

"The INs and OUTs of Glia"

PROGRAM

Monday, February 16, 2026

09:00 **Welcome Note, Klaus-Armin Nave (MPI-NAT)**

Session 1: *The Making of Oligodendrocytes and Myelin*

Chair: Charles ffrench-Constant (University of East Anglia)

09:15 **Leda Dimou (University of Ulm)**

NG2-glia at the crossroads: from health to disease

09:45 **Amit Agarwal (University of Heidelberg)**

The art of wrapping: how myelinating glia perfect sheath geometry

10:15 **Hauke Werner (MPI-NAT)**

Correlative microscopy and proteome analysis identifies molecular heterogeneity of myelin

10:45 - 11:15 **Coffee & Tea break**

Session 2: *Oligodendrocytes in Disease*

Chair: Johannes Hirrlinger (University of Leipzig, MPI-NAT)

11:15 **Mika Simons (DZNE, Technical University Munich)**

Myelination from development to adult

11:45 **Goncalo Castelo-Branco (Karolinska Institutet)**

Transitions of oligodendroglia to disease-associated states in MS: Insights from single-cell and spatial omics

12:15 - 13:30 **Lunch break**

Session 3: *Learning from the Periphery: Schwann Cells in Disease*

Chair: Michael Sereda (U. Göttingen, MPI-NAT)

13:30 **Robert Fledrich (University of Leipzig)**

Size matters: axon caliber-driven control of myelin quality

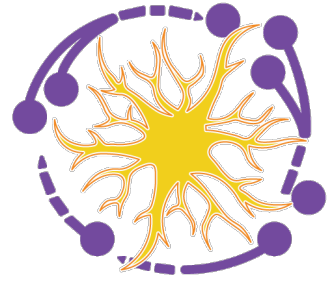
14:00 **Ruth Stassart (University of Leipzig)**

Glial determinants of peripheral nerve repair

14:30 **Gerd Meyer zu Hörste (University of Münster)**

Novel approaches to understanding the immuno-pathology of human peripheral nerves

15:00 - 15:30 **Coffee & Tea break**



Session 4: Unconventional Neuron-Glia Interactions

Chair: Klaus-Armin Nave (MPI-NAT)

- 15:30 Robin Franklin (Altos Labs Cambridge Institute of Science)**
Schwann cells in the CNS
- 16:00 Evi Krämer (University of Mainz)**
OUTbreak: glial extracellular vesicles and their journey through the brain (and body)
- 16:30 Michelle Monje (Stanford University)**
Neuron-oligodendroglial interactions in health and disease: from cognition to cancer
- 17:00 Oriol Vinyals jr. (Google DeepMind)**
Towards a brain-machine-interface
- 18:30 Aperó**
- 19:30 Dinner buffet**

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Session 5: Neuron-Glia Interactions

Chair: Wiebke Möbius (MPI-NAT)

- 09:00 Maarten Kole (University of Amsterdam)**
New nanoelectronics insights on the myelin sheath
- 09:30 Julia Edgar (University of Glasgow)**
Transport routes across myelin: myelin motors matter
- 10:00 Aiman Saab (University of Zürich)**
The metabolic symphony of white matter
- 10:30 Carlos Matute (University of the Basque Country)**
Brain myelin as an energy source in humans

11:00 - 11:30 Coffee & Tea break

Session 6: Glia in Alzheimer's Disease

Chair: Soumen Das (MPI-NAT)

- 11:30 Constanze Depp (Harvard University)**
Defective myelin, microglia and amyloid-beta: a trio infernale driving neurodegeneration
- 12:00 Andrew Sasmita (University College Cork)**
Rethinking amyloid- β production through the lens of oligodendrocytes and axons



- 12:30** **Simone Eggert (MPI-NAT)**
IN and OUT of microglia - A β clearance under acidic conditions
- 13:00 - 14:00** **Lunch break**

Session 7: *Responsive Glia*

Chair: Markus Schwab (University of Leipzig)

- 14:00** **Shane Liddelow (NYU Grossman School of Medicine)**
What is a reactive astrocyte, and what do they do?
- 14:30** **Gesine Saher (MPI-NAT)**
Towards understanding brain ketone body metabolism
- 15:00** **Anne Schäfer (MPI for Biology of Aging)**
"Adaptive" immunity by microglia
- 15:30 - 16:00** **Coffee & Tea break**

Session 8: *The Ageing Brain*

Chair: Jacqueline Trotter (University of Mainz)

- 16:00** **Sandra Goebbels (MPI-NAT)**
Myelin aging and turnover
- 16:30** **Tal Iram (Weizmann Institute)**
Preserving myelin integrity in aging and neurodegenerative diseases

Session 9: *Closing Lecture*

- 17:00** **Helmut Kettenmann (MDC, Shenzhen University of Advanced Technology)**
The concept of glia – a historical journey
- 17:30** **Klaus-Armin Nave (MPI-NAT)**
Closing remarks
- 18:30** **Dinner buffet**
- 20:00** **Collegial Evening**

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