

JOHN BURNS BROOKSBY

CBE, BSc, PhD, DSc(Lond), HonDSc(Edin), FRCVS, FRS

John Burns Brooksby was born in Glasgow on 25 December 1914 and died suddenly at Swaffham Bulbeck near Cambridge on 17 December 1998. The son of an organ builder, George B Brooksby, John Brooksby attended Hyndland School, Glasgow before proceeding to the Glasgow Veterinary College. He completed the course in 1935 but could not be admitted as MRCVS until his 21st birthday on 25 December. While completing an external BSc in Veterinary Science for London University he taught histology at the Glasgow Veterinary College to second-year veterinary students, among whom was his wife-to-be, Muriel Weir. In 1936 he decided on a career in research on animal physiology and obtained a research scholarship from the Department of Agriculture for Scotland, spending a year each at University College, London, McGill University, Montreal, Canada and Edinburgh University under Professor F A E Crew. However, in 1939 there were no openings available in animal reproduction, his preferred choice, and he joined the Foot-and-Mouth Disease Research Institute, Pirbright, as a research officer under Dr I A Galloway to become a veterinary virologist.

During his early career at Pirbright John Brooksby's main interest was serology. He devised quantitative methods for measuring neutralising antibody and perfected a complement fixation test for the diagnosis and typing of foot-and-mouth virus, a test which was adopted worldwide. He identified four of the seven types of foot-and-mouth disease virus and many subtypes and his department was designated the World Reference Laboratory for Foot-and-Mouth Disease. With Galloway and Henderson he published a series of papers dealing with diagnosis and control by vaccination based on studies of strains of foot-and-mouth disease virus isolated from a widespread epidemic in Mexico. He collaborated with colleagues on measurement of the survival of virus in meat and studies of antigenic components of the virus by ultracentrifugation. He was awarded the PhD in 1947 and the DSc in 1957.

John Brooksby became Deputy Director of the Institute in 1957 and Director in 1964 and his work turned more to direction of research, administration and advisory activities. During this period he encouraged the development of vaccines against foot-and-mouth virus, first attenuated strain vaccines and, when these were found to have drawbacks, the use of BHK 21 cells (first developed at the Institute of Virology, Glasgow) grown in suspension as inactivated vaccines. In 1967-8, there occurred the most extensive epidemic of foot-and-mouth disease that Britain had experienced. Investigations during the epidemic and subsequently included a successful programme of research on the diagnosis, pathogenesis and epidemiology of the disease including airborne spread. In 1968 John was elected FRSE and in 1971 received the John Henry Steel Medal of the Royal College of Veterinary Surgeons.

On becoming Director, John had extended the programme of the Institute (now renamed the Animal Virus Research Institute) to include research on African swine fever and blue tongue viruses as well as on foot-and-mouth disease, vesicular stomatitis and vesicular exanthema viruses. Later a new porcine virus originating from Italy and Hong Kong and causing vesicular lesions in pigs was studied. As a result the Institute was prepared for the epidemic of swine vesicular disease, which started in 1972, both in the initial diagnosis and in subsequent investigations on the epidemiology and advice on the control of the disease. John was awarded the CBE in 1973. Research on the physical and chemical nature of the viruses was encouraged leading to fundamental discoveries as well as biochemical methods for identifying the viruses and the various strains.

John Brooksby took a prominent role in advice on the prevention and control of virus diseases overseas. He participated in the control of epidemics of foot-and-mouth disease in the Middle East and Turkey and took part in discussions on measures to enable the export of breeding stock from Europe to the United Kingdom and Northern Ireland, Ireland, Canada and USA. He advised African governments on control of foot-and-mouth disease and assisted in the development of the Foot-and-Mouth Disease Institute in Kenya. He lectured annually to overseas students attending postgraduate courses at the Centre for Tropical Veterinary Medicine, Edinburgh. He was chairman of committees of FAO and OIE involved in research and control of foot-and-mouth disease. He also set up a research programme at the Institute on equine respiratory virus diseases with funds from the Horserace Betting Levy Board. John Brooksby served on committees concerned with the handling of dangerous pathogens and with genetic manipulation. He followed developments in the latter with great interest as throughout his career he always encouraged his workers to get down to basics. For his work on direction of research and advice on prevention and control of animal virus diseases John was elected FRS in 1980. He also received the FRCVS by election in 1978 and an honorary DSc from the University of Edinburgh in 1981.

John was also actively involved in scientific societies and journals. He was President of the Veterinary Research Club and President of the Section of Comparative Medicine of the Royal Society of Medicine. He served as Convener of the Virus Section of the Society for General Microbiology as well as being a founding member of the editorial board of *Research in Veterinary Science*.

John was always very enthusiastic in his pursuits whether at home or at work. He encouraged younger members of the Institute in their careers and many are grateful for his support. He instilled a love of poetry in his children and in later years took up painting with some success both in exhibiting and selling his work. In his youth he played golf, often escaping from the veterinary college with Muriel to play. At Pirbright they regularly went each year to watch the Worplesdon foursomes. He also travelled widely often fitting in holidays with Muriel when in Kenya. He also enjoyed the cuisine of

France and Italy. In retirement they spent their holidays in Dumfries and Galloway. John Brooksby married Muriel Weir in 1940 and is survived by her and their two children, Elspeth and Iain.

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R F SELLERS