



Curriculum Vitae Prof. Dr. Ole Petter Ottersen



Name: Ole Petter Ottersen

Born: 17 March 1955

Main areas of research: signal pathways in the brain, synapses, membrane molecules, brain volume regulation, development of neurodegenerative diseases

Ole Petter Ottersen is a neuroscientist. His research focuses mainly on signal molecules and synaptic transmissions in the brain. He clarified the function of membrane molecules in the brain, an accomplishment that could serve as the starting point for the development of new medicines.

Academic and Professional Career

- since 2017 Karolinska Institutet, Sweden
- 2009 - 2017 Rector of the University of Oslo, Norway
- 2002 - 2009 Director of the Center for Molecular Biology and Neurosciences, University of Oslo
- 2001 - 2002 Chair of EMBIO (cross-faculty department for molecular biology, biotechnology and bioinformatics at the University of Oslo)
- 2000 - 2002 Vice dean for research, Medical Faculty, University of Oslo
- 1997 - 1999 Head of the Department for Anatomy, Institute for Medical Fundamental Research, University of Oslo
- since 1992 Professor for medicine, Institute for Medical Fundamental Research, University of Oslo
- 1983 - 1992 Researcher, Institute for Anatomy, University of Oslo
- 1982 PhD in neurosciences, University of Oslo
- 1980 MD, University of Oslo
- 1978 - 1983 Research Fellow, Institute for Anatomy, University of Oslo

Functions in Scientific Societies and Committees

since 2016	Chair of the Guild of Research Intensive Universities
since 2014	Chair of the advisory board of the Academic Monitoring Panel on Global Governance for Health
since 2014	Chair of the Olav Thon Prize committee
since 2014	Strategic consultant for the EAT Foundation
since 2013	Chair of the Kavli Prize committee for neurosciences
since 2013	Member of the Business for Peace Advisory Board
since 2013	Member of the advisory board of Partnership for Change
2013 - 2016	Member of the advisory board in Nordforsk
2013 - 2015	Chairman of the Norwegian Association of Higher Education Institutions (UHR)
2013 - 2015	Head of the Nordiske Universitetssamarbeidet (NUS)
2012 - 2015	Member of the strategic advisory committee of the Biocenter Finland
since 2012	Member of the advisory board of the Oslo University Hospital (OUS)
2011 - 2014	Chair of Lancet - University of Oslo Commission on Global Governance for Health
2009 - 2017	Chair of the board of the University Oslo
2009 - 2017	Board member of the Universitetsforlaget
2008 - 2012	Committee chairman of the European Research Council (ERC) Advanced Grants
2007 - 2013	Member of the scientific advisory board of the Lundbeck Foundation
2006 - 2009	Chief editor of Neuroscience
2006 - 2008	Member of the board of the Institute for neurosciences, Norwegian University for Science and Technology
2005 - 2009	Grant coordinator of the Nordic Council
2005 - 2008	Grant coordinator of the Norwegian Research Council (STORFORSK)
2004 - 2006	Member of the Expert Advisory Board, Brain Power, Sweden
2003 - 2007	Chairman of FUGE (National Program for Functional Genomics in Norway)
2002 - 2009	Director of the Center of Excellence (Norwegian Research Council)
2002 - 2007	Chair of the scientific advisory board of the Helsinki Neuroscience Center
2002 - 2006	Board member of the Wallenberg Consortium North
2002 - 2005	Associate Editor of Neuroscience

- 2001 - 2005 Norwegian representative in the European Cooperation in Scientific and Technological Research (COST)
 - 2001 - 2002 Committee chairman of the EVA Project (evaluation committee of the research activities of the University of Oslo)
 - 2000 - 2009 Editor of the European Journal of Neuroscience
 - 2000 - 2002 Chair of the Interim Board of CONNECT Norway
 - 2000 - 2002 Member of the senior advisory committee of Nordic CONNECT
 - 2000 - 2001 Member of the Interim Board of the Norwegian Biotechnology Forum
 - 1996 - 2003 Chair of the election committee of the Jahre Prize
- Consultant for organisations, institutions and research facilities like INSERM (France); Wellcome Trust, Academy of Finland, University of Gothenburg, Royal Swedish Academy of Sciences

Project coordination, Membership in collaborative research projects

- 2003 - 2005 Co-coordinator of the EU Biomed Project “Kainate and AMPA receptor trafficking (KAR-TRAP)”
- 2005 - 2008 Co-coordinator of the EU project “Glutamate Receptor Interacting Proteins as Novel Neuroprotective Targets (GRIPANNT)”
- 2006 - 2009 Partner of the EU training network CORTEX
- 2006 - 2009 Partner of the EU project NEUROIMAGE
- 2007 Founding partner of the Norwegian Network of the Nordic partnership with the European Molecular Biology Laboratory (EMBL)

Honours and Awarded Memberships

- 2015 Honorary doctorate of the École Normale Supérieure, Lyon, France
- 2010 Honorary doctorate of the University Kuopio, Finland
- 2008 Anders Jahre’s Award for Medical Research (Senior Prize)
- since 2006 Member of the Royal Norwegian Society of Sciences and Letters
- since 2006 Member of the Scanbalt Academy
- 2005 Lundbeck Foundation Nordic Award for Outstanding Research, together with Jon Storm Mathisen
- since 2001 Member of the German National Academy of Sciences Leopoldina
- 1994 Research Award of the University of Oslo

since 1993 Member of the Norwegian Academy for Physical Sciences and the Humanities
1990 Anders Jahre's Award for young scientists in medicine

Major Scientific Interests

Ole Petter Ottersen is a neuroscientist. His research focuses mainly on signal molecules and synaptic transmissions in the brain. He clarified the function of membrane molecules in the brain, an accomplishment that could serve as the starting point for the development of new medicines.

Ole Petter Ottersen investigated how plasma membranes in the brain deal with water, which is an important question in connection with brain volume. He was able to explain the role of Aquaporin-4 (AQP4), which is the most prevalent membrane molecule in the brain. It is very widespread in the boundary areas (interfaces) of the blood brain barrier and the spinal fluid brain barrier.

He was able to show that AQP4 is involved in functions like the regulation of the volume of extracellular space, potassium buffering, interstitial fluid resorption, neuroinflammation, cell migration and calcium signalling. AQP4 is also necessary for the trouble-free functioning of the retina of the eye and the inner ear. Additionally, this molecule is involved in the processes associated with the development of neurodegenerative diseases. Targeted treatments could be aimed at the AQP4 membrane molecule.