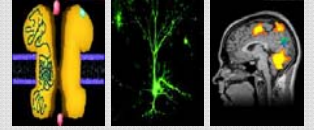


SFB 874 / IGSN

CONFERENCE



SENSORY PROCESSES: FROM MOLECULES TO COGNITION

12th - 13th of April 2016

Veranstaltungszentrum, Ruhr University Bochum

Programme

April 12th **9:15** **Welcome** - opening of the conference
Denise Manahan-Vaughan Director / Dean of Studies IGSN / Speaker SFB 874
Ulf Eysel Speaker IGSN

Session 1 9:25 Cellular Mechanisms

9:30 **Siegrid Löwel**
 Department of Systems Neuroscience, Göttingen University
**The dynamic architecture of the adult visual cortex
 or how can I keep my brain young?**

10:05 **Tobias Moser**
 University Medical Center Göttingen / Max Planck Institute for Biophysical Chemistry
**Inner hair cells decompose auditory signals
 through active zones with different Ca²⁺-influx**

10:40 **Coffee break / Poster Session**

12:00 **Dirk Dietrich**
 Laboratory of Experimental Neurophysiology, Department of Neurosurgery,
 University of Bonn Medical School
**Activity-dependent myelination and neuro-glia synapses:
 role of oligodendrocyte precursor cells**

12:35 **Lunch break**

SENSORY PROCESSES: FROM MOLECULES TO COGNITION

April 12th - Afternoon

Session 2: 13:40 Neuronal Networks and Circuits

13:45 **Benedikt Grothe**
Ludwig-Maximilians-University München /
Max Planck Institute of Neurobiology, Martinsried
The evolution of neuronal circuits for sound localization

14:20 **Rohini Kuner**
Institute of Pharmacology, Heidelberg University
Cortical circuits in nociception and chronic pain

14:55 Coffee break / **Brainstorming session (1) and (2)**

15:45 **Mark Hübener**
Max Planck Institute of Neurobiology, Martinsried
**How sensory experience and learning
change neuronal responses in the visual cortex**

SENSORY PROCESSES: FROM MOLECULES TO COGNITION

April 13th - Morning

Session 3 **9:15** **Neuronal Oscillations and Cellular Communication**

9:20 **Heinz Beck**
Department of Epileptology, Experimental Epileptology and Cognition Research,
Life and Brain Center, University of Bonn Medical Center

Mechanisms of sparse coding in the dentate gyrus

9:55 **Andreas Draguhn**
Institute of Physiology and Pathophysiology, Heidelberg University

**Multineuronal activity patterns and
hippocampal network oscillations**

10:30 **Coffee break / Poster Session**

11:30 **Andreas Engel**
Department of Neurophysiology and Pathophysiology, University Medical Center
Hamburg-Eppendorf

Intrinsic Coupling Modes and Cognition

12:05 **Lunch break**

SENSORY PROCESSES: FROM MOLECULES TO COGNITION

April 13th - Afternoon

Session 4 **13:10** **Sensory Integration and Representation**

13:15 **Denise Manahan-Vaughan**
Department of Neurophysiology, Ruhr University Bochum
**Neuronal processing and integration of sensory information
by the hippocampus**

13:50 **Coffee break / Brainstorming session (3) and (4)**

14:40 **Jan Born**
Institute for Medical Psychology and Behavioural Neurobiology, University Tübingen
Sleep, Memory and Perception

15:15 **Onur Güntürkün**
Department of Biopsychology, Ruhr University Bochum
Visual categories in the pigeon brain

16:00 **FAREWELL** – end of conference

