

Program

WEDNESDAY, OCTOBER 4TH, 2017

9:00-12:00 Institute of Immunology // Tutorial „Handling of Flow Cytometers“ // Thomas Kamradt, Nico Andreas // Institute of Immunology, Jena

9:30 -11:30 Lecture Hall 6 // Core Facility Networking Event

10:30-12:00 Seminar Room 04.03.07 // Tutorial „Scientific Publication“ // Attila Tarnok // University of Leipzig, Germany

11:45-12:45 Foyer // Welcome & Registration

12:45-14:15 Lecture Hall 6 // Session 1: Nanotechnology
Chair: Ulrike Taylor, Wolfgang Fritzsche

Microplastics – What we know and what we don't know //
Gunnar Gerdtz // Alfred Wegener Institute, Helgoland, Germany

Mass cytometry for detection of silver at the bacterial single cell level //
Yuting Guo // Department of Environmental Microbiology, Helmholtz Centre for Environmental Research, Leipzig, Germany

Development of a flow cytometer for nanoparticle detection //
Martin Hussels // Physikalisch-Technische Bundesanstalt, Germany

14:15-15:45 Lecture Hall 6 // Session 2: Product Slam
Chair: Frank Schildberg, Elmar Endl

15:45-16:45 FOYER // COFFEE BREAK & INDUSTRY SESSION

16:45-18:15 Lecture Hall 6 // Session 3: Cutting Edge
Chair: Elmar Endl, Wolfgang Fritzsche

Single cell transcriptomics to better understand immune cell differentiation and heterogeneity //
Marc Beyer // German Center for Neurodegenerative Diseases (DZNE), Bonn

Picturing metabolism of individual cells //
Theodore Alexandrov // EMBL Heidelberg, Germany

Cell cycle progression: A comparison between vibrational and cytofluorimetric signatures //
Lisa Vaccari // Elettra – Sincrotrone Trieste, Italy

Adding multispectral capabilities to a standard flow cytometer – a report on benefits and promising first results //

Toralf Kaiser // DRFZ, Germany

18:15-19:15

Lecture Hall 6 // Keynote

Chair: **Wolfgang Fritzsche**

Cytometry at the Point of Care – why and how this makes sense //

Eugen Ermantraut // Blink AG, Jena, Germany

19:15-21:00

Foyer // Welcome Reception at Industry Exhibition

THURSDAY, OCTOBER 5TH, 2017

9:15-10:45

Lecture Hall 6 // Session 4: Microbiology

Chair: **Christin Koch, Alexander Grünberger**

Microfluidics-based co-culture device, HuMiX, allows proximal co-culture of human epithelial cells and microbes //

Joanna Baginska // University of Luxembourg

Stronger together: On the benefits of dividing metabolic labor in bacteria //

Christian Kost // University of Osnabrück

Cytometry meets Next Generation Sequencing – Towards systems-level analyses of phenotypic heterogeneity //

Raphael Freiherr von Boeselager // Institute of Bio- and Geosciences, IBG-1: Biotechnology, Forschungszentrum Jülich, Germany

Natural microbial community cytometric analysis //

Zishu Liu // Helmholtz-Zentrum für Umweltforschung GmbH, Leipzig, Germany

10:45-11:15

FOYER // COFFEE BREAK

11:15-12:45

Lecture Hall 6 // Session 5: European Guest Session – Association Française Cytométrie (AFC)

Chair: **Wolfgang Fritzsche**

High expression of the pluripotency-associated transcription factor OCT4 associated with differentiation anomalies in acute myeloid leukemia and myelodysplastic syndromes //

Lydia Campos // CHU St. Etienne, Présidente de l'AFC

The bone marrow microenvironment in MDS: emerging concepts with therapeutic implications //

Carmen Aanei // CHU St. Etienne

12:45-13:30 Foyer // Poster Pitch & Poster Session

13:30-14:30 FOYER // LUNCH & POSTER SESSION

14:30-16:00 Lecture Hall 6 // Session 6: Klaus-Goerttler-Session
Chair: Jonathan Leo Schmid-Burgk, Wolfgang Fritzsche

Klaus-Goerttler-Laureat-Lecture //
MAPK signaling and inflammation link melanoma phenotype switching to induction of CD73 during immunotherapy //
Julia Reinhardt // University of Bonn

Redox proteomics using an MS-cleavable tag //
Sebastian Virreira-Winter // Max Planck Institute Berlin

Flow cytometric dissection of cellular processes using genome-wide loss of function genetics //
Lucas Jae // Gene Center Munich

16:00-16:45 Foyer // Poster Session

16:45-17:30 Lecture Hall 6 // Guest Lecture
Chair: Wolfgang Fritzsche

Navigation in an extreme environment: how desert ants forage efficiently //
Markus Knaden // Max Planck Institute for Chemical Ecology, Jena, Germany

17:30-19:00 Lecture Hall 6 // Members Assembly

19:00-22:00 VOLKSBAD // SOCIAL EVENT & CONFERENCE DINNER

Access with conference badge only

FRIDAY, OCTOBER 6TH, 2017

9:15-10:45

Lecture Hall 6 // Session 7: Microscopy

Chair: Anja Hauser, Raluca Niesner

Go with the flow – blood flow dynamics and HSPC homing in bone marrow microvessels //

Gabriele Bixel // Max Planck Institute for Molecular Biomedicine, Germany

The diversity of glial responses in health and disease – combining in vivo 2P imaging and transgenic mice with fluorescent reporter expression //

Frank Kirchhoff // University of Saarland, Germany

High-throughput 3D-Tomographic-Imaging Flow Cytometry //

Thomas Henkel // Leibniz-Institute of Photonic Technology (Leibniz IPHT)

Fourier transform infrared micro-spectroscopic imaging of biological samples //

Patrick Hoffmann // Center for Sepsis Control and Care / Jena University Hospital, Germany; Leibniz Institute of Photonic Technology, Germany

10:45-11:15

FOYER // COFFEE BREAK

11:15-12:45

Lecture Hall 6 // Session 8: Clinical Applications – ISAC-Lecture

Chair: Gergely Toldi, Stephan Schmid

Use of flow cytometry to determine the phenotype and function of tumour infiltrating lymphocytes in human cancer //

Paul Moss // University of Birmingham, United Kingdom

Regulation of pro- and anti-inflammatory human T helper cell functions by the microenvironment //

Christina Zielinski // Technical University of Munich, Germany

Antibiotics susceptibility testing by machine learning supported image analysis of colour coded microfluidic droplets //

Carl-Magnus Svensson // Hans Knöll Institute, Jena, Germany

Long-term stabilization of whole blood samples for flow and mass cytometry //

Sabine Baumgart // German Rheumatism Research Centre (DRFZ) Berlin

12:45-13:45

FOYER // FAREWELL & SNACKS
