

## OBITUARY

### JOSEPH FRANCIS DONEGAN



**Professor J. F. Donegan**

Professor J. F. Donegan, Emeritus Professor of Physiology in University College, Galway, died on August 9th, 1985, a few weeks after his 92nd birthday.

He was born in Gurteen, Co. Sligo, in 1893 and entered University College, Galway in 1910. He graduated in 1916 having obtained 1st class honours in all the University examinations. Physiology attracted his interest at an early stage, and he was awarded the B.Sc. degree with 1st class honours in 1914. Following graduation he was awarded the Travelling Studentship in Physiology by the National University of Ireland, and chose to work in the Physiology Laboratory in Cambridge under Professor Joseph Barcroft, who was his examiner for the Studentship. He arrived in Cambridge at a time of exciting discoveries in cardio-

vascular and respiratory physiology, and in collaboration with T. R. Parsons and Gilbert S. Adair he made important contributions to the understanding of the acid-base state of the blood.

In 1918 he moved to Queen's University, Belfast, and worked with Professor J. H. Milroy and he returned to Galway in 1919. Shortly after his return he was awarded the Science Research Scholarship of the 1851 Exhibition and he went to work with W. M. Bayliss and Ernest H. Starling in the Institute of Physiology, University College, London. The development of the mammalian heart-lung preparation had led to great advances in the understanding of cardiovascular function and Starling was the author of the *Law of the Heart* in 1914. Knowledge of the factors controlling venous return was scanty, and Joseph Donegan's paper "Experimental work on the relations of venous nervous mechanism to the circulation" was a major contribution to the understanding of this aspect of cardiovascular physiology.

The excellence of his undergraduate record, his single-minded dedication to science and the quality of his research work ensured his appointment to the Chair of Physiology in University College, Galway, in 1920. Joseph Donegan worked with Otto Warburg in the Kaiser Wilhelm Gesellschaft in Berlin during the summer vacations of 1927 and 1931, and in 1928 he spent a sabbatical year there. In Berlin he also worked with Hans Krebs, another Nobel Laureate, and their friendship lasted until Krebs' death in 1981.

In Galway, Joseph Donegan taught Physiology with remarkable flair, breadth

of knowledge and clarity of expression and provided a thorough appreciation of Physiology and its application in medicine for generations of students until his retirement in 1963.

Joseph Donegan was given the honour of delivering the John Mallet Purser Lecture in Trinity College, Dublin in 1942. The topic he chose was "Some Aspects of Muscle Physiology" and contained the results of "simple experiments carried out with rough laboratory equipment consequent on supply difficulties". The results, however, clearly demonstrated the importance of potassium ion in the neuromuscular mechanism. It is of interest that "supply difficulties" also hampered his research during the 1st World War when he and Parsons were delayed by several weeks awaiting the delivery of three feet of rubber tubing.

Joseph Donegan's interest in physiological research did not cease with his retirement and for many years he maintained a research laboratory at his home. He continued to read with avid interest the *Journal of Physiology*, and until a short time before his death, he was keen to discuss the recent scientific developments in the fields of Physiology and Medicine.

He became a member of the Physiological Society in 1924, and served as a Council member from 1962 to 1966. This society honoured him in 1976 by conferring on him the distinction of Honorary

membership. To mark the occasion the Royal Academy of Medicine in Ireland compiled a *Festschrift* in his honour. He was a founder member of the Medical Research Council of Ireland, and served on the Governing Body of U.C.G. from 1947 to 1950.

His leisure interests were many, and in earlier years he travelled widely in Europe with his wife Julia (Dodo) Lenihan. He had a great love for classical music and recalled many memorable concerts conducted by Furtwangler, Klemperer and Bruno Walter in Berlin and Vienna. He also regularly attended the Mozart Festival in Salzburg. Theatre was his other great love and he spoke often of his attendance at the original production of famous plays by Bertold Brecht in Berlin: *Mahagonny* in 1927 and the *Three-penny Opera* in 1928.

His passing was peaceful and until shortly before his death his intellectual powers were undiminished and he was full of the vibrant physical and mental energy that made knowing him a great pleasure and privilege. With his sister Doreen, and brother Mitchell, his nieces, nephews and many friends, we mourn his passing with a sorrow mellowed by the knowledge that he lived a fulfilled life and died peacefully. His wife predeceased him in 1972 and they had no children.

P. F.

C. F. McC.