

Obituaries

ALEXANDER GRAHAM MCDONNELL WEDDELL MD, DSc 1908–1990

Graham Weddell, who died on 21 March 1990 at the age of 83 was Emeritus Professor of Human Anatomy at Oxford. After qualifying in medicine at St Bartholomew's Hospital in 1933 he set out immediately on an academic career in anatomy as demonstrator in anatomy under Professor Woollard at St Bartholomew's and University College with, in between, a Commonwealth Fund Fellowship in neuroanatomy at Washington University. In 1939 he served with the RAMC, including a period in the neurosurgical unit at Oxford under Sir Hugh Cairns, which may well have stimulated him to join in 1945 the Department of Human Anatomy at Oxford as demonstrator, then reader and finally professor. Weddell's main research was concerned with neuropathies and particularly the processes of degeneration and regeneration of peripheral nerves, using the best currently available light and electron microscope techniques. He was one of the first working in this field to use electron microscopy.

It was the appreciation by Robert Cochrane in the early 1950s of the potential relevance of Weddell's studies on peripheral nerves to nerve damage in leprosy and Weddell's initial willingness to investigate, that resulted in him giving, over the next 25 years, a major proportion of his team's research time and his own life to leprosy.

Weddell's expertise as a neuroanatomist, wide knowledge of neural structural changes, including the application of light and electron microscopy and most recently ultra structural studies on leprosy lesions in experimental leprosy infections in animals and in man, have added significantly to our understanding of the mechanism of nerve damage and host response to infection.

During the late 1960s, by which time the Department of Anatomy's studies on leprosy neuritis was beginning to receive international recognition, Dr Cochrane proposed the establishment of a small clinical facility for leprosy patients, to boost still further Oxford's contribution to the field of leprosy research. With the powerful support of the then Director of Dermatology, Dr Vickers, and financial backing from the Nuffield Foundation, this centre, known as the 'Cochrane Annex', was opened in August 1970 in the grounds of the Slade Hospital. The centre was in fact a partial recognition of Weddell's present achievements and a base from which he and others in Oxford could develop and extend their leprosy research facilities. Undoubtedly, with the assistance of Dr McDougall from the Department of Anatomy, and Drs Vickers and Ryan from the Department of Dermatology, Weddell's researches benefited from the direct clinical materials.

While Weddell's important scientific work, based always on technical skills of the highest order, are of no mean achievement, they represented, however, only a part of his makeup which contributed to his achievements. He had an inborn belief in being responsible for teaching and sharing *all* his relevant knowledge with others. This he provided in Oxford to all visiting workers, or

provided to those abroad during his many visits to leprosy endemic countries. This was of greatest benefit for centres wishing to set up electron microscopy facilities.

Weddell was also endowed with an engaging and infectious sense of humour, as well as being an untiring raconteur. These gifts combined with generous entertaining at Oriel College, or by his wife Barbara at their home or in the garden of their delightful 14th century house in Oxford. It was always his delight to show the small, similarly aged chapel in the grounds of their garden where the floor was sloped away from the altar to allow it to be washed down after 'lepers' had attended the service.

R J W REES

Following an introduction from Dick Rees in the National Institute for Medical Research, I was fortunate enough to meet Graham Weddell in Oxford and to have the opportunity to work with him from 1970 onwards. Though well into middle-age and clinically orientated, I was attempting to make a change to some form of leprosy research based in the UK and Graham offered me the chance to work in his unit on the histopathology of leprosy. It was he who taught me how to use a research microscope, revitalized my knowledge of histology and then gradually introduced me to the complexities of the histopathological response to *Mycobacterium leprae*, first in animal tissues and later in human tissues. Through the 1970s and even into his retirement from the Department of Dermatology at the Slade Hospital, we worked together on a wide range of material from the NIMR in Mill Hill and MRC Unit in Malaysia. Research workers joined his unit from Europe, the USA and India and often completed D.Phil. projects on subjects related to leprosy, making full use of both light and electron microscopy, under his expert guidance.

Graham combined enthusiasm, imagination, energy, scientific ability and kindness in a way which endeared him to medical students, postgraduates and visiting research workers over a period of many years. Although he remained cautious about advances and 'breakthroughs' in what he recognized to be a difficult subject, his own contribution was both formidable and sustained. Following a few visits from Bob Cochrane, he not only established high quality research in the science area of a prestigious university, but he also personally carried out a great deal of work over a period of about 20 years, whilst at the same time stimulating and teaching many others. I was privileged to be one of them.

A COLIN McDOUGALL

I first met Dr Graham Weddell in 1963 in Oxford, England, where he was Professor of Anatomy and had already made a name for himself as an international authority in neuroanatomy. His contributions to the understanding of sensory nerve endings in human skin is monumental.

In 1963 I was getting interested in neuropathology of leprosy and was planning to do some electronmicroscopic work. However, I was reluctant to embark on a project using a complex instrument of which I had very little knowledge. On hearing of my interest Dr Weddell gladly showed me how to use the instrument quickly dispelling my misconceptions and fears. His willingness to spend so much of his time with a novice, the generous way he shared his expertise and his genuine friendliness touched me deeply. It was the beginning of a friendship which lasted for many years. There are many beside me who were inspired by Dr Weddell, trained by him and benefited from his ready willingness to share his knowledge.

At a period when leprosy was a neglected field and had little to do with academic medicine, Dr Weddell took an interest in leprosy research. His work on the Schwann cell as a host cell of *Mycobacterium leprae* opened up a wide field for investigative studies. His original contributions to the understanding of the transmission of leprosy were significant. He helped to stimulate many

scientists to do leprosy research and make their own contributions to further the knowledge of leprosy.

In Dr Graham Weddell we have lost a brilliant scientist, a great teacher, and a kind and generous friend. We are thankful to see his work continuing in the lives of so many of his students and coworkers who are engaged in leprosy research throughout the world.

C K JOB

It has been my privilege to have known Dr Graham Weddell when he was Reader in Anatomy at Oxford University in the early 1950s. I was struggling with the interpretation of my findings on intravital stained intradermal nerves in over 200 skin biopsy specimens from normal sites or hypesthetic or anaesthetic skin lesions from patients with leprosy in Bombay. Professor Khanolkar introduced me to Dr Weddell and for the first two years our communications were solely postal. In 1953 he visited Bombay after I had sent him my thesis on the above subject. We established closer professional and personal contact; he looked at my preparations under a microscope and chatted with me about the neurohistological substrate of cutaneous sensibilities.

It was most reassuring to me that based on his own observations and mine, he was in agreement with my 'thesis' that the normal hairy skin of man did not have and did not need any organized nerve endings to subserve the modalities of touch, pain, heat and cold. In 1958 I had a chance to visit him in Oxford and again in 1964 when I lectured on Nerves in Leprosy.

In 1967 we had the pleasure of a visit from Dr Weddell in Bombay; his personal friendliness as well as professional astuteness were again in evidence. In continuation of his interest in the neuritis of leprosy, he also visited with us the Acworth Leprosy Hospital. His remarks at the CIBA Foundation Symposium at about the same time that the Schwann cell was the target organ in leprosy, was among the earliest of such observations. Along with Dr Dick Rees, he was instrumental in developing in England the experimental mouse model of leprosy.

In 1974, after he had been Professor of Anatomy for some time, my wife and I visited him at his department in Oxford and his charming informality was again a delightful experience. During one of my visits to Oxford, I had the privilege of meeting Mrs Weddell at a luncheon there. Her wit and graciousness matched Graham's.

Because Graham was ill on my last visit to Oxford I was greatly disappointed not to be able to meet one who had been my great friend and mentor.

D K DASTUR

The progress in the scientific knowledge on leprosy has passed through several phases in the past five decades. While today there is a focus on immunology, there was a time when all attention was focused on the understanding of the pathology of the disease. Dr Graham Weddell was one of the founder fathers in building up the knowledge on pathology of leprosy, particularly the pathology of nerve damage. His insight into the subject was so deep and his commitment so firm that he inspired several other scientists in different disciplines and stimulated research on various aspects of leprosy. No wonder Oxford became an important centre for learning about leprosy, attracting several scientists from different parts of the world. I had the privilege of working for a brief period at Oxford and derived benefit from the tutorage of Dr Weddell. He was an excellent teacher. His unique quality was that even the most junior of students would feel absolutely comfortable with him and could discuss and argue without fear or prejudice. This made him a person who was greatly loved and respected by his students. Also it was evident that he was the most popular professor with the students in the medical school. Dr Graham Weddell was a unique person, with a deep knowledge of his subject, an inimitable style of teaching, an inexhaustible store of energy for work

and above all an infinite love and concern for his juniors and students. Men of his qualities are rare to find.

K V DESIKAN

In the early 1950s Dr Robert Cochrane, who had recently established in London what was then known as the Leprosy Research Fund, visited Dr Graham Weddell at the Department of Human Anatomy in Oxford. Dr Weddell had been investigating experimental damage to cutaneous nerves and the resultant level of sensory loss, and Dr Cochrane asked him if he would bring his new and detailed findings to bear upon the problem of peripheral nerve damage in leprosy. Fortunately Dr Weddell immediately became interested in this new line of investigation, and facilities were made available for him to study some leprosy patients in India and also much biopsy material. From that time on he and his staff in the Department were ever increasingly engaged in studying the disease in many of its aspects.

I started working with Dr Cochrane in 1961 in the renamed Leprosy Study Centre and I thus had the opportunity of contact with Dr Weddell and his colleagues for many years. I should like to record my deep gratitude to him for his friendship and for his constant readiness to help with any histopathological problems which came to us in the biopsy service work of the Centre. It was always a privilege to discuss and to share with him any interesting material we received and I personally was greatly indebted to him for the light which his knowledge of the tissues, the spread of infection and the defence mechanisms of the body shed on many an obscure problem. He was also very generous in making available the special facilities of his laboratory, and the resultant work, be it stained section, photomicrograph or report, was always of an enviably high standard and most helpful.

Dr Weddell's death is very sad news for those of us who knew and admired him, but at the same time we rejoice in his brilliant and very productive life's work and in the important contributions which he made to leprosy research.

D J HARMAN

Graham Weddell was an academic visionary motivated to apply his wide knowledge of human anatomy to the specific problem of nerve damage in leprosy patients.

At the request of Dick Rees, Graham made available not only his expertise, but also provided essential space and facilities in his laboratory for Lepra's Research Unit at a time when leprosy research was vital. Graham not only made this possible, but was an original member of the newly formed Lepra Medical Advisory Board which had, and still has a major influence on the way Lepra develops its work.

Graham was also a humanist and enjoyed entertaining friends and colleagues in the Senior Common Room at Oriel College as much as sitting waiting for his flight at an African airport observing his fellow travellers.

I was very fortunate to be the Director of Lepra during this time, and not only enjoyed Graham's Oxford hospitality, but also his generous and constructive advice and support on very many occasions.

G F HARRIS