

WILSON, HERBERT REES (1929-2008), scientist

Name: Herbert Rees Wilson
Date of birth: 1929
Date of death: 2008
Spouse: Elizabeth Wilson (née Turner)
Parent: Jennie Wilson (née Humphrey)
Parent: Thomas Rees Wilson
Gender: Male
Occupation: scientist
Area of activity: Science and Mathematics
Author: Lyn Owen

Herbert Wilson was born on 20 March 1929 on his grandfather's farm at Nefyn in Caernarfonshire. He was the son of Thomas Wilson, a ship's captain, and his wife Jennie. Herbert was educated at Pwllheli Grammar School, and went on to study physics at Bangor University, gaining a first class honours degree in 1949. He then continued his studies to gain a doctorate in 1952, under the supervision of Professor Edwin Owen. His studies were initially in the field of metals, but he was also increasingly drawn to the new field of biophysics. He married Beti Turner, a fellow student at Bangor, in 1952, and they had two daughters and one son.

Having received a University of Wales fellowship he accepted an offer in 1952 from Professor Maurice Wilkins to join a team at King's College in London to study the composition of DNA. There he began in September 1952 his pioneering work, carrying out X-ray diffraction studies of DNA nucleoproteins and cell nuclei. These studies showed that DNA from different sources, living and dead, all had the same essential structure.

In April 1953 the magazine *Nature* published three separate papers relating to DNA. One of these was by Crick and Watson, one by Franklin and Gosling, and the third by Maurice Wilkins, Herbert Wilson and Alexander Stokes. The latter paper was titled 'Molecular structure of dyoxypentose nucleic acids'. After this the work continued and Herbert Wilson carried out further studies to refine the DNA model. Recognising the progress on understanding DNA, the 1962 Nobel Prize for Physiology or Medicine was awarded to Francis Crick, James Watson and Maurice Wilkins.

Despite not being one of the researchers awarded the Nobel Prize at the time, the contribution made by Herbert Wilson was extremely important and has been widely recognised in the subsequent years. In the quadrangle entrance of King's College there is now a plaque commemorating the five DNA pioneers of that institution, listing Herbert Wilson alongside Rosalind Franklin, Raymond Gosling, Alexander Stokes and Maurice Wilkins. His contribution was featured in a special edition of the magazine *Nature* published in January 2005.

In 1957 Wilson was appointed to a lectureship in Physics at Queen's College Dundee (then part of St. Andrew's University), becoming Senior Lecturer in 1964. He had also become a Visiting Research Associate at the Children's Cancer Research Foundation in Boston Massachusetts in 1962. He continued research on X ray studies of nucleic acids and structural studies of viruses. In 1966 he published a landmark book, *Diffractions of X rays by Proteins, Nucleic Acids and Viruses*. He became Reader at Dundee University in 1973, and was appointed Professor of Physics at the University of Stirling in 1983, a post which he held until his retirement in 1991.

He received many awards and honours including the Rodman medal from the Royal Photographic Society for his early X-ray photography. He was elected a Fellow of the Royal Society of Edinburgh in 1975, awarded an honorary doctorate in Science from the University of Wales in 2005, and received a Fellowship from Bangor University in the same year. He always kept close contact with Wales, and was also made a bard of the Gorsedd of the National Eisteddfod at Newport in 2003. He died of cancer, in Stirling, on 22 May 2008.

Author

Lyn Owen

Sources

Bangor University Graduate Obituaries

Royal Society of Edinburgh obituary profile

Archives of King's College, London

Further Reading

King's College London Archives: [DNA Story at King's: The Hidden DNA workers](#), accessed August 2020

Wikipedia Article: [Herbert Wilson](#)

Additional Links

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