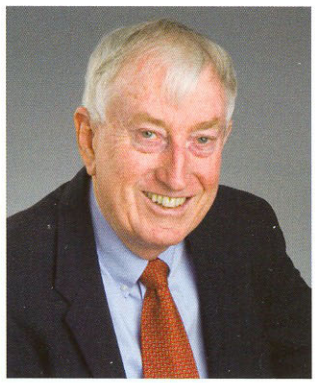
Curriculum Vitae:
Professor Peter Doherty

Peter Doherty was born in Australia in 1940. He obtained his BVSc degree in 1962 from the University of Queensland.



Prof Peter Doherty

After qualifying as a veterinarian, he worked for 4 years as a Veterinary Officer at the Animal Research Institute in Brisbane. In 1967 Peter Doherty joined the Department of Experimental Pathology at Moredun Research Institute in Scotland. He received his PhD from the University of Edinburgh Medical School in 1970. He returned to Australia in 1972, and worked as a Research Fellow in the Department of Microbiology, Australian National University. In 1975 he was appointed an Associate Professor at the Wistar Institute in Philadelphia, USA. He returned to Australia in 1982, and served as Professor and Head in the Department of Experimental Pathology at the Australian National University.

Peter Doherty shared the Nobel Prize in Physiology or Medicine in 1996 with Swiss colleague Rolf Zinkernagel, for their discovery of how the immune system recognizes virus-infected cells. Peter Doherty is the first person with a veterinary qualification to win a Nobel Prize. The research conducted by Peter Doherty and Rolf Zinkernagel has laid a foundation for an understanding of general mechanisms used by the cellular immune system to recognize both foreign microorganisms and self molecules. This discovery relates both to efforts to strengthen the immune response against invading microorganisms and certain forms of cancer. In addition, their findings have been used in research on the effects of autoimmune reactions in inflammatory diseases, such as rheumatic conditions, multiple sclerosis and diabetes.

In 1997 Peter Doherty was named "Australian of the Year'. He currently commutes between St Jude Children's Research Hospital in Memphis and the Department of Microbiology and Immunology at the University of Melbourne. His research is mainly in the area of defence against viruses. He regularly devotes time to delivering public lectures, writing articles for newspapers and magazines and participating in radio discussions. Peter is also the author of several books, including "A Light History of Hot Air" and "The Beginner's Guide to Winning the Nobel Prize".

Sir Arnold Theiler Memorial Lecture

Adventures in Infection and Immunity

Prof Peter Doherty, (pcd@unimelb.edu.au)

Department of Microbiology and Immunology, University of Melbourne, Australia; and Department of Immunology, St Jude Children's Research Hospital, Memphis, USA.

Beginning with the Swiss-born Arnold Theiler, many veterinarians have made major contributions to the understanding of infection and immunity. Sir Arnold first came to prominence when he produced a smallpox vaccine to protect mine workers, then went on to found the great South African tradition in veterinary infectious disease research. His son Max was awarded the 1951 Nobel Prize for developing the yellow fever vaccine that is still used today.

That back and forth between veterinary and human medicine has, of course, been a long tradition, particularly when it comes to pathogens. My personal scientific journey began at age 17 when I started at the University of Queensland School of Veterinary Science and, at least in the public sense, peaked almost 40 years later when the Nobel Foundation recognized my Swiss colleague Rolf Zinkernagel and I for discovering the basis of cell-mediated immunity. At least in those distant days when I was an undergraduate, veterinarians weren't too interested in geriatrics and degenerative conditions, but were well trained to deal with infections. My interest in viral pathogenesis and immunity began as an undergraduate and remains fundamental to what I do in science today. I'll relate some of that personal journey from student, to veterinary scientist, to experimental pathologist, to research immunologist to being a public advocate for rational enquiry and cultural values that emphasize an evidence-based view of the world.

Now as then, we may begin our professional lives with one focus, but may end up somewhere very different. A training in veterinary science gives a respect for reality, a knowledge that the world can never be a totally safe place, a set of practical skills, a solid scientific grounding and an understanding of ecological balance and sustainable production systems. That can be a pretty good place to start as we seek to do our part in dealing with the all too real problems that face humanity through this coming century. Apart from anything else, the challenge of feeding people will be very much to the fore. The future belongs to the young. My bet is that those who start out as veterinarians will continue to play a substantial part, and in a great diversity of roles.

Prof Peter Doherty
Nobel Laureate