

Contact details

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Degrees

MD, General Medicine (1st Class, Albert Szent-Gyorgyi University, Szeged, Hungary, 1986)
PhD in Biochemistry (Hungarian Academy of Sciences, Budapest, 1993)

Current posts

Professor of Neuroscience (2004-), Research Theme Leader for Molecular and Cellular Neuroscience (2010-), MRC Centre for Synaptic Plasticity, School of Physiology and Pharmacology, University of Bristol
Visiting Professor (2005-, Honorary appointment), The University of the West of England, Bristol

Previous posts

Reader (2001-2004), Lecturer (1999-2001) in Neuroscience, University of Bristol, UK
Lecturer in Pharmacology (1997-1999), University of Newcastle upon Tyne, UK
MRC Scientist (1991-1997), MRC Anatomical Neuropharmacology Unit, University of Oxford, UK
Research Scientist (1989-1990), State University of New York, Syracuse, NY, USA
Research Fellow (1986-1993), University of Szeged, Hungary

Research areas

- Molecular mechanisms of neuronal plasticity: developmental and activity dependent changes in the molecular organisation and function of glutamate receptors in the central nervous system
- Pharmacological properties and distribution of kainate receptors
- White matter injury in the immature brain: functional analysis of metabotropic glutamate and GABA_B receptors in developing oligodendrocytes
- Development and application of novel subtype selective glutamate receptor antagonists for the study of synaptic plasticity

Grant funding

BBSRC, MRC, The Royal Society

Editorial Boards

J Neurochem (2002-), *Mol Brain* (2007-), *Neural Regeneration Res* (2007-), *World J Pharmacol* (2011-)

Grant selection committee and review panel memberships

BBSRC (UK) Research Committee A (Member 2009-, Core Member 2011-), Health Research Board in Ireland (2008-), Romanian National University Research Council (2008-), Science Foundation Ireland (2006-), European Commission Brain Research Panel (2004)

Publications

The number of refereed papers in academic journals: 74; Cumulative impact factor: 366; Total citations: 3214.

Selected recent publications:

Appleby VJ, Corrêa SAL, Duckworth JK, Nash JE, Noël J, Fitzjohn SM, Collingridge GL, Molnár E (2011) LTP in hippocampal neurons is associated with a CaMKII-mediated increase in GluA1 surface expression. *J Neurochem* **116**:530-543.

Atlason PT, Scholefield CL, Eaves RJ, Mayo-Martin MB, Jane DE, Molnár E (2010) Mapping the ligand binding sites of kainate receptors: Molecular determinants of subunit-selective binding of the antagonist [³H]UBP310. *Mol Pharmacol* **78**:1036-1045.

Ball SM, Atlason PT, Shitu-Balogun OO, Molnár E (2010) Assembly and intracellular distribution of kainate receptors is determined by RNA editing and subunit composition. *J Neurochem* **114**:1805-1818.

Nash JE, Appleby VJ, Corrêa SAL, Wu H, Fitzjohn SM, Garner CC, Collingridge GL, Molnár E (2010) Disruption of the interaction between myosin VI and SAP97 is associated with a reduction in the number of AMPARs at hippocampal synapses. *J Neurochem* **112**:677-690.

- Gladding CM, Fitzjohn SM, Molnár E (2009) Metabotropic glutamate receptor-mediated long-term depression: Molecular mechanisms. *Pharmacol Rev* **61**:395-412.
- Gladding CM, Collett VJ, Jia Z, Bashir ZI, Collingridge GL, Molnár E (2009) Tyrosine dephosphorylation regulates AMPAR internalisation in mGluR-LTD. *Mol Cell Neurosci* **40**:267-279.
- Molnár E (2008) Molecular organization and regulation of glutamate receptors in developing and adult mammalian central nervous systems. In: *Handbook of Neurochemistry and Molecular Neurobiology: Neurotransmitter Systems* (eds: Lajtha A, Vizi ES), Third edition, Springer Reference, pp415-441.
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