

2nd Brain Dynamics Scientific Day

28.09.2023



Centre for Biotechnology and Biomedicine (BBZ)
Seminar room and foyer, Deutscher Platz 5, 04103 Leipzig

Program

08:55 Welcome speech – Brain Dynamics Graduate School Speakers
Prof. Dr. **Marc Schönwiesner**, Institute of Biology, Faculty of Life Sciences;
Prof. Dr. **Stefan Hallermann**, Carl Ludwig Institute of Physiology, Medical Faculty.

09:00 Keynote Lecture

“Exciting complexity: Circuit mechanisms of neurodegeneration”

Prof. Dr. Dr. **Sabine Liebscher**, Department of Neurology, University Hospital Cologne
& Institute of Clinical Neuroimmunology, University Hospital, Ludwig Maximilian University
Munich.

09:50 Poster session + coffee

11:00 “Discovery of a peroxisome proliferator-activated receptor α -dependent
mechanism for hyperactivity in early life stage zebrafish exposed to structurally
similar Per- and Polyfluoralkyl Substances (PFAS)”

Sebastian Gutsfeld, Department of Bioanalytical Ecotoxicology, Helmholtz Centre for
Environmental Research – UFZ GmbH.

11:15 “Effects of congenital toxoplasmosis on the developing brain of the guinea
pig”

Dr. Thomas Grochow, Institute of Veterinary Anatomy, Histology and Embryology,
Faculty of Veterinary Medicine.

11:30 “Presynaptic mechanisms in neocortical long-term depression”

Timothy Murai von Büнау, Carl Ludwig Institute of Physiology, Medical Faculty.

11:45 “Cerebellar pathology in two mouse models for spinal muscular atrophy”
Sandra Wittig, Carl Ludwig Institute of Physiology, Medical Faculty.

12:00 Lunch break with elections of the GS Board representatives

13:40 PI lightning talks:

- “Learning and memory: The role of dopamine in *Drosophila* larvae”
Prof. Dr. Andreas Thum, Institute of Biology, Faculty of Life Sciences;
- “Brain Dynamics – Dynamics of Metabolism”
Prof. Dr. Johannes Hirrlinger, Carl Ludwig Institute of Physiology, Medical Faculty & Department of Neurogenetics, MPI for Multidisciplinary Sciences, Göttingen;
- “Resolving subplasmalemmal Ca²⁺ microdomains and effector coupling in living cells”
Prof. Dr. Michael Schaefer, Rudolf-Boehm-Institute of Pharmacology and Toxicology, Medical Faculty;
- “On the seeding of neuropathological proteins”
Prof. Dr. Steffen Roßner, Paul Flechsig Institute of Brain Research, Medical Faculty;
- “Motor circuit pathology in motor neuron diseases”
Dr. Christian Simon, Carl Ludwig Institute of Physiology, Medical Faculty;
- “The role of myelin in health and disease”
Dr. Robert Fledrich, Institute of Anatomy & Paul Flechsig Institute of Neuropathology, Medical Faculty;
- “Stem Cell-Derived Retinal Organoids to Repair Vision”
PD Dr. Zohreh Hosseinzadeh, Paul Flechsig Institute of Brain Research, Medical Faculty & Department of Ophthalmology and Eye Hospital, University Hospital;
- “Cognitive neuroanatomy”
Dr. Sofie Louise Valk, Otto Hahn Group Cognitive Neurogenetics, MPI CBS, Institute of Neuroscience and Medicine, Brain & Behaviour (INM-7), Research Centre Jülich & Institute of Systems Neuroscience, Heinrich Heine University Düsseldorf;
- “Markov chains as a proxy for the predictive processing of event sequences”
Prof. Dr. Erich Schröger, Wilhelm Wundt Institute for Psychology, Faculty of Life Sciences;
- “Flexible neural network recruitment during language processing”
Prof. Dr. Gesa Hartwigsen, Lise Meitner Research Group Cognition and Plasticity, MPI CBS & Wilhelm Wundt Institute for Psychology, Faculty of Life Sciences.

14:30 “Synaptic alterations in motor circuits relevant to the peripheral nerve disease Charcot-Marie-Tooth type 1A”

Dr. Mar Bosch Queralt, AG Stassart/Fledrich, Paul Flechsig Institute of Neuropathology, Medical Faculty.

14:45 “Young children protect rule-breakers to repay a favour - even though they know better”

Louisa Huff, Leipzig Research Center for Early Child Development, Faculty of Education.

15:00 “Developing Brain Signatures for Self- & Other-Referential Mentalizing”

Dorukhan Açıl, Department of Child and Adolescent Psychiatry, Psychotherapy, and Psychosomatics, University Hospital.

15:15 Poster session + coffee

16:00 Keynote Lecture

“Monitoring brain activity - out and about”

Prof. Dr. **Stefan Debener**, Department of Psychology & Cluster of Excellence Hearing4All, Carl von Ossietzky University Oldenburg.

17:15 Guided tour of the Monument to the Battle of the Nations (das Völkerschlachtdenkmal).