

## Program overview

# 8th German Mass Cytometry User Forum



GerMaNet  
German Mass Cytometry Network

February 11 - 12, 2025, Jena

**8<sup>th</sup> German  
Mass Cytometry  
User Forum**

uulm   DRFZ   UNIVERSITÄTS KLINIKUM jena   IBIH Berlin Institute of Health @ Charité   UNIVERSITÄTS KLINIKUM erlangen

**11<sup>th</sup> – 12<sup>th</sup> of February 2025**

### Location

Jena University Hospital  
Hörsaal Psychiatrie  
Philosophenweg 3  
07743 Jena

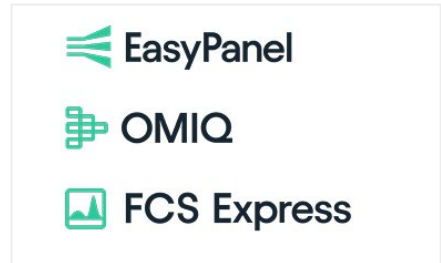
### E-mail

[masscytometry@drfz.de](mailto:masscytometry@drfz.de)

### Website

[masscytometry.de](http://masscytometry.de)

## Our conference sponsors



## The meeting is supported by





## Dear friends of mass cytometry,

Welcome to the 8th German Mass Cytometry User Forum, taking place on February 11th and 12th, 2025, in Jena. For many of us, this annual meeting has become more than just a scientific conference – it is a chance to reconnect with familiar faces, share our latest findings, and collectively reflect on the progress we have made as mass cytometrists.

This year's meeting, hosted by Sabine Baumgart and Diana Dudziak from Jena University Hospital, again features a rich and varied program. We are excited to present talks from four distinguished keynote speakers: Carl Lee (University of Oxford), Daniel Bachurski (University of Cologne), Sonia Gavasso (University of Bergen), and Denis Shapiro (Heidelberg University Hospital). Moreover, we will feature the ever-popular "Getting Started" tutorial, and the "News from" sessions, where mass cytometry and imaging mass cytometry sites from Germany and Austria share their latest developments.

The poster session, always a lively part of the forum, will showcase innovative work and provide an excellent opportunity for in-depth discussions. We are pleased to once again recognize outstanding contributions with a poster prize. Additionally, we will award the best abstract-selected talk, both of which are generously sponsored by Denovosoftware.

We would like to thank our eight industry partners, some of whom are joining us for the first time. Their support plays a crucial role in making this event possible. We truly appreciate their contribution and look forward to seeing their latest developments and innovations.

Whether this is your first time attending or you have been with us since the early days, we hope you will find these two days in Jena to be enriching, engaging, and enjoyable.

Best wishes,

### The organizers of the GMCUF

**Sabine Baumgart, Bertram Bengsch, Desiree Kunkel, Henrik Mei, Sarah Warth, Ute Hoffmann, Jacqueline Hirscher, and Axel Schulz**



## 11.02.2025 Tuesday

**8:30 am**      **Start of registration**

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**9:00 am**      **Getting started – Tutorial**

Anika Rettig, Berlin, Désirée Kunkel, Berlin, Axel R Schulz, Berlin, Chair: Sarah Warth, Ulm

**11:00 am** *Coffee break*

**11:30 am - 12:00 pm**      **Welcome**

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**Opening by the meeting organizers**

**Welcome talk by Diana Dudziak**

*Universitätsklinik Jena, Germany*

**Phenotypic characterization of dendritic cell subpopulations in mouse and human lymphoid and non-lymphoid tissues**

**12:00 pm - 12:40** **Invited talk by Daniel Bachurski, Cologne, Germany**

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Chairs: Diana Dudziak & Sabine Baumgart

**Tellurium-based labeling of the extracellular vesicle proteome (TeLEV) enables high-dimensional analyses and nanometer-resolution imaging of EV recipients**

**12:40 pm – 1:10 pm** **Techno bites**

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Chairs: Sarah Warth & Axel Schulz

**BlueCatBio, Cell Signaling Technologies, Ionpath, Parhelia Biosciences, Polaris Biology, Scidentify**

**1:10 pm – 2:30 pm** **Lunch break & networking**

**2:30 pm – 3:45 pm** **Suspension MC session**

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Chairs: Henrik Mei & Axel Schulz

**Invited Talk by Sonia Gavasso, Bergen, Norway**

**Immune signature changes in blood of MS patients undergoing aHSCT**

**Short Talk by Mehmet Serdar Koca, Granada, Spain**

**CyTOF harmonization for multicenter immune monitoring studies**

**Short Talk by Lucas Arendholz, Berlin, Germany**

**High-parameter immunophenotyping using cytometry by time of flight (CyTOF) and unbiased bioinformatical analysis identifies biomarkers of Post-Covid Syndrome ME/CFS and of response to immunoadsorption therapy**

**Short talk by Jonas Haugsøen, Bergen, Norway**

**Immune Reconstitution After Hematopoietic Stem Cell Transplantation in Multiple Sclerosis**

*3:45 pm - 4:15 pm Coffee break*

**4:15 pm - 6:00 pm News from ... Part 1**

Chairs: Claudia Peitzsch & Sarah Warth

**News from Jena: Christian Puta**

**What is the impact of acute anaerobic exercise on immune cells in individuals with and without B cell depletion in the context of post-viral infection syndrome? – A case study**

**News from Berlin (BIH): Jennifer von Schlichting**

**Putting TeMals to work: Multiplexing of Matrigel embedded, patient-derived organoids using thiol-reactive barcodes**

**News from Leipzig: Sergio Gomez Olarte**

**Applications of CyTOF-based immunophenotyping: a case example of chemical mixture effects**

**News from Ulm: Simona Ursu**

**Start with CyTOF: Step by step to success from the perspective of a core facility**

**News from Cologne: Patrick Hölker**

**News from Cologne – Expanding high-dimensional analyses of aggressive lymphoma, the tumor microenvironment, and extracellular vesicles**

**News from Berlin (DRFZ): Adrian Barreno-Sanchez**

**A Mass Cytometry Workflow for Ex-Vivo Phosphorylation and Mucosal Immune Profiling in Systemic Lupus Erythematosus**

**News from Freiburg: Emilia Schlaak**

**I will discuss data from translational work that identifies key responding immune populations in patients exposed to checkpoint blockade in HCC.**

**6:00 pm – 10:00 pm Poster session & dinner**

## 12.02.2025 Wednesday

### 9:00 am – 9:30 am Product feature talk Standard BioTools

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Chairs: Sabine Baumgart & Claudia Peitzsch

#### Benjamin Ehret, Data Scientist, Navignostics AG

**Enhancing IMC through AI-based information transfer between antibody panels**

### 9:30 am – 10:45 am Imaging MC and Data Session

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Chairs: Bertram Bengsch & Desiree Kunkel

#### Invited Talk by Carl Lee, Oxford, UK

**Advancing Spatial Biology: Unlocking Clinical Potential with Spatial Proteomics**

#### Short Talk by Huck Adrian, Berlin, Germany,

**Fatty acid metabolism-dependent polarization of tumor associated macrophages**

#### Short Talk by Ira Godbole, Freiburg, Germany

**Deep profiling of the tumor immune microenvironment for personalized treatment for biliary tract cancer**

#### Short talk by Matthieu van Tilbeurgh, Fontenay-aux-Roses, France

**Role of antigen bio-distribution and persistence in early and long-term immune responses to the yellow fever vaccine in non-human primates**

### 10:45 am – 11:30 am Coffee break

### 11:30 am – 1:00 pm News from ... Part 2

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Chairs: Sabine Baumgart & Lena Müller

#### News from Wien: Klára Brožová

**Spatial proteomics to reveal intratumoral heterogeneity in breast cancer subtypes induced by the tumor microenvironment**

#### News from Dresden: Ezgi Senoglu

**Epi-CyTOF-based investigation of the epigenetic state of the human developing neocortex**

#### News from Heidelberg: Felix Hartmann

**Spatial quantification of cellular metabolism identifies metabolic niches predictive of response to immune checkpoint inhibition in metastatic melanoma patients**

**News from Berlin (MPIMG): Anika Rettig**

**Quantifying IMC data analysis step by step: a comparative evaluation of MICCRA and traditionally used approaches**

**News from Erlangen: Aleix Rius Rigau**

**Imaging mass cytometry-based characterisation of fibroblast subsets and their cellular niches in systemic sclerosis**

**News from Freiburg II: Florian Ingelfinger**

**CytoVI: Deep generative modeling of cytometry data across technologies**

**1:00 pm – 2:00 pm Lunch break & networking**

**2:00 pm – 2:40 pm Invited talk by Denis Schapiro, Heidelberg, Germany**

Chair: Bertram Bengsch & Henrik Mei

**From oncology to cardiology: Spatial omics technologies for topographic biomarker discovery**

**2:40 pm – 3:00 pm Farewell & Award Ceremony**

**Survey for the 8th GMCUF**



[https://docs.google.com/forms/d/e/1FAIpQLScHIPR\\_HvwwLbxf6uhtyQc0WBAeoKlx6w5HDhBCR-D7Yvb7rw/viewform?usp=header](https://docs.google.com/forms/d/e/1FAIpQLScHIPR_HvwwLbxf6uhtyQc0WBAeoKlx6w5HDhBCR-D7Yvb7rw/viewform?usp=header)