



universität freiburg



Charité – Universitätsmedizin Berlin  
Max Planck Institute  
of Immunobiology and Epigenetics  
Medical Center – University of Freiburg  
University of Freiburg  
Weizmann Institute of Science

sponsored by



### Coordination

Tanja Wilde  
Institute of Neuropathology  
Medical Center – University of Freiburg  
Phone: +49 761 270 - 51190  
[tanja.wilde@uniklinik-freiburg.de](mailto:tanja.wilde@uniklinik-freiburg.de)

More information on the TRR 167

[www.sfb-trr167.uni-freiburg.de/](http://www.sfb-trr167.uni-freiburg.de/)



funded by 

### Invited speakers

Daniel Berchtold, Berlin, Germany  
Bart Eggen, Groningen, The Netherlands  
Daniel Erny, Freiburg, Germany  
Yuki Hattori, Nagoya, Japan  
Michael Heneka, Esch-Belval, Luxemburg  
Jürgen Knoblich, Vienna, Austria  
Takahiro Masuda, Fukuoka, Japan  
Doron Merkler, Geneva, Switzerland  
Anna Molofsky, San Francisco, USA  
Rosa Chiara Paolicelli, Lausanne, Switzerland  
Anne-Katrin Pröbstel, Basel, Switzerland  
Francisco Quintana, Boston, USA  
Serge Rivest, Québec, Canada  
Bart De Strooper, London, UK  
Simon Schäfer, Munich, Germany

### Stand bei Drucklegung

Herausgeber: © Universitätsklinikum Freiburg | 2024  
Redaktion: Institut für Neuropathologie  
Gestaltung: Medienzentrum | Universitätsklinikum Freiburg

### Meeting Venue



**Historisches Kaufhaus Freiburg**  
Münsterplatz 24, 79098 Freiburg

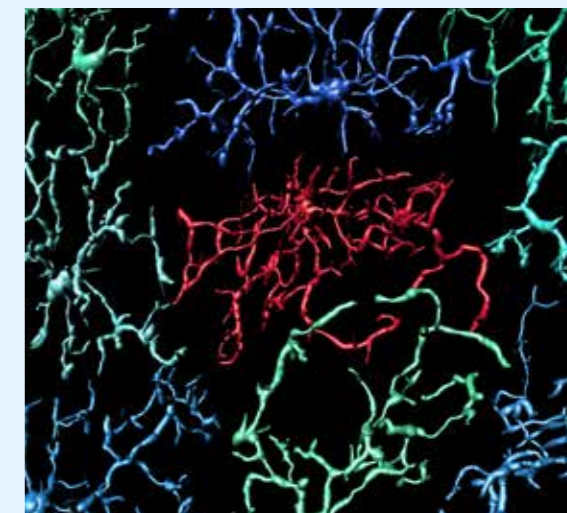
### DFG – Collaborative Research Centre/ Transregio (CRC/TRR 167)

Development, function and  
potential of myeloid cells in  
the central nervous system



### Invitation

## 2nd INTERNATIONAL Novo Nordisk - NeuroMac SYMPOSIUM on Neuroimmunology



**September 16 - 17, 2024**

Freiburg

Dear Colleagues and Friends,

It is our great pleasure to welcome you to our international symposium on neuroimmunology organized by our Collaborative Research Centre/Transregio 167 (CRC/TRR 167) "Development, function and potential of myeloid cells in the central nervous system" and its NeuroMac School. The CRC/TRR 167 is funded by the German Research Foundation (DFG). The overall aim of the initiative was the coordinated investigation of the functional, spatial, temporal and developmental diversity of myeloid cells, including microglia, perivascular cells, meningeal macrophages and disease-associated blood-borne monocytes. There were major achievements within the funding period of this multidisciplinary research network such as 1. the identification of the microglia and CNS-associated macrophages precursors, in the yolk sac, 2. the generation of new genetic tools to target microglia, 3. the establishment of the tissue-specific single-cell signature of macrophages and some more. We hope that these discoveries will open new avenues in myeloid cell research in both basic and clinical science in the future.

Renowned speakers are going to cover these topics and connect molecular mechanisms with clinical observations and the development of novel treatment strategies.

We thank you for your participation and contribution and hope you will enjoy your stay in Freiburg.

  
Josef Priller

  
Marco Prinz



## 2nd International Novo Nordisk – NeuroMac Symposium on Neuroimmunology

### PROGRAM

#### SEPTEMBER 16<sup>th</sup>, 2024 / MONDAY

08.30 a.m. Registration

#### OPENING & KEYNOTE

09.00 a.m. Welcome and Introduction

09.15 a.m. Opening Keynote: The cellular phase of Alzheimer's disease  
Bart De Strooper, London, UK

10.00 a.m. Coffee Break (30 min)

#### SESSION 1: NEW TECHNOLOGIES IN NEUROSCIENCES

Chairs: Olaf Groß, Martin Kerschensteiner

10.30 a.m. Using cerebral organoids to model human-specific aspects of brain development  
Jürgen Knoblich, Vienna, Austria

11.10 a.m. Building human stem cell-based models to study brain-microglia interactions in health and disease  
Simon Schäfer, Munich, Germany

11.30 a.m. Astrocytes and Inflammatory Signaling  
Francisco Quintana, Boston, USA

12.10 p.m. Lunch Break (70 min)

#### SESSION 2: DEVELOPMENT OF MYELOID CELLS

Chairs: Lukas Amann, Klaus-Peter Knobloch

01.20 p.m. Targeting CNS macrophages for genetic manipulation  
Takahiro Masuda, Fukuoka, Japan

02.00 p.m. Spatiotemporal control of microglial colonization in the developing brain  
Yuki Hattori, Nagoya, Japan

02.40 p.m. Coffee Break (30 min)

#### SESSION 3: INTERACTION OF IMMUNE AND NEURAL CELLS

Chairs: Robert Zeiser, Seija Lehnardt

03.10 p.m. Cytokine regulation of CNS development  
Anna Molofsky, San Francisco, USA

03.50 p.m. Microbiota-immune crosstalk in neuroinflammation  
Anne-Katrin Pröbstel, Basel, Switzerland

04.30 p.m. Postersession

05.00 p.m. End

07.00 p.m. Speakers's Dinner (Speakers only)

### PROGRAM

#### SEPTEMBER 17<sup>th</sup>, 2024 / TUESDAY

09.00 a.m. Welcome and Posteraward

#### SESSION 4: DISEASE OF THE CNS I

Chairs: Anne Kathrin Lößlein, Thomas Blank

09.10 a.m. Human microglia diversity in development and disease  
Bart Eggen, Groningen, The Netherlands

09.50 a.m. Early roles of microglia in the pathogenesis of neurodegeneration  
Rosa Chiara Paolicelli, Lausanne, Switzerland

10.30 a.m. Coffee Break (30 min)

#### SESSION 5: DISEASE OF THE CNS II

Chairs: Melanie Meyer-Lühmann, Shima Safaiyan

11.00 a.m. Neuroprotective properties of patrolling monocytes via NOD2 signaling  
Serge Rivest, Québec, Canada

11.40 a.m. Crosstalk between myeloid cells, pericytes, B and T lymphocytes in chronic neuroinflammation after stroke  
Daniel Berchtold, Berlin, Germany

12.00 a.m. Lunch Break (60 min)

#### SESSION 6: MECHANISMS OF MYELOID CELL ACTIVATION

Chairs: Chotima Böttcher, Philipp Henneke

01.00 p.m. Innate immune activation in Alzheimer's disease  
Michael Heneka, Esch-Belval, Luxemburg

01.40 p.m. Unraveling long-term neuronal alterations following an immunological attack  
Doron Merkler, Geneva, Switzerland

02.20 p.m. Microglial features are mouse strain-dependent and divergently controlled by host microbiota  
Daniel Erny, Freiburg, Germany

02.40 p.m. Closing words