

rhine – main neuroscience network



6th Biennial Meeting

June 24 - 26, 2020

sponsored by



Wednesday, June 24

14:00 Welcome

Ralf Galuske speaker rmn²
Susann Schweiger, speaker program committee

Symposium I “Neural Development”

Chair: Susann Schweiger

14:05 – 15:00 Plenary Lecture

Brunhilde Wirth
University Hospital Cologne
Spinal muscular atrophy: From gene to modifiers and therapy -
In the Challenges is a Solution

15:00 – 15:20

Marion Silies
Institute of Developmental Biology and Neurobiology, JGU Mainz
Building robust circuits in the fly visual system

15:20 – 15:40

Jennifer Winter
Institute of Human Genetics, University Medical Center Mainz
MicroRNA function in neurodevelopment

15:40 – 16:00

Ulrike Nuber
Stem Cell and Developmental Biology, TU Darmstadt
Components of the BAF chromatin remodeling complex are
essential for brain midline development

16:00 – 16:30 Coffee break

Symposium II “Resilience: focus on safety learning”

Chair: Raffael Kalisch

16:30 – 17:30 Plenary Lecture

Joshua Johansen
RIKEN Center for Brain Science, University of Tokyo, Japan
Neuromodulatory circuits for triggering and reversing aversive
emotional memories

17:30 – 17:50

Marianne Müller
Department of Psychiatry, University Medical Center Mainz &
Leibniz Institute for Resilience Research (LIR), Mainz
Discrimination and extinction as hallmarks of resilience

17:50 – 18:10

Sevil Duvarci
Institute of Neurophysiology, Goethe University Frankfurt
Is extinction an appetitive learning process?

18:10 – 18:30

Raffael Kalisch
Neuroimaging Center (NIC), University Medical Center Mainz, &
Leibniz Institute for Resilience Research (LIR), Mainz
The making of safety memories

18:30 – open end Cookout

Thursday, June 25

08:00 – 09:00 Breakfast

Symposium III “Neuroimmunology”

Chair: Stefan Bittner

09:00 – 10:00 Plenary Lecture

Luisa Klotz
Clinic for Neurology with Institute for Translational Neurology,
University Medical Center Münster
Novel insights into the mechanism of action of modern
Immunotherapeutics for treatment of Multiple Sclerosis

10:00 – 10:20

Tatjana Tchumatchenko
MPI for Brain Research, Frankfurt
How a model of neuron-glia crosstalk can help understand
neural network resilience

10:20 – 10:40

Beatrice Wasser + Tineke Vogelaar
Department of Neurology, University Medical Center Mainz
CNS-intrinsic mechanisms of self-defense against an
immune attack

10:40 – 11:00

Tommy Regen

Institute for Molecular Medicine, University Medical Center Mainz

IL-17 controls CNS autoimmunity through the intestinal microbiome

11:00 – 11:30 Coffee break

Symposium IV “Neurovascular Interactions”

Chair: Amparo Acker-Palmer

11:30 – 12:30 Plenary Lecture

Carmen Ruiz de Almodóvar

Biochemistry Center, University of Heidelberg

Vascular control of oligodendrocyte precursor cell specification

12:30 – 12:50

Elke Hattingen

Institute for Neuroradiology, University Medical Center Frankfurt

Neuroradiological Methods investigating neurovascular interactions

12:50 – 13:10

Jasmin Hefendehl

Institute of Cell Biology and Neuroscience, GU Frankfurt

Brain pericytes are stromal progenitors that participate in cerebrovascular regeneration after stroke

13:10 – 13:30

Marta Segarra

Institute of Cell Biology and Neuroscience, GU Frankfurt

The role of Reelin in Neurovascular communication

13:30 – 14:30 Lunch break

14:30 – 17:30 Posters and Coffee

Symposium V “New in the Region”

Chair: Klaus Lieb

17:30 – 17:50

Stefan Eimer

Cell Biology and Neurosciences, GU Frankfurt

Understanding the molecular mechanisms leading to Parkinson's disease

17:50 – 18:10

Wolfgang Kelsch

Clinic for Psychiatry and Psychotherapy, University Medical Center Mainz

Neuronal and systems dynamics of reward memories

18:10 – 18:30

Martin Heine

Institute for Developmental Biology and Neurobiology, JGU Mainz

Dynamic organisation of synaptic ion channels

18:30 – 18:50

Michael Plichta

Clinic for Psychiatry, Psychosomatics and Psychotherapy, University Medical Center Frankfurt

Replication crisis in neuroimaging?

19:00 – 20:00 Dinner

20:30 – open end Party

Friday, June 26

08:00 – 09:00 Breakfast

Symposium VI “Neural Circuits and Behaviour”

Chair: Ralf Galuske

09:00 – 10:00 Plenary Lecture

Alexander Thiele

School of Psychology, University of Newcastle

Dopaminergic contribution to probabilistic decision making in parietal and prefrontal macaque cortex

10:00 – 10:20

Hiroshi Ito

MPI for Brain Research, Frankfurt

Representations of navigational goals in the prefrontal cortex

10:20 – 10:40

Molly Henry

MPI for Empirical Aesthetics, Frankfurt

An individualized approach to understanding neural entrainment to auditory rhythms

10:40 – 11:00

Simon Rumpel

Systemic Neurophysiology, JGU Mainz

Network dynamics of the auditory cortex

11:00 – 11:30 Coffee and Snacks

Symposium VII “Cognition and Computation”

Chair: Constantin Rothkopf

11:30 – 11:50

Frank Jäkel

Centre for Cognitive Science, TU Darmstadt

Bayesian Reverse-Engineering of Perception and Cognition

11:50 – 12:10

Gemma Roig

Computational Vision and Artificial Intelligence, GU Frankfurt

Task-specific Vision DNN Models for Explaining Different Areas of the Visual Cortex

12:10 – 12:30

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12:30 – 13:30 Plenary Lecture

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13:30

Awarding of Poster Prizes

Concluding Remarks

14:00

Departure