor in the chair of Bacteriology and Immunology at McGill, Dr. R. W. Reed, has published a tribute to Professor Murray in the September number of the McGill News, from which the following is quoted:

"Outspoken enthusiasm and support for good honest work and equally outspoken disapproval of anything shoddy were characteristic of this great scientist and

scholar. These qualities together with his sparkling wit and warm humanity will be sadly missed and long remembered by his friends and colleagues far and wide.

"Throughout his professional life, he contributed regularly to microbiology by his scientific publications, by his lectures before learned societies and by his keen comments on papers read before various meetings. In his later years he concerned himself with 'constructive speculations', a field for which his wide experience, critical judgment and originality of thought made him eminently well-suited."

I am very proud to state that from 1930 to 1964 Joburg Murray had been a very close personal friend. Although the disciplines represented by each of us differed widely, the literally hundreds of discussions that we had through the years on matters not relating to either bacteriology or endocrinology were always stimulating and enjoyable. During the years that we overlapped at McGill University there was a small and most unusual club known as the "Greenhouse Follies" which met every Monday night in the potting house of the greenhouse to drink beer and eat meatballs prepared by the well-known McGill character, Professor Lloyd. It was at these informal gatherings that a small group of mutually congenial people felt free to discuss any subject, and as a matter of fact these gatherings on many occasions represented the teeing off of many new discoveries in a variety of fields. Joburg was a most faithful attender at these get-togethers and truly by his spontaneous discussions and native wit kept the whole group most joyously entertained.

In 1955 when Joburg's normal retirement from his position at McGill was imminent, I was most happy to be able to offer him the position of Guest Professor of Medical Research at the University of Western Ontario, and to rejoice in his acceptance of this offer. For nearly nine years thereafter, hardly a day went by without a parley between us which always added to the happiness of our living. It was very fortunate that Dr. Murray's passing was without lingering pain. He died of heart failure on the early morning of July 6 and I will always remember the rather long conversation that we had on the afternoon of the previous Friday.

J. B. COLLIP

DR. JOHN R. McARTHUR, 57, Associate Professor of Obstetrics and Gynecology at the University of Toronto, died in the Princess Margaret Hospital, Toronto, on November 14, 1964. A native of Cardinal, Ont., he graduated in medicine from the University of Toronto in 1932 and undertook postgraduate studies in England. Dr. McArthur specialized in the treatment of gynecological cancer and was on the active staff of the Toronto General Hospital. He was a Fellow of the Royal College of Obstetricians and Gynaecologists, England; a Fellow of the Royal College of Physicians and Surgeons, Canada; and a past president of the Society of Obstetricians and Gynaecologists of Canada. About a year ago, he served in England as an examiner of applicants for membership in the Royal College of Obstetricians and Gynaecologists, the first physician outside the United Kingdom to be accorded this honour.

Dr. McArthur is survived by his widow.