

Imre Vida

Charité - Universitätsmedizin Berlin
Institute for Integrative Anatomy
Charitéplatz 1 | D-10117 Berlin
Phone: +49(0)30 450-528062
Email: imre.vida@charite.de



Curriculum vitae

since 2012	Head, Institute of Integrative Neuroanatomy, Charité
since 2011	Professor (W3), Neuroanatomy, Charité
2007 - 2011	Senior Lecturer in Neuroscience, School of Life Sciences, University of Glasgow
2001 - 2006	Assistant Professor, Institute of Anatomy and Cell Biology, University of Freiburg
1996 - 2001	Postdoctoral research fellow (Advisor: Prof. M. Frotscher), Institute of Anatomy, University of Freiburg
1997	PhD in Medical Sciences/Neuroscience ('summa cum laude')
1992 - 1996	PhD Studies, Pécs University Medical School, Hungary, and Oxford University, (Advisors: Drs G. Czéh, E.H. Buhl and P. Somogyi)
1992	State exam, degree in Human Medicine ('cum laude')
1986 - 1992	Studies in Medicine, Pécs University Medical School, Hungary

Research fields

My primary scientific interest concerns the structure and function of hippocampal neuronal circuits and focuses on the following main specific themes:

- Anatomical, physiological, and functional diversity of GABAergic neurons
- Role of inhibition and inhibitory neurons in controlling and coordinating neuronal activity
- Connectivity and inhibitory interaction among GABAergic interneurons mediated by ionotropic and metabotropic receptors
- Generation and modulation of network oscillations under physiological and pathological conditions, particularly in epilepsy

Activities in the scientific community, honors, awards

since 2014	Principal Investigator in the BCCN Graduate College (GRK 1589)
since 2011	Principal Investigator at the NeuroCure Cluster of Excellence at the Charité - Universitätsmedizin Berlin
2010	Co-editor, "Hippocampal Microcircuits: A Computational Modelers' Resource Book", eds. V. Cutsuridis, S. R. Cobb, B. P. Graham, and I. Vida, Springer Verlag, published in February 2010.
2009	Guest editor of the special issue "Cortical microcircuits", Neural Networks (eds: J. G. Taylor, V. Cutsuridis, B. P. Graham, I. Vida, T. Wennekers)
since 2008	External member, Bernstein Center for Computational Neuroscience, Freiburg
1995	Research scholarship, National Science Research Fund, Hungary, at MRC Anatomical Neuropharmacology Unit, Oxford
1992 - 1993	Research scholarship of the Hungarian Academy of Sciences at the Institute of Physiology, Pécs University Medical School, Hungary
1998	Grastyán Award, Endre Grastyán Foundation, Pécs, Hungary

Selected publications

Booker SA, Althof D, Gross A, Loreth D, Muller J, Unger A, Fakler B, Varro A, Watanabe M, Gassmann M, Bettler B, Shigemoto R, Vida I, Kulik A. KCTD12 Auxiliary Proteins Modulate Kinetics of GABAB Receptor-Mediated Inhibition in Cholecystinin-Containing Interneurons. *Cereb Cortex*. 2016.

Booker SA, Pires N, Cobb S, Soares-da-Silva P, Vida I. Carbamazepine and oxcarbazepine, but not eslicarbazepine, enhance excitatory synaptic transmission onto hippocampal CA1 pyramidal cells through an antagonist action at adenosine A1 receptors. *Neuropharmacology*. 2015;93:103-15.

Dugladze T, Maziashvili N, Borgers C, Gurgenedze S, Haussler U, Winkelmann A, Haas CA, Meier JC, Vida I, Kopell NJ, Gloveli T. GABA(B) autoreceptor-mediated cell type-specific reduction of inhibition in epileptic mice. *Proceedings of the National Academy of Sciences of the United States of America*. 2013;110(37):15073-8.

Booker SA, Gross A, Althof D, Shigemoto R, Bettler B, Frotscher M, Hearing M, Wickman K, Watanabe M, Kulik A, Vida I. Differential GABAB-receptor-mediated effects in perisomatic- and dendrite-targeting parvalbumin interneurons. *J Neurosci*. 2013;33(18):7961-74.

Beed P, Gundlfinger A, Schneiderbauer S, Song J, Bohm C, Burgalossi A, Brecht M, Vida I, Schmitz D. Inhibitory gradient along the dorsoventral axis in the medial entorhinal cortex. *Neuron*. 2013;79(6):1197-207.

Dugladze T, Schmitz D, Whittington MA, Vida I, Gloveli T. Segregation of axonal and somatic activity during fast network oscillations. *Science (New York, NY)*. 2012;336(6087):1458-61.

Sambandan S, Sauer JF, Vida I, Bartos M. Associative plasticity at excitatory synapses facilitates recruitment of fast-spiking interneurons in the dentate gyrus. *J Neurosci*. 2010;30(35):11826-37.

Vida I, Bartos M, Jonas P. Shunting inhibition improves robustness of gamma oscillations in hippocampal interneuron networks by homogenizing firing rates. *Neuron*. 2006;49(1):107-17.

Kulik A, Vida I, Fukazawa Y, Guetg N, Kasugai Y, Marker CL, Rigato F, Bettler B, Wickman K, Frotscher M, Shigemoto R. Compartment-dependent colocalization of Kir3.2-containing K⁺ channels and GABAB receptors in hippocampal pyramidal cells. *J Neurosci*. 2006;26(16):4289-97.

Bartos M, Vida I, Frotscher M, Meyer A, Monyer H, Geiger JR, Jonas P. Fast synaptic inhibition promotes synchronized gamma oscillations in hippocampal interneuron networks. *Proceedings of the National Academy of Sciences of the United States of America*. 2002;99(20):13222-7.

Vida I, Frotscher M. A hippocampal interneuron associated with the mossy fiber system. *Proceedings of the National Academy of Sciences of the United States of America*. 2000;97(3):1275-80.

Vida I, Halasy K, Szinyei C, Somogyi P, Buhl EH. Unitary IPSPs evoked by interneurons at the stratum radiatum-stratum lacunosum-moleculare border in the CA1 area of the rat hippocampus in vitro. *J Physiol*. 1998;506 (Pt 3):755-73.