

RALPH HUDSON JOHNSON
MA, MB, BChir, MD(Cantab), MA, DM, DPhil(Oxon), DSc(Glas), FRCPG, FRACP, FRCP

Ralph Johnson was born on 3rd December 1933 in Sunderland, County Durham, son of Phyllis and Sydney Reynold Edward Johnson, chartered electrical and mechanical engineer. He attended the Lawrence Sheriff School in Rugby until entering Rugby School as a Foundation Scholar. In 1952 he proceeded to St Catharine's College, Cambridge as Draper's Co Scholar and Lord Kitchener Scholar, graduating BA (Hons)(Cantab) before completing his medical training at University College Hospital Medical School, London (MB, BChir Cantab, 1958), remaining in that hospital for two years as House Physician and House Surgeon before going to the accident service at the Radcliffe Infirmary, Oxford. His two years there were seminal for his research career as that hospital was pioneering the development of artificial respiration for poliomyelitis and the rehabilitation of paraplegics. Johnson became a research registrar for work on artificial respiration and autonomic control in man under the supervision of Dr J M K Spalding in the Department of Neurology, Radcliffe Infirmary from 1961 to 1964 with awards from the Polio Research Fund, the British Medical Association, and a Schorstein Medical Research Fellowship of Oxford University. As a research student and Research Fellow in Worcester College, Oxford he was medical officer to the Oxford University Ecuador Expedition (1960) and led an expedition for research on a tribe in the Atlas Mountains with a personal research award from the Royal Society (1961). In 1964, a Wyndham Deedes Scholarship enabled him to study medical services in Israel. These youthful explorations and a later Anglo-Jordanian Expedition in 1967, supported by the Royal Society as a project for the UK International Biological Programme, fostered a research interest on human adaptations to environmental extremes. Awarded the MA (Cantab and Oxon) in 1961 and proceeding D Phil (Oxon) in 1965, Dr Johnson became a member of the scientific staff of the MRC Body Temperature Research Unit and assistant to the Regius Professor of Medicine in Oxford where he took the MD degrees of Cambridge and Oxford before being appointed Lecturer in the Oxford University Department of Clinical Neurology. The eight years in Oxford, with more than 20 collaborative papers culminating in three doctorates and the Arris and Gale Lecture for 1964-65 to the Royal College of Surgeons, England provided the groundwork for an innovative book *Disorders of the Autonomic Nervous System* with J M K Spalding, published in 1974.

Concurrent with his clinical research studies in Oxford, Johnson was Dean of St Peter's College, University of Oxford which enabled him to develop a talent for administration, fund raising, and for inspiring young people in collaborative research which was to be a feature of the rest of his career. His success as dean of a college and his growing reputation in neurological research brought him to Glasgow University in 1968 as Warden of Queen Margaret Hall, Senior Lecturer in the Department of Neurology, and Consultant Neurologist in the new Institute of Neurological Sciences, Glasgow which was then in temporary quarters with no university research or technical staff and without apparatus in his research field but he soon borrowed equipment and established a research group, many of whom are now in senior academic posts. The autonomic studies became of secondary interest despite the opportunity for quantitative measurement of small nerve fibre activity by colleagues in the Institute and plasma renin elsewhere in Glasgow. Instead, Johnson and his team exploited studies started in Oxford with Sir Hans Krebs and others on metabolic fuels during and after severe exercise in athletes and non-athletes. It was a productive period but characterised an unfortunate tendency to adopt a technique and apply it to loosely related clinical situations rather than using a range of *ad hoc* techniques to crack a particular problem. Quantitative assays of anticonvulsant drugs and various hormones turned his interest towards the treatment of epilepsy and migraine. His work was recognised by the DSc(Glas) in 1975 and by election to the Fellowship of the Royal Society of Edinburgh in 1976.

In 1970 he married Gillian S Keith, MA, with whom he shared a deep concern for the welfare of chronically sick and disabled persons outside the hospital environment. Their study on differences in opportunities for the disabled in England and Scotland was influential on a private member's bill to Parliament to make all sections of the Chronically Sick and Disabled Persons Act (1970) apply to Scotland. Their book on Multiple Sclerosis in Scotland was published in 1978.

Early specialisation in applied physiology and clinical neurology bypassed the usual training path of the young physician which was detrimental to promotion to a clinical Chair, but the Royal College of Physicians and Surgeons of Glasgow elected him to its Membership in 1974 for published work and he later proceeded to the Fellowship of that College (1977), the Royal Australasian College of Physicians (1984) and the Royal College of Physicians of London in 1992 in recognition of distinguished contributions to medical research and education.

Ralph's unrivalled experience of University administration and growing expertise in medical education led to his appointment in 1977 as first Dean of Wellington Clinical School of Medicine in New Zealand with the continuing rank of Professor of Medicine. Though he was able to continue with limited neurological practise and to supervise research on epilepsy, migraine and alcoholism, with a number of junior colleagues, this was a turning point in his career. Johnson was not a bench scientist: his gifts were organisational, seeking and obtaining collaboration from scientific disciplines outwith neurology for application to neurological problems. It was not surprising that administration and medical education became his dominant interests. The Wellington clinical school, newly established by Otago University, could have advanced to independent status but for the global economic recession and a contemporary opinion that the Western world was training too many doctors. Ralph devoted his unfailing surplus of energy to fostering a new Diploma in Community Health (1981) and a Department of Post-basic Nursing Studies in collaboration with the Victoria University of Wellington. His many committees in New Zealand included the education committee of the Medical Council of New Zealand, the Council for Postgraduate Education for New Zealand, and the national education committee of the NZ Medical Association. In 1985, with D G Lambie and J M K Spalding, he published a monograph of *Neurocardiology* and contributed chapters to many textbooks. His authority on the human autonomic nervous system was universally acknowledged, but medical education was now his main theme.

In 1987 he was appointed Director of Postgraduate Medical Education and Training in the University of Oxford, linked with a professorial fellowship of Wadham College and an honorary consultant post for neurological duties in the Nuffield Department of Medicine. In his short time at Oxford his work on postgraduate training was increasingly recognised. From 1989 he represented the University on the General Medical Council and Chaired the UK Conference of Postgraduate Medical Deans. With his characteristic energy and enthusiasm, he was becoming widely known nationally and internationally when he died in tragic circumstances. In the Oxford garden he loved, with Gillian and his daughter Rachel and son Mark, he was stung to death by his own bees on 1st July 1993.

JOHN A SIMPSON