## 1<sup>ST</sup> IMMUNOLOGY & INFLAMMATION

(I & I) CONFERENCE

# FEBRUARY 24 - 26, 2019

### Sunday, February 24th, 2019

Langenbeck-Virchow-Haus Luisenstraße 58/59, 10117 Berlin

13:30 - 14:45	Registration & Coffee
14:45 - 15:00	Welcome Klaus Rajewsky
15:00 - 16:00	Keynote Lecture <b>Dan Littman</b> , NYU School of Medicine  Th17 cells and inflammation: a new kid on the block

#### **SESSION I: LINEAGE DETERMINATION IN THE HEMATOPOIETIC SYSTEM**

Chair: **Mathias Heikenwälder,** German Cancer Research Center in the Helmholtz Association

16:00 - 16:40	<b>David Kent,</b> Cambridge Stem Cell Institute Understanding blood stem cell clonal dynamics in ageing and disease
16:40 - 17:00	Short talk  Valentyn Oksenych, Norwegian University of Science and Technology  Acetyltransferases Gcn5 and PCAF regulate B cell development
17:00 - 17:20	Coffee break
17:20 - 18:00	<b>Hans-Reimer Rodewald,</b> German Cancer Research Center Fate mapping and barcoding of hematopoiesis
18:00 - 18:20	Short talk  Christopher Kressler, German Rheumatism Research Center  Hit-and-run epigenetic editing of a single enhancer converts  naive and memory T cells into FOXP3 expressing T cells
18:20 - 19:00	Sten Linnarsson, Karolinska Institutet Inferring in vivo cell differentiation dynamics using RNA velocity

### Monday, February 25th, 2019

Max Delbrück Communications Center (MDC.C) Robert-Rössle-Straße 10, 13125 Berlin

#### **SESSION II: ANTIBODY DIVERSIFICATION AND RECEPTOR FUNCTION**

Chair: **Michela Di Virgilio,** Max Delbrück Center for Molecular Medicine in the Helmholtz Association

09:00 - 09:40	Frederick Alt, Boston Children's Hospital  The fundamental role of chromatin loop extrusion in antibody diversification
09:40 - 10:00	Short talk <b>Kathrin de la Rosa,</b> Max Delbrück Center for Molecular  Medicine  Antibody diversification through non-VDJ insertions
10:00 - 10:40	<b>David Schatz,</b> Yale School of Medicine Transposon molecular domestication and the evolution of the RAG recombinase
10:40 - 11:00	Coffee Break
11:00 - 11:40	Michael Reth, Max Planck Institute of Immunobiology and Epigenetics / University of Freiburg Molecular requirements for antigen sensing by the adaptive immune system
11:40 - 12:00	Short talk  Qiang Pan-Hammarström, Karolinska Institutet  AID dependent- and independent- mechanisms of mutagenesis in human B-cell lymphomas
12:00 - 12:40	<b>Gabriel Victora,</b> The Rockefeller University Clonal dynamics of recall germinal centers

12:45 - 14:45 Poster session over lunch

### **SESSION III: NEUROINFLAMMATION**

Chair: Martin Korte, Helmholtz Center for Infection Research

14:45 - 15:25	Oleg Butovsky, Brigham and Women's Hospital The Role of Apoe-TGFB Signaling in Microglia Regulation in Neurodegeneration
15:25 - 16:05	<b>Joseph El-Khoury,</b> Massachusetts General Hospital Reciprocal interactions between Microglia and Gliomas
16:05 - 16:45	<b>Bente Finsen,</b> University of Southern Denmark  Proteomic profiling of CNS myeloid cells and CNS tissues from APP/PS1 mice and Alzheimers disease cases
16:45 - 17:05	Coffee Break
17:05 - 17:45	Marco Prinz, University Medical Centre Freiburg Heterogeneity of myeloid cells in the CNS
17:45 - 18:25	Carla Shatz, Stanford University
	Surprise at the synapse: unexpected role for MHC class I in neurons

### Tuesday, February 26th, 2019

Max Delbrück Communications Center (MDC.C) Robert-Rössle-Straße 10, 13125 Berlin

### **SESSION IV: INNOVATIVE IMMUNE THERAPIES**

Chair: **Uta Höpken,** Max Delbrück Center for Molecular Medicine in the Helmholtz Association

Christopher Garcia, Stanford University School of Medicine Exploiting immune receptor structure and mechanism to open new therapeutic doors
Short talk  Alexander Scheffold, Kiel University  Modulation of human Th17 cells via cross-reactivity to an intestinal commensal
Carl June, Perelman School of Medicine at the University of Pennsylvania  Next Generation CAR T cells
Coffee Break
Cliona M Rooney, Baylor College of Medicine Providing signal 3 for Immunotherapeutic T-cells
Short talk  Xiaojing Chen, Max Delbrück Center for Molecular Medicine  Human TCR-MHC coevolution after divergence from mice includes increased nontemplateencoded CDR3 diversity
Andreas Strasser, Walter and Eliza Hall Institute of Medical Research Learning the rules of programmed cell death to develop novel cancer therapies
Short talk  Stephan Mathas, Max Delbrück Center for Molecular Medicine Checkpoint inhibition in classical Hodgkin lymphoma
Concluding remarks Michela Di Virgilio & Klaus Rajewsky
Departure