CV Albert Osterhaus 2025

Professor Osterhaus has been Head of the Department of Viroscience at Erasmus MC Rotterdam until 2014, is currently Director of the Center of Infection Medicine and Zoonosis Research and Guest-Professor at the University of Veterinary Medicine Hannover. He has a long track record as a scientific researcher and Principal Investigator of numerous major scientific projects. At Erasmus MC, Professor Osterhaus has run a diagnostic virology lab with more than 40 staff and a research virology lab with over 150 personnel. His research programme follows a novel integrated "viroscience" concept, bringing together world-leading scientists in molecular virology, immunology, epidemiology, pathogenesis, and intervention studies on human and animal virus infections. Among the major accomplishments are the discovery of more than 70 new viruses of humans and animals (e.g. human metapneumovirus, coronaviruses and influenza viruses), elucidation of the pathogenesis of major human and animal virus infections, and development of novel intervention strategies. This has enabled health authorities like the WHO to effectively combat disease outbreaks like SARS and avian influenza. The spin-offs, Viroclinics-DDL, Vironovative and CR2O, together employing more than 500 people, allow effective testing and refining of diagnostic tools and other intervention strategies and illustrate additional societally relevant successes. The international recognition of Professor Osterhaus is further highlighted by major prizes, guest lecture invitations, (co-)organiserships of international meetings and editorships of scientific journals. Professor Osterhaus has acted as mentor for more than 85 PhD students and holds several key patents. He is also the author of more than 1360 papers in peer-reviewed journals, together cited 90,000 times, with an H index 142. He is inventor on many patents and has been Chair of the European Working Group on Influenza (ESWI) and the One Health Platform/Commission for the past decades. He organised numerous international scientific conferences on influenza and other emerging infections, and received numerous prestigious awards. He holds several senior editorships and is Chief Editor of One Health Outlook, a newly established journal of the Springer-Nature group. He is member of the Dutch and German National Academies of Sciences, member of the Belgium Academia of Medicine, and Commander of the Order of the Dutch Lion.

D.o.B. 2-6-1948

Current Position

2014 - Professor / Founding Director, RIZ-TiHo Hannover

Academic and Research Posts

1989 - 1994 Head Laboratory of Immunobiology, RIVM, The Netherlands

1990 - 2010 Professor of Environmental Virology, State University Utrecht

1993 - 2015 Professor of Virology, Erasmus MC, Rotterdam

1993 - 2015 Head of the Department of Viroscience, Erasmus MC, Rotterdam

1993 - 2015 Director National Influenza Center (NIC), Rotterdam

1995 - 2000 Director WHO Global Reference Laboratory for Measles, Rotterdam

2003 - 2015 WHO National Reference Laboratory for Measles and Rubella with RIVM

1995 - 2015 Director WHO Collaborating Centre Arboviruses and Haemorrhagic Fevers

2011 - 2016 Professor of Wildlife Virology and Virus Discovery, University Utrecht

2014 - Professor University of Veterinary Medicine Hannover (TiHo)

Other Scientific Roles

1993 - 2017 Associate Editor, Vaccine Journal

1998 – 2003 Member and Chairman of the Scientific Veterinary Committee (European Commission)

1998 – 2003 Member of the Scientific Steering Committee (SSC) and Chairman of its TSE/BSE ad hoc Group (European Commission)

2003 – 2028 Registered Veterinary Microbiologist

2007 - 2015 Chairman of the Postgraduate School Molecular Medicine Erasmus MC

2008 - 2015 Chairman of the Master program Infection and Immunity

2012 - 2018. Editor-in-Chief, Current Opinion in Virology and ONE HEALTH Journal

2018 - Editor-in-Chief, One Health Outlook (Springer-Nature)

Awards and Prizes

1985 Schimmel Viruly Award: Faculty of Veterinary Medicine, Utrecht

1989 Heine Medin Award: European Society against Virus Diseases

1992 Ciba Geigy Prize for Research in Animal Health

1993 Laureate Van Loghem lecture, Dutch Society for Immunology

1995 Firkin Oration, Australian Society for Medical Research

1998 M.W.Beijerinck Virology Award, Royal Dutch Academy of Sciences

2000 UK Royal Society lecture on 'Catastrophes after crossing species barriers'

2000 Mulder-Masurel Award on influenza research

2002 The ESCV Gardner Lecture - Viruses emerging from animal reservoirs

2004 James H. Nakano Citation - CDC prize for exceptional scientific publications.

2004 Dr. Saal van Zwanenberg-Oragon prize

2004 Reinier de Graaf medal – for exceptional contribution to medicine

2006 Federa prize – for original and exceptional research achievements

2006 European Respiratory Society - European Lung Foundation Award

2007 Prix scientifique Louis D - Académie des sciences de l'Institut de France

2007 Allan Granoff Lectureship in Virology Award, St. Jude's Hospital

2008 Erasmus Award, Erasmus MC Rotterdam, The Netherlands

2010 ESCMID Award for Excellence in Clinical Microbiology and Infectious Diseases

2011 NGI Valorisation Award for 'Excellent deal making with Industry" (1 million Euros)

2012 WSAVA One Health Award for cross-species viral infection

2015 Chanchiani Global Health Research Award (McMaster, USA)

2016 Doctorate h.c. University Liege, Belgium

2016 Robert C. Gallo Award for Scientific Excellence

2018 ACVM Distinguished Microbiologist Award

2021 Fritz-Hartmann Lecture

2022 Research.com Immunology in Germany Leader Award

2023 Research.com Medicine in Germany Leader Award

2023 Research.com Immunology in Germany Leader Award

20 Selected Publications on acute respiratory Infections (of >1360 original publications, H-index >140, cited >90.000 times).

1. Kaiser F et al., Filamentous Fungus-Produced Human Monoclonal Antibody Provides Protection Against SARS-CoV-2 in Hamster and Non-Human Primate Models. ***Nat Commun.*** *in press*

2. Palacios-Predrero MA *et. al.*, Age-related signs of immunosenescence correlate with poor outcome of mRNA COVID-19 vaccination in older adults. ***Nature Aging*** 2022 https://doi.org/10.1038/s43587-022-00292-y

3. Armando F, et al., SARS-CoV-2 Omicron variant causes mild pathology in the upper and lower respiratory tract of hamsters. ***Nat Commun***. 2022 Jun 20;13(1):3519.

4. Postel A et al., Infections with highly pathogenic avian influenza A virus (HPAIV) H5N8 in harbor seals at the German North Sea coast, 2021. ***Emerg Microbes Infect***. 2022 dec; 11(1):725-729

5. Du W. et al., An ACE2-blocking antibody confers broad neutralization and protection against Omicron and other SARS-CoV-2 variants of concern. ***Sci Immunol***. 2022 Apr 26:eabp9312.

6. Jo WK. et al.,: Reverse genetics systems for contemporary isolates of RSV enable rapid evaluation of antibody escape mutants. ***PNAS*** 2021 Apr 6;118(14)

7. Wang C, et al., A human monoclonal antibody blocking SARS-CoV-2 infection. ***Nat Commun.*** 2020 May 4;11(1):2251.

8. Thiele S et al., Cellular Importin-α3 Expression Dynamics in the Lung Regulate Antiviral Response Pathways against Influenza A Virus Infection. ***Cell Rep.*** 2020 Apr 21;31(3): 107549

9. Herfst S, *et al.*, Hemagglutinin Traits Determine Transmission of Avian A/H10N7 Influenza Virus between Mammals. ***Cell Host Microbes***. 2020 Oct 7;28(4):602-613.

10. de Vries RD, *et al.,* Human Paramyxovirus Infections Induce T Cells That Cross-React with Zoonotic Henipaviruses. **mBio**. 2020 Jul 7;11(4):e00972-20. 11. Haagmans BL, et al., An orthopoxvirus-based vaccine reduces virus excretion after MERS-CoV infection in dromedary camels. ***Science*** 2016, 351:77-81.

12. Mina MJ, et al., Long-term measles-induced immunomodulation increases overall childhood infectious disease mortality. ***Science*** 2015, 348:694-699.

13. Zaki AM, et al., Isolation of a novel coronavirus from a man with pneumonia in Saudi Arabia. ***New England Journal of Medicine*** 2012, 19:1814-1820.

14. Herfst S, et al., Airborne transmission of influenza A/H5N1 virus between ferrets. ***Science*** 2012, 336:1534-1541.

15. Stittelaar KJ, et al., Antiviral treatment is more effective than smallpox vaccination upon lethal monkeypox virus infection. ***Nature*** 2006, 439:745-748.

16. Haagmans BL et al., Pegylated interferon-alpha protects type 1 pneumocytes against SARS coronavirus infection in macaques. ***Nature Medicine*** 2004, 10(3):290-293.

17. Kuiken T, et al., Avian H5N1 influenza in cats. ***Science*** 2004, 306:241.

18. Fouchier RA, et al., Koch's postulates fulfilled for SARS virus. ***Nature*** 2003, 423:240.

19. Martina BE, et al., SARS virus infection of cats and ferrets. ***Nature*** 2003, 425:915.

20. van den Hoogen BG, et al.,A newly discovered human pneumovirus isolated from young children with respiratory tract disease. ***Nature Medicin****e* 2001. 7(6):719-24.