Leopoldina
Nationale Akademie
der Wissenschaften

Curriculum Vitae Prof. Dr. Alexei Verkhratsky

Name: **Alexei Verkhratsky**

Born: **30 July 1961**

Alexei Verkhratsky is a professor of Neurophysiology at the University of Manchester. His major scientific interests are in neurophysiology with particular emphasis on neuroglia and glial neuronal interactions in health and disease.

Academic and Professional Career

Since 2002	Professor of Neurophysiology at the Faculty of Life Sciences, The University of Manchester, Manchester, UK
2002 – 2004	Chairman of the Division of Neuroscience at the School of Biological Sciences, The University of Manchester, Manchester, UK
2001 – 2002	Reader in Neurophysiology at the School of Biological Sciences, The University of Manchester, Manchester, UK
1999 – 2001	Senior Lecturer at the School of Biological Sciences, The University of Manchester, Manchester, UK
1995 – 1999	Senior Research Scientist at the Department of Cellular Neuroscience in the Max Delbrück Center for Molecular Medicine, Berlin
1993 – 1995	Head of the Research Group of Cellular Neuroscience, Bogomoletz Institute of Physiology, Kiev
1993 – 1993	Guest scientist at the Department of Cellular Neuroscience of the Max Delbrück Center of Molecular Medicine, Berlin
1992 – 1995	Deputy director of the International Center of Molecular Physiology of the Ukrainian Academy of Sciences

1992	Guest scientist at the Research Group of Cellular Neurophysiology, Max Planck Institute for Biophysical Chemistry, Göttingen
1990 – 1993	Senior Research Scientist at the Department of General Physiology of the Nervous System, Bogomoletz Institute of Physiology
1989 – 1990	Research Scientist in the Institute of Neurobiology, Heidelberg University
1986 – 1989	Junior Research Scientist at the Department of General Physiology of the Nervous System, Bogomoletz Institute of Physiology, Kiev

Functions in Scientific Societies and Committees (Selection)

Since 2012	Member of membership committee of the American Society for Neuroscience, ASN
Since 2007	Member of Council of the Federation of European Physiological Societies, FEPS
2006 – 2013	Chairman of the Physiology and Medicine Section of the Academia Europaea; Member of the Council
2002 – 2006	Member of Council of The Physiological Society, UK
1994 – 2006	Member of International Committee of The Physiological Society, UK

Project coordination, Membership in collaborative research projects (Selection)

Since 2012	Adjunct director of Achucarro Basque Centre for Neuroscience
2011 – 2013	Visiting Honorary Professor at Kyushu University, Fukuoka, Japan
2007 – 2010	Visiting Professor; Head of the Department of Molecular Neurophysiology, Institute of Experimental Medicine, ACSR, Prague, Czech Republic

Honours and Awarded Memberships (Selection)

2013	Fellow of Japan Society for the Promotion of Science (JSPS)
2013	Recipient of Dozor Visiting Scholar award, Ben Gurion University, Beer Sheva, Israel
2012	Elected member of Real Academia Nacional de Farmacia, Spain
2012	Research Award of German Purine Club
2012	Elected member of European Dana Alliance for the Brain
2003	Elected Member of Academia Europaea

Major Scientific Interests

Alexei Verkhratsky is an internationally recognised scholar in the field of cellular neurophysiology. His research is concentrated on the mechanisms of inter- and intracellular signalling in the CNS, being especially focused on two main types of neural cells, on neurones and neuroglia. He made important contributions to understanding the chemical and electrical transmission in reciprocal neuronal-glial communications and on the role of intracellular Ca^{2+} signals in the integrative processes in the nervous system. Many of A. Verkhratsky's studies are dedicated to investigations of cellular mechanisms of neurodegeneration. A. Verkhratsky was the first to perform intracellular Ca^{2+} recordings in old neurones in isolation and *in situ*, which provided direct experimental support for "Ca^{2+} hypothesis of neuronal ageing". In recent years he studies the glial pathology in Alzheimer disease. He authored a pioneering hypothesis of astroglial atrophy as a mechanism of neurodegeneration.