JOHN SWANSON BECK

22 AUGUST 1928 - 29 JANUARY 2007

Professor John Beck who died on 29 January 2007, was a distinguished academic pathologist who contributed much to the clinical practice of diagnostic pathology, to medical education both at the under- and post-graduate level and to medical research throughout a long career spanning more than 50 years. He was part of a small group of medical scientists in Scotland in the second half of the last century whose influence on the development of their specialty was far reaching and spread worldwide. His passion and enthusiasm for his many interests and his boundless energy were truly infectious for those who knew him and worked with him, and remained undiminished until the end of his life.

Born into a medical family in Glasgow, Beck was educated first at Glasgow Academy and then Glasgow University, where he excelled in his medical studies. Somewhat unusually for the time, he graduated first with an honours degree in physiology in 1950 and then with honours MB ChB in 1953. Perhaps not surprisingly, he was the recipient also of the Brunton Medal awarded to the most outstanding medical graduate of the year. His initial postgraduate training took place in Glasgow, where he decided early on to pursue a career in laboratory medicine so that he could combine experimental studies on human disease with clinical diagnostic work. Between 1953 and 1958 he held junior posts in various Glasgow hospitals before being appointed in 1958 to a lectureship in pathology in Glasgow University, based at the Western Infirmary. Here his lifelong research interests in clinical problems, centred at the interface between tissue pathology and immune reactivity, were initiated. After an MRC Clinical Research Fellowship held at Mill Hill in London, he moved in 1963 to Aberdeen University as Senior Lecturer in Pathology based in Aberdeen Royal Infirmary, joining the department headed by the distinguished Scottish pathologist, Sir Alastair Currie, a former President of this Society. Working with Sir Alastair and other colleagues, his career flourished and in 1971 he was appointed to the Chair of Pathology at Dundee University and as Clinical Director of Pathology at Ninewells Hospital in Dundee. He remained in this position until his retirement in 1993, during which time he established a department that became one of the leading academic centres in pathology in the country.

Unwilling to accept the normal pattern of activity on retirement, he took up an appointment shortly afterwards as Foundation Dean and Chief Executive Officer of the International Medical College in Kuala Lumpur. This involved establishing from scratch a new medical college independent of any financial support from the Malaysian Government, so as to avoid any discrimination on non-academic grounds of students who might not otherwise enjoy such opportunities. His principal objective was to provide an affordable education in preclinical medical sciences and pharmaceutical subjects for Malaysian students to the standards that were expected in leading European, North American, and Australasian Universities. He approached this somewhat daunting task with his usual enthusiasm and energy, recruiting the teaching and administrative staff required, developing new curricula in preclinical medical sciences and pharmaceutical subjects, fitting out new teaching spaces and establishing the necessary collaborations with the 20 other Western Medical Schools and Universities needed for students to complete their clinical and pharmaceutical training and to graduate from these centres. It was to his great credit and a lasting tribute to his achievements that by the time of his retirial in 1997, the College was recruiting nearly 500 students each year and has since been granted full independent University status by the Malaysian authorities. In recognition of these contributions, he was given a Distinguished Scholar award by the International Medical University, Malaysia, the highest accolade it can bestow.
His second retirement however, true to character, was short-lived, and soon after returning to his home in Kirriemuir he became heavily involved in the affairs of this Society, serving on the Council (for the second time) from 1997 to 2003 as Secretary to Meetings and subsequently Programme Convener. In recognition of his many contributions since election as a Fellow in 1984, he was awarded the Society’s Bicentenary Medal in 2004. Despite these commitments, it is remarkable that during this period of service to the Society he found time also to pursue his long standing interest in mathematics, enrolling for a degree course at St Andrews University from which he graduated successfully with honours shortly before his death.

Beck’s research work took many forms during his life, although largely focused on the pathogenic significance of immune tissue reactions in connective tissue and autoimmune diseases, and in chronic debilitating infections such as tuberculosis and leprosy. The techniques he developed were widely used for many years in clinical laboratories for diagnostic purposes and for monitoring patients suffering from such conditions. He was among the first to recognise that selected human sera containing well-characterised autoantibodies could be used as discriminating reagents in cytochemical localisation studies. A by-product of this work was the use of these reagents to study aspects of nuclear division in mammalian cells, and in the nuclear structure of trypanosomes. He was first also to demonstrate immunocytochemical localisation of human growth hormone in the pituitary acidophils, and the foetal adenohyophysis and the localisation of human placental lactogen in the syncytiotrophoblast of the human placenta. In his work on autoimmune forms of thyroid disease, he was first to describe the hyperplastic changes in the thymus that accompany Graves’ disease, the commonest form of hyperthyroidism, and the changes that followed treatment by chemical and surgical means in these organs. These were important studies in understanding the pathogenesis of this condition. He pioneered studies on lymphocyte stimulation tests and conducted novel investigations that demonstrated the pathophysiological basis of the tuberculin test widely used throughout the world to determine whether humans and cattle have been exposed to tuberculous infection. In other studies of immune responses in infections with tuberculosis and leprosy he was able, with other colleagues, to demonstrate that certain genetic factors played an important part in determining the susceptibility to these infections. In further studies, just prior to his retirement from Dundee, he developed a novel and simple method for detecting the peripheral neuropathy that causes loss of limb function and the greatest disability in leprosy at an early stage when it might be treatable. These important studies resulted in over 300 publications in scientific and medical journals during his research career.

Throughout his professional life, Beck contributed significantly to diagnostic clinical service work wherever he was based. Increasingly this took on a more managerial and administrative form, culminating in his appointment as Clinical Director for Pathological Services at Dundee Teaching Hospitals. In this capacity he took a special interest in the accuracy of the subjective morphological assessments made by consultant pathologists of tissue biopsy material, and the laboratories in Dundee were one of the first to introduce robust methods for the quality control of such procedures. These methods have since been widely adopted and form part of the accreditation process in pathology for NHS laboratories. His interest in new approaches to teaching medical undergraduates led him also to develop new curricula that concentrated more on the pathophysiological aspects of disease and its clinical relevance, as compared with more traditional courses in vogue elsewhere. He was an ardent exponent too of problem-solving methods of teaching and their use for examination purposes, long before these became more widely applied. Despite such heavy clinical service and academic commitments, Beck was always willing to play his part in providing advice and support to
government departments and other organisations relevant to his interests. In Scotland, he served the Chief Scientist’s Office on many research and technology committees dealing with medical research issues. For many years he was a member of Tayside Health Board, and served on various Scottish Home and Health Department advisory bodies. At the national level, he was a member of several key advisory and grant-awarding committees of the Medical Research Council and of the Department of Health and Social Services. He was appointed to and chaired committees for the National Biological Standards Board and for the Royal Colleges of Physicians and of Pathology. On two separate occasions he served on the Council of this Society and apart from service for six years as Meetings and Programme Convenor, he was also a member of various committees assessing suitability of candidates for Fellowship and for awarding research grants administered by the Society.

John Beck led a very full life, during which he achieved a great deal medically and scientifically, and he received many academic awards in recognition of his contributions. He was intensely loyal to his colleagues and friends and took great pride and interest in students and young doctors who trained with him. He was held in the highest regard by these individuals, who were inspired by the energy and enthusiasm he displayed in all that he did and by the standards he set in the course of his professional life. He was devoted to his wife Marion, now sadly deceased, and to his son and his daughter, who survive him.

Colin Bird

John Swanson Beck, BSc Hons, MB ChB Hons, MD Hons (Glasgow), DSc (Dundee), FRCPath, FRCPSG, FRCPE, FIbIol, FRSA, FRCPI, FRACP, Dr Hon Causa (Strathclyde), Distinguished Scholar (IMU). Born 22 August 1928; Elected FRSE 5 March 1984; Died 29 January 2007