Program: Meeting of the GBM Study Group „Molecular Neurobiology“

„Dynamics of the Nervous System in Health and Disease "

20.9. – 22. 9 . 2018, Marburg

Venue: Deutscher Sprachatlas, Pilgrimstein 16, 35037 Marburg

Organisers (in alphabetical order):
J.W. Bartsch, R. Brandt, H.G. Breitinger, T. Hucho, S. Kins, S. Lichtenthaler, M. Rust

Thursday, September 20, 2018

from 13:30 – 14:30	Welcome and Registration
14:30	Opening
Jörg W. Bartsch	Spokesperson of GBM-Section ‘Molecular Neurobiology’
Michael Bölker	Vice-President of Philipps-University of Marburg
Carsten Culmsee	Executive Board of CMBB (Center for Mind, Brain and Behavior), Research Campus Central Hessen

Session I: Cytoskeletal dynamics in Neurons (Chair: Marco Rust)

(kindly supported by DFG, GRK2213 “Membrane Plasticity in Tissue Development and Remodeling”)

15:00 - 15:30	Pirta Hotulainen, Minerva Foundation Institute for Medical Research, Helsinki, Finland *Actin in synaptic plasticity and learning*
15:30 – 16:00	Kristin Michaelsen-Preusse, Zoological Institute, Braunschweig University, Germany *Local translation of actin binding proteins in the fragile x syndrome*
16:00 – 16:30	Coffee Break
16:30 – 17:00	Elena Marcello, Dept. of Pharmacological and Biomolecular Sciences, Milan University, Italy *ADAM10 and actin: an inner dialogue in the frame of the spine*
17:00 – 17:15	Lena Hoffman, Institute of Pharmacology and Clinical Pharmacy, University of Marburg *Role of the actin-regulating protein cofilin1 in mitochondrial and cellular resilience*

17:15 – 17:30	Sophie Meyer, Institute of Physiological Chemistry, University of Marburg *The actin-binding protein Profilin1 restricts the basal radial glia pool in mice*
17:30 – 18:00	Business Meeting (SG Molecular Neurobiology, all GBM members)

Dinner (Buffet)

Keynote Lecture (held in the „Fürstensaal", Landgrafenschloss)

19:30	Milos Pekny, Department of Clinical Neuroscience at Institute of Neuroscience and Physiology, University of Gothenburg, Sweden ***Targeting reactive astrogliosis in neurological diseases and CNS regeneration*** (kindly supported by Leica Microsystems)
20:30	Get together (Foyer of the Fürstensaal)

Friday, September 21, 2018

Session II: Molecular Mechanisms of Neurodegeneration and Neuroinflammation (Chairs: Stefan Kins, Roland Brandt)

9:00 – 9:30	Lucia Chavez-Gutierrez, KU Leuven, Belgium *Protein dynamics and the risk of Alzheimer's disease*
9:30 – 10:00	Michael Heneka, DZNE and University of Bonn *Innate Immunity in Alzheimer's disease*
10:00 – 10:15	Simone Eggert, University of Kaiserslautern *APP gene family members function as synaptic adhesion molecules*
10:15 – 10:45	Coffee Break
10:45 – 11:00	Dieter Petit, KU Leuven, Belgium *An emerging role for the NCT ectodomain in the modulation of Aß length through direct interaction with APP*
11:00 – 11:30	Graziella Cappelletti, University of Milan *Microtubule dysfunction in Parkinson's disease: from pure protein to human brain*
11:30 – 12:00	Markus Morawski, University of Leipzig *Protective properties of the specialized neuronal extracellular matrix*
12:00 – 12:30	Ali Ertürk, ISD and LMU Munich *Disease mechanisms in transparent mice*
12:30-12:45	Shadaan Zulfiqar, University of Marburg *Investigating isoform-specific effects of APOE in Alzheimer's Disease progression using isogenic patient iPSC-derived neural cells*
13:00 – 15:30	Lunch (Buffet) and Poster Viewing

Session III: Neuroproteomics and Novel Methods in Molecular Neuroscience (Chair: Jörg W. Bartsch)

15:30 – 16:00	Monika Brill, Technical University Munich *Microtubule poly-glutamylation as a possible regulator of neuromuscular synapse elimination*

16:00 – 16:15	Christian Gach, University of Osnabrück *The Cytoskeleton under Stress: Live-cell Imaging Indicates a Primary Role of Microtubule Destabilization in Neurodegeneration*
16:15 – 16:30	Thomas Enzlein, Mannheim University of Applied Sciences *Assessment of Alzheimer Amyloid Plaque Composition by MALDI mass spectrometry imaging*
16:30 – 17:00	Coffee Break
17:00 – 17:30	Dominik Paquet, ISD and LMU Munich *Investigating neurodegenerative and neurovascular diseases in CRISPR-edited stem-cell derived human brain cells*
17:30 – 17:45	Fabian Raudzus/Hendrik Schöneborn, University of Bochum *Remote Control of Neuronal Cell Signaling by Cytoplasmic Magnetic Nanoparticles*
17:45 – 18:15	Johannes Vogt, Institute of Microscopic Anatomy and Neurobiology, JGU Mainz *Role of bioactive phospholipids at central synapses: implication for psychiatric disorders*
18:15 – 18:45	Silvia Cappello, Max-Planck-Institute for Psychiatry, München, Germany *Molecular and cellular mechanisms regulating human neurogenesis*
19:00	Dinner (Buffet) and Music
21:00	Night Sightseeing (German and English) Meeting points: English Guide: Marktplatz (Brunnen) German Guide: Kornmarkt (unter der Linde) please see map

Saturday, September 22, 2018

Session IV: Molecular Mechanisms of Signal Reception in Molecular Neuroscience (Chair: Tim Hucho)

9:00 – 9:30	Dominik Oliver, University of Marburg *Control of Neuronal Excitability by Phosphoinositide Pathways*
9:30 – 10:00	Carmen Villmann, University of Würzburg *Impaired glycinergic inhibition in neurological diseases"*
10:00 – 10:15	Jan Kullman, St Jude Children's Research Hospital, Memphis, USA/Institute of Physiological Chemistry, University of Marburg *Oxygen-Tension and the VHL-Hif1 α Pathway Comprise a Developmental Switch Controlling the Onset of Neuronal Polarization and Germinal Zone Exit*
10:15 – 10:30	Peter Soba, ZMNH (Hamburg) *Microtubule dynamics are regulated by conserved Tao kinase activity to control dendrite development*
10:30 – 11:00	Coffee Break
11:00 – 11:15	Daniela Mauceri, University of Heidelberg *VEGFD regulates the balance between dendritic structural plasticity and maintenance.*
11:15 – 11:45	Hanns Ulrich Zeilhofer, Zürich *Investigating spinal sensory circuits through intersectional gene manipulation*
11:45 – 12:00	Closing remarks, End of Meeting