Obituary

David Whitteridge DM FRCP FRS FRSE

David Whitteridge read medicine at Magdalen College, Oxford in 1931 and proceeded to do a BSc (now MSc) before qualifying in clinical medicine at King's College, London.

In 1938 he returned to Oxford and began his long and distinguished career in neurophysiology. Soon after the war he became involved with research at Stoke Mandeville and the resulting partnership between Guttman and Whitteridge produced the vital documentation of cardiovascular disturbances in the spinally injured.

In 1944 Guttman noted in three patients that, when their bladders were washed out, their heads and necks became red, they complained of headaches and blocked noses and they were noted to be bradycardiac. No sphygmomanometers were available on the wards

and hence the blood pressure was not initially recorded. David Whitteridge was asked to investigate the physiological basis to this phenomenon. First, he documented the difference in skin temperature between the head and neck *versus* the legs and then he measured the arterial blood pressure. He noted a dramatic change in blood pressure from 90/60 mm Hg to 220/140 mm Hg in one of these patients.

The subsequent studies and publications (such as the paper by Guttman and Whitteridge 1947; *Brain* 70: 361–404) described the failure of the control system for blood pressure and temperature in spinal patients with lesions at T6 and above, enabling us to understand and treat autonomic dysreflexion today.

In 1950 he succeeded to the chair of physiology in Edinburgh and injected fresh enthusiasm into both medical training and research. During this time he became a Fellow of the Royal Society of Edinburgh and of the Royal Society. He also became a regular visitor to India and helped to found an exchange programme between Edinburgh and Baroda.

Eighteen years later he returned to Oxford as Waynflete Professor of Physiology, and he successfully regenerated the physiology department there. Professor Whitteridge, recording from motor endplates of his own intercostal muscle fibres during a lecture on respiration, will be remembered by all his students.

From his return until the end of his life he remained dedicated to neurological research. He predominately investigated the visual cortex, establishing ubiquitous topographical maps in the brain. However, he also carried out many important studies on proprioceptive inputs from eye movements and neural mechanisms controlling speech and breathing and, throughout his life, he had a keen interest in stretch receptors in the heart and lungs. Indeed, his last paper, published in 1993, was on the effects of phosgene, the gas released in the 1984 Bhopal disaster, on lung stretch receptors.

During his retirement he continued to work and experiment with the next generation of neurophysiologists, his keen mind contributing to their discoveries despite dramatic technological changes in their approach to the research.

He continued to keep in contact with Stoke Mandeville and was able to attend its 50th anniversary celebrations, 4 months before his death.

The memorial service to Professor D Whitteridge was held at Magdalen College, Oxford, on 21 October 1994.

Su Thomas and Hans Frankel