



Österreichische Gesellschaft für Zytometrie
Austrian Society for Cytometry

AlpenFlow 2026

7. – 9. May 2026



Location: *Kongress & TheaterHaus Bad Ischl*
Kurhausstraße 8
4820 Bad Ischl, Austria

Thursday, 07.05.2026

9:00 – 10:00 Registration

10:15 – 10:30 **Opening of the AlpenFlow**

Key note lecture

10:30 – 11:15 Cells in the Limelight
Andreas Radbruch, Berlin, Germany

Multiparameter in various settings

11:15 – 11:40 Performance of Fluorochromes used for Flow Cytometry
Sieghart Sopper, Innsbruck, Austria

11:40 – 12:05 Advanced Spectral Flow Cytometry for Immunophenotyping: Impact of Sample Preservation and Overnight Staining
Friedrich Neubauer, Vienna, Austria

12:05 – 12:30 Mapping the Cerebrospinal Fluid Immune Landscape in Multiple Sclerosis Using 39-Color Spectral Flow Cytometry
Sina Zaic, Vienna, Austria

12:30 – 14:00 Lunch & Networking

Data analysis

14:00 – 14:25 Handling big Data flows as a Core Facility
Bernhard Hochreiter, Klosterneuburg, Austria

14:25 – 14:50 Before and after Data Analysis: Data Acquisition and Data Management
Sophia Dardack, Vienna, Austria

14:50 – 15:15 Flow Cytometry Data Analysis Workflows using R
Aleander Tolios, Vienna, Austria

15:15 – 16:30 Break & Networking

16:30 – 18:00 **Workshop I** (3 in parallel, each WS 1.5 hours)

1. Multicolor Flow Cytometry

“An updated Step-by-Step guide for Spectral Panel Design from 5-50 Colors”
Florian Mair, Zurich, Switzerland

2. BioLegend

“Single-Cell Multiomics with TotalSeqT: From Multicolor Flow Cytometry to Simultaneous RNA and Protein Analysis”

Multiomics has transformed traditional sequencing experiments by providing exceptional protein and genetic analysis. In this presentation BioLegends newest TotalSeq Antibodies will be highlighted, now also enabling the analysis of Cytokines and Nuclear Protein Staining.

Samuel Körner, BioLegend From Revvity, Germany

3. Sartorius Lab Instruments GmbH

“Maximize Performance at Market Leading Speed: Meet the New iQue5”

In high throughput screening and companion diagnostics, time to result is key to success. See for yourself how the iQue5 acquires microtiter plates within minutes and how ForeCyt software organizes multiplexed assays and empowers cross-plate analysis.

Kathrin Dienst & Matthias Anstaett, Sartorius Lab Instruments, Germany

18:15 – 21:00 **Get together** – Kongress & TheaterHaus Bad Ischl

Friday, 08.05.2026

Extracellular Vesicles

8:30 – 8:55 Extracellular Vesicles as Novel Therapeutics Promises and Challenges
Johannes Grillari, Vienna, Austria

8:55 – 9:20 Nanoanalytics for EV characterization
Jaroslav Jacak, Linz, Austria

9:20 – 9:45 Human Cell-Derived Extracellular Vesicles as Novel Drug-Candidates: First-in Human Experience
Eva Rohde, Salzburg, Austria

9:45 – 10:10 Bacterial Extracellular Vesicles: What we know, what we guess, and what’s next
Irma Schabussova, Vienna, Austria

10:10 – 10:45 Break

10:45 – 12:15 **Workshop II** (3 in parallel, each WS 1.5 hours)

1. Beckman Coulter

“Small Particles, Smart Strategies: single particle workFLOW optimization”

Gain a clear, practical framework for the complete workflow of single-particle EV cytometry – from optimizing conventional instruments and implementing rigorous cleaning, controls, and calibration to applying validated staining and analysis strategies. The experts will also share case examples illustrating how flow cytometry is enabling deeper biological insights in EV studies.

Maximilian Haertinger, Vienna, Austria & Martin Wolf, Salzburg, Austria

2. OLS OMNI Life Science

“The NovoCyte Opteon Spectral Flow Cytometer: From Panel Design with Easypanel to R-Based Analytics”

This workshop introduces a complete spectral flow cytometry workflow, from acquisition on the NovoCyte Opteon to computational analysis. We will cover rational panel design using "Easypanel" and practical considerations for high-dimensional experiments. The session concludes with R-based strategies for advanced analysis and visualization of multiparameter flow data.

Thorsten Rieling, Sales and Product Specialist, Bremen, Germany

3. Milteny Biotec

“Dimensions matter - From dissociated cells to spatially resolved and cleared organoids”

This workshop demonstrates an integrated 1D–2D–3D workflow for organoid research, starting with gentle sorting of dissociated cells using the MACSQuant Tyto Lux. Two-dimensional multiplex spatial analysis on the MACSima enables interpretation of cell states within their spatial context rather than in isolation. Three-dimensional analysis of cleared whole organoids using the UltraMicroscope Blaze extends this by capturing cellular organization and architecture across the entire organoid volume.

Nina Fülle & Oliver Petters & Stephan Werk, Miltenyi Biotec, Bergisch Gladbach, Germany

12:15 – 13:15 Lunch & Networking

Imaging

13:15 – 13:40 Integrative Spatial Proteomics by Imaging Mass Cytometry and MALDI-MSI uncovers Tumor- and Microenvironment-driven Heterogeneity in Breast Cancer.
Klara Brozova, Vienna, Austria

13:40 – 14:05 Flow Cytometric Profiling of Erythroid Cells: Identification of Morphological and Phenotypic Subclasses
Michael Eigenschink, Vienna, Austria

14:05 – 14:30 Decoding Tumor Plasticity by Multiplexed Imaging: Spatial Insights into Metastatic Breast Cancer
Eva Chrenkova, Vienna, Austria

14:30 – 15:00 Break

Workshops

15:00 – 16:30 ***Workshop III*** (2 in parallel, each WS 1.5 hours)

1. Imaging Analysis

“Image analysis: segmentation, clustering, and overprocessing”

Manuel Campos-Medina, Vienna, Austria

2. Waters Biosciences (formerly BD Biosciences)

„Design smarter. Discover deeper“

With BD's CellView™ technology, you can analyze and sort cells based on their morphological features using flow cytometry, adding a powerful new dimension to single-cell research. This enables you to link cell shape and structure directly with phenotypic and functional markers in one integrated workflow.

The new BD Real Dyes™ dramatically simplify panel design thanks to their optimized spectral properties and deliver more robust performance, particularly in large, complex panels.

In combination with the BD FACS Discover™ platform, these modern tools help you generate more accurate, reproducible results and deeper biological insight, even as experimental complexity increases.

Karen Hogg, York, UK & Uwe Speck, Waters Biosciences, Heidelberg, Germany

16:30 – 16:45 Break

16:45 – 18:15 **Workshop IV** (2 in parallel, each WS 1.5 hours)

1. Cytex Biosciences

“Shedding Light on Extracellular Vesicles with Imaging and Spectral Flow Cytometry”

Flow cytometric analysis of extracellular vesicles (EVs) remains challenging due to the nanoscale size of the majority of EVs. To address these challenges, we have adopted both the Cytex® Amnis® ImageStream® imaging flow cytometry platform and our Full Spectrum flow cytometry systems (Northern Lights™, Aurora™, and Aurora™ CS). In this workshop, we will demonstrate end-to-end workflows for EV acquisition, including instrument setup, and share practical strategies to enhance EV detection and analytical resolution.

Peter Rhein, Cytex Biosciences, Amsterdam, The Netherlands

2. Sony Biotechnology

“Performance and portability for spectral analysis and cell sorting with the ID7000 and FP7000” (1h)

Learn how the ID7000 spectral cell analyzer is used for phenotyping antigen-specific T cell responses and supporting multi-site standardization.

We also highlight the seamless portability between the ID7000 and FP7000, allowing effortless transitions from analyzer to sorter.

Karim Boustani, Sony

„Establishment of a 20-color spectral flow cytometry panel for the characterization of murine antigen-specific CD8 T cell subsets on the SONY ID7000.“ (0.5h)

The purpose of the panel is to delineate CD8 T cell memory (TEM, TCM, and TRM) and various effector CD8 T cell (TE) subsets, along with their activation states upon systemic virus infections in mice. Tetramer staining was employed to define CD8 T cell specificity. Overall, this 20-colour panel provides a powerful and flexible tool for in-depth analysis of antigen-specific CD8 T responses.

Leonie Wolf, Innsbruck, Austria

- 18:30 **Special Lecture – “Memory of Mankind – Cerabyte”**
Martin Kunze, Hallstadt, Upper Austria, Austria
- The most durable data carriers (in the form of ceramic tablets), stored deep in the oldest salt mine in the world will carry our stories hundreds of thousand of years into the future. www.memory-of-mankind.com



- 20:00 – 23:00 **Common Dinner** in the **Cafe-Restaurant Zauner**
pre-registration required – fee applies 40€

Saturday, 09.05.2026

Immune deficiencies

- 9:00 – 9:25 Precision diagnostics of Inborn Errors of Immunity by cytometry - chances and limits
Elisabeth Förster-Waldl, Vienna, Austria
- 9:25 – 9:50 Inflammatory Landscape of HLH Patients
Manuel Trebo, Innsbruck, Vienna, Austria
- 9:50 – 10:25 Applying Flow Cytometry to Investigate the Tumor Microenvironment of Aggressive Lymphoma
Aleander Deutsch, Graz, Austria
- 10:25 – 11:00 Break

New techniques and Basics

- 11:00 – 11:25 Modern Metrics for Spread and Resolution: Cytometry in the Era of 50+ Colors
Florian Mair, Zurich, Switzerland
- 11:25 – 11:50 Developing Novel Fluorescent Dyes via Sustainable Synthesis
Danica Drpic, Vienna, Austria
- 11:50 – 12:15 A Snapshot of Single Cell Proteomics
Karl Mechtler, Vienna, Austria
- 12:15 – 12:40 A first Glimpse at Cells: Imaging with the S8 Sorter
Sebastian Peer, Innsbruck, Austria
- 12:45 Farewell

Organisation:

Maximilian Härtinger

Medical University of Vienna, Department of Pathology, Vienna, Austria

Sieghart Sopper

Medical University Innsbruck, Core Facility Flow Cytometry, Innsbruck, Austria

Andreas Spittler

Medical University of Vienna, Core Facility Flow Cytometry & Surgical Research Laboratories, Vienna, Austria

Alexander Tolios

Medical University of Vienna, Department of Blood Group Serology and Transfusion Medicine, Vienna, Austria

Approbation:

The conference of the "Austrian Society for Cytometry" (7.-9.5.2026) is approved for the Diploma Training Program of the ÖÄK with **20 Medical DFP Points** and by *biomed austria - Austrian Professional Association of Biomedical Analysts* with **20 CPD points**.

Speakers and Presenters:

Anstaett, Matthias

Sartorius Lab Instruments

Baumgart, Martin

Sony Biotechnology Europe

Boustani, Karim

Sony Biotechnology Europe

Brozova, Klara

Medical University Vienna, Core Facilities, Vienna, Austria

Campos-Medina, Manuel

Medical University Vienna, Core Facilities, Vienna, Austria

Chrenkova, Eva

Medical University Vienna, Center for Cancer Research, Vienna, Austria

Drpic, Danica

CeMM Research Center for Molecular Medicine, Vienna, Austria

Derdak, Sophia

Medical University of Vienna, Core Facilities, Vienna, Austria

Deutsch, Alexander

Medical University Graz, Department of Internal Medicine, Division of Haematology, Graz, Austria

Dienst, Kathrin

Sartorius Lab Instruments

Eigenschink, Michael

Medical University Vienna, Department of Pediatrics and Adolescent Medicine, Vienna, Austria

Förster-Waldl

Medical University Vienna, Department of Pediatrics and Adolescent Medicine, Vienna, Austria

Fülle, Nina

Miltenyi Biotec

Grillari, Johannes

Ludwig Boltzmann Institute for Traumatology, Vienna, Austria

Hogg, Karen

Technology Facility, Department of Biology, University of York, York, United Kingdom

Jacak, Jaroslaw

University of Applied Sciences, Linz, Austria

Härtinger, Maximilian

Medical University Vienna, Klinisches Institut für Pathologie, Vienna, Austria

Hochreiter, Bernhard

Institute of Science and Technology Austria - ISTA, Imaging and Optics Facility, Klosterneuburg, Austria

Neubauer, Friedrich

Medical University Vienna, Department of Pediatrics, Vienna, Austria

Körner, Samuel

BioLegend

Kunze, Martin

Hallstadt World Heritage, Hallstadt, Upper Austria, Austria

Mair, Florian

ETH Zurich, Institute of Molecular Health Sciences, Zurich, Switzerland

Mechtler, Karl

Research Institute of Molecular Pathology (IMP), Vienna, Austria

Peer, Sebastian

Medical University Innsbruck, Department of Internal Medicine & FACS Core Facility, Innsbruck, Austria

Petters, Oliver

Miltenyi Biotec

Radbruch, Andreas

The German Rheumatology Research Center (DRFZ), Berlin, Germany

Rieling, Thorsten

OLS OMNI Life Sciences

Rhein, Peter

Cytek Biosciences

Rohde, Eva

Paracelsus Medical University, Core Facilities, GMP Laboratory, Salzburg, Austria

Schabussova, Irma

Medical University Vienna, Institute of Specific Prophylaxis and Tropical Medicine, Vienna, Austria

Sieghart Sopper

Medical University Innsbruck, Core Facility Flow Cytometry, Innsbruck, Austria

Speck, Uwe

Waters Biosciences (formerly BD Biosciences)

Tolios, Alexander

Medical University Vienna, Department of Blood Group Serology and Transfusion Medicine, Vienna, Austria

Trebo, Manuel

Medical University Innsbruck, Department of Internal Medicine V, Innsbruck, Austria

Werk, Stephan

Miltenyi Biotec

Wolf, Leonie

Medical University Innsbruck, Virology Innsbruck, Innsbruck, Innsbruck

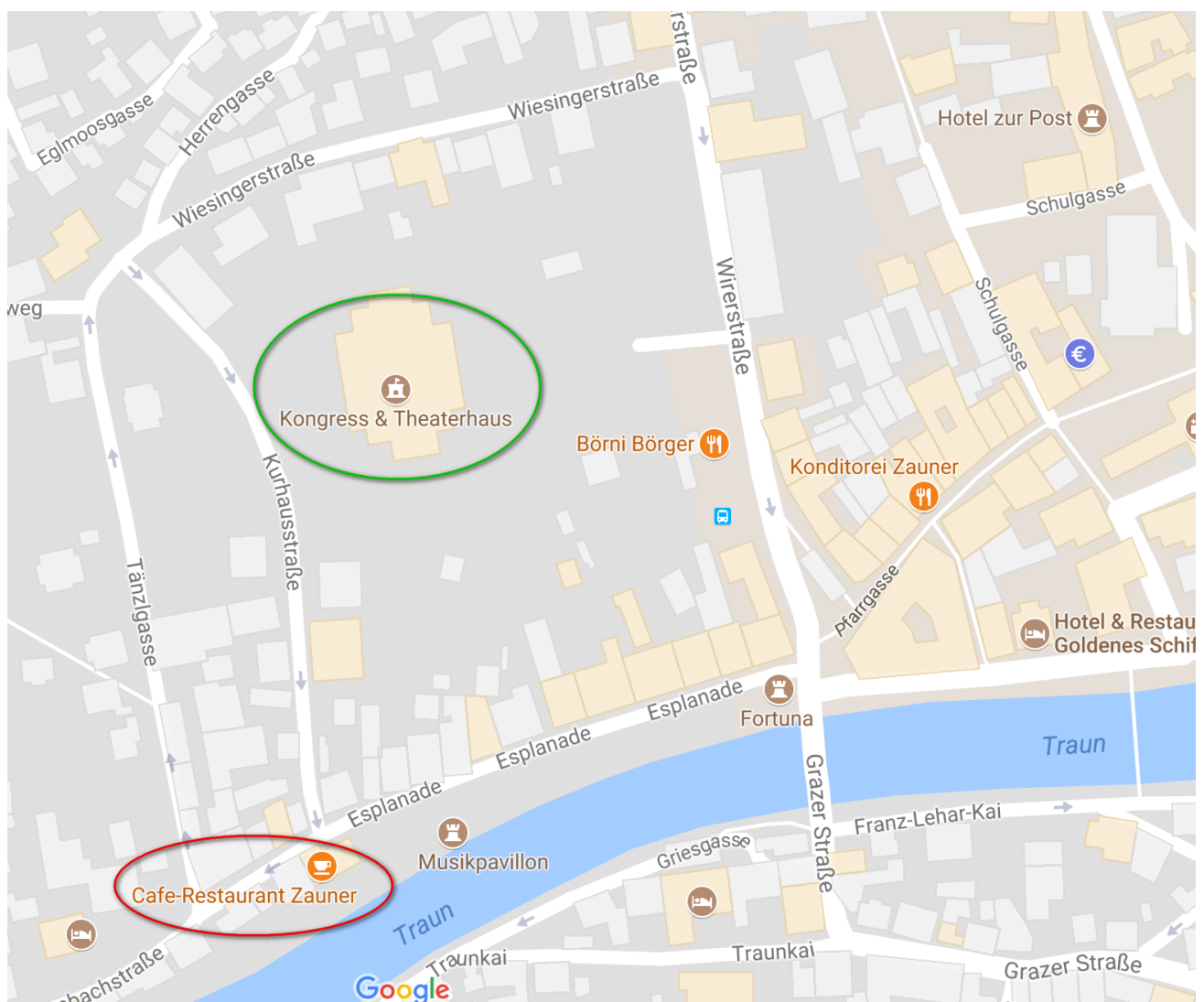
Wolf, Martin

Paracelsus Medical University, Institute of Experimental and Clinical Cell Therapy, Salzburg, Austria

Zaic, Sina

Medical University Vienna, Department of Neurology, Vienna, Austria

The **joint dinner** for pre-registered participants takes place in the "**Cafe-Restaurant Zauner**", Hasnerallee 2 (Esplanada), 4820 Bad Ischl (red circle).



Notes and drawings

Main Sponsors of the OEGfZ



Sponsors

The logo for Sartorius, featuring the word 'SARTORIUS' in a bold, black, sans-serif font centered within a bright yellow rectangular background.

Imprint:

Austrian Society for Cytometry
c/o Vienna Medical Academy for Medical Education and Research
Alserstraße 4, 1st Courtyard, 1090 Vienna
Phone: +43 (1) 405 13 83 - 21, Fax: +43 (1) 407 82 74
E-mail: ds@medacad.org

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