

Meeting of the GBM study group
„Molecular Neurobiology“

„Perspectives in Molecular Neurobiology“

September 13-15, 2012
RUB Veranstaltungszentrum, Room 2b, Bochum

Preliminary Program:

Thursday:

- 16.00 Registration
 17.00 **Opening by Rolf Heumann**
 17.15 **Eckart Gundelfinger**, Magdeburg (DE)
Molecular organization and plasticity of the cytomatrix at the active zone
 18.15 Break
 18.30 **Naoyuki Inagaki**, Nara (JP)
Mechano systems biological analysis of neuronal polarity formation
 19.30 Get-together

Friday:

Session 1: *Live cell imaging in the study of neuronal development and neurodegeneration (Chair: Roland Brandt)*

- 9.00 **Roland Brandt**, Osnabrück (DE)
Imaging Tau's interactions in living neurons
 9.30 **Lucia Poggi**, Heidelberg (DE)
Developing neuronal diversity through lineage and asymmetric cell division
 10.00 **Christian Tackenberg**, Zürich(CH)
Neuronal and synaptic toxicity of beta-amyloid and tau – Role of NR2A- and NR2B-NMDA receptors
 10.20 Progress report selected from Poster Abstracts
 10.30 Break

Session 2: *Regulators participating in differentiation and connectivity of neural cells (Chair: Gerald Thiel)*

- 11.00 **Gerald Thiel**, Homburg (DE)
Signaling and gene transcription following activation of G protein-coupled designer receptors
 11.30 **Ulrich Boehm**, Homburg (DE)
Neural circuitry underlying reproductive behavior and physiology in the central nervous system
 11.50 Poster Abstract
 12.00 Lunch Break & Poster session & Business Meeting

Session 3: *Intracellular transport and signaling (Chair: Rolf Heumann)*

- 15.00 **Michael Sendtner**, Würzburg (DE)
Postal Codes for axonal mRNA transport in neurons
 15.30 **Volkmar Lessmann**, Magdeburg (DE)
BDNF signaling in the formation, maturation and plasticity of glutamatergic and GABAergic-synapses

- 16.00 **Christoph Goemans**, Bochum (DE)
The role of the mitochondrial protein import translocases in apoptotic and non-apoptotic cell death
- 16.20 Poster Abstract
- 16.30 Break

Session 4: *Peroxisome proliferator-activated receptors, a new concept for transcription factor control of neurosignaling and neuroprotection (Chair: Georg Reiser)*

- 17.00 **Georg Reiser**, Magdeburg (DE)
The new model of a PPAR triad in the brain with (PPAR) β/δ as integrator
- 17.30 **Luisa Minghetti**, Rome (IT)
PPAR, mitochondrial functions and calcium
- 18.00 **Michael Heneka**, Bonn (DE)
PPAR and protection in ischemia
- 18.20 Poster Abstract
- 18.30 Dinner & More

Saturday:

Junior-GBM lecture:

- 9.00 **Kai Erdmann**, Sheffield (UK)
Molecular mechanism of Lowe syndrome
- 9.30 Poster Abstract
- 9.45 Poster Abstract

Session 5: *Myelin (Chair: Klaus Nave)*

- 10.00 **Klaus Nave**, Göttingen (DE)
Myelinating glial cells – an introduction
- 10.10 **Michael Wegner**, Erlangen (DE)
From genes to chromatin: The multiple roles of Sox10 during myelination
- 10.40 **Hauke Werner**, MPI Göttingen (DE)
Proteomic and genetic dissection of myelination
- 11.00 **Mika Simons**, MPI Göttingen (DE)
Mechanisms of myelin membrane growth
- 11.30 Break and Poster discussion

Session 6: *Stem cells with potential for neuronal regenerative therapies (Chair: Barbara Kaltschmidt)*

- 12.00 **Jared Sternecker**, Münster (DE)
Human Neural Plate Border Stem Cells for High-Throughput Disease Modelling
- 12.30 **Alexander Storch**, Dresden (DE)
Stem cell-based therapies in Parkinson's disease: future hope or current treatment option?
- 13.00 **Darius Widera**, Bielefeld (DE)
Highly efficient generation of glutamatergic and dopaminergic neurons from human inferior turbinate stem cells
- 13.20 Poster Abstract
- 13.30 **Closing Remarks & Poster prize**