John Atherton Young

1936 - 2004

John Young, who died on 10 February 2004 after a long illness, was a towering figure in Australian physiology and in global exocrine physiology. After studies in medicine in Brisbane, John travelled to Sydney for doctoral training in renal physiology, followed by post-doctoral studies in Berlin, before returning to Australia in 1966 to a Senior Lectureship in Physiology at Sydney University. Subsequently he was promoted to Professor and Head of Department (in rotation with Liam Burke), before becoming Dean of Medicine in 1989 and then Pro-Vice-Chancellor for Health Sciences in 1996, a post he held until his retirement in April 2003.

Despite the increasing pressure of these demanding posts, he remained committed to physiology research throughout his 40 illustrious years at Sydney University and until the day he finally succumbed to acute myeloid leukaemia. He had continuous NHMRC support from 1962 until retirement, and never had a grant application turned down.

John had a true appreciation of the finer things in life. Given the choice of post-doctoral studies in Berlin and Chapel Hill (and remember this was 1965) he chose Berlin, to study with Karl Ulrich. I suspect the choice was heavily influenced by the presence in West Berlin alone of two opera houses, seven symphony orchestras, 30 theatres and numerous museums (John was not afraid to state that he had never kicked a football in his life). He arrived in Berlin with the expectation of studying urea transport in the loop of Henle, but Karl persuaded him to apply micropuncture techniques to salivary glands. This was a pivotal decision. In December 1965 John presented his data at a Meeting of the Physiological Society held at the London Zoo, where they caught the attention of Arnold Burgen, who sought John's permission to include the data in his keynote paper at an international conference on exocrine secretion in Birmingham, Alabama and also arranged for John to be invited as a plenary speaker. Thus, John's career was launched. Thereafter, he quickly became recognised as an authority on exocrine secretion and the undoubted authority on salivary secretion, which he remained until his dying day, as evidenced by nine ISI-defined citation classics and nearly 5,000 citations in all.

John's original studies on salivary duct function (in Berlin) and micropuncture studies (in Sydney), laid the foundation for understanding salivary glands, while whole gland perfusion studies (some through collaborations with myself and Martin Steward) and electrophysiological and microfluorometric studies (chiefly with David Cook) added greatly to our knowledge of salivary secretory processes.

John also strayed in other secretory organs, including the pancreas where we also enjoyed a fruitful collaboration. The Sydney-Manchester connection led to more than a dozen joint publications, including four papers in *The Journal of Physiology* and many communications to the Society, some given by John during his sabbatical in Manchester (in 1981) and subsequent visits, and these led to his election to the Society in 1982.

John was not only an excellent scientist but a true scholar who enjoyed synthesising work into carefully crafted review articles and a superb monograph on the morphology of salivary glands, written with his anatomical colleague Ernst van Lennep. He was also one of the most generous people I know, someone who gave unsparingly to the countless students he trained and counted it a real pleasure to host wonderful dinners for colleagues around the world.

Maynard Case
University of Manchester

Graham Francis Baker

1947 – 2004

Graham Francis Baker passed away at the beginning of March at the early age of 56, having succumbed to a pancreatic tumour after several months of illness.

Graham was born in 1947 and went to Christ's College, a grammar school in Finchley, and then to Bedford College where, in 1969, he was one of the first men to graduate from this erstwhile women's college in physiology in spite of his severe hearing deficit, which rather cut him off from the cut and thrust of normal conversation. He then went on to work with Wilfred Widdas for a PhD, the completion of which was delayed by the untimely death of his father in 1972, also of pancreatic disease. He completed his PhD in 1974 and worked with me for a period of time at St Thomas's and then with Richard Naftalin at King's College London. In 1981 he was appointed lecturer at Bedford College and after the merger with Royal Holloway he moved to Egham.

A popular and excellent teacher, Graham had a good rapport with the students and was well liked by all. Everyone who knew him remarked on his exceptional kindness and helpfulness to those who asked for his advice. He always dressed elegantly and was well known for wearing either an orchid or rose in his buttonhole.

Graham was a very able experimentalist, well organized and had an excellent knowledge of physiology in general and transport in particular. Although he worked independently on respiratory epithelium he continued working with Wilfred Widdas on human erythrocyte transport systems throughout his career. Graham had great skill in translating Widdas's theoretical ideas into practical experiments using self-built equipment. Professor Widdas freely admitted that it was only through Graham's practical skills that they were able to achieve most of the results in red cell transport.

As Wilfred says one of Graham's main scientific contributions was the discovery of the asymmetric action of 4,6 O-ethylidene-D-glucose in inhibition of glucose transport first presented to the Physiological Society in 1973. He showed that the inside transporter site had a very low affinity, whereas the outside bound the sugar with relatively high affinity. His interest in the asymmetry of the sugar transporter continued long after this - one of the last papers he wrote was with M Kaloyianni in 1998 on the effects of ATP on phloretin affinity.

Richard Naftalin and Graham collaborated in a study of the affinity of the inner face of the glucose transporter. They found that the affinity for glucose was variable depending on how it was measured, high on entry but low on exit. Tony Carruthers who was working with Peter Baker at the time and Graham and Richard working together came up with a neat structural explanation for these findings. They suggested that a vestibule at the inner surface of the transporter was a plausible explanation for the kinetic asymmetry of the transporter. The more recent work on effects of ATP on glucose transport support this explanation.

Graham in latter years developed an interest in transport across the nasal mucosa and from this he evolved a number of techniques for studying the human airways *in vitro*. He developed an interest in the effect of air pollution in the airways mucosa and with this he successfully completed an interesting series of student projects with implications for the understanding of asthma. These projects were cut short by his illness.

As well as his ability as a physiologist, Graham had a great interest in horticulture and for many years enjoyed fresh vegetables and flowers from his three allotments. He won many prizes for his horticultural skills at local competitions and the City of London Flower Show. Graham was a keen orchid grower and also kept bees. He was particularly adept in growing many varieties of apples and he was most pleased when be beat one of the landed gentry at a Royal Horticulture Society Show.

Graham married Petroulla (Petra) in 1986. They had two children, a daughter, Emma (16) and a son, Paul (15).

Malcolm Segal and Richard Naftalin
King's College London

Nachman Ambache

1917 – 2004

Born in Egypt in 1917, Nachman Ambache came to this country in 1929 for education at Peterborough Lodge School, London, Clifton College, Bristol and Trinity College, Cambridge, gaining Major Scholarships and First Class Honours.

In 1939 he returned to Egypt to work in Professor Anrep's department and gain some experience of physiological research. On his return to the UK he took his MA (Cantab) and qualified MRCS, LRCP following completion of his clinical training at the Radcliffe Infirmary, Oxford.

From 1943 to 1946 he became Demonstrator and assistant Lecturer in Pathology and Bacteriology at Guy's Hospital Medical School and, in 1947, Lecturer in Physiology at UCL under Sir Lovatt Evans.

In 1948 he settled on a career in physiology and pharmacology joining the full time staff at the MRC Ophthalmologic Research Unit in Judd Street, and later the MRC External Staff at the Royal College of Surgeons, being promoted to Special Appointments Grade. In 1957 his research into prostaglandins led him into the discovery of irin.

In more relaxed moments he enjoyed making music, for he was an accomplished violinist. In later years he became more interested in the physical character of violins, particularly the famous ones. His garden gave him great joy and he loved to share his discoveries of special plants with his many friends.

He died of heart failure on 3 February, leaving a wife and two children, one of whom is a professional pianist.

Desmond Greaves
Lyminton, Hants

(This obituary is published with permission from the *British Medical Journal* (2004, 328, 960).

Hannelore Pawelzik

1960-2004

Hanna joined my group in the Department of Physiology in 1996, having completed her PhD with Walter Zieglgansberger in Munich and began dual intracellular recordings in hippocampal slices with parallel pharmacology and anatomy. Despite severe illness that resulted in a major operation in 1997 and treatment for the rest of her life, Hanna was an active member of the group and of the Physiology Department at the Royal Free. Her courage, kindness, home made cakes and love of opera will be