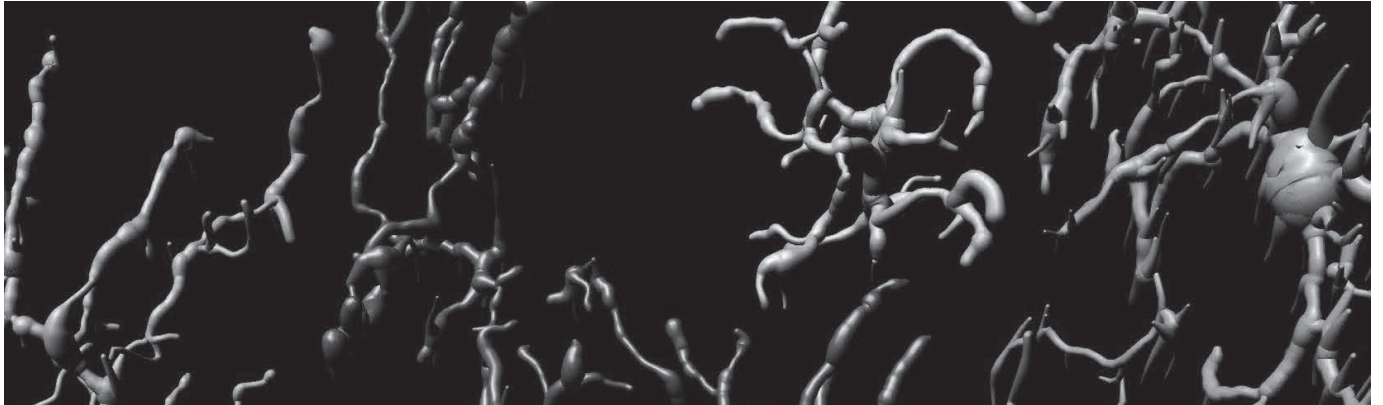


Ⅲ 国際シンポジウム



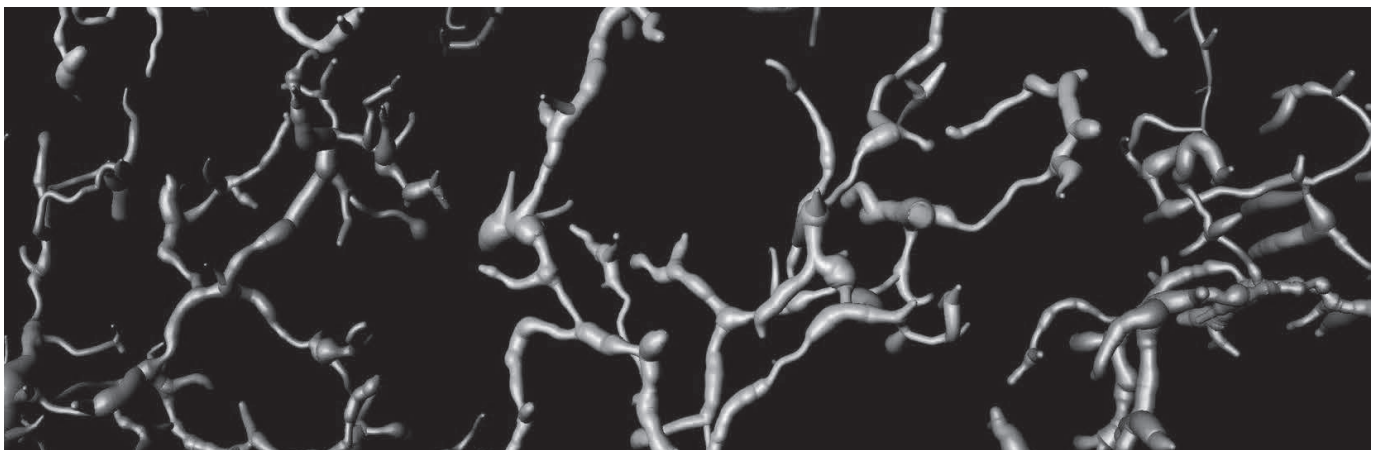
ASPIREGlia

Adopting Sustainable Partnerships for Innovative Research Ecosystem



MIB-ASPIRE Glia International Joint Symposium
~The 34th Hot Spring Harbor International
Symposium, 2nd ASPIRE Glia Symposium~
4th-6th July 2025

Institute of Neuropathology
University of Freiburg, Germany





Venue: Seminar Room in the Neurocenter (Neurozentrum),
Breisacherstraße 64, D-79106 Freiburg Germany

Day 1

Friday, July 4th

13:00(CEST) Opening

Welcome and Overview of the Consortium
Hiroaki Wake, Marco Prinz, Takahiro Masuda

Session 1: Microglia and Macrophage 1

Chair: Yuki Hattori

- 13:10(L) **Hiroaki Wake**
Division of Multicellular Circuit Dynamics, National Institute for Physiological Sciences
Microglia and macrophage in neurodegenerative disease
- 13:30(S) **Eva Simoncicova**
University of Victoria, Canada
Sex-specific responses of microglia to an inflammatory stimulus exposure in aged C57BL6J mice
- 13:45(L) **Chintan Chhatbar**
Institute of Neuropathology, University of Freiburg, Germany
Spatial atlas of microglia states across CNS pathologies
- 14:05(S) **Zhongtian Guo**
Division of Multicellular Circuit Dynamics, National Institute for Physiological Sciences
The mechanisms of synapse loss in the early stages of Alzheimer's disease
- 14:20(L) **Takahiro Masuda**
Division of Molecular Neuroimmunology, Medical Institute of Bioregulation, Kyushu University
Understanding the multifaceted characteristics of brain macrophage

ASPIRE meeting -1 (on-site only)

Young Trainee Interaction Working Groups (on-site only)

Dinner (on-site only)



Day 2

Saturday, July 5th

Session 2: Astrocyte and Oligodendrocyte 1

Chair: Hiroaki Wake

- 9:00(L) **Schuichi Koizumi**
University of Yamanashi
Microglial transplantation or replacement and brain functions
- 9:20(S) **Bolati Wulaer**
RIKEN Center for Brain Science
Think local, act global: Astrocyte regulation of brain-wide circuitry
- 9:35(L) **Jun Nagai**
RIKEN Center for Brain Science
Probing astrocyte-neuron dynamics during learning
- 9:55-10:10 **Coffee break**

Session 3: CNS and others

Chair: Jun Nagai

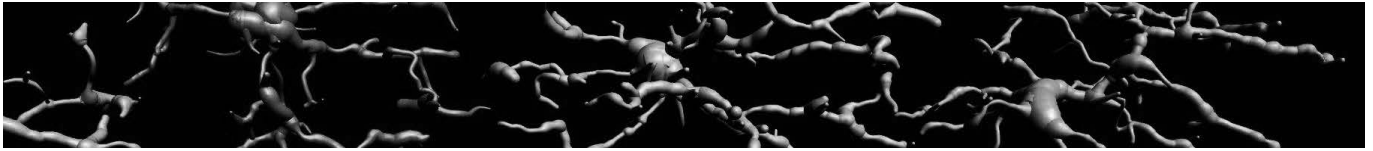
- 10:10(L) **Minako Ito**
Division of Allergy and Immunology, Medical Institute of Bioregulation, Kyushu University
Characterization of T cell functions in central nervous system diseases
- 10:30(S) **Lance Fredrick Pahutan Bosch**
Institute of Neuropathology, University of Freiburg, Germany
The therapeutic capacity of spatially distinct microglial subsets during neurodegeneration
- 10:45(L) **Tetsuya Takano**
Institute for Advanced Study Medical Institute of Bioregulation, Kyushu University
Spatial Proteomics Uncovers the Molecular Architecture of Neural Circuits
- 11:05(S) **Mio Inoue**
Department of Anatomy and Molecular Cell Biology, Nagoya University Graduate School of Medicine
Neuronal circuit for multisensory integration in higher visual cortex
- 11:20(S) **Noriaki Fukatsu**
Division of Multicellular Circuit Dynamics, National Institute for Physiological Sciences
OPTIC: Rapid and Efficient Semi-automated Analysis Toolbox for Mul-cellular Calcium Imaging Data
- 11:35-12:30 **Lunch break**

Session 4: Microglia and Macrophage 2

Chair: Marco Prinz

- 12:30(L) **Rosa Paolicelli**
University of Lausanne, Switzerland
Microglia dysfunction in the pathogenesis of neurodegeneration
- 12:50 (S) **Yuta Kashiwagi**
Department of Cellular Neurobiology, Graduate School of Medicine, The University of Tokyo
Imaging neuronal and glial cell structure in thick brain tissue using super-resolution techniques
- 13:05(L) **Yuki Hattori**
Graduate School of Medicine, Nagoya University
Cellular behaviors shaping microglial diversity during early brain development
- 13:25 (S) **Maximilian Fliegau**
Institute of Neuropathology, University of Freiburg, Germany
Distinct repopulation features of macrophages at CNS borders

ASPIRE meeting-2 (on-site only)



Day 3

Sunday, July 6th

Session 5: Astrocyte and Oligodendrocyte 2

Chair: Schuichi Koizumi

- 9:00(L) **Eiji Shigetomi**
University of Yamanashi
Spatiotemporal ATP/adenosine dynamics in neuron-glia interaction
- 9:20(S) **Shota Sugio**
Division of Multicellular Circuit Dynamics, National Institute for Physiological Sciences
Activity-dependent changes in oligodendrocytes regulate axon conduction and its effect on motor task
- 9:35(S) **Akari Hashimoto**
Max Planck Institute
Microglia in multi-modal sensory integration in higher visual areas
- 9:50-10:10 **Coffee break**

Session 6: Microglia and Macrophage 3

Chair: Rosa Paolicelli

- 10:10(L) **Ryuta Koyama**
National Center of Neurology and Psychiatry, Japan
Phagocytic role of microglia during development and disease
- 10:30(S) **Hatsumi Nakagawa**
Department of Anatomy and Molecular Cell Biology, Nagoya University Graduate School of Medicine
Visualization of P2Y₁₂ Receptor for Microglial Process Dynamics in health and disease
- 10:45(S) **Takahiro Kochi**
Division of Molecular Neuroimmunology, Medical Institute of Bioregulation, Kyushu University
FcγR- and CD9-dependent synapse engulfing microglia in the thalamus drives cognitive impairment following cortical brain injury
- 11:00(S) **Yutaro Saito**
Department of Anatomy and Molecular Cell Biology, Nagoya University Graduate School of Medicine
Visualization of microglial phenotypic changes using P2Y₁₂ receptor-targeted compound in MRI
- 11:15(S) **Makenna Gargus**
University of Victoria, Canada
Non-invasive vagus nerve stimulation as a preventative treatment strategy in maternal immune activation influences offspring behavioural and neurodevelopmental outcomes

Closing remarks

ASPIRE meeting-3 (on-site only)

Young Trainee Interaction Working Groups (on-site only)

Final Remarks

