

Rhine – Main Neuroscience Network

rmn²



1st meeting

November 24 – 26, 2010

Jugendherberge Oberwesel
Auf dem Schönberg
55430 Oberwesel

Wednesday, November 24

14:00

Introductory remarks

Jacky Trotter, Mainz
Herbert Zimmermann, Frankfurt
Robert Nitsch, Mainz

14:15 – 15:00

Klaus Unsicker (Chair: Thomas Deller, Frankfurt)
Department of Molecular Embryology, University of Freiburg
GDF-15, a novel TGF- β superfamily member, is crucial for the maintenance of postnatal motor and sensory neurons

Symposium I (Chair: Hermann Rohrer, Frankfurt)

15:00 – 15:20

Ana Rogulja-Ortmann
Institute for Genetics, Mainz
Regulation and impact of Hox RNA processing on regional diversification during Drosophila CNS development

15:20 – 15:40

Mirko Schmidt
Edinger Institute, Frankfurt
EGFL7 regulates adult neural stem cell maintenance and differentiation by inhibition of Notch1

15:40 – 16:00

Amparo Acker-Palmer
Institute for Cell Biology and Neuroscience, Frankfurt
EphrinB signaling during nervous system development and plasticity

16:00 – 16:20

Johannes Vogt
Institute for Microanatomy and Neurobiology, Mainz
Phospholipid signaling at the glutamatergic synapse: Does early neuronal activity influence neuronal connectivity?

16:20 – 16:40

Break

Symposium 2 (Chair: Beat Lutz, Mainz)

16:40 – 17:00

Volker Siffrin

Neurological Clinic, Mainz

In vivo imaging of partially reversible TH17-induced neuronal dysfunction in the course of encephalomyelitis

17:00 – 17:20

Werner Kilb

Institute for Physiology and Pathophysiology, Mainz
Depolarizing GABA responses during early development: Excitatory or inhibitory?

17:20 – 17:40

Andreas Vlachos

Institute for Clinical Neuroanatomy, Frankfurt
Developmental stabilization and activity-dependent regulation of gephyrin scaffolds at hippocampal gabaergic synapses

17:40 – 18:00

Constantin Gonsior

Molecular Cell Biology, Mainz

Post-transcriptional regulation of myelin basic protein expression

18:00 – 18:45

Reinhard Jahn (Chair: Helmuth Steinmetz, Frankfurt)
Department of Neurobiology, MPI for Biophysical Chemistry
Molecular steps in the exocytosis of synaptic vesicles
Dinner

18:45-00:00

Cookout

Thursday, November 25

07:30 – 08:45

Breakfast

08:45 – 9:00

Georg Krausch, President of the Johannes Gutenberg University Mainz
Salutatory Address

Werner Müller-Esterl, President of the Goethe University Frankfurt
Salutatory Address

09:00 – 9:45

Christian Büchel (Chair: Ulf Ziemann, Frankfurt)
Department of Systems Neuroscience, University Medical Center Hamburg-Eppendorf
Brain Imaging as a Neurophysiology Toolkit in Humans

Symposium 3 (Chair: Christian Behl, Mainz)

9:45 – 10:05

Julia Leschik
Institute for Physiological Chemistry and Pathobiochemistry, Mainz
Functions of the cannabinoid receptor 1 (CB1) in adult neurogenesis

10:05 – 10:25

Manuela Nowotny
Institute for Cell Biology and Neuroscience, Frankfurt
Mechano-electrical Transduction in Hearing Organs

10:25 – 10:45

Kerstin Nagel-Wolfrum
Cell and Matrix Biology, Institute for Zoology, Mainz
Gene-based therapy options for Usher syndrome type 1C

10:45 – 11:00

Coffee break

Symposium 4 (Chair: Irmgard Tegeder, Frankfurt)

11:00 – 11:20

Morna Gruber
Neurobiology, Institute for Zoology, Mainz
Electrophysiological characterization of neurons in the tectum opticum of *Carassius auratus* with respect to "color" and "motion"

11:20 – 11:40

Alexander Gottschalk
Institute for Biochemistry, Frankfurt
Optogenetic analysis of synaptic transmission and neuronal networks in *Caenorhabditis elegans*

11:40 – 12:00

Hartwig Spors
Max Planck Institute for Biophysics, Frankfurt
Testing Olfactory Processing

12:00 – 14:00

Lunch

14:00 – 14:45

Giles Laurent (Chair: Heiko Lühmann, Mainz)

Max Planck Institute for Biophysics, Frankfurt
Adaptive gain control in an olfactory environment

14:45 – 18:30

Poster Session

18:30 – 19:30

Dinner

19:30 – 20:15

Angela Giangrande (Chair: Gerd Technau, Mainz)

Department of Cell Biology and Development, IGBMC Strasbourg
Differentiation and Reprogramming of Neural Stem Cells in *Drosophila*

20:30 – 00:00

Party

Friday, November 26

07:30 – 08:45

Breakfast

09:00 – 09:45

Trevor Smart (Chair: Jochen Kaiser, Frankfurt)

Department of Neuroscience, Physiology and Pharmacology, University College London
Plasticity of Synaptic and Extrasynaptic Inhibitory Transmission

Symposium 5 (Chair: Jochen Triesch, Frankfurt)

09:45 – 10:05

Pascal Fries
Ernst Strüngmann Institute, Frankfurt
Electrophysiological imaging of the attention network

10:05 – 10:25

Michael Wibrall
Brain Imaging Center, Frankfurt
Neuronal Correlates of Perceptual Closure processing - an investigation with time-resolved MEG-Beamforming and Transfer Entropy

10:25 – 10:45

Jörg Lücke
FIAS, Frankfurt

What are the Functional Goals of Learning and Sensory Encoding in the Cortex? - Lessons from Simple Cell Responses in V1

10:45 – 11:00

Break

Symposium 6 (Chair: Matthias Schreckenberger, Mainz)

11:00 – 11:20

Andreas Kern
Institute for Pathobiochemistry, Mainz
Adaptation of neuronal proteostasis during aging

11:20 – 11:40

Andreas Fellgiebel
Department of Psychiatry and Psychotherapy, Mainz
Translational neuroscience approaches based on cognitive phenotypes in neuropsychiatric syndromes

11:40 – 12:00

Helmut Laufs
Clinic for Neurology, Frankfurt
Multimodal imaging of brain states

12:00 – 12:45

Marius Ueffing (Chair: Uwe Wolfrum, Mainz)

Department of Protein Science, Helmholtz Zentrum München
Targeting Protein Networks in Neurosensory Disease: Functional Proteomic Approaches to Analyse Molecular Defects on a Systems Level

12:45

Wolf Singer, Frankfurt

Max Planck Institute for Brain Research, Frankfurt
Perspectives in the Neurosciences and awarding of poster prizes

13:00 – 14:00

Lunch

14:00

Departure