Prof. Dr. Jakob von Engelhardt

Department: Pathophysiology

CV:

JAKOB VON ENGELHARDT

Prof. Dr. med.

Personal

Date of Birth: December 11, 1972

Place of Birth: Heidelberg, Germany

Academic Education and Appointments

1993 – 1999

Medicine, Philipps-University Marburg

1999 – 2001

M.D. thesis, Department of Internal Medicine at the Philipps-University Marburg

2000 – 2003

Resident, Neurology Department of the University Hospital Heidelberg

2001

Approbation as a medical doctor

2001

Dr. med. Philipps-University Marburg, Germany

2003 – 2011

Postdoc, University Hospital Heidelberg, Prof. Dr. H. Monyer

2005

Visiting scientist in the laboratory of Rafael Yuste, Ph.D. at the Howard Hughes Medical Institute, Columbia University, New York, USA

2006 – 2007

Visiting scientist, Postdoc, Vollum Institute of the Oregon Health and Science University (OHSU), Portland, USA, Prof. Dr. G. Westbrook

2010 – 2010

Visiting scientist, University of Bordeaux 2, Physiologie Cellulaire de la Synapse, CNRS, Bordeaux, France, Prof. Dr. D. Choquet

2012 – 2016

Junior group leader, DZNE & DKFZ

2013

Fachphysiologe (title for a specialized physiologist awarded by the German Physiological Society)

2014

Habilitation in Physiology, Ruprecht-Karls-University Heidelberg, Germany

Since 2017

W3 Professor at the Institute of Pathophysiology, University Medical Center, Johannes Gutenberg-University, Germany

Publications

(This is not a complete list of publications, but only a selection of the major ones.)

Chen X, Wang D, Kegel M, **von Engelhardt J** (2019) Electrophysiological Investigations of Retinogeniculate and Corticogeniculate Synapse FunctionJ. Vis. Exp. 150.

von Engelhardt J (2019) AMPA Receptor Auxiliary Proteins of the CKAMP Family. Int J Mol Sci. 20(6)

Müller MK, Jacobi E, Sakimura K, Malinow R, **von Engelhardt J** (2018) NMDA receptors mediate synaptic depression, but not spine loss in the dentate gyrus of adult amyloid Beta (Abeta) overexpressing mice. Acta Neuropathol Commun 6:110.

Chen X, Aslam M, Gollisch T, Allen K, **von Engelhardt J** (2018) CKAMP44 modulates integration of visual inputs in the lateral geniculate nucleus. Nat. Comm. 9: 261.

Anwarullah, Aslam M, Badshah M, Abbasi R, Sultan A, Khan K, Ahmad N, **von Engelhardt J** (2017) Further evidence for the association of CYP2D6*4 gene polymorphism with Parkinson's disease: a case control study. Genes Environ 39:18

Chen S, Tisch N, Kegel M, Yerbes R, Hermann R, Hudalla H, Zuliani C, Gulculer GS, Zwadlo K, **von Engelhardt J**, Ruiz de Almodovar C, Martin-Villalba A (2017) CNS Macrophages Control Neurovascular Development via CD95L. Cell Rep 19:1378-1393.

Jacobi E, **von Engelhardt J** (2017) Diversity in AMPA receptor complexes in the brain. Curr Opin Neurobiol 45:32-38.

Farrow P*, Khodosevich K*, Sapir Y*, Schulmann A*, Aslam M, Stern-Bach Y*, Monyer H*, **von Engelhardt J*** (2015) Auxiliary subunits of the CKAMP family differentially modulate AMPA receptor properties, eLIFE. 1(4).

von Engelhardt J*, Bocklisch C*, Tönges L, Herb A, Mishina M, Monyer H (2015) GluN2D-containing NMDA receptors-mediate synaptic currents in hippocampal interneurons and pyramidal cells in juvenile mice. Frontiers in Cellular Neuroscience. 9(95).

Khodosevich K*, Jacobi E*, Farrow P*, Schulmann A, Rusu A, Zhang L, Sprengel R, Monyer H, **von Engelhardt J** (2014) Co-expressed auxiliary subunits exhibit distinct modulatory profiles on AMPA receptor function. Neuron 83(3): 601-15.

Khodosevich K, Lazarini F*, **von Engelhardt J***, Kaneko H, Lledo PM, Monyer H (2013) Connective tissue growth factor regulates interneuron survival and information processing in the olfactory bulb. Neuron 79(6):1136-1151.

von Engelhardt J, Khrulev S, Eliava M, Wahlster S, Monyer H (2011) 5-HT3A Receptor-Bearing White Matter Interstitial GABAergic Interneurons Are Functionally Integrated into Cortical and Subcortical Networks. J Neurosci 31(46):16844-16854.

Bargiotas P, Krenz A, Hormuzdi SG, Ridder DA, Herb A, Barakat W, Penuela S, **von Engelhardt J**, Monyer H, Schwaninger M (2011) Pannexins in ischemia-induced neurodegeneration. Proc Natl Acad Sci U S A. 108(51):20772-7.

von Engelhardt J*, Mack V*, Sprengel R, Kavenstock N, Li KW, Stern-Bach Y, Smit AB, Seeburg PH, Monyer H (2010) CKAMP44: a brain-specific protein attenuating short-term synaptic plasticity in the dentate gyrus. Science 327:1518-1522.

Korotkova T, Fuchs EC, Ponomarenko A, **von Engelhardt J**, Monyer H (2010) NMDA receptor ablation on parvalbumin-positive interneurons impairs hippocampal synchrony, spatial representations, and working memory. Neuron 68(3):557-569.

von Engelhardt J, Doganci B, Seeburg PH, Monyer H (2009) Synaptic NR2A- but not NR2B-Containing NMDA Receptors Increase with Blockade of Ionotropic Glutamate Receptors. Front Mol Neurosci 2(19).

von Engelhardt J*, Doganci B*, Jensen V, Hvalby O, Gongrich C, Taylor A, Barkus C, Sanderson DJ, Rawlins JN, Seeburg PH, Bannerman DM, Monyer H (2008) Contribution of hippocampal and extra-hippocampal NR2B-containing NMDA receptors to performance on spatial learning tasks. Neuron 60(5):846-860.

Inta D, Alfonso J, **von Engelhardt J**, Kreuzberg MM, Meyer AH, van Hooft JA, Monyer H (2008) Neurogenesis and widespread forebrain migration of distinct GABAergic neurons from the postnatal subventricular zone. Proc Natl Acad Sci U S A 105(52):20994-20999.

von Engelhardt J*, Coserea I*, Pawlak V, Fuchs EC, Kohr G, Seeburg PH, Monyer H (2007) Excitotoxicity in vitro by NR2A- and NR2B-containing NMDA receptors. Neuropharmacology 53(1):10-17.

von Engelhardt J, Eliava M, Meyer AH, Rozov A, Monyer H (2007) Functional characterization of intrinsic cholinergic interneurons in the cortex. J Neurosci 27(21):5633-5642.