

Program

33rd Annual Conference of the German Society for Cytometry



Pre-Program

September 18, 2023: Meeting Point Cytometry and Tutorials

Conference

September 19-21, 2023

Location

Charité – Universitätsmedizin Berlin &
Deutsches Rheuma-Forschungszentrum Berlin, ein Leibniz Institut
Charitéplatz 1
10117 Berlin

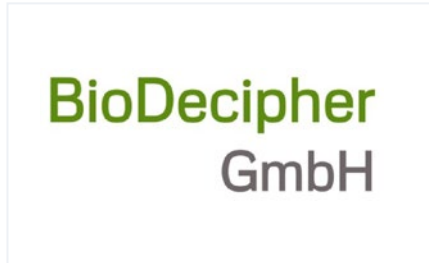
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Dear friends of cytometry,

on behalf of the German Society for Cytometry I have the pleasure to announce the 33rd Annual Meeting of the German Society for Cytometry in Berlin on September 19-21, 2023 to get together & discuss cytometry and the biology of cells in all its wonderful dimensions.

We have designed an exciting scientific programme for you, representing cytometric imaging, cutting-edge technologies, mass cytometry, nanotechnology, microbiology, advanced data analysis techniques, and mechanocytometry. We warmly welcome the Danish Society for Cytometry as hosts of this year's Guest Session.

Get in touch during the poster session and industry exhibition while coffee breaks, the welcome reception and the networking event will provide plenty opportunity to expand your cytometry network.

Last but not least tutorials and our famous Product Slam featuring cutting-edge news on instruments, assays and services from the wide range of industry partners will round up the meeting.

What`s new this year?

For the very first time we will offer a Welcome session termed „Meeting Point Cytometry – First Time Attendee and New Member Welcome Orientation“. We are warmly welcoming scientists of all levels and core facility managers that are new to the community or a first time participant at our annual meeting.

In line with this year's focus on technology transfer in cytometry, we introduce the new Entrepreneur networking event, providing a forum for exchange between everyone interested in securing IP and building a business around their innovation in cytometry, or discoveries made with the help of cytometry. We have invited role models for successful technology transfer to discuss and share their ways of making it happen.

The many facets of cytometry, its applications and the variety of career tracks it offers inspired to headline this edition of our annual meeting with „DIMENSIONS“, to represent the science of cytometry, the science enabled by cytometry, and to celebrate our vivid community carried by so many unique personalities.

I am looking forward to welcoming you!

Henrik Mei
President of the DGfZ

18.09.2023

Monday

Meeting Point Cytometry

Starting 1:30 pm with Soup - 3:00 pm, DRFZ Foyer

First Time Attendee and New Member Welcome Orientation session

Tutorial 1

Cycle Analysis by Flow Cytometry

3:00 pm – 5:00 pm, DRFZ - Seminar room 1+2

Chairs: Toralf Kaiser, Claudia Giesecke-Thiel

Tutorial 3

Mass Cytometry Getting Started

3:00 pm - 5:00 pm, DRFZ - Seminar room 3

Chair/Moderator: Sarah Warth

Speakers: Axel Schulz, Anika Rettig, Desiree Kunkel

19.09.2023

Tuesday

Tutorial 4

Mechanocytometry for label-free sorting

9:00 am - 11:00 am, DRFZ Seminar room 3

Chair: Oliver Otto

Tutorial 5

Data annotation, quality and sharing under FAIR principles

9:00 am - 11:00 am, PEH

Chairs: Christian Busse, Sebastian Ferrara & Amro Abbas

19.09.2023**Tuesday****8:30 - 11:45 CCO****Registration & Soup**

11:45 am - 12.00 pm, PEH

Welcome**Henrik Mei**

12:00 pm - 1:30 pm, PEH

Imaging

Chairs: Anja Hauser, Raluca Niesner

Marco Fritzsche**Mechanobiology of T-cell activation in numbers**

Oxford, United Kingdom

Nicole Strittmatter**Spatially resolved metabolomics using mass spectrometry imaging of tissues**

Munich, Germany

Laurenz Krimmel

(Short Talk)

The spatial and unique composition of infiltrating immune cells defines autoimmune- and checkpoint-therapy associated hepatitis

Freiburg, Germany

Katja Sallinger

(Short Talk)

Imaging-based transcriptomics technology identifying predictive biomarkers for relapse in colon cancer stage II

Graz, Austria

1:30 - 2:00 CCO**Coffee Break/Industry Exhibitio**

2:00 pm – 3:00 pm, PEH

Product Slam

Chairs: Elmar Endl, Tom Bauer

Industrial partners will present their newest innovative technological developments and products:**AHF, APE, Beckman Coulter, BD, BioDecipher, BIO RAD, BioLegend, Blue Cat Bio, Canopy, Curiox, Cyttek, Cytolytics, Berlin Partner, Mileny Biotec, OLS, Particle Metrix, Sony, Standard Biotools, ThermoFischer, Zelmechanik Dresden****3:00 - 3:30 CCO****Coffee Break/Industry Exhibition**

Cutting Edge

3:30 pm - 5:00 pm, PEH

Chairs: Bertram Bengsch & Henrik Mei

Ermelinda Porpiglia

Through the lens of CyTOF: resolving signatures of muscle stem cell aging one cell at the time

Aarhus, Denmark and Stanford, USA

André Rendeiro

Spatially and temporally resolved pathology of COVID-19 in the lung

Vienna, Austria

Alexandra E. Schlaak

(Short Talk)

Development of a competitive tetramer assay that allows mass-cytometry profiling of epitope-specific CD8+ T Cells after bead enrichment

Freiburg, Germany

Axel Ronald Schulz

(Short Talk)

Vaccinology meets mass cytometry – Identifying baseline predictors of vaccination outcome

Berlin, Germany

Toni Sempert

(Short Talk)

Single-cell microbiota phenotypes for classification of chronic-inflammatory diseases and functional characterization to decipher their role in pathophysiology

Berlin, Germany

5:00 pm - 5:30 pm

Coffee Break/Industry Exhibition

Keynote

5:30 pm - 6:30 pm, PEH

Chair: Henrik Mei, Bertram Bengsch

Sean Bendall

Bottom-Up Organization of Single Cell Human Systems

Stanford, USA

Welcome reception

6:30 pm - 10:00 pm, CCO

Exhibition area

Core Facility Networking Event

8:00 pm - 10:00 pm, DRFZ

Chairs: Désirée Kunkel, Sarah Warth, Christian Kukat

Gert van Isterdael

A new view on cytometry with the BD CellView™ Image technology

Ghent, Belgium

Entrepreneur Networking Event

8:00 pm - 10:00 pm, CCO

Chairs: Lisa Budzinski, Henrik Mei

Kathrin Brenker, opto biolabs GmbH, Aida Meghraoui, AMKbiotech, Tyler Burns, Burns Life Sciences Consulting GmbH

20.09. 2023

Wednesday

Rare cells Session

9:00 am - 10:30 am, PEH

Chairs: Thomas Kroneis & Frank Schildberg

Michael Eikmans

Rare cells in pregnancy: the role of regulatory T cells and microchimeric cells in placental and fetal development

Leiden, The Netherlands.

Udo Markert

Transplacental migration of maternal natural killer and T cells assessed by ex vivo human placenta perfusion – evidence for microchimerism?

Jena, Germany

Leonard Fiebig

(Short Talk)

Characterization of Antigen-Specific B Cells and Plasma Cells Using a Tetramer-based Detection Method by Flow and Mass Cytometry

Berlin, Germany

Emiel Slaats

(Short Talk)

Image-based SNP detection for discriminating haploidentical microchimeric cells

Graz, Austria

10:30 am - 11:00 am

Coffee Break/Industry Exhibition

European Guest Session: Austrian Society

11:00 am - 12:00 pm, PEH

Chair: Anja Bille Bohn (Aarhus, Denmark)

Anja Bille Bohn

Introduction

Jesper Geert Pedersen

Investigating host immune function in metastatic melanoma patients treated with immunotherapy

Aarhus, Denmark

Carina Agerbo Rosenberg

Rethinking diagnostics in myelodysplastic syndrome and unexplained cytopenia: employing morphometric evaluation of dysplasia by imaging flow cytometry

Aarhus, Denmark

12:00 pm - 1:00 pm

Lunch (Postersession starts at: 12.30 pm)

Poster Session

12:30 pm - 2:30 pm, CCO

Chairs: Henrik Mei, Oliver Otto

2:30 pm - 3:00 pm

Coffee Break/Industry Exhibition

3:00pm - 4:30pm, PEH

Klaus-Goerttler-Session incl. award ceremony

Chair: Elisa Rosati, Klaus Goerttler Awardee 2022

Giulia Pasqual

Enzymatic labeling of cell cell interactions in vivo

Padova, Italy

Bram Slütter

Single cell approaches to dissect antigen specific T-cell interactions in atherosclerosis

Leiden, The Netherlands

Annika Betzler

(Klaus Goerttler Awardee)

Molecular characterization of the transcriptional co-activator BOB.1/OBF.1 in B versus T lymphocytes and its specific contribution to the Germinal Center Reaction

Ulm, Germany

4:30 pm - 5:00pm

Coffee Break/Industry Exhibition

5:00 pm - 6:00 pm, PEH

Guest Lecture

Chair: Henrik Mei

Eicke Latz

Inflammasome function in health and disease

Berlin, Germany

6:00 pm - 7:00 pm, PEH

DGfZ-Members Assembly

Chair: Henrik Mei

7:00 pm - 11:00 pm, DRFZ

Meet the Speaker & Poster Prize Ceremony & Dinner

for all speakers, participants and industry partners

21.09. 2023**Thursday****Mechanocytometry**

9:00 am - 10:30 am

Chairs: Marta Urbanska and Oliver Otto

Franziska Lautenschläger **Cytoskeletal fibres as building blocks for life**

Saarbrücken, Germany

Salvatore Girardo**Harnessing Microfluidic Technologies for Advancing Mechanobiology**

Erlangen, Germany

Marta Urbanska

(Short Talk)

De novo identification of universal cell mechanics gene signatures

Cambridge, UK

Stefan Simm

(Short Talk)

Explainable artificial intelligence image analysis for blood cell discrimination

Greifswald, Germany

10:30 am - 11:00 am**Coffee Break/Industry Exhibition****Microbiology**

11:00 am - 12:30 pm

Chairs: Lisa Budzinski & Christin Koch

Fatima C. Pereira**Probing microbiome function using single-cell chemical imaging**

Southampton, United Kingdom

Sabina Leanti La Rosa**Hunting systems for typical and atypical glycan processing in gut microbiomes, one cell at a time**

Ås, Norway

Doreen Reichert

(Short Talk)

Impact of long term 2,3,7,8-tetrachlorodibenzo-p-dioxin treatment on gut microbiome composition and glycosylation patterns in male and female C57BL/6 mice analyzed by flowcytometry

Düsseldorf, Germany

Juan Lopez Galvez

(Short Talk)

Development of an Automated Online Flow Cytometry Method to Quantify Cell Density and Fingerprint Bacterial Communities

Leipzig, Germany

Daniel Kage

(Short Talk)

Label-free flow-cytometric bacteria sorting with angle-resolved scattered light signals

Berlin, Germany

12:30 pm - 1:30 pm**Lunch**

Nanotechnology

1:30 pm - 3:00 pm

Chairs: Ulrike Taylor and Wolfgang Fritzsche

Melanie Schürz

Overview of current methods for the characterization of extracellular vesicles with a focus on single vesicle imaging and quantification

Salzburg, Austria

André Görgens

Comparing Apples to Apples: Analysis of Extracellular Vesicles by Flow Cytometry

Stockholm, Sweden

Martin Hussels

(Short Talk)

Imaging of Scattered Light in a Flow Cytometer to Analyse Size, Shape and Internal Structures of Particles and Cells

Berlin, Germany

Michael Kirschbaum

(Short Talk)

High-resolution image-activated cell sorting at low shear stress

Potsdam, Germany

3:00 pm - 3:15 pm

Farewell