## FRANK R. WINTON 1894-1985

Professor F.R. Winton, a Trustee and one of the Founding Members of the Society, died quietly this June in his 91st year. He was not only an outstanding physiologist, but a brilliant musician and scientific administrator, with a warm and glowing personality that had the gift of enabling people with widely differing disciplines and backgrounds to work together.

Frank Robert Winton was educated at Oundle and at Clare College, Cambridge where he read Natural Sciences. He went on to do medicine at St. Bartholomew's Hospital and University College Hospital. He obtained an M.D. degree from Cambridge in 1926 and a D.Sc. from London in 1942.

The links between Cambridge and University College were important throughout Winton's career. In 1924 he became an Assistant in the Department of Pharmacology at U.C.L. where he worked for a time with E.B. Verney on the isolated kidney and on the heart-lung preparation. In 1927 he became a Lecturer in the Department of Physiology at University College under Professor (later Sir Charles) Lovatt Evans. He was awarded a Beit Memorial Research Fellowship and moved back to Cambridge in 1931, becoming a Reader in the Department of Physiology in 1933. In 1938 he returned to University College to take up the Chair of Pharmacology, a position he retained until his retirement from active scientific life in 1961.

Much of Winton's early work was carried out in collaboration with J.R. Pappenheimer (later of Harvard Medical School) and Grace Eggleton (who later married Leonard Bayliss). More a physiologist than a pharmacologist, Winton's work involved primarily the kidney. Most of his experiments were carried out on Starling's heart-lung preparation and on the isolated kidney preparation of which he became a master. Outstanding with instrumentation in the days when electronics were virtually nonexistent, he adapted and constructed much of the equipment necessary to record the multitude of parameters from his technically involved experiments. The Harvey Lecture which he delivered in New York in 1951 summarizes his work on the effects of arterial, venous and ureter pressure on renal function.

Winton had a great love for University College and was influential in many aspects of the College. During the war years, Winton was Dean of the Faculty of Medical Sciences at U.C.L. and the success of its evacuation from London ultimately to Leatherhead was in large measure due to his personality and drive. He established and administered a complete school of Medical Sciences which remained there until its return to Gower Street in 1944.

Born in London of German parents, Winton was brought up to be bilingual. Probably because of his fluency in German, he was sent to Germany immediately after the war and spent a year in Gottingen helping to re-establish medical education in Germany.

His wide interests outside his own subject were evidenced in the variety of College activities in which he had exerted an active influence. He played a major part in the establishment of the Student Health Centre and was actively involved in the Student Health Association. He was responsible for the formulation of a comprehensive scheme of training for junior laboratory technicians. The College Music Society and the Chamber Music Club also owed much to his encouragement.

He developed a great interest in the actions of drugs on the CNS and played a major role in establishing psychopharmacology as an integral sub-discipline of pharmacology at U.C.L. For a number of years he was on the Board of Governors of the Institute of Psychiatry.

In 1928, Professor Lovatt Evans suggested that he and Leonard Bayliss write a comparatively short textbook of physiology to run as a companion to the longer textbook by Starling, who had died the previous year. This was the origin of *Human Physiology* by Winton and Bayliss which ran for six editions. After the death of Leonard Bayliss in 1965, Winton was fortunate in inducing O.C.J. Lippold to join him in preparing the sixth and seventh editions (1979).

Winton was a valued Member of the British Pharmacological Society from its foundation. His laboratories at University College often hosted Society meetings and he served on many subcommittees. In addition, he was on the Society's Committee 1938-45, succeeded J.H. Burn as Secretary (1945-47), and was an original member of the Editorial Board of the British Journal of Pharmacology (1945-47). He became (with Burn and Feldberg) a Trustee in 1965 and two years later the Society to which he had devoted so much energy elected him an Honorary Member.

Possibly Winton's most lasting contribution to British science was neither in physiology nor pharmacology. He succeeded Sir Henry Dale as Chairman of the Biological Council in 1946 and played a major role in that group establishing the Institute of Biology in 1950. The Institute is concerned with

the professional standing of biologists and Winton was influential in inaugurating the Institute's own examination for Membership and with a scheme for the Higher National Certificate and Diploma which the Institute operated jointly with the Department of Education and Science. Winton was insistent in establishing high scientific standards for these bodies, emphasizing that the currency was not being devalued by such a system and that the quality of British science would, as it has, in the long run benefit. He became a Fellow of the Institute of Biology in 1962 and was made an Honorary Fellow in 1978.

Winton was also very involved with the Council for National Academic Awards (C.N.A.A.) and was Chairman of their Life Sciences Board for a ten year period. During this time he played a major role in establishing the standards for C.N.A.A. degrees, particularly Doctorate degrees in biological sciences. In recognition of his valuable contribution to the Council, the C.N.A.A. awarded Winton an Honorary Doctorate in Education in 1976.

After retiring from the Chair of Pharmacology, Winton became a consultant to May & Baker Ltd where he was very helpful to young biologists in the research laboratories and in establishing links with professional bodies and societies and also in setting up systems for technical staff to obtain professional qualifications both through the Institute of Biology and the C.N.A.A.

Winton had a great love for music. Indeed, in his early years he seriously considered making music rather than science his career. He was an outstanding cellist who from his undergraduate days until many years after his retirment delighted in playing string quartets and all forms of chamber music. In 1922 he married Bessie Rawlins, one of the outstanding solo concert violinists of the time and with whom Frank maintained a very active interest in chamber music throughout his life.

My lasting memories of Frank Winton are of a kind and friendly gentleman who knew and was known by everyone in British biomedical science. Always gracious and unpretentious, always good company, always free in giving information and friendly advice, particularly to the young physiologist or pharmacologist. He is survived by his wife, his daughter and two grandchildren, one of whom is a student at University College.

D.R.M