

# rhine – main neuroscience network



rhine main neuroscience

5<sup>th</sup> Biennial Meeting

June 13 - 15, 2018

Jugendherberge Oberwesel  
Auf dem Schönberg  
55430 Oberwesel

sponsored by



## Wednesday, June 13

13:00 Welcome

Heiko Luhmann, speaker program committee  
Klaus Lieb, speaker rmn<sup>2</sup>

13:05 – 14:00 Lecture

Edita Navratilova  
Dept. Pharmacology, University of Arizona  
Pain Processing in the Brain

### Symposium I "Mechanisms of pain persistence and relief"

Chair: Irmgard Tegeder, Inst. Clinical Pharmacology, Frankfurt

14:00– 14:20

Katharina Zimmermann  
Department of Anesthesiology, Erlangen  
Identifying susceptibility factors of cold allodynia with behavioural animal models

14:20 – 14:40

Marco Sisignano  
Inst. Clinical Pharmacology, Frankfurt  
Lipid signalling in neuropathic pain states

14:40 – 15:00

Frank Birklein  
Neurology Clinic, Mainz  
Immune mechanisms of Complex Regional Pain

15:00 – 15:30 Coffee break

### Symposium II "New in the Region"

Chair: Heiko Luhmann, Inst. Physiology, Mainz

15:30 – 15:50

David Slattery  
Department of Psychiatry, Frankfurt  
Rbfox1 – a novel candidate gene for psychiatric disorders

15:50 – 16:10

Jakob von Engelhardt  
Inst. Pathophysiology, Mainz  
Modulatory role of AMPA receptor interacting proteins

16:10 – 16:30

Julijana Gjorgjieva  
MPI for Brain Research  
Activity-dependent organizing principles in developing cortical networks

16:30 – 16:50

Florian Ringel  
Department of Neurosurgery  
TBA

16:50 – 17:30 Coffee Break

17:30 – 17:45

Constantin Rothkopf  
Dept. Psychology and Centre for Cognitive Science, TU Darmstadt  
Introduction of the Centre for Cognitive Science

17:45 – 18:00

Constantin Rothkopf  
Dept. Psychology and Centre for Cognitive Science, TU Darmstadt  
Computational models of active vision: understanding gaze selection in space and time

18:15 – 18:30

Ralf Galuske  
Dept. Biology and Centre for Cognitive Science, TU Darmstadt  
The role of cortico-cortical interactions during visual processing

18:15 – 18:30

Bodo Laube  
Dept. Biology, TU Darmstadt  
Role of glutamatergic transmission and ionizing radiation in cellular stress

19:00 – open end Cookout

## Thursday, June 14

08:00 – 09:00 Breakfast

09:00 – 10:00 Lecture

Francois Guillemot  
Francis Crick Institute, UC London  
Heterogeneity of stem cells in the adult brain

## Symposium III "Gene regulatory mechanisms in brain development and function"

Chair: Jennifer Winter, Inst. Human Genetics, Mainz

**10:00 – 10:20**

**Susann Schweiger**

*Inst. Human Genetics, Mainz*

**Epigenetic modulation in imprinting disorders- therapeutic implications**

**10:20 – 10:40**

**Marisa Karow**

*Inst. Physiol. Chem., Mainz & LMU München, BMC, Physiologische Genomik*

**Probing the transcriptional programs underlying human neurogenesis by direct lineage reprogramming**

**10:40 – 11:00**

**Marzieh Zonouzi**

*Boehringer Ingelheim*

**Regulation of axon-oligodendrocyte interaction in health and disease**

**11:00 – 11:30 Coffee break**

**11:30 – 12:30 Lecture**

**Marija Petrinovic**

*Inst. Psychiatry, Psychology & Neuroscience, King 's College, London*

**Repetitive behaviour(s) in animal models of autism**

## Symposium IV "The Neuroscience of Autism Spectrum Disorder"

Chair: Christine Ecker, Dept. Child and Adolescent Psychiatry, Frankfurt

**12:30 – 12:50**

**Michael Schmeißer**

*Inst. Anatomy, Magdeburg*

**Novel avenues in the pathobiology of autism spectrum disorder**

**12:50 – 13:10**

**Andreas Chiocchetti**

*Dept. Child and Adolescent Psychiatry, Frankfurt*

**Translating the genetic landscape of autism to brain developmental trajectories**

**13:10 – 13 :30**

**Caroline Moessnang**

*Central Health Inst., Mannheim*

**A multisite investigation of functional brain systems in autism spectrum disorder using task-based fMRI**

**13:30 – 14:00 Lunch break**

**14:00 – 15:00 Lecture**

**Rohini Kuner**

*Inst. Pharmacology, Heidelberg*

**Chronic pain: why time does not heal all wounds**

**15:00 – 18:00 Posters and Coffee**

**17:15 Meeting FTN-fellowship holders**

their attendance at posters only until 17:00

**18:00 – 19:00 Lecture**

**Istvan Mody**

*Dept. Physiology, UCLA, Los Angeles*

**Inhibition in the aging brain**

**19:00 – 20:00 Dinner**

**20:30 – open end Party**

# Friday, June 15

**08:00 – 09:00 Breakfast**

**09:00 – 10:00 Lecture**

**Ilona Grunwald Kadow**

*Technical University of Munich, Freising*

**Dissecting adaptive animal behaviour in the fly**

## Symposium V "Synaptic plasticity and learning in neuronal networks"

Chair: Julijana Gjorgjieva, MPI Brain Research, Frankfurt

**10:00 – 10:20**

**Johannes Letzkus**

*MPI Brain Research, Frankfurt*

**Behavioural control of neocortical computations through layer 1**

**10:20 – 10:40**

**Florence Kleberg**

*FIAS, Frankfurt*

**Network structure shaped by excitatory and inhibitory plasticity**

**10:40 – 11:00**

**Mark Hübener**

*MPI Neurobiology, Martinsried*

**Neuronal correlates of category learning in mouse visual cortex**

**11:00 – 11:30 Coffee and Snacks**

## Symposium VI "Neurophysiology of cognitive functions"

Chair: Maik Stüttgen, Inst. Pathophysiology, Mainz

**11:30 – 11:50**

**Torfi Sigurdsson**

*Inst. Neurophysiology, Frankfurt*

**Prefrontal circuits supporting spatial working memory**

**11:50 – 12:10**

**Sevil Duvarci**

*Inst. Neurophysiology, Frankfurt*

**Dopaminergic mechanisms of fear extinction**

**12:10 – 12:30**

**Martin Vinck**

*ESI, Frankfurt*

**State dependence of visual encoding and temporal activity patterns**

**12:30 – 13:30 Lecture**

**Marshall Shuler**

*Dept. Neuroscience, Johns Hopkins, Baltimore*

**The genesis of reward timing and a theory of temporal decision making**

**13:30**

**Awarding of Poster Prizes**

**Concluding Remarks**

**14:00**

**Departure**