



Charité – Universitätsmedizin Berlin
Max Planck Institute
of Immunobiology and Epigenetics
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Coordination

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Please contact Tanja Steinhauser for registration until January 31, 2020 at the latest. We have only a limited contingent of hotel rooms.

More information on the TRR 167

www.sfb-trr167.uni-freiburg.de/



funded by 

Invited speakers

Frederic Geissmann (New York, USA)	Kiavash Movahedi (Brussels, Belgium)
Diego Gomez-Nicola (Southampton, UK)	Francisco J. Quintana (Boston, USA)
Martin Kerschensteiner (Munich, Germany)	Serge Rivest (Quebec, Canada)
Eicke Latz (Bonn, Germany)	Aysa Rolls (Haifa, Israel)
Veronique Miron (Edinburgh, UK)	Tony Wyss-Coray (Stanford, USA)

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Hotels

**Hotel Albrechtshof and Hotel Allegra
(Depandance Hotel Albrechtshof)**
Albrechtstraße 8, 10117 Berlin
www.hotel-albrechtshof.de

Meeting Venue (7 min walk from both hotels)



Haus der Land- und Ernährungswirtschaft
Claire-Waldoff-Straße 7, 10117 Berlin
(No parking space in close proximity!)

Directions

Arriving at Tegel Airport, take the bus TXL heading to the Central Train Station (20 min). Then take the S-Bahn (S5, S7, S75) heading to “Alexanderplatz” and exit at the next station “Friedrichstraße” (5 min).

Arriving at Schönefeld Airport, take the S-Bahn (S9) heading to “Spandau” or take a local train (RE7 or RB14), in both cases exit at station “Friedrichstraße” (35-45 min).

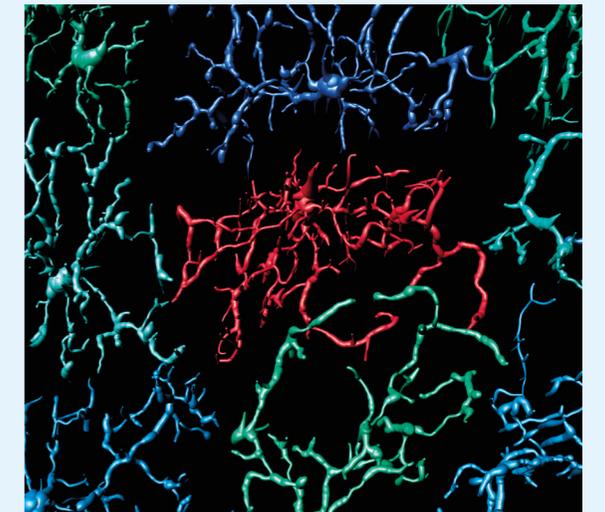


**DFG – Collaborative Research Centre/
Transregio (CRC/TRR 167)**
Development, function and
potential of myeloid cells in
the central nervous system



Invitation

2ND INTERNATIONAL SYMPOSIUM on Brain Myeloid Cells



April 23 - 25, 2020

Berlin

Dear Colleagues and Friends,

It is our great pleasure to welcome you to our 2nd and final international symposium on brain myeloid cells 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 precursor in the yolk sac, 2. the generation of new genetic tools to target microglia, 3. the establishment of the tissue-specific epigenetic 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 Berlin.



Josef Priller



Marco Prinz



Program

APRIL 23rd, 2020 / THURSDAY

02.00 p.m. Registration and snack

03.00 p.m. Welcome and Introduction

SESSION: PHENOTYPING OF CNS MYELOID CELLS

Chairs: Olaf Groß, Seija Lehnardt

03.10 p.m. **Aysa Rolls, Haifa, Israel**
Neuronal control of central and peripheral immunity

03.35 p.m. **Frederic Geissmann, New York, USA**
Microglia somatic mutations and neurodegeneration

04.00 p.m. **Marco Prinz, Freiburg, Germany, CRC 167**
Genomic and spatial analysis of myeloid cell expansion in the CNS

04.15 p.m. **Steffen Jung, Rehovot, Israel, CRC 167**
Probing microglial memory – a longitudinal analysis of the microglia compartment

04.30 p.m. **Ido Amit, Rehovot, Israel, CRC 167**
Single cell genomics analysis and characterization of microglia in normal brain physiology and in neurodegenerative diseases

04.45 p.m. Break (15 min)

SESSION: MECHANISMS OF MYELOID CELL ACTIVATION

Chairs: Chotima Böttcher, Tim Lämmermann

05.00 p.m. **Eicke Latz, Bonn, Germany**
Myeloid cell metabolic and functional reprogramming by innate immune stimulation

05.25 p.m. **Christian Madry, Berlin, Germany**
Ion channels and receptors as determinants of microglial membrane voltage and motility in a model of Alzheimer's disease

05.40 p.m. **Olaf Groß, Freiburg, Germany, CRC 167**
The NLRP3 inflammasome, a guardian of myeloid cell integrity

05.55 p.m. **Edward Pearce, Freiburg, Germany**
Triacylglycerol synthesis as an underlying requirement for inflammatory macrophage activation

06.10 p.m. End of presentations day I

APRIL 24th, 2020 / FRIDAY

SESSION: DISEASES OF THE CNS I

Chairs: Christian Meisel, Steffen Jung

09.00 a.m. **Tony Wyss-Coray, Stanford, California**
Microglia dysfunction during aging and disease

09.25 a.m. **Serge Rivest, Quebec, Canada**
S14 Glial phagocytic clearance in health and disease

09.50 a.m. **Seija Lehnardt, Berlin, Germany, CRC 167**
microRNAs as signaling molecules in CNS inflammation

10.05 a.m. **Andreas Vlachos, Freiburg, Germany**
Role of microglia in homeostatic adaptation following denervation

10.20 a.m. **Andreas Meisel and Christian Meisel, Berlin, Germany, CRC 167**
Role of myeloid cells in autoreactive CNS antigen-specific B-cell responses and delayed cognitive decline in stroke

10.35 a.m. **Antigoni Triantafyllopoulou, Berlin, Germany**
Innate cellular networks determine tissue damage in systemic lupus erythematosus

10.50 a.m. Coffee Break (15 min)

11.05 a.m. Poster session and Meet the Speaker (School)

12.00 noon Lunch buffet (60 min)

SESSION: DISEASES OF THE CNS II

Chairs: Josef Priller, Thomas Blank

01.00 p.m. **Diego Gomez-Nicola, Southampton, UK**
Targeting neuroinflammation in chronic neurodegeneration: why, when and how?

01.25 p.m. **Veronique Miron, Edinburgh, UK**
Regenerative functions of myeloid cells in central nervous system remyelination

01.50 p.m. **Philipp Henneke, Freiburg, Germany, CRC 167**
Cytomegalovirus subverts macrophage identity

02.05 p.m. **Chotima Böttcher, Berlin, Germany, CRC 167**
Functional characterization of monocytes and macrophages in neuropsychiatric disorders

02.20 p.m. **Robert Zeiser, Freiburg, Germany, CRC 167**
The role of myeloid cells during GvHD of the CNS

02.35 p.m. Break (15 min)

SESSION: INTERACTION OF IMMUNE AND NEURAL CELLS

Chairs: Robert Zeiser, Ido Amit

02.50 p.m. **Francisco Quintana, Boston, USA**
Role of Astrocytes in MS pathogenesis

03.15 p.m. **Martin Kerschensteiner, Munich, Germany**
In vivo analysis of phagocyte actions in the inflamed CNS

03.40 p.m. **Christoph Klose, Berlin, Germany**
Neuronal regulation of group 2 innate lymphoid cells

03.55 p.m. **Josef Priller, Berlin, Germany, CRC 167**
Modelling microglial function using human induced pluripotent stem cells

04.10 p.m. **Daniel Erny and Thomas Blank, Freiburg, Germany, CRC 167**
Impact of host microbiota on microglia during normal and pathological aging

04.25 p.m. **Klaus-Peter Knobeloch, Freiburg, Germany and Antje Beling, Berlin, Germany**
Regulation of microglia activation and interference signalling by USP-18

04.40 p.m. End of presentations day II

07.00 p.m. "Speakers' and Editors' Dinner" (Speakers, Editors, Pls as well)

APRIL 25th, 2020 / SATURDAY

08.25 a.m. Poster Award

SESSION: MYELOID CELLS AT CNS INTERFACES

Chairs: Andreas Meisel, Philipp Henneke

08.30 a.m. **Kiavash Movahedi, Brussels, Belgium**
Heterogeneity and dynamics of brain macrophages: from homeostasis to disease and back

08.55 a.m. **Tim Lämmermann, Freiburg, Germany, CRC 167**
Role of integrin receptors for myeloid cell trafficking and motility in the CNS

09.10 a.m. **Katrin Kierdorf, Freiburg, Germany**
In vitro adaptation of organotypic factors to understand tissue macrophage immunometabolism

09.25 a.m. Concluding Remarks