



Microglia 2018

EMBO WORKSHOP



We have moved our website to embl.org/events. The content below is no longer being updated.

EMBL Courses and Conferences during the Coronavirus pandemic

With the onsite programme paused, many of our events are now being offered in virtual formats.

Registration is open as usual for many events, with back-up plans in place to move further courses and conferences online as necessary. Registration fees for any events affected by the COVID-19 disruption are fully refundable.

More information for participants of events at EMBL Heidelberg can be found [here](#).

Programme

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Day 1 - Sunday 18 March 2018

Time	Speaker
11.30 - 13.15	Registration and Lunch
13.15 - 13.30	Opening remarks

Time	Speaker
	Keynote Lecture
13.30 - 14.30	Nature and nurture of microglia identity and function Christopher K. Glass - <i>University of California, San Diego, USA</i>
Session 1: Ontogeny and Diversity	
Chair: Amanda Sierra	
	Understand Microglia Ontogeny
14.30 - 15.00	Florent Ginhoux - <i>Singapore Immunology Network (SigN), Agency for Science, Technology and Research (A*STAR), Singapore</i>
	Genetic analysis of glial development and function in zebrafish
15.00 - 15.30	William S. Talbot - <i>Stanford University, United States of America</i>
15.30 - 16.00	Coffee Break and meet the speakers
	Microglia state changes during development and disease
16.00 - 16.30	Beth Stevens - <i>Boston Children's Hospital, United States of America</i>
	Regulation of Brain Macrophage Development
16.30 - 17.00	Melanie Greter - <i>University of Zurich, Switzerland</i>
	A combination of ontogeny and CNS environment establishes microglial identity
17.00 - 17.15	Chris Benett - <i>Stanford University, United States of America</i>
	BM-derived parenchymal brain macrophages differ from microglia in transcriptome, epigenome and responsiveness to challenge
17.15 - 17.30	Steffen Jung - <i>Weizmann Institute of Science, Israel</i>
	Zebrafish adult, but not embryonic microglia derive from c-myb dependent hematopoietic progenitors
17.30 - 17.45	Valerie Wittamer - <i>Universite Libre de Bruxelles (ULB), Belgium</i>
	Microglia-myelinogenic and neuroprotective cells in the CNS
17.45 - 18.00	Agnieszka Wlodarczyk - <i>Institute for Molecular Medicine, University of Southern Denmark, Denmark</i>
18.00	Dinner - EMBL Canteen
19.30	Bus leaves for Walking Tour downtown Heidelberg Bus leaves for conference bus stops

Day 2 - Monday 19 March 2018

Time**Speaker****Session 2: Microglia Physiology****Chair: David Atwell**

09.00 - 09.30	How do microglia and astrocytes coordinate synapse elimination during development? Mariko Bennett - <i>Stanford University, United States of America</i>
09.30 - 09.45	Cerebellar microglia are dynamically unique and survey Purkinje neurons in vivo Rianne Stowell - <i>University of Rochester, United States of America</i>
09.45 - 10.00	Defective cholesterol clearance limits remyelination in the aged central nervous system Ludovico Cantuti-Castelvetri - <i>German Center for Neurodegenerative Disease Research (DZNE), Germany</i>
10.00 - 10.30	Microglial ITAM/ITIM-signaling receptors for maintenance of the immune homeostasis in the brain Harald Neumann - <i>University of Bonn, Germany</i>
10.30 - 11.00	Coffee Break and meet the speakers
11.00 - 11.15	Inflammatory microglia mediate early synapse loss in multiple models of multiple sclerosis Sebastian Werneburg - <i>University of Massachusetts Medical School, United States of America</i>
11.15 - 11.30	Deficiency of Progranulin (PGRN) results in accelerated prion diseases Caihong Zhu - <i>Institute of Neuropathology, Switzerland</i>
11.30 - 11.45	Neuroprotective microglia and neurotoxic monocytes in epilepsy Long-Jun Wu - <i>Mayo Clinic, United States of America</i>
11.45 - 12.00	Catatonia - starting to understand mechanisms involving myelin Hana Janova - <i>Max Planck Institute of Experimental Medicine, Germany</i>
12.00 - 13.30	Lunch - EMBL Foyer
12.30 - 13.30	Panel Discussion - Let's mingle with Industry, ATC Courtyard Room
	Session 3: Microglia and the synapse
	Chair: Marco Prinz
13.30 - 14.00	Formation of Cortical Local Circuits by Microglia in Development Junichi Nabekura - <i>National Institute for Physiological Sciences, Japan</i>

Time	Speaker
14.00 - 14.30	Molecular dissection of activity-dependent microglial function within neural circuits Dorothy P. Schafer - <i>University of Massachusetts Medical School, United States of America</i>
14.30 - 15.00	Do microglia really eat synapses? Cornelius Gross - <i>EMBL Rome, Italy</i>
15.00 - 15.30	Coffee Break and meet the speakers
15.30 - 16.00	Microglial cells regulate the functional maturation of cortical circuits during postnatal development Etienne Audinat - <i>University of Montpellier, France</i>
16.00 - 16.15	Tau pathology induced synapse labeling by C1q leads to removal of synapses by microglia Borislav Dejanovic - <i>Genentech, United States of America</i>
16.15 - 16.30	Brain hyperthermia activates microglia to engulf inhibitory synapses in epilepsy Ryuta Koyama - <i>The University of Tokyo, Japan</i>
16.30 - 17.00	Flash Talks: #43 S. Acharjee, #61 C. Chhatbar, #87 J. Hua, #127 B. Pinto, #133 D. Ragozzino, #167 R. von Bernhardt, # 171 P. West, #173 Y. Xu
17.00 - 19.00	Poster Session 1 - Odd numbers, ATC Helix A
19.00 - 21.00	Dinner - EMBL Canteen
21.00 - 23.00	Get together with live music - ATC Rooftop Lounge

Day 3 - Tuesday 20 March 2018

Time	Speaker
Session 4: Microglia and Other Cells Chair: Staci Bilbo	
09.00 - 09.30	Microglia and prenatal inflammation in the early wiring of cortical circuits Sonia Garel - <i>Institut de Biologie de l'ENS (IBENS), France</i>
09.30 - 10.00	Towards a dynamic quantitative understanding of how microglia keep the brain clean Francesca Peri - <i>University of Zürich, Switzerland</i>

Time	Speaker
10.00 - 10.30	Factors regulating the function of microglia Marco Prinz - <i>University of Freiburg, Germany</i>
10.30 - 11.00	Coffee Break and meet the speakers
11.00 - 11.15	Peripheral macrophage control of microglia during CNS injury Andrew Greenhalgh - <i>INRA, University of Bordeaux, France</i>
11.15 - 11.30	Glioma-induced inhibition of caspase-3 in microglia promotes a tumor-supportive phenotype Bertrand Joseph - <i>Karolinska Institutet, Sweden</i>
11.30 - 11.45	Tumor initiating cells induce Cxcr4 mediated infiltration of pro-tumoral macrophages into the brain Dirk Sieger - <i>University of Edinburgh, United Kingdom</i>
11.45 - 12.00	Early Maternal Stress Alters Microglia Responsiveness to Activation and Impacts Striatal Circuit Function and Behaviors Lindsay Hayes - <i>Johns Hopkins University, United States of America</i>
12.00 - 13.30	Lunch - EMBL Foyer
12.30 - 14.30	Panel discussion - Meet the Editors, ATC Courtyard Room
	Session 5: Neurodegeneration/Psychiatric Disorders Chair: Sonia Garel
CANCELLED	Microglial Transcriptomes: Foundations for Progress Richard Ransohoff - <i>Third Rock Ventures, United States of America</i>
14.00 - 14.30	Microglial elimination of dopamine receptors defines sex-specific nucleus accumbens development and social behavior during adolescence Staci Bilbo - <i>MassGeneral Hospital for Children, USA</i>
14.30 - 15.00	Microglial phagocytosis: from neurogenesis to neurodegeneration Amanda Sierra - <i>Ikerbasque, Basque Foundation for Science, Spain</i>
15.00 - 15.30	Coffee Break and meet the speakers
15.30 - 15.45	A somatic mutation in erythro-myeloid progenitors causes neurodegenerative disease Elvira Mass - <i>LIMES Institute, University of Bonn, Germany</i>

Time	Speaker
15.45 - 16.00	Microglial memory of peripheral inflammation shapes neurological disease Jonas Neher - <i>German Centre for Neurodegenerative Diseases (DZNE), Germany</i>
16.00 - 16.15	Loss of microglial TDP-43 induces alteration in cytokine expression and loss of synapses, associated with motor deficits in mice Rosa C. Paolicelli - <i>University of Zurich, Switzerland</i>
16.15 - 16.30	Microglia drives sickness behavior and social behavior through Serotonin 2B receptors. Implication for susceptibility to depression? Anne Roumier - <i>Institut du Fer à Moulin, France</i>
16.30 - 17.00	Flash Talks: #66 A. Denes, #74 R. Gaspar, #80 L. Herrgen, #98 H. Konttinen, #100 J. Kotah, #128 S. Garofalo, #140 J. Rosin, #162 M. Mizee
17.00 - 19.00	Poster Session 2 - Even numbers, ATC Helix A
19.00 - 21.00	Conference Dinner - EMBL Canteen
21.00 - 00.00	Conference Party - ATC Foyer

Day 4 - Wednesday 21 March 2018

Time	Speaker
	Session 6: New Ways to study Microglia Chair: Cornelius Gross
09.00 - 09.30	Dish Microglia: Towards Synthetic Models of Human Neuro-Immune Interactions Julien Muffat - <i>The Hospital for Sick Children, Canada</i>
09.30 - 09.45	Diverse Requirements for Microglial Survival, Specification, and Function Revealed by Defined-Medium Cultures Christopher Bohlen - <i>Genentech, United States of America</i>
09.45 - 10.00	New tools to study microglial self-renewal, clonal expansion and network re-organization Tuan Leng Tay - <i>University of Freiburg, Germany</i>
10.00 - 10.15	Modelling neurodegenerative disease in human iPSC microglia neuronal-co-culture systems Walther Hänseler - <i>University of Zurich, Switzerland</i>
10.15 - 10.45	Coffee Break and meet the speakers

Time	Speaker
10.45 - 11.15	Ben Barres Young Speaker Prize and Poster Prizes
	Keynote Lecture
11.15 - 12.15	Microglial membrane control of motility, Ca²⁺ signalling, immune function and vascular function David Attwell - <i>University College London, United Kingdom</i>
12.15 - 12.30	Closing Remarks
12.30 - 13.00	Packed Lunch and departure
13.00	Departure - Bus leaving to Frankfurt International Airport - Separate bus leaving for downtown