Obituary

Leonard Glynn 1910–2005

‘Taplow’ is a name that resonates in the memories of most rheumatologists who witnessed the post-war maturation of their discipline into a recognized branch of modern scientific medicine. It lives on also in classical rheumatological papers and in ideas that have become so universally familiar that their source is all too often taken for granted. In 1947 the Special Unit for Juvenile Rheumatism was established at the Canadian Red Cross Memorial Hospital in Taplow, Buckinghamshire and in 1958 it came under the aegis of the Medical Research Council (MRC) as the Rheumatism Research Unit. The clinical skills and investigative achievements of Eric Bywaters and Barbara Ansell would in themselves have secured Taplow’s place in rheumatological history, despite its physical demise. But it has an additional claim to lasting fame. In 1947 Leonard Glynn was appointed consultant pathologist to the hospital and the newly established unit. In 1958 he became the MRC Unit’s Director of Laboratory Research. This appointment ensured that the unit would become outstanding not only for its clinical care but also as a centre for interdisciplinary research in the rheumatic diseases based on collaborative clinical and laboratory studies. Collaboration between clinicians and scientists has become the norm for most centres of academic rheumatology throughout the world and Leonard Glynn was largely responsible for this fundamental innovation.

Glynn’s research strategy combined extraordinary expertise in orthodox pathology and immunology with novel ideas about the role of autoimmunity in the rheumatic diseases. The whole concept of autoimmune disease, now generally accepted, was then still controversial. He was amongst the first investigators to propose that cross-reactions between muscle and streptococcal antigens might explain the pathology of rheumatic fever and carditis. He showed that group A β-haemolytic streptococci can make polysaccharides potential targets of an autoimmune response that would account for the characteristic lesions. He also early appreciated the importance of genetic susceptibility to rheumatic fever since streptococcal infection was ubiquitous but relatively few infected individuals developed rheumatic fever. In those early days of immunogenetics, blood group antigen secretor status was virtually the only feasible method for exploring this hypothesis. His collaborative findings with John Holborow were a significant boost to this rapidly developing field.

Glynn’s research on the pathogenesis of juvenile chronic arthritis, rheumatoid arthritis and connective tissue diseases depended in part on developing and analysing suitable models. He showed that both humoral and cell-mediated immunity contribute to the lesions of experimental autoimmune orchitis in guinea-pigs. These findings helped to lay the foundations for future research into the contribution of different cell populations and their products in initiating and modulating autoimmune diseases. In collaboration with Dudley Dumonde, he induced arthritis in rabbits by immunization with fibrin and for many years this was a standard model for testing the efficacy of drugs and novel antiarthritic agents. Subsequently Glynn, Hugo Jasin and their colleagues explored the mechanisms by which immunization with polypeptides related to collagen produces relapsing or persistent arthritis in guinea-pigs. His findings encouraged a growing consensus of belief that autoimmunity contributes to the pathogenesis of rheumatoid arthritis, other forms of persistent arthritis, and systemic connective tissue diseases.
However, he did not maintain that autoimmunity was necessarily the complete explanation for persistent joint inflammation in animal models or in human disease. He explored other contributory factors, especially the role of persistent antigen, whether microbial or a protein foreign to the body. He used his detailed knowledge of immunopathology to analyse and compare the key features of experimentally induced synovitis and rheumatoid arthritis, and his observations also had a major influence on research in this area.

During this period, clinicians recognized the diagnostic importance of rheumatoid factor in rheumatoid arthritis and of other autoantibodies in this and other rheumatic diseases. Glynn was instrumental in devising a coherent scheme for understanding the underlying significance of these observations. He emphasized that autoantibodies should not be simply regarded as coincidental phenomena and was equally cautious about overstating their pathological significance.

From 1972 to 1977 Glynn served as Director of the Kennedy Institute for Rheumatology in West London before it moved to its present site on Imperial College's Charing Cross Hospital campus. His vision, status in the immunological world, and ability to recruit and support promising young research workers were of great importance in the institute's progress to achieving its outstanding international reputation. He continued his personal research and collaborated with Joe Chayen and Lucille Bitensky in analysing the histochemical features of inflammatory and degenerative arthritis.

Glynn placed as much importance on the precise and accurate use of the English language, spoken and written, as he did on accurate and logical experiments. His 1965 book (with John Holborow) Autoimmunity and Disease is a model of clarity and precision. He edited the journal Immunology from 1962 to 1982. This was one of the first international journals devoted to this subject and he ensured that its articles were not only of high scientific standard but also clearly written. He was in great demand as a speaker at conferences and as a visiting professor. Many new rheumatology units in developing and advanced countries benefited from his advice. He especially encouraged the nascent field of rheumatological research in Israel and worked closely with Yehuda Scharf and Menahem Nahir of the Rambam Hospital in Haifa.

Glynn was renowned for his astute intellect, powers of reasoning, and wit, which were undimmed by age. He was also deeply concerned to advise and encourage young colleagues. He was a captivating raconteur and cricket enthusiast, and a man of wide cultural interests, interests that he retained and displayed to the very end of his long life. His many honours included the 1967 Heberden Oration, the 1971 Cameron Foundation Lectureship of the Royal College of Pathologists, and election to Fellowship of University College, London.