

Thursday, January 23rd

9:00 Welcome (Henrk Mei)

Session 1

Chairs: Bertram Bengsch & Henrik Mei

09:15 Antonio Cosma, Luxembourg: Business intelligence, number theory and mass cytometry
Henrik Mei, Berlin: Chronic inflammation

10:45 *Coffee break*

Session 2 News from ...

Chairs: Bertram Bengsch & Henrik Mei

11:15 ... Freiburg: Bertram Bengsch - Understanding T cell exhaustion in different human disease entities

... Ulm: Fabian Gärtner - Phenotyping of immune cells in adipose and lean mice after thorax muscle trauma

Selected abstract:

Camila Fernandez-Zapata - Diversity of human myeloid compartment in active lesions of late stage multiple sclerosis determined by mass cytometry

12:45 *Lunch break*

Session 3 - Presentation of selected abstracts

Chair: Axel Schulz

14:15 **Selected abstracts:**

Marie Urbicht - Dissecting immune cell modulation during therapeutic targeting of CD38 in Systemic Lupus Erythematosus using mass cytometry

Jessica Suwandi - 1 Multidimensional analyses of proinsulin peptide-specific regulatory T cells induced by tolerogenic dendritic cells

Marilena Letizia - Mass cytometry reveals effects of Store-operated Calcium Entry pathway in human intestinal inflammation

15:45 *Coffee break*

Session 4 Workshop: Mass Cytometry Basics and Reagents

Chairs: Henrik Mei & Axel Schulz

16:30 **ISAC Lecture:**

Michael Leipold, Stanford: CyTOF in large studies: Challenges and lessons learned

Selected abstract:

Heidi Ødegaard Notø - Single cell gating by cell cycle analysis in mass cytometry

Pannel discussion: Moderator Axel Schulz

Poster presentation and get together

Chairs: Désirée Kunkel & Sarah Warth

18:30-23:00 Poster Session and Dinner: generously supported by Fluidigm Corporation

Friday, January 24th

Session 5

Chair: Henrik Mei

- 9:00 Burkhard Becher, Zurich: High-dimensional cytometry for immunophenotyping
Thomas Höllt, Leiden: Explorative visual analytics for large single-cell data
- 10:30 *Coffee break*

Session 6 Workshop Data Analysis

Chair: Marie Urbicht

- 11:15 Tyler Burns, Berlin: A visual interrogation of dimension reduction tools for single-cell analysis
Selected abstract:
Ina Stelzer - A third trimester multi-omic clock predicts the spontaneous onset of labor
Panel discussion Moderator Marie Urbicht, Berlin
- 13:15 *Lunch break*

Session 7 News from...

Chair: Désirée Kunkel

- 14:45 ... Berlin (DRFZ): Andreas Grützkau - How many roads must a biomarker walk down, before you call it a BIOMARKER? Hope and Hype for new cellular biomarkers in rheumatology
... Berlin (BCRT): Thomas Sell - Modelling cell-type specific signalling networks by mass cytometry in intestinal organoids
Selected abstract:
Marieke Ijsselsteijn - Characterisation of granzyme b positive myeloid cells with immunotherapeutic potential for colorectal cancer patients using imaging mass cytometry.
- 16:15 *Coffee break*

Session 8 Fluidigm Session

Chair: Henrik Mei

- 16:45 *Invited talk sponsored by Fluidigm:*
Marie-Laure Yaspo, Berlin: Systems omics for exploring melanoma subtypes

Poster prize award and farewell

Chair: Henrik Mei

- 17:30 Poster prize (sponsored by Beckman Coulter Life Sciences) award ceremony
Wrap-up and farewell with soup