

PETER CHARLES DOHERTY



Nobel Prize-winning Australian veterinarian, immunologist

In 1996, Peter Charles Doherty and Rolf M. Zinkernagel were awarded the Nobel Prize in Medicine for their discovery of how the immune system's T cells recognize viruses and bacteria.

CAREER

Peter C. Doherty was born in Brisbane, Australia in 1940. At the age of 17 he applied to the University of Queensland to study veterinary medicine. He graduated with a BSc in 1962 and a MSc degree in 1966, while also completing the rural veterinary and laboratory internships required by the State Department of Agriculture. He then applied for a post at the Moredun Research Institute in Edinburgh and obtained a PhD from the University of Edinburgh in 1970.

Doherty returned to Australia in December 1971 to the Australian National University in Canberra, where he was offered a research post. He first studied Semliki Forest virus infection in mice, then moved on to lymphocytic choriomeningitis virus (LCMV), which was more suitable for immunoassays. In 1973, he met Rolf Zinkernagel and they started a joint program to study how the immune system's 'killer cells', the T cells, recognize which virus-infected cells to destroy. They found that, in addition to the MHC molecules, the infected cell „presents“ one of the pathogen's proteins and that the T lymphocytes recognize the complex of the two and eliminate these cells. The discovery soon found practical applications in transplantation, vaccine development, autoimmune disease research and the development of anti-infective drugs.

He is now a patron of the Doherty Institute and remains active in his research, shuttling between St. Jude Children's Research Hospital in Memphis and the Peter Doherty Institute at the University of Melbourne, where he is still working.

In addition to his scientific output on PubMed, he is the author of several books:

The Beginner's Guide to Winning the Nobel Prize (2005)

A Light History of Hot Air (2007)

Sentinel Chickens: What Birds Tell us About our Health and our World (2012)

Pandemics: What Everyone Needs to Know (2013)

The Knowledge Wars (2015)

PROFESSIONAL ACHIEVEMENTS

- 1975-1982 - Adjunct Professor of Immunology at the University of Pennsylvania
- 1982 - Head of the Department of Immunology at the University of Tennessee
- 1983 - Paul Ehrlich Prize
- 1986 - Gairdner Foundation International Prize
- 1995 - Albert Lasker Prize
- 1996 - Joint Nobel Prize in Medicine with Rolf M. Zinkernagel
- Australian of the Year, Member of the Order of the Australian Knights (1997)