John Guy Widdicombe
1925–2011

I feel privileged and somewhat humbled that John’s family asked me to write about him for Physiology News, following his sad death on 26 August 2011. Although we never collaborated scientifically, I knew John since 1975 when, as a very ‘green’ lecturer, I joined him at his then embryonic Department of Physiology at St George’s Hospital Medical School, London. The new Medical School opened the same year I started and thanks to John’s international reputation the department blossomed, new lecturers came in and he attracted scientists from all over the world. The Physiology Department has never seen such vibrant times.

John was born in Barnet, Hertfordshire on 26 December, 1925. His secondary education was at St Alban’s School and in 1943 he received a scholarship to study medicine at New College Oxford. He obtained a first class degree in Natural Sciences at Oxford and then graduated in medicine in 1949. He became a house physician for a year at St Bartholomew’s Hospital before returning to Oxford in 1950 to take up research. John achieved his DPhil in 1953 as an MRC scholar at the Nuffield Institute for Medical Research. At this time he held the title of Junior Research Fellow at Queen’s College Oxford. In 1953 he was conscripted and became an RAF Squadron Leader at Porton Down in the Microbiological Research Establishment. By 1955 he was back to Bart’s as a lecturer and then senior lecturer where his research focused on lung mechanics and lung reflexes. In 1960–1961 he was a Visiting Scientist in the Cardiovascular Research Institute in San Francisco, working on the nervous control of breathing and on the regulation of the bronchomotor tone, before returning to Oxford in 1961 as a lecturer in Physiology and Fellow of New College. He continued his work on lung mechanics, the control of breathing and lung reflexes.

John remained in Oxford for 11 years until he took up his post as Professor and Chairman of the new Physiology Department at St George’s in 1972 where he was to stay until his ‘official retirement’. During his career he was to receive many awards/degrees including his FRCP in London in 1976, an honorary MD from Helsinki University in 2000, nine international medal awards, honorary membership of four international societies and a Life Time Achievement award.

John retired ‘officially’ in 1992 but remained an Emeritus Professor at St George’s until his death and became a visiting honorary scientist at both St Thomas’ and Guy’s Hospitals in London. In reality though he never retired, working untiringly from home until his untimely death.

John was a notable scientist and published over 180 peer-reviewed papers and at least 250 reviews and chapters, as well as his important and well-known monograph, Respiratory Physiology. He was also the editor of many multi-author books and symposia and gave uncounted talks and lectures throughout the world. His first paper was published in 1951 (Respiratory and cardiovascular reflexes from the heart and lungs. Dawes GS, Mott JC & Widdicombe JG, J Physiol 115, 258–291) and this year, at the age of 85, he was co-author of at least four papers (to my knowledge!).

John has been described as one of the giants of respiratory physiology over the last 50 years and has deeply influenced our thinking about the anatomy, physiology and pathophysiology of the airways and lungs. He also provided an unparalleled contribution to the understanding and treatment of diseases like asthma and chronic obstructive pulmonary disease.

Although his main scientific interests were respiratory reflexes, he became increasingly interested more specifically in cough reflexes, which became the focus of his later research interests. In fact it is probably true to say that he opened up the whole research field in cough physiology. Indeed, two of his latest contributions to the field were in helping to identify the deflation reflex and contributing to the development of an anti-tussive drug. John was convinced that Aδ fibres play a prominent role in cough mediation. His views on the role of Aδ fibres have now been validated by the results of a new study which demonstrate that the anti-tussive drug VRP7000 markedly inhibits Aδ fibres in the airways. This new drug has now gone through successful clinical trials. In June of this year John attended a ‘Cough Symposium’ in New York where he remarked that he hoped to see this drug marketed. Sadly, his untimely death meant that this was not to be.

Apart from his major scientific contributions he also contributed to the scientific community as a whole. He was an Editor of The Journal of Physiology and British Journal of Pharmacology and was also on various other editorial boards. Between 1994 and 1998 he was the President of the British Association for Lung Research and in 1990 he became the Honorary Treasurer of The Physiological Society for 6 years. It was during this time that I became Editor of Physiology News and we were both working in a little ‘Phys Soc community’ at St George’s. That is the period we became real friends and he was no longer my revered boss!
John Shepherd, MD, a visionary Mayo Clinic physiologist who headed the American Heart Association, served as a NASA adviser and led US scientific exchanges with the Soviet Union during the Cold War, died October 4. He was 92.

Dr Shepherd made major contributions to understanding the regulation of the circulatory system, producing more than 300 scientific publications and four books. He was president of the American Heart Association in 1975–76. He was also a fellow of the Royal College of Physicians, and of the Royal College of Physicians of Ireland.

John received many awards over the years, including honorary degrees from the Universities of Bologna, Ghent and Queen’s. He was actively involved with NASA and the National Academy of Sciences, and chaired the Academy’s Committee on Space Medicine from 1965 to 1974. During the Cold War, he helped the US space program by working with colleagues in the then-Soviet Union on space physiology.

Dr Shepherd was recognised as a giant in cardiovascular physiology who made fundamental observations about blood pressure regulation in humans and many other elements of cardiovascular control. He was also a visionary leader who engaged in and promoted translational research 30 or 40 years before it was a buzz word at NIH (National Institutes of Health) and in the scientific community.

While John performed cutting-edge scientific work, he was also leading the ongoing transformation of the Mayo Clinic from a group practice to a group practice embedded in a world-class academic medical centre.

He was born May 21, 1919, in Belfast, Northern Ireland, and received his MB, BCh, MChir and MD with honours from Queen’s University in Belfast. He completed his internship and residency at the Royal Victoria Hospital in Belfast.

Later, he joined the academic staff at Queen’s in the Department of Physiology. In 1953, he was awarded a Fulbright Scholarship to go to the Mayo Clinic for one year to engage in cardiovascular research. The selection of the Mayo Clinic was based on his brother’s enthusiasm after reading The Doctors Mayo in the late 1940s.

John returned to Northern Ireland but eventually moved to the US in 1957 and joined the Mayo where he spent the rest of his professional career.

He and his three close colleagues in the small Department of Physiology at Queen’s University later became deans of medical schools around the world.

At the Mayo Clinic John was Director of Research from 1969 to 1976. He became Director for Education of the Mayo Foundation and Dean of the new Mayo Medical School from 1977 to 1983. This included responsibility for the Mayo Graduate School of Medicine and Mayo School of Health-Related Sciences. From 1983 to 1988, he chaired the Mayo Board of Development and was actively involved in establishment of the Mayo Clinic campus in Jacksonville, Florida. He retired from the Mayo Clinic in 1989. In 2003, he published a memoir, Inside the Mayo Clinic.