

**Herbert Davenport Kay**, CBE, D.Sc, FRS, former Director of the National Institute for Research in Dairying, and Research Professor of Biochemistry in the University of Reading, died peacefully at his home on November 24, 1976, aged 83. He had been an active participant in scientific affairs until a few days before his death.

His academic career, which began in 1914 with graduation from Manchester University with 1st class honours in chemistry, was interrupted by military service throughout the First World War, during which he was twice mentioned in despatches and awarded the Military OBE.

Fortunately in 1919 he decided to resume his biochemical studies. He held two Beit Fellowships and several teaching and research posts in Leeds, London, Cambridge and Freiberg under such eminent scientists as H. S. Raper, Sir Charles Martin, Arthur Harden and Sir Frederick Gowland Hopkins. During this period he was awarded a Ph.D. from Cambridge and a D.Sc. from Manchester. Four years were spent at the University of Toronto as Professor of Biochemistry, until in 1933 he accepted an invitation to become Director of the National Institute for Research in Dairying (NIRD), Shinfield, where he remained until his retirement in 1958.

Professor Kay's early publications reflect a wide range of interests which eventually became centred on problems of phosphorus metabolism. The role of tissue phosphatases in the transport, deposition and mobilisation of phosphorus in health and disease claimed his particular attention. He put the thermolability of milk phosphatase into a practical context when, with his Canadian colleague, W. R. Graham, he devised a simple test for phosphatase in milk, thereby offering a ready means of confirming effective pasteurisation. The test was extremely valuable at that time when raw or inadequately pasteurised milk was likely to contain tubercle bacilli, and after forty years its value is still accepted throughout the world.

The development of the Kay-Graham phosphatase test was characteristic of his commonsense attitude to basic research which, he felt, was vital to the solution of practical problems. As Director of NIRD he saw the need for much more fundamental knowledge in the field of dairy science, and in the years immediately following the Second World War he appointed men and women trained in the basic sciences. He encouraged them further to investigate the physiological and biochemical mechanisms involved in lactation and factors affecting the quality and nutritional value of milk, and to make their findings known to the dairy

farmer and milk processor. He successfully fought against economic restrictions and when he retired in 1958 his dream of establishing a flourishing and well-equipped research institute had been realised.

At 65 he was far from ready to retire. During the next five years he planned and directed the Twyford Laboratories where again his main object was to apply the findings of basic science to industrial problems. From 1963 until his death he retained his interest in research, devoting particular attention to the agricultural uses of copper compounds.

Herbert Kay had served in his youth under several distinguished scientists and by his middle years had every claim to be numbered among them. In 1945 he was elected a Fellow of the Royal Society and the following year was honoured as CBE. His services to the dairy industry were recognised by the award in 1957 of the gold medal of the Society of Dairy Technology. Many learned societies have benefited from his activities and he contributed much to the work of FAO, WHO and UNICEF.

To his staff he was a kindly and encouraging director, recognising no barriers of rank or class, and ready to stand up for his principles against all comers. His familiar figure striding vigorously across the Institute's fields will be remembered by many with affection. His happy family life with his wife and four sons did much to sustain him in his demanding professional duties. **Marie E. Coates**

**Dr Henry Miller**, Vice Chancellor of the University of Newcastle upon Tyne, and formerly Dean of the Medical School and Professor of Neurology, died on August 25, 1976, at the age of 62.

Obituaries in the national press and the national medical journals have justly paid tribute to Dr Miller's various talents, in particular his generosity and wit, his brilliant mind and profound intelligence. Comment has been made on his energy and his literary output which always more than justified his hedonistic tendencies.

Following qualification in Medicine and a period as Research Fellow at Johns Hopkins Hospital in Baltimore, Henry returned to the United Kingdom to have his career interrupted by war-time service in the Royal Air Force. He then trained further at Hammersmith and at the National Hospital, Queen Square, before his years as a successful part-time general physician at Newcastle's teaching hospital.

Although he was productive in these early years writing many papers and editing *Progress in Clinical Medicine* through many editions, his academic and research career began with the founding of the University Department of Neurology in the mid-50s. Having attracted to that Department neuro-radiologists, neurosurgeons and neurological colleagues, he developed an active investigative team of research and ancillary workers from whom there flowed a succession of scientific papers on many diverse aspects of basic and clinical neurology. His major interest became the demyelinating diseases and with scientific collaborators he made major contributions to our understanding of the epidemiology, diagnosis and management of multiple sclerosis.

He was appointed to a personal Chair in Neurology in 1964 and became Dean of the Medical School in 1966 and Vice Chancellor of the University of Newcastle in 1968.

He was always prepared to admit his lack of talent for the physical aspects of bench research and never claimed to be a laboratory worker. Such was his appeal, however, that scientists both junior and senior sought to work within his department and were nurtured and stimulated by the flow of ideas and the enthusiasm which stemmed from this very original mind. His major writings extended from demyelinating disease through the problem of accident neurosis to the more general topics of the country's Health Service and of Medicine in relation to community life both at home and abroad.

He was much honoured, and others have listed his many achievements which included his invitation as Visiting Professor to many overseas universities, Secretary General of the World Federation of Neurology, one-time President of the Association of Physicians of Great Britain and Ireland, and latterly a very significant member of the Committee of Vice Chancellors.

His literary contributions were extensive, but perhaps amongst the most provocative were those he produced in his last few years, in particular his monograph on *Medicine and Society* and his series of articles in *The Listener*.

Whilst not always agreeing with the ideas he expressed, none failed to admire his style, and in the lecture room, television studio, or in private, his personality never failed to attract and hold his audience.

His behaviour was extravagant but always he challenged his friends and colleagues to justify the principles which they held, a challenge some found irreverent but others essentially stimulating.

**J. B. Foster**