

rhine – main neuroscience network



3rd Biennial Meeting

June 25 - 27, 2014

Jugendherberge Oberwesel
Auf dem Schönberg
55430 Oberwesel

Wednesday, June 25

14:00 Introductory remarks

Susann Schweiger, Mainz
Helmuth Steinmetz, Frankfurt

14:15 – 15:00 Lecture

Cornelius Gross
EMBL, Monterotondo, Italy
Controlling our fears: cortical modulation of innate defensive circuits in mice

Symposium I “Resilience”

Chair: Raffael Kalisch

15:00– 15:20

Soojin Ryu
MPI for Medical Research, Heidelberg
Stress response regulation in zebrafish larvae

15:20 – 15:40

Marianne Müller
Department of Psychiatry and Focus Program Translational Neuroscience, University Mainz
Neurobiological mechanisms shaping resilience to stress: a spotlight on mouse models

15:40 – 16:00

Michèle Wessa
Institute of Psychology, University Mainz
Relevance of emotion regulation for resilience: preliminary data and perspectives

16:00 – 16:20

Stephan Bender
Department of Child and Adolescent Psychiatry, University Frankfurt
The cortical excitation-inhibition balance in psychopathology and resilience

16:20 – 16:40 Coffee break

Symposium II “Contextual control of neural computation”

Chair: Matthias Kaschube

16:40 – 17:00

Jochen Roeper
Institute for Neurophysiology, University Frankfurt
Neuromodulatory Control of Cortical Function

17:00 – 17:20

Torfi Sigurdsson
Institute for Neurophysiology, University Frankfurt
Modulation of auditory cortex by behavior

17:20 – 17:40

Michael Schmid
Ernst-Strüngmann-Institute, Frankfurt
Signal processing without primary visual cortex: Contextual control unmasked?

17:40 – 18:00

Jochen Triesch
Frankfurt Institute for Advanced Studies
Self-organized learning and inference explain key properties of neural variability

18:00 – 18:45 Lecture

Florentin Wörgötter
Bernstein Center for Computational Neuroscience, Göttingen
The Semantics of Actions and Objects: From Recognition to Understanding

19:00 – open end Cookout

Thursday, June 26

07:30 – 09:00 Breakfast

09:00 – 09:30 Lecture

Helmut Leder
Department of Psychological Basic Research and Research Methods, Faculty of Psychology, Vienna
Visual Empirical Aesthetics - Psychology of the Arts

Symposium III “Empirical Aesthetics and Neuroaesthetics”

Chair: Pascal Nicklas

09:30 – 10:00

Winfried Menninghaus
MPI for Empirical Aesthetics, Frankfurt
Features and effects of poetic and rhetorical language use

10:00 – 10:20

Matthias Schlesewsky
Department of English and Linguistics, University Mainz
Primate audition as a biologically plausible model for human language

10:20 – 10:40

Marion Behrens
Brain Imaging Center, University Frankfurt
Context-dependent processing of natural and artificial visual scenes

10:45 – 11:00 Coffee break

11:00 – 11:45 Lecture

IAK Molecular and Cellular Neurobiology speaker

Paul Saftig

Department of Biochemistry, University Kiel

APP Secretases: Insights into their multiple roles in health and disease

Symposium IV “Physiological role of APP in the CNS”

Chair: Thomas Deller/Ulrike Müller

11:45 – 12:00

Ulrike Müller

Inst. for Pharmacy and Molecular Biotechnology, University Heidelberg

Beyond amyloid - dissecting the functions of the APP gene family

12:00 – 12:15

Andreas Draguhn

Institute for Physiology and Pathophysiology, University Heidelberg

The role of APP and APLP for synaptic transmission, plasticity, and network function: lessons from genetic mouse models

12:15 – 12:30

Andreas Vlachos

Institute for Clinical Anatomy, University Frankfurt

A role for APP in homeostatic plasticity in the hippocampus

12:30 – 12:45

Stefan Kins

Div. of Human Biology and Human Genetics, TU Kaiserslautern

Copper promotes APP dimerization and synaptogenic function

12:45 – 13:00

Claus Pietrzik

Institute for Pathobiochemistry, University Mainz

APP dimerization: Implications on APP neuronal transport and APP release

13:00 – 14:00 Lunch break

14:30 – 17:00 Posters and Coffee

Symposium V “Neural homeostasis”

Chair: Robert Nietsch

17:00 – 17:20

Björn Kampa

Institut de Neurosciences de la Timone, Marseille

Cortical Representation of Visual Scenery

17:20 – 17:40

Johannes Letzkus

MPI for Brain Research, Frankfurt

Circuit mechanisms of associative fear learning in auditory cortex

17:40 – 18:00

Axel Methner

Clinic for Neurology and Focus Program Translational Neuroscience, University Mainz

University Mainz

The role of a neuronal Calcium-binding protein in Huntington's disease

18:00 – 20:30 Dinner (and FIFA World Cup USA-GER)

20:30 – 21:15 Lecture

Hannah Monyer

Department of Clinical Neurobiology, Medical Faculty of Heidelberg University and DKFZ

University and DKFZ

Dissecting functions of local and long-range inhibitory GABAergic neurons

21:30 – open end Party

Friday, June 27

07:30 – 09:00 Breakfast

09:00 – 09:45 Lecture

Johannes Bohacek

Lab of Neuroepigenetics, Brain Research Institute, University/ETH

Zürich

Inheritance of the effects of early trauma across generations: Non-genomic mechanisms

Symposium VI “Neurogenetics and autism”

Chair: Susann Schweiger

09:45 – 10:05

Christine Freitag

Department of Child and Adolescent Psychiatry, University Frankfurt

Glutamatergic Candidate Genes in Autism Spectrum Disorder

10:05 – 10:25

Ulrich Zechner

Institute for Human Genetics and Focus Program Translational Neuroscience, University Mainz

University Mainz

The role of epigenetics in cognitive and mental disorders

10:25 – 10:45

Jennifer Winter

Institute for Human Genetics and Focus Program Translational Neuroscience, University Mainz

University Mainz

RNA regulation and the pathogenesis of ASD

10:45 – 11:05

Vijay Tiwari

Institute of Molecular Biology (IMB) and Focus Program Translational Neuroscience, Mainz

University Mainz

Epigenetic regulation of Neurogenesis

11:05 – 11:20 Coffee break

Symposium VII “New in the region”

Chair: Helmuth Steinmetz

11:20 – 11:40

Maik Stüttgen

Institute for Physiology and Pathophysiology and Focus Program Translational Neuroscience, University Mainz

University Mainz

Single-neuron correlates of perceptual decisions in sensory and associative brain areas

11:40 – 12:00

Hermann Cuntz

Ernst-Strüngmann-Institute, Frankfurt

A developmental stretch-and-fill process that optimises dendritic space filling

12:00– 12:20

Wolfgang Retz

Department of Psychiatry, University Mainz

Gene-Environment Interaction in the Development of Violent Behavior

12:20 – 12:40

Simon Rumpel

Institute for Physiology and Pathophysiology and Focus Program Translational Neuroscience, University Mainz

University Mainz

Neocortical dynamics and the perception of sounds

12:40 – 13:25 Lecture

Etienne Koechlin

Laboratoire de Neurosciences Cognitives, Département d'Etudes Cognitives, Ecole Normale Supérieure, Paris

University Paris

Reasoning and decision-making in the human prefrontal cortex

13:25

**Awarding of Poster Prizes
Concluding Remarks**

13:30 – 14:30 Lunch

14:30

Departure