

Curriculum Vitae Professor Dr Rolf M. Zinkernagel

Name: Rolf M. Zinkernagel
Date of birth: 6 January 1944

Research Priorities: Experimental immunology, immune system, virus-infected cells, T-cells, virus antigens, MHC complexes

Rolf Zinkernagel is a Swiss physician and immunologist. He decoded the basic mechanisms of immune defence. For his discovery of how T-cells recognise virus-infected host cells, he was awarded the 1996 Nobel Prize in Physiology or Medicine together with the Australian veterinarian Peter Doherty. In addition, Rolf Zinkernagel carried out a range of traditional studies on the function of the thymus and the simultaneously protective and pathogenic effect of T-cells.

Academic and Professional Career

since 2008	Professor Emeritus
1992 - 2008	Full Professor and Director, Institute of Experimental Immunology, University of Zurich, Zurich, Switzerland
1979 -1992	Adjunct Distinguished Professor, University of Zurich, Zurich, Switzerland
1976 - 1979	Professor, Scripps Research Institute, La Jolla, USA
1975	Doctorate and Habilitation, Australian National University, Canberra, Australia
1970 - 1973	Research Assistant, Institute of Biochemistry, University of Lausanne, Lausanne, Switzerland
1970	Completed Doctorate to become Dr. med., University of Basel, Basel, Switzerland
1962 - 1968	Degree in Medicine, University of Basel, Basel, Switzerland

Functions in Scientific Societies and Committees (selection)

2007 - 2010	Vice President, International Union of Immunological Societies (IUIS)
2005 - 2010	European Research Council
2004 - 2007	President, IUIS
since 2001	Member, Board of Directors, Board of Patrons, SwissBridge Foundation, Switzerland
2000 - 2004	Member, Swiss Science Council, Switzerland
1998 - 2000	Honorary Member, World Innovation Foundation (WIF)
since 1998	Member, Board of Patrons, Stiftung Gen Suisse, Zurich, Switzerland
since 1996	Honorary Member, Swiss Society of Allergy and Immunology (SSAI), Switzerland
since 1996	Honorary Member, Australian Society for Immunology, Australia
1993 - 1994	President, SSAI, Switzerland
since 1993	Honorary Member, American Association of Immunologists, USA
since 1990	Member, ENI European Network of Immunological Institutions
since 1990	Member, International Society for Antiviral Research
since 1990	Member, German Society of Virology, Germany
since 1989	Member, Swiss Society of Cell and Molecular Biology, Switzerland
since 1987	Member, Swiss Association for the Study of the Liver (SASL), Switzerland
since 1981	Member, Swiss Society of Pathology, Switzerland
since 1980	Honorary Member, French Society for Immunology, France
since 1980	Member, Swiss Society of Microbiology, Switzerland
since 1978	Honorary Member, Scandinavian Society of Immunology
since 1977	Member, American Association of Immunologists, USA
since 1977	Member, American Association of Pathologists, USA
1973 - 1975	Member, Australian Society for Immunology, Australia
since 1971	Member, SSAI, Switzerland

Honours and Awarded Memberships (selection)

2011	Honorary Doctorate in Pharmacy and Biochemistry, University of Buenos Aires,
	Buenos Aires, Argentina
2010	Honorary Doctorate, University Libre de Bruxelles, Brussels, Belgium

2010	Endowed Professor, University of Düsseldorf, Düsseldorf, Germany
2007	Honorary Doctorate, Chengdu Medical College of Third Military Medical University, Chengdu, China
2006	Lifetime Award in Virology, World AIDS Day, China
2005	Honorary Doctorate, Cuban Society for Immunology, Cuba
2004	Behring Kitasato Award, Philipps-Universität Marburg, Marburg, Germany
since 2003	Foreign Member, Russian Academy of Sciences, Russia
2003	Honorary Doctorate, La Trobe University, Melbourne, Australia
2002	Maharshi Sushruta Award, Institute of Kidney Diseases and Research Center and Institute of Transplantation Sciences, Ahmedabad, India
2001	Thomas E. Starzl Prize, University of Pittsburgh, Pittsburgh, USA
2001	Honorary Doctorate, Moscow State University, Moscow, Russia
since 2001	Member, The Harvey Society, New York City, USA
since 2001	Foreign Fellow, American Philosophical Society, USA
2000	Honorary Doctorate, Université de Montréal, Montréal, Canada
2000	Honorary Doctorate, University of Buenos Aires, Buenos Aires, Argentina
2000	Honorary Doctorate , Medical University of Warsaw, Warsaw, Poland
2000	Honorary Doctorate, Odessa National Medical University, Odessa, Ukraine
1999	Honorary Companion, General Division, The Order of Australia, Australia
1999	Member, Order Pour le Mérite for Sciences and Arts, Germany
1999	Honorary Doctorate, University of Basel, Basel, Switzerland
since 1998	Foreign Fellow, American Academy of Arts and Sciences, USA
since 1998	Foreign Fellow, Royal Society, UK
since 1998	Foreign Fellow, Académie Royale de Medicine de Belgique, Belgium
since 1998	Associate Member, Berlin-Brandenburg Academy of Sciences and Humanities, Berlin, Germany
since 1998	Honorary Member, German Society for Immunology, Germany
1998	Honorary Doctorate, University of Latvia, Riga, Latvia
1998	Honorary Doctorate, University of Warsaw, Warsaw, Poland
1997	Honorary Doctorate, University of Oslo, Oslo, Norway
1997	Honorary Doctorate, University of Québec, Québec, Canada

1997	Novartis-Drew Award for Biomedical Research, Novartis International AG, Switzerland and Drew University, Madison, USA
1997	Reichstein Medal, Swiss Academy of Pharmaceutical Sciences, Switzerland
1997	Honorary Doctorate, University of Genoa, Genoa, Italy
since 1996	Fellow, American Academy of Microbiology, USA
since 1996	Foreign Fellow, National Academy of Sciences, USA
since 1996	Foreign Fellow, Australian Academy of Sciences, Australia
1996	Honorary Doctorate, University of Liège, Liège, Belgium
1996	Honorary Doctorate, Australian National University, Canberra, Australia
1996	Nobel Prize in Physiology or Medicine (jointly with Peter Doherty), Nobel Foundation, Stockholm, Sweden
1995	Albert Lasker Award for Basic Medical Research, Lasker Foundation, New York City, USA
since 1994	Member, Swiss Academy of Pharmaceutical Sciences, Switzerland
since 1994	Member, German National Academy of Sciences Leopoldina, Germany
1992 - 2002	Member, The Delphinium Society, UK
1992	Cristoforo Colombo Award, Bowling Green State University, Bowling Green, USA
since 1991	Member, German Society for Immunology
since 1989	Member, Academia Europea
1988	Louis-Jeantet Prize, Louis-Jeantet Foundation, Geneva, Switzerland
1988	Otto Naegeli Prize, Otto Naegeli Foundation, Zurich, Switzerland
1987	William B. Coley Award, Cancer Research Institute, New York City, USA
1987	Member, Scientific Advisory Board, Cancer Research Institute, New York City, USA
1986	Canada Gairdner International Award, Gairdner Foundation, Toronto, Canada
1985	Mack-Forster Prize, European Society of Clinical Investigation
since 1984	Member, European Molecular Biology Organization (EMBO)
1983	Paul Ehrlich and Ludwig Darmstaedter Prize, Paul Ehrlich Foundation, Frankfurt am Main, Germany
1982	Ernst Jung Prize for Medicine, Jung Foundation for Science and Research, Hamburg, Germany
1981	Cloëtta Prize, Professor Dr Max Cloëtta Foundation, Zurich, Switzerland

Research priorities

Rolf Zinkernagel is a Swiss physician and immunologist. He decoded the basic mechanisms of immune defence. For his discovery of how T-cells recognise virus-infected host cells, he was awarded the 1996 Nobel Prize in Physiology or Medicine together with the Australian veterinarian Peter Doherty. In addition, Rolf Zinkernagel carried out a range of traditional studies on the function of the thymus and the simultaneously protective and pathogenic effect of T-cells.

Together with Peter Doherty, Rolf Zinknagel investigated the question as to which mechanisms lead to organ rejection after a transplant. In experiments on mice infected with the meningitis virus they were able to show that when an organ is rejected after transplant the immune system mobilises as it would in the event of a viral infection. Specific antigens, known as major histocompatibility antigens, play a key role in both processes. They are present on the cell surface and tell the immune system that the transplanted organ is a foreign part that has to be fought against. Both researchers were awarded the Nobel Prize for this discovery.

Zinkernagel's work was committed to both research policy and experimental research. On the European and Swiss Scientific Councils, for example, he was involved with grants for outstanding scientists.