

# Program overview

## 34<sup>th</sup> Annual Conference of the German Society for Cytometry



### Pre-Program

September 10, 2024: Meeting Point Cytometry and Tutorials

### Conference

September 11-13, 2024

### Location

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

### E-mail

[dgfz-meeting@drfz.de](mailto:dgfz-meeting@drfz.de)



Conference: [dgfz2024.de](http://dgfz2024.de)  
DGfZ: [dgfz.org](http://dgfz.org)

## Our conference sponsors





**Dear friends of cytometry,**

## **Join the CYTometry community in the heart of Berlin**

We kindly welcome you to the Annual Meeting of the German Society for Cytometry in Berlin!

At DGfZ and our annual meetings, we cultivate a highly interactive, interdisciplinary and cooperative spirit to advance collaboration, communicate cutting edge approaches in cytometry and promote excellence in the application of cytometric technologies. We are proud to provide a national hub for the cytometry community in Germany, linking technology developers, engineers, physicists, biologists, chemists, and clinicians engaged in service facilities and research labs!

Specials: We kindly welcome the Irish Society for Cytometry (<https://cytometry.wixsite.com/ireland>) hosting this year's guest session!

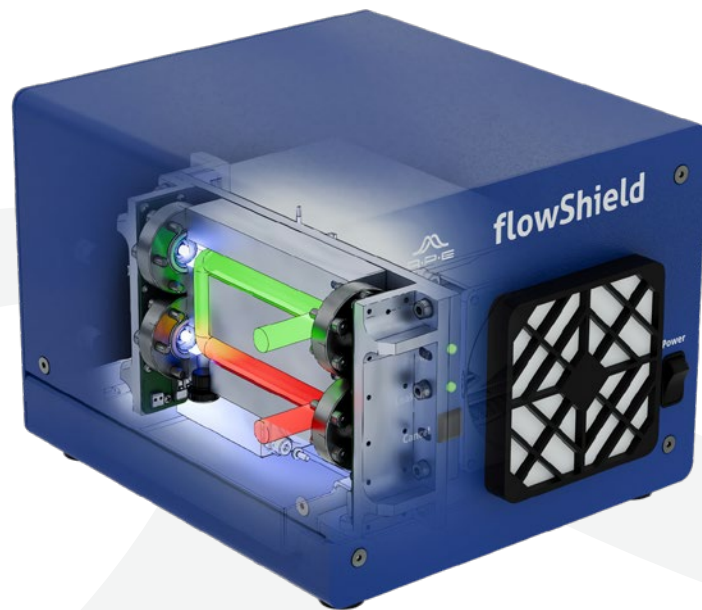
Also note the Keynote Lecture and Guest Lecture as additional highlights in our scientific program.

Welcome to Berlin!

Henrik Mei  
President of the DGfZ

# flowShield

UV-C decontamination  
for germ-free cell sorting



- Germ-free sheath fluid
- Efficient UV-C decontamination
- Easy integration into cell sorters
- Robust and maintenance free
- Optimal sort conditions for cell cultivation

Reach out to us!

10. - 13. September, Berlin



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# 10.09.2024

## Tuesday

### Meeting Point Cytometry

Starting 14:00 pm - 3:00 pm, DRFZ Foyer

### First Time Attendee and New Member Welcome Orientation Session

#### Tutorial 1

##### Securing Intellectual property

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

Dr. Martin Behrndt, European Patent Attorney Hertin & Partner, Berlin

Dr. Konrad von Volkmann, CEO APE, Berlin

Dr. Christin Koch, Director IP Strategy Symrise AG, Holzminden

#### Tutorial 2

##### Deep Learning in Image Analysis

3:00 pm - 5:00 pm, DRFZ - Seminar room, first floor  
Anja Hauser, Raluca Niesner & Pendar Alirezazadeh

#### Tutorial 3

##### Data annotation, quality, sharing, and FAIR principles

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

Sebastian Ferrara & Christian Busse

### Entrepreneur Networking Event

5:30 pm at DRFZ

Lisa Budzinski & Henrik Mei

# 11.09.2024

## Wednesday

#### Tutorial 4

##### Core Facility / Core Manager Tutorial

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

Jochen Behrends & Elmar Endl

#### Tutorial 5

##### Flow Cytometry

9:00 am - 11:00 am, Seminar room 1+2

Claudia Giesecke-Thiel, Andreas Dolf, Daniel Kage,

Toralf Kaiser

# 11.09.2024

## Wednesday

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### Registration & Soup

8:30 am - 11:45 am, CCO

### Welcome by Henrik Mei, President DGfZ

11:45 am - 12:00 pm, PEH

### Core Facility Session

12:00 pm - 1:00 pm, PEH, Chairs: Anne Gompf & Jochen Behrends

#### Malte Paulsen

*Novo Nordisk, Måløv, Denmark*

***Enabling great Science everyday – staying innovative and selfcritica***

#### Florian Mair

*Flow Cytometry Core Facility, Institute of Molecular Health Sciences, ETH Zurich, Switzerland*

***High-dimensional cytometry in the spectral era: new metrics to achieve a 50-color pane***

#### Short talk: Susanne Strahlendorff-Herppich

*Precision for Medicine, Cell Biology, Berlin Germany*

***High-dimensional cytometry in the spectral era: new metrics to achieve a 50-color pane***

### High Dimensional Cytometry Session

1:00 pm - 2:pm, PEH, Chairs: Henrik Mei & Bertram Bengsch

#### Chotima Böttcher

*Experimental and Clinical Research Center (ECRC), Charité – Universitätsmedizin Berlin and the MDC*

***Proteo-metabolomic features of multiple sclerosis***

#### Nils Blüthgen

*Institute of Pathology, Charite Universitätsmedizin Berlin & Institute of Biology, Humboldt University of Berlin*

***Using CyTOF and single cell RNA-sequencing to dissect oncogenic signalling in colon cancer***

## Short talk: Yaroslava Shevchenko

Department of Hepatology and Gastroenterology, Charité Universitätsmedizin Berlin, Berlin, Germany

***A comprehensive assessment of compensation particles for generation of optimized reference controls for full spectrum flow cytometry***

**2:00 pm - 3:00 pm, CCO**

**Coffee Break/Industry Exhibition**

## Product Slam

3:00 pm - 4:00 pm, PEH, Chairs: Elmar Endl & Tom Bauer

***Industrial partners will present their newest innovative technological developments and products:***

AHF, APE, Beckman Coulter, BD, BioLegend, Cytex, Cytolytics, Berlin Partner, Milteny Biotec, OLS, Particle Metrix, Sony, Standard Biotools, ThermoFischer

**4:00 pm - 5:00pm, CCO**

**Coffee Break/Industry Exhibition**

## Keynote Lecture

5:00 pm - 6:pm, PEH, Chair: Henrik Mei

### Yvan Saeys

Ghent University

***AI's Odyssey in cytometry wonderland: challenges and prospects of emerging foundation models for single-cell analysis***

## Welcome Reception

6:00 pm - 10:00 pm, CCO, Exhibition area

## Core Facility Networking Event

7:30 pm - 10:00 pm, DRFZ      Chairs: Désirée Kunkel, Sarah Warth

This event is an opportunity to meet colleagues and share your experiences and challenges working in a core facility. We will have short presentations and lots of time for formal and informal discussions

# 12.09. 2024

## Thursday

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### Endosymbiosis to Nanobiotechnology Session

9:00 am - 11:00 am, PEH

Chairs: Christin Koch, Lisa Budzinski, Wolfgang Fritzsche

#### Andrey Turchanin

*Institut für Physikalische Chemie, Friedrich-Schiller-Universität Jena*

***Two-dimensional (2D) carbon materials for ultrasensitive detections of biomarkers***

#### Thomas Gassler

*Institute of Microbiology, ETH Zurich*

***Inducing Novel Endosymbioses by Bacterial Implantation into Fungi***

#### Short talk: Simone de Carli

*Fraunhofer Institute for Cell Therapy and Immunology IZI, Branch Bioanalytics and Bioprocesses IZI-BB, Potsdam, Germany*

***X-ray Compatible Flow Cell for Dielectrophoretic Manipulation and Trapping of Cells and Microparticles***

#### Short talk: Carrie Maynard

*Lightcast Discovery Ltd, Cambridge, United Kingdom*

***A programmable and automated microfluidic platform for massively parallel and sequential processing of single cell assay operations***

#### Short talk: Peter Rubbens

*Kytos BV, Ghent, Belgium*

***Cytometric indicators quantify microbiome health in aquaculture systems***

#### Short talk: Toni Sempert

*German Rheumatology Research Center Berlin, a Leibniz Institute, Berlin, Germany*

***The stratification by age is critical for microbiome analyses of children with juvenile idiopathic arthritis***

**11:00 am - 11:30 am, CCO Coffee Break/Industry Exhibition**

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### European Guest Session: Ireland

11:30 am - 12:30 pm, PEH, Chair: Barry Moran

#### Barry Moran

PEH = Paul Ehrlich Hörsaal, Virchowweg 4

CCO = Cross-Over-Gebäude, Virchowweg 6

DRFZ = Virchowweg 12



Trinity Biomedical Sciences Institute, Trinity College Dublin

### **Complementary cell analysis technologies to elucidate skin disease – No Kuddelmuddel!**

**David Finlay**

Trinity Biomedical Sciences Institute, Trinity College Dublin, Ireland

### **Using Click-chemistry to study nutrient uptake in single cells**

**Ella Fouhy**

School of Biomolecular and Biomedical Science, University College Dublin

### **Uncovering the early circulating environment that precedes a diagnosis of Pre-eclampsia**

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

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## **Poster Session**

1:30 pm - 3:00 pm, CCO, Chairs: Thomas Kroneis & Frank Schildberg

**3:00 pm - 3:30 pm, CCO, Coffee Break/Industry Exhibition**

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## **Guest Lecture**

3:30 pm- 4:30 pm, PEH, Chair: Henrik Mei

**Lena Kaufmann**

Bernstein Center for Computational Neuroscience, Humboldt Universität zu Berlin, Berlin, Germany

Berlin School of Mind and Brain, Humboldt Universität zu Berlin, Berlin, Germany

### **Elephant neurobiology and behavior: from trunks to brains**

## **DGfZ - Members Assembly**

4:30 pm – 6:00 pm, PEH, Chair: Henrik Mei

## **Meet the Speaker & Poster Prize Ceremony & Dinner**

**6:00 pm – 10:00 pm, DRFZ, for all speakers, participants and industry partners**

# **13.09. 2024**

## **Friday**

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**9:30 am - 10:00 am, CCO Coffee Break/Industry Exhibition**

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## Imaging & Cytometry Session

10:00 am - 12:00 pm, PEH, Chairs: Anja Hauser, Raluca Niesner & Oliver Otto

### Fabian Coscia

Max Delbrück Center for Molecular Medicine

***Spatial tissue proteomics to assess health and disease***

### Kerstin Göpfrich

Center for Molecular Biology of Heidelberg University

***Engineering and sorting of synthetic cells***

### Esther Wehrle

AO Research Institute Davos, Switzerland

***Spatial transcriptomics of bone healing***

### Short talk: Alexander Fiedler

Biophysical Analytics, German Rheumatology Research Center (DRFZ), Berlin, Germany

***In vivo fluorescence lifetime micro-endoscopy creates new perspectives on immunometabolic heterogeneity in the bone***

### Short talk: Michael Kirschbaum

Fraunhofer Institute for Cell Therapy and Immunology IZI, Branch Bioanalytics and Bioprocesses, Potsdam, Germany

***On-chip integrated re-sorting enhances sort performance in microfluidic flow cell sorting in one single step***

**12:00 pm - 1:00 pm, CCO, Lunch/Industry Exhibition**

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## Klaus Goerttler Session

1:00 pm - 2pm, PEH, Chair: Annika Betzler, Klaus Goerttler Awardee 2023

### Marta Rizzi

Dept of Rheumatology and Clinical immunology and CCI – University Medical Center Freiburg and Center for Pathophysiology, Infectiology and Immunology; Institute of Immunology – Medical University of Vienna

***Modulation of peripheral B cell maturation and generation of autoantibodies: lesson from rare autoimmune diseases***

### Christian Busse

DKFZ Heidelberg

## Farewell

2:00 pm - 2:15, PEH



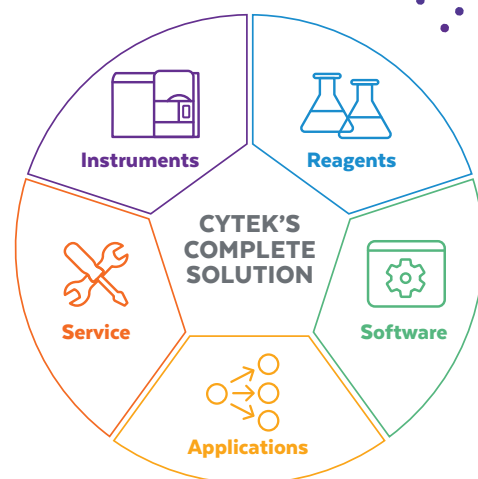
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