

BENEFRI Neuroscience Workshop

”The brain: evolution and plasticity”

January 24-26, 2024

Auditorium Biology (PER 04, 0.110), Rte A. Gockel 3, CH-1700 Fribourg

January 24, Wednesday

Morning session: “Circuits, Metabolism and Memory”

Chairs: Simon Sprecher, Dominique Glauser, Boris Egger

- 09:00-9:15 Welcome and general organization Katrin Huber
Introduction Sprecher, Glauser, Egger
- 9:15-10:15 Mario de Bono, Institute of Science and Technology Austria
“Genetic and biochemical analysis of a microcircuit that switches animal states”
- 10:15-10:30 *Coffee break*
- 10:30-11:30 Catarina Homem, Nova Medical School, Universidade Nova de Lisboa, Portugal
“Metabolic remodeling during *Drosophila* brain tumor formation”
- 11:30-12:30 Pierre-Yves Plaçais, Brain Plasticity Department, ESPCI, Paris, France
“Metabolic plasticity in the *Drosophila* memory center”
- 12:30-13:45 *Lunch*

Afternoon session: “Clever guts and food for thoughts in *Drosophila*”

Chairs: Anne von Philipsborn, Thomas Auer

- 14:00-14:15 Poster “Blitz” presentations*: *students*
- 14:15-14:30 Introduction, von Philipsborn, Auer
- 14:30-15:30 Dafni Hadjieconomou, Institut du Cerveau – Paris Brain Institute, France
“Exploring gut senses“
- 15:30-16:00 *Coffee Break and Poster** Viewing Session*
- 16:00-17:00 Daniel Münch, Champalimaud Foundation, Lisbon, Portugal
“Neuronal principles of internal state dependent sensory processing”

January 25, Thursday

Morning session: “Cerebral cortex: what is it good for?”

Chairs: Michael Harvey, Mario Prsa

- 09:00-09:05 Introduction Harvey/Prsa
- 09:10-10:00 Prof. Randy Bruno, Oxford “*title tba*”
- 10:00-10:15 *Coffee Break*
- 10:20-11:10 Prof. Riccardo Beltramo, Cambridge “Cortical real estate for an ancestral visual system”
- 11:15-12:05 Prof. Tania Rinaldi Barkat, Basel “The pivotal role of cortex in orchestrating the refinement of responses to surprising sounds”
- 12:10-12:30 Roundtable discussion
- 12:30-13:45 *Lunch*

Afternoon session: “Mouse models to study neuronal metabolism and function”

Chair: Patricia Boya

- 14:00-14:15 Poster “Blitz” presentations*: *students*
- 14:15-14:30 Introduction, Boya
- 14:30-15:30 Juan Pedro Bolaños, Institute of Biomedical Research of Salamanca (IBSAL), Hospital Universitario de Salamanca, Universidad de Salamanca, CSIC, Salamanca, Spain
“Impact of astrocyte metabolism on cognition”
- 15:30-16:00 *Coffee Break and Poster** Viewing Session*
- 16:00-17:00 Christian Grimm, Lab for Retinal Cell Biology, Dept Ophthalmology / USZ, University of Zürich “Out of Breath: the impact of hypoxia on photoreceptor metabolism and vision”

January 26, Friday

Morning session: “Unraveling the primate brain: Insights into neurorehabilitation and cognitive brain function”

Chair: Michael Schmid

- 09:00-09:15 Introduction Schmid
- 09:15-10:15 Dr. Charles Latchoumane (EPFL) “title tba”
- 10:15-10:30 *Coffee Break*
- 10:30-11:30 Prof. Ziad Hafed, University of Tübingen “On the inevitability of visual interruption.”
- 11:30-12:30 Prof. Alex Thiele, Newcastle University “Decision Making Under Working Memory Limitation”
- 12:30-13:45 *Lunch*

Afternoon session: “Brain-Body Interactions”

Chair: Juliane Britz

- 14:00-14:15 Poster “Blitz” presentations*: *students*
- 14:15-14:30 Introduction, Britz
- 14:30-15:30 Juliane Britz, University of Fribourg “Bodily signals shape the neural pathway to awareness”
- 15:30-16:00 *Coffee Break and Poster** Viewing Session*
- 16:00-17:00 Dorothee Lulé, University of Ulm, Germany “A brain disconnected from its body”

Organizers: Thomas Auer, Patricia Boya, Juliane Britz, Boris Egger, Dominique Glauser, Michael Harvey, Anne von Philipsborn, Mario Prsa, Michael Schmid, Simon Sprecher, and Katrin Huber

* PhD students give a 3 min “Blitz” presentation (+ 2 min discussion) of their poster for the full audience in the main auditorium. A maximum of 2 power point slides are admitted. Students are advised to upload their slides on the conference-room computer 15 min before the start of the session. The posters can be visited during the coffee breaks for the duration of the workshop. Authors are encouraged to attend their posters to promote discussion.

** Format: AO Portrait, 84,1cm wide and 118,9 cm high