

Program Overview

Wednesday, October 7, 2015

9:00am - 12:00pm Core Managers Meeting

DRFZ, Seminar Room 3

9:00am - 12:00pm Tutorials

DRFZ, Seminar Room 1

Attila Tárnok Publishing Cytometric Data

Andreas Grützkau Multi-Colour Flow Cytometry

Benjamin Tiburzy Analysis of Intracellular and Nuclear Factors

12:30pm - 12:45pm Welcome

Paul-Ehrlich Lecture Hall

Hyun-Dong Chang

12:45pm - 2:15pm Session 1: Cells in Situ

Paul-Ehrlich Lecture Hall

Chairs: Raluca Niesner, Attila Tárnok

Matthias Gunzer Whole organ tomography and live cell imaging in novel animal models to study the physiology of neutrophil granulocytes

Thomas Schüler The regulation of CD8+ T cell responses by Interferon- γ

Willem Corver Near-Haploidisation in Thyroid Cancer significantly associates with the Oncocytic Phenotype but not with Mitochondrial DNA Mutations

Randy Lindquist Intestinal epithelial cells fragment upon isolation, and their debris is taken up by intestinal epithelial lymphocytes or other epithelial cells

2:15pm - 2:45pm Coffee Break Atrium Cross Over

2:45pm - 4:15pm Session 2: Cells on the Move

Paul-Ehrlich Lecture Hall

Chairs: Thomas Kroneis, Michael Nüsse

Ellen Heitzer Insights into tumor heterogeneity and progression by the analysis of circulating tumor cells

- Anja Hauser** Dynamics of bone marrow survival niches for long-lived plasma cells
- Shukun Chen** Characterization of circulating tumor cells isolated by using a functionalized *in vivo* detector: from enumeration to single cell analysis
- Mairi A. McGrath** Cytometric determination of the mobility of memory CD4 lymphocytes
- 4:15pm - 5:30pm** **Product Slam**
Paul-Ehrlich Lecture Hall
Chairs: Frank Schildberg, Elmar Endl
- All exhibitors** 3-minute presentations about new products and technologies
- 5:30pm - 6:00pm** **Coffee Break** **Atrium Cross Over**
- 6:00pm - 7:00pm** **Guest Lecture**
Paul-Ehrlich Lecture Hall
Chair: Jörg Hemmer
- Emily Baird** Insect navigation: How miniature brains solve giant problems
- 7:00pm - 9:00pm** **Welcome Reception**
DRFZ Lobby
- 8:00pm - 10:00pm** **Core Managers Workshop**
DRFZ - Seminar Room 1
Chair: Elmar Endl

Thursday, October 8, 2015

- 9:00am - 10:30am** **Session 3: Cytometry of Microbial Communities**
Paul-Ehrlich Lecture Hall
Chairs: Christin Koch, Susann Müller
- Josep Gasol** Usage of flow cytometry to diagnose aquatic environment health by looking at the microbes
- Susanne Günther** Assessing responsiveness towards changes in environmental factors in complex microbial communities
- Susanne Dunker** Phenotypic plasticity and community dynamics of phytoplankton organisms revealed by flow cytometry
- Jakob Zimmermann** High-resolution flow cytometry reveals dysbiosis in murine inflammatory bowel disease

10:30am - 11:00am Coffee Break Atrium Cross Over (CCO)

11:00am - 12:30pm Session 4: Nanotechnology

Paul-Ehrlich Lecture Hall

Chairs: Wolfgang Fritzsche, Ulrike Taylor

Vladimir Zharov Recent advances in *in vivo* flow cytometry

Matthias Epple Silver as antibacterial and cytotoxic agent: Nanoparticles, ions, and silver alloys

Mareike Klinger-Strobel Blue fluorescent labeling of PLGA for particle tracking in LIVE/DEAD® stained pathogenic biofilms

Susanne Melzer Image cytometric analysis of gold nanoparticle uptake by macrophages

Judith Krawinkel Interaction of laser irradiation with peptide-conjugated gold nanoparticles for intracellular molecule delivery

12:30pm - 2:00pm Lunch & Poster Auditorium Cross Over

1:00pm - 1:30pm Poster Session Track A

Auditorium Cross Over

Chairs: Leoni Kunz-Schughart, Torsten Viergutz

1:30pm - 2:00pm Poster Session Track B

Auditorium Cross Over

Chairs: Leoni Kunz-Schughart, Torsten Viergutz

2:00pm - 3:30pm Session 5: High Content Analysis

Paul-Ehrlich Lecture Hall

Chairs: Andreas Radbruch, Cees Cornelisse

Bernd Bodenmiller Imaging mass cytometry: A novel imaging modality to visualize dozens of biomarkers in a targeted and simultaneous manner in tumor samples.

Robert F. Murphy Building models of cell organization, differentiation and perturbation directly from microscope images

Dieter G. Weiss A novel functional *in vitro* phenotypic screening assay for detecting anti-Parkinson drugs using neuronal networks derived from dopaminergic human iPSCs

Kristen Feher Comparison of flow cytometry samples using dimension reduction and binning

3:30pm - 4:00pm **Coffee Break** **Atrium Cross Over**

4:00pm - 5:30pm **Session 6: Iberian Society Guest Session**

Paul-Ehrlich Lecture Hall

Chairs: Andrea Cossarizza, Hyun-Dong Chang

Jordi Petriz Searching for the hematopoietic stem cells: Functional heterogeneity of CD34 positive and CD34 negative cells by co-staining with Vybrant® DyeCycle™ Violet (DCV) and an Alkaline phosphatase live stain

Julia Almeida Flow cytometry immunophenotyping of hematological malignancies: recent advances and future challenges

Jose-Enrique O'Connor Analysis by Real-Time Cytometry of the Interaction between Nitric Oxide and Superoxide Anion in Hematic and Tumor Cells

Francisco Sala-de-Oyanguren A novel phagocytosis assay in whole blood by flow- and imaging cytometry with GFP-Expressing bacteria

5:30pm - 7:00pm **Members Assembly**

Paul-Ehrlich Lecture Hall

8:00pm - 11:00pm **Conference Dinner**

Arminius Markthalle, Berlin-Moabit

Friday, 09/Oct/2015

9:30am - 11:00am **Session 7: Immunology**

Paul-Ehrlich Lecture Hall

Chairs: Gergely Toldi, Günter Valet

Andreas Thiel Few Parameter Cytometry – How to survive in the Century of Big Data

Leo A. Hansmann Multiple myeloma – from phenotypes to relationships

Dirk Mielenz Reduced fluorescence versus forward scatter time-of-flight and increased peak versus integral fluorescence ratios indicate receptor clustering in flow cytometry

Kerstin v. Kolontaj Automatic measurement of early T cell activation via Flow Cytometry FRET

Anna Nowak Lack of CD154 expression discriminates stable from instable Foxp3-expressing CD137+ Treg

11:00am - 11:30am **Coffee Break** **Atrium Cross Over**

11:30am - 1:00pm **Session 8: Emerging Technologies**

Paul-Ehrlich Lecture Hall

Chairs: Leoni Kunz-Schughart, Wolfgang Göhde

- AYOXXA** Multiple Cytokine Detection: three dimensional assay – two dimensional read-out
- Beckman Coulter** Beckman Coulter CytoFLEX Research Analyser, Exceptional Performance In A Surprisingly Small Instrument
- Beckton Dickinson** 20 Colors And Beyond
- eBioscience** Assessment of early kinetics of sequential gag mRNA and protein expression following HIV-1 latency reversal using PrimeFlow RNA technique
- Merck Millipore** Imaging Flow Cytometry Enhances the Detection of Small Particles and Rare Events Enabling Emerging Applications in Immunology and Oncology
- Zellkraftwerk** High-Content Cytometry for Translational Research

1:00pm - 2:00pm **Lunch** **Atrium Cross Over**

2:00pm - 3:30pm **Session 9: Klaus Görttler Session**

Paul-Ehrlich Lecture Hall

Chairs: Anna Rao, Alexander Grünberger

- Frank Delvigne** Bet-hedging in bioprocesses deciphered by on-line flow cytometry
- Walter Schubert** The human toponome project: translating the spatial protein network code (Toponome) into efficient therapies
- 3:30pm - 4:30pm** **Keynote: „Meet the Expert“**
- Paul-Ehrlich Lecture Hall
- Chair: Hyun-Dong Chang*

- Paul S. Frenette** Dissecting hematopoietic stem cell niches

4:30pm **Farewell**

We highly appreciate the support by:



WLAN password Atrium Cross Over

Benutzername: dgfz

Kennwort: 64a3