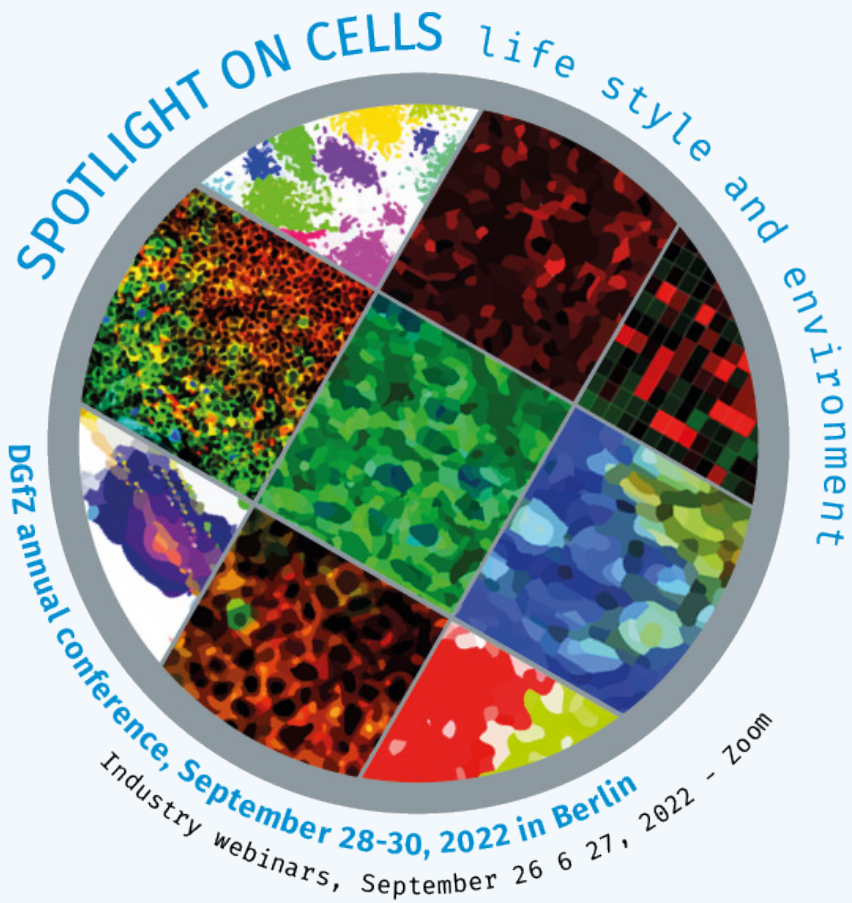


Program





Dear friends of cytometry,

After two challenging years due to the pandemic, it is my greatest pleasure to welcome you to the 32nd Meeting of the German Society for Cytometry (DGfZ), from Sept, 28th to 30th, in Berlin, at a historical location: Charité Campus Mitte.



Following this year's motto "Spotlight on cells: life style and environment", we strive to bring together experts from various disciplines for a lively discussion about game-changing technologies and their newest applications. A number of invited speakers have already confirmed their attendance, and we will have exciting sessions on microscopy/metabolic imaging, cutting-edge technologies, nanotechnology, microbiology, mass-cytometry as well as mechano-cytometry. We are sure, this inspiring program will spark vivid discussions between scientists, technologists and industrial partners, having the potential to give unique impulses to the cytometry science.

In addition to the well-established industry exhibition, where you will have the opportunity to directly get informed about recently launched products, we will again have the popular "Product Slam" format, where our industrial sponsors will present their newest innovations within three minutes. Learning from the pandemic, we will offer you the chance to get informed virtually about new commercial technologies during the online industry webinars, at September 26th and 27th.

I wish you all an exciting DGfZ 2022!

Raluca Niesner
President of the DGfZ

Monday, September 26th, 2022

Industry Webinars online in Zoom

09:30 am - 10:15 am

Cytek



10:30 am - 11:15 am

OMNI Life Sciences



11:30 am - 12:15 pm

BioLegend



Tuesday, September 27th, 2022

Industry Webinars online in Zoom

9:30 am - 10:15 am

Fast Forward Discoveries GmbH



10:30 am - 11:15 am

Particle Metrix GmbH



Tutorial 1: FACS - in presence

11:30 am - 2:30 pm

Flow, FACS, usual fallacies – limited for 20 participants

DRFZ - Seminar room 1+2

Chairs: Toralf Kaiser, Claudia Giesecke-Thiel

Tutorials 2 and 3 - in presence

03:00 pm - 05:00 pm

Image Analysis

DRFZ - Seminar room 1st floor

Chair: Ralf Köhler

03:00 pm - 05:00 pm

Mass Cytometry

DRFZ - Seminar room 3

Moderator: Sarah Warth

Wednesday, September 28th, 2022

Tutorial 4 - in presence

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

Mechanocytometry
Chair: Oliver Otto

8:30 - 11:45 CCO

Registration & Soup

11:45 am - 12.00 pm, PEH

Welcome

Raluca Niesner

12:00 pm - 1:30 pm, PEH

Session 1: Imaging

Chairs: Raluca Niesner, Anja Hauser

Ruslan Dmitriev, Gent

Probing intestinal organoids oxygenation and metabolism using phosphorescence and fluorescence lifetime imaging microscopies

Anna Pascual-Reguant, Berlin

Activated fibrovascular niches orchestrate immunopathology in severe COVID-19 disease

Alexander Fiedler (ST)

Development of functional in vivo fluorescence lifetime microendoscopy of the femoral bone marrow

Eric Sündermann (ST)

Cytometric single-cell analysis of membrane tension

1:30 - 2:00 CCO

Coffee Break/Industry Exhibition

2:00 pm - 3:00 pm, PEH

Session 2: Product Slam

Chairs: Elmar Endl, Tom Bauer

Selected industrial partners will present their newest innovative technological developments and products

(ST) = short talk

3:00 - 3:30 CCO

Coffee Break/Industry Exhibition

3:30 pm - 5:00 pm, PEH

Session 3: Cutting Edge

Chairs: Henrik Mei, Asylkhan Rakhymzhan

Emily Stephenson, Newcastle TBA

Rafael Jose Arguello, Marseille Metabolism in the single cell era: approaches to sharpen the cutting edge of the metabolism field

Marie Burns, Berlin (ST) Single cell phospho-signatures for precision medicine in SLE and other chronic inflammatory diseases

Daniel Kage, Berlin (ST) Cell sorting based on angle-resolved pulse shapes

5:00 pm - 5:30 pm

Coffee Break/Industry Exhibition

5:30 pm - 6:30 pm, PEH

Keynote (open to public)

Chair: Marta Ferreira Gomes

Simon Haas, Berlin Exploiting the power of single-cell genomic technologies to enable data-informed cytometry

6:30 pm - 10:00 pm, CCO

Welcome reception

Exhibition area

*8:00 pm - 10:00 pm, DRFZ**

Core Facility Networking Event

Chairs: Désirée Kunkel, Sarah Warth

Jochen Behrends, Borstel, Anne Gompf, Dresden, Marie Follo, Freiburg, Desiree Kunkel, Berlin, Sarah Warth, Ulm

**Seminar room 1+2, DRFZ*

Thursday, September 29th, 2022

9:00 am - 10:30 am, PEH

Session 4: Microbiology

Chairs: Christin Koch and Hyun-Dong Chang

Naama Geva-Zatorsky, Haifa	TBA
Jakob Zimmermann, Bern	Noninvasive assessment of gut function using transcriptional recording sentinel cells
Lisa Budzinski, Berlin (ST)	Single-cell bacterial phenotyping for disease classification and identification of disease-relevant microbiota populations
Shuang Li, Leipzig (ST)	Stabilization of complex microbial communities revealed by single-cell analysis

10:30 am - 11:00 am

Coffee Break/Industry Exhibition

11:00 am - 12:00 pm, PEH

Session 5: European Guest Session: Austrian Society

Chairs: Raluca Niesner, Henrik Mei

Andreas Spittler, Vienna	Introduction: The Austrian Society for Cytometry
Sieghart Sopper, Innsbruck	One tube to find them all
Beate Rinner, Graz	Thinking outside the box in cell culture
Lena Müller, Vienna	Mapping the cellular landscape of human airways by using mass cytometry

12:00 pm - 1:00 pm

Lunch

(ST) = short talk

1:00 pm - 2:30 pm, PEH

Speed Talk Session

Chairs: Henrik Mei, Oliver Otto

2:30 pm - 3:00 pm

Coffee Break/Industry Exhibition

3:00pm - 4:30pm

Session 6: Klaus-Goerttler-Session incl. award ceremony

Chair: Janine Kemming (last year awardee)

Bertram Bengsch, Freiburg

Enolase represents a metabolic checkpoint controlling the differential exhaustion of virus-specific CD8+ T cells in HBV versus HCV

Asbjørn Christophersen, Oslo

A similar T-cell subset is increased across multiple autoimmune conditions and contains the antigen-specific cells in celiac disease

Klaus Goerttler-Awardee:

Elisa Rosati, Kiel

Profiling the SARS-CoV-2-reactive CD4+ T cell repertoire

4:30 pm - 5:00pm

Coffee Break/Industry Exhibition

5:00 pm - 6:00 pm, PEH

Guest Lecture

Chair: Raluca Niesner

Sebastian Meller, Hannover

Diagnoses by Dog Noses?

6:00 pm - 7:30 pm

DGfZ-Members Assembly

Chairs: Raluca Niesner, Henrik Mei

7:30pm - 11:00pm, DRFZ

Meet the Speaker & Dinner

All speaker, participants and industry partners

Friday, September 30th, 2022

9:00 am - 10:30 am

Session 7: Mechanocytometry

Chairs: Marta Urbanska and Oliver Otto

Chii Jou Chan, Singapore	Mechanical control of mammalian ovarian folliculogenesis
Anna Taubenberger, Dresden	Studying the mechanical and morphological phenotype of Cancer-associated fibroblasts of the prostate
Bob Fregin, Greifswald (ST)	Dynamic real-time deformability cytometry to decipher the response of bats to heterothermy
Benedikt Hartmann, Erlangen (ST)	Linking mechanical properties of cells with their ability to circulate using real-time deformability cytometry
Martin Kräter, Erlangen (ST)	Clinical application of physical characterization of major blood cell types during COVID-19 and beyond

10:30 am - 11:00 am

Coffee Break/Industry Exhibition

11:00 am - 12:30 pm

Session 8: Core Facility Session

Chairs: Alina Liebheit and Frank Schildberg

Harsharan Bhatia, Munich	Spatial molecular profiling of 3D imaged whole organs and organisms
Anika Grüneboom, Dortmund	From tissue clearing to cleared immunological processes
Till Mertens, Berlin	MarShie – a novel tissue clearing pipeline to comprehensively reveal myeloid-vasculature interactions throughout the murine bone marrow

12:30 pm - 1:00 pm

Lunch

(ST) = short talk

1:00 pm - 2:30 pm

Session 9: Nanotechnology

Chairs: Wolfgang Fritzsche and Julia Böke

Tom Robinson, Berlin	High-throughput microfluidic production of multi-compartment synthetic eukaryotic cells
Claudia Lorenz, Aalborg, DK	Microplastics – Small particles, big challenges
Julia Böke, Jena	Imaging Flow Cytometry – from 3D tomographic over multispectral imaging to nanoparticle tracking
Martin Hussels, Berlin (ST)	Integration and Control of Low-Cost Industrial Cameras in a Home-Built Flow Cytometer

2:30 pm - 2:45 pm

Farewell/Speed talk Award