

SINGLE CELL 2008















5th Münster Conference on

Single Cell and Molecule Analysis

Progress in Research and Technology

November 24-25, 2008









Under the Auspices

of the Interdisciplinary Center for Clinical Research (IZKF) "The Chronic Disease" of the Medical Faculty of the University of Münster

Technology Platform and Core Unit "Integrated Functional Genomics" (IFG)

Organizing Committee

PD Dr. Simone König (IFG Proteomics Facility) Dr. Rita Naskar (IZKF Scientific Office)

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Conference Venue

Max-Planck-Institute for Molecular Biomedicine Röntgenstr. 20 48149 Münster





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Program

Monday, November 24

| 1:00 pm | Stephan Ludwig Opening and Introduction |
|---------------------|--|
| 1:05 pm | Alfred Yergey Keynote Lecture Variability in Mass Spectra – How we can get better answers |
| 1:50 pm | Katherina Psathaki The cell: An animated Introduction |
| 2:15 pm | POSTER & COMPANY EXHIBTION |
| 2:30 pm | WORKSHOP - LaVision BioTec - Uwe Schröer BioAnalyzer Gel - Proteomic imaging system for unstained and stained Gels |
| 3:15 pm | WORKSHOP - Carl Zeiss - Monika Stich Laser Capture Microdissection: A New Dimension in Sample Purity |
| SESSION I CHAIR: | TECHNOLOGY Stephan Ludwig |
| 4:00 pm | Philip Tinnefeld From single molecules to biomolecular interactions and super resolution microscopy |
| 4:25 pm | Andreas Offenhäuser Non-invasive monitoring of cellular ion-channel activity using electronic devices |
| 4:50 pm | Uwe Karst Quantitative analysis of fluorescently labeled thiols and amines by microchip capillary electrophoresis with wavelength-resolved fluorescence detection |
| 5:15 pm | Johannes Wessels Popular Science Lecture Big Bang & Primordial Soup: The hunt for the Quark-Gluon-Plasma |
| 6:00 pm | GET-TOGETHER |
| 6:15 pm | MÜNSTER-AT-NIGHT SIGHTSEEING TOUR |





11:50 am

1:00 pm

Tuesday, November 25

| SESSION II CHAIR: | OPTICAL IMAGING Malcolm Clench |
|-----------------------|---|
| 9:00 am | Christian Lohr ATP in the brain: More than an energy currency |
| 9:25 am | Michael Schäfers Isotope-based imaging of molecular targets in tissues and living animals |
| 9:50 am | Christoph Bremer In vivo cell tracking using magnetic resonance and optical imaging techniques |
| 10:15 am | Klaus Tiemann Small animal ultrasound – from functional to molecular imaging |
| 10:40 am | COFFEE BREAK |
| SESSION III CHAIR: | MASS SPECTROMETRIC IMAGING Alfred Yergey |
| 11:00 am | Malcolm Clench SPOTS, SMOTS and SLOTS - Shotgun Proteomics, Shotgun Metabolomics and Shotgun Lipidomics on Tissue Samples |
| 11:25 am | Marten Snel MALDI MS Imaging coupled with high-efficiency ion mobility separation |

Cell Biosciences - Andy Higgs Getting towards protein isoform assays in single cells

Towards cellular imaging – An elemental perspective

1:25 pm AlphaMetrix - Udo Schimmel

Alan Cox

Gene expression profiling from a minimal number of LCM selected pure cells





Tuesday, November 25

SESSION IV CELLS

CHAIR: Christian Lohr

1:50 pm Christian Wilhelm

Physiological characterization of plant cells by means of single cell analysis

2:15 pm **Heinrich Leonhardt**

Targeting and tracing antigens in living cells

2:40 pm Christian Korfhage

Single-cell whole genome amplification: Reliability and limits

3:05 pm Jürgen Klingauf

Coupling of exo- and endocytosis: insights from single-vesicle recordings

3:45 pm END OF CONFERENCE