

PROGRAMME

WEDNESDAY, October 5th, 2011

10:30-13:00 **PROFESSIONAL INFORMATION EVENT**

WELCOME ADDRESS

by the organisers

13:00 Siegfried Neumann *Molecular Diagnostics – Recent Advances and the Practical Needs for Translation from Bench to Bedside*

Session 1 **RNA TECHNOLOGIES**

Chair: Jens-Peter Fürste

14:00 Jörn Glökler *Life in a Bubble: of Emulsions and Nucleic Acid Libraries*

14:30 Georg Sczakiel *Target RNA influences guide strand loading of biologically active Argonaute-2*

15:00  COFFEE BREAK

Session 2 **SINGLE MOLECULE ANALYSIS**

Chair: Tim Hucho

15:30 Detlev Schild *Gaining Information From the Time Domain of [Ca²⁺]_i Signals*

16:00 Stefan Prechtel *Is Phenotypic High-Content Screening the Better Pathway Screening Approach to Identify Novel Chemical Entities?*

16:30 Sören Deininger *MALDI Imaging in Clinical Cancer Research*

17:00  COFFEE BREAK

Session 3 **BIOTECHNOLOGY**

Chair: Babette Regierer

17:30 Peter Guttman *3-D View into Cells with the HZB X-ray Microscope*

18:00 Candan T. Behar *Specific Targeting Molecular Probes: From Materials to Cells*

18:30 Fabio Facchinelli *Establishment of Endosymbiosis and the Making of Synthetic Chloroplasts*

19:00 POSTER SESSION with  and 

THURSDAY, October 6th, 2011

Session 4 **SYSTEMS BIOLOGY I**

Chair: Ria Baumgrass

09:00 Tobias Scheel *Quantitative Single Cell Analysis of Endogenous Transcription Factor Expression Levels Reveals NFATc2 and c-fos as Limiting Factors for IL-2 Production*

09:30 Mir-Farzin Mashreghi *MicroRNA Expression in Chronically Activated Memory Helper T Lymphocytes*

10:00 Luca Gerosa *Dissecting Transcriptional Circuits from Bacterial Growth*

10:30  COFFEE BREAK

Session 5 **TRANSLATIONAL CONTROL**

Chair: Stefan Kubick

11:00 Constanze Kaiser *The Interplay between miR2-RISC and the Translation Initiation Machinery*

11:30 Jan Medenbach *Translational Control by Protein Regulated Upstream Open Reading Frames*

12:00 Lisa Roberts *Understanding and Exploiting Novel Mechanism of Viral Translation*

12:30 –13:30  LUNCH BREAK

Session 6 DATA MINING AND MATHEMATICAL SYSTEMS

Chair: Peter Deuffhard

- 13:30 Stephan Menz *Direct Hybrid Stochastic-Deterministic Solution of the Chemical Master Equation*
14:00 Thierry Le Bihan *Quantitative Proteomic Analysis of the Unicellular Alga *Ostreococcus Tauri* under Various Conditions*

14:30

QUIZ

15:00



COFFEE BREAK

Session 7 FUNCTIONAL PROTEOMICS AND GENOMICS I

Chair: Harald Seitz

- 15:30 Robert Wellhausen *Protein Microarrays*
16:00 Friedrich W. Herberg *Protein Kinase A as a Model for in Vitro, in Vivo and in Silico Studies*
16:30 Jörg Hoheisel *Proteomics - Antibody Microarrays - Protein Microarrays*

17:00



COFFEE BREAK

Session 8 FUNCTIONAL PROTEOMICS AND GENOMICS II

Chair: Ina Pokorny

- 17:30 Ingo Dreyer *Long-range Interactions in Transporter Networks in Plants – New Insights from in Silico Approaches*
18:00 Andreas Vogt *Structural and Functional Protein Network Analysis Predicts Novel Systemic Functions for the G-Protein Coupled Receptor Rhodopsin*
18:30 Malte Buchholz *Parallelized Functional Characterization of Pancreatic Cancer Candidate Genes on Reverse Transfection Cell Microarrays*



CONFERENCE DINNER
(registration required for guests)

FRIDAY, October 7th, 2011

Session 9 SYNTHETIC BIOSYSTEMS

Chair: Susanne Hollmann

- 09:00 Günter von Kiedrowski *Systems Chemistry: Replicators and Assemblers*
09:30 Nediljko Budisa *Expanding and Engineering the Genetic Code*
10:00 Kristian Müller *From Binding Domain to Nano Structure - Selection and Interaction Devices*

10:30



COFFEE BREAK

Session 10 SYSTEMS BIOLOGY II

Chair: Klaus-Peter Michel

- 11:00 Hartmut Grammel *Redox Phenomena in Photosynthetic Bacteria – Applications in Systems Biology and Biotechnology*
11:30 Björn Junker *Towards High-throughput Metabolic Flux Analysis in Seeds of Crop Plants*
12:00 Timm Schröder *Tracking Stem Cells at The Single Cell Level: New Tools for Old Questions*
12:30 Melanie Börries *Short and Long-term Correlation Between Transcriptome Dynamics and Protein Synthesis Reveal the Existence of Slaving Principle in Complex Cellular Systems*

13:00

CLOSING REMARKS