

3rd NovAliX Conference

Scientific Programme

Tuesday June 7, 2016

Registration

Welcome Address

Session 1: Emerging Technologies

Session Chair

Dr Chun-wa CHUNG
(GLAXOSMITHKLINE, Stevenage, United Kingdom)

Mass Spectrometry and its Role in Drug Discovery (PL01)

Prof. Carol ROBINSON
(UNIVERSITY OF OXFORD, Oxford, United Kingdom)

A 5-Year Retrospective on Non-Covalent Mass Spectrometry Applied to Drug Discovery (OC01)

Dr Mathias ANTOINE
(INSTITUT DE RECHERCHES SERVIER, Croissy-sur-Seine, France)

Maldi Mass Spectrometry: From Imaging to Ultra-High-Throughput-Screening (Maldi-Uhts) (OC02)

Dr Jens FUCHSER
(BRUKER DALTONICS, Bremen, Germany)

Coffee Break

Exploring GPCR and Membrane Protein Dynamics with Solution NMR and X-ray Free-Electron Lasers (PL02)

Prof. Gebhard F.X. SCHERTLER
(PAUL SCHERRER INSTITUTE, Villigen, Switzerland)

**Exhibitor Short Presentation: Creoptix AG
The WAVE of the Future in Kinetics**

Dr Matyas VEGH
(CREOPTIX AG, Wädenswil, Switzerland)

**Exhibitor Short Presentation: Bruker BioSpin
Fragment Screening by Ligand Observed NMR**

Dr Stefan JEHLE
(BRUKER BIOSPIN, Faellanden, Switzerland)

Keynote Lecture

Chair

Dr Ursula EGNER
(BAYER, Berlin, Germany)

The Discovery of ABL001, an Allosteric Inhibitor of BCR-ABL (KN01)

Dr Sandra JACOB
(NOVARTIS, Basel, Switzerland)

Welcome Reception

Wednesday June 8, 2016

Registration

Session 2: Biophysics for Challenging Targets

Session Chair

Dr Geoff HOLDGATE
(ASTRAZENECA, Macclesfield, United Kingdom)

New Strategy for Challenging Targets: Time Resolved Molecular Interaction Analysis on Living Cells Using LigandTracer (PL03)

Dr Karl ANDERSSON
(RIDGEVIEW INSTRUMENTS AB, Vänge, Sweden)

**Exhibitor Short Presentation: Dynamic Biosensors
Biophysical Analysis of Molecular Interactions and Enzymatic Activity with switchSENSE**

Dr Duncan BORTHWICK
(DYNAMIC BIOSENSORS, Martinsried/Planegg, Germany)

Combining Binding Thermodynamics and Kinetic Binding Mechanisms to Assess The Selectivity of Inhibitors of Histone Deacetylase-Like Amidohydrolases (OC03)

Mr Christian MEYNERS
(UNIVERSITY OF APPLIED SCIENCES DARMSTADT, Darmstadt, Germany)

Coffee Break

Thermodynamics of the Ribosome Translation Machinery (OC04)

Dr Eric ENNIFAR
(CNRS, Strasbourg, France)

**Exhibitor Short Presentation: Molecular Sensing
Affinity Assays for GPCR ligand binding using TruBind™ Molecular Interaction Analysis**

Dr Yvonne VOLZ
(MOLECULAR SENSING, Idstein, Germany)

Probing the Structure and Dynamics of Proteins with Single-Molecule Spectroscopy (PL04)

Prof. Ben SCHULER
(UNIVERSITY OF ZURICH, Zurich, Switzerland)

Lunch & Networking

Poster Session 1

Session 3: Special Focus on Cryo-EM

Session Chair

Dr Ursula EGNER
(BAYER, Berlin, Germany)

Scientific Programme

High-Resolution Electron Cryo-Microscopy of Membrane Protein Complexes (PL05)

Prof. Werner KÜHLBRANDT
(MAX PLANCK INSTITUTE OF BIOPHYSICS, Frankfurt am Main, Germany)

Cullin-Ring Ubiquitin E3 Ligase Regulation by the Cop9 Signalosome (OC05)

Dr Simone CAVADINI
(FRIEDRICH MIESCHER INSTITUTE FOR BIOMEDICAL RESEARCH, Basel, Switzerland)

Coffee Break

Visualizing Dynamic Macromolecular Complexes at High Resolution by Cryo-EM (PL06)

Prof. Holger STARK
(MAX PLANCK INSTITUTE FOR BIOPHYSICAL CHEMISTRY, Göttingen, Germany)

EM in Industry: Expectations and Perspectives (PL07)

Dr Denis ZEYER
(NOVALIX, Illkirch, France)

Keynote Lecture

Chair

Dr Herbert NAR
(BOEHRINGER INGELHEIM, Biberach, Germany)

X-ray Crystallography: an Ever-Reemerging Technology (KN02)

Dr Gerard BRICOGNE
(GLOBAL PHASING LTD., Cambridge, United Kingdom)

Thursday June 9, 2016

Session 4: Computational Biophysics

Session Chair

Prof. Rod HUBBARD
(UNIVERSITY OF YORK & VERNALIS, Cambridge, United Kingdom)

Structural Stability of Protein-Ligand Complexes: Applications in Virtual Screening (PL08)

Prof. Xavier BARRIL
(BARCELONA UNIVERSITY, Barcelona, Spain)

Exhibitor Short Presentation: BioSolveIT

A Visual Approximation to On-the-Fly Computational Thermodynamic Profiling

Dr Marcus GASTREICH
(BIOSOLVEIT, St. Augustin, Germany)

Diverse Applications of Free Energy Calculations in Drug Discovery (OC06)

Dr David RINALDO
(SCHRÖDINGER, Mannheim, Germany)

Coffee Break

Uncoupling the Structure-Activity Relationships of Beta-2 Adrenergic Receptor Ligands from Membrane Binding (OC07)

Dr Callum DICKSON
(NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, Cambridge, United States)

Exhibitor Short Presentation: Biodesy

Real-time, Solution-based Measurement of Protein Conformational Change

Dr Tad GEORGE
(BIODESY, San Francisco, United States)

Computational Exploration of Protein Dynamics for Ligand Design (PL09)

Prof. Rebecca WADE
(HEIDELBERG INSTITUTE FOR THEORETICAL STUDIES AND HEIDELBERG UNIVERSITY, Heidelberg, Germany)

Lunch & Networking

Poster Session 2

Session 5: Cellular Biophysics

Session Chair

Prof. Helena DANIELSON
(UPPSALA UNIVERSITY, Uppsala, Sweden)

The Life and Death of Cells: Cellular Bioenergetics for Better Phenotype Based Drug Discovery (PL10)

Dr Magnus JANSSON
(SYMCEL SVERIGE AB, Spanga, Sweden)

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**Exhibitor Short Presentation: Sierra Sensors
Introducing MASS-2 for High Performance, High Throughput SPR Analysis**

Dr Sven MALIK
(SIERRA SENSORS, Champs sur Marne, France)

**Exhibitor Short Presentation: NovAliX
Balancing Standard and Unique Services for Drug Discovery**

Dr Frank MOFFATT
(NOVALIX, Illkirch, France)

Insulin Degrading Enzyme: Drug Target Engagement in Hela Cells by Cellular Thermal Shift Assay (OC08)

Mr Adrien HERLEDAN (INSTITUT PASTEUR DE LILLE, Lille, France)

Coffee Break

Imaging of G-protein Coupled Receptors while Quantifying their Ligand-binding Free Energy Landscape to Multiple Ligands (PL11)

Prof. Daniel MÜLLER
(ETH ZÜRICH, Basel, Switzerland)

Poster Prizes

Conference Dinner

Friday June 10, 2016

Session 6: Biophysics for Biotherapeutics

Session Chair

Dr Johannes OTTL
(NOVARTIS INSTITUTE OF BIOMEDICAL RESEARCH, Basel, Switzerland)

The Neonatal Fc Receptor (FcRn) Binds Independently to Both Sites of the IgG Homodimer with Identical Affinities (PL12)

Dr Yasmina ABDICHE
(RINAT-PFIZER, San Francisco, United States)

**Exhibitor Short Presentation: Malvern Instruments
Innovative Solutions for Biosimilars**

Mr Michel TERRAY
(MALVERN INSTRUMENTS, Orsay Cedex, France)

Analysis of Bispecific Interactions with the Switchsense Biosensor (OC09)

Dr Ulrich RANT
(DYNAMIC BIOSENSORS GMBH, Martinsried/Planegg, Germany)

Coffee Break

Kinetic Excursion Analysis (Kinexa) of Avidity Enhancement of a Multi-Valent Adnectin Binding to Clustered Receptors on Cho Cells (OC10)

Dr Lumelle SCHNEEWEIS
(BRISTOL-MYERS SQUIBB, Princeton, NJ, United States)

**Exhibitor Short Presentation: NanoTemper Technologies
Prometheus NT.48 - The Stability Expert**

Dr François-Xavier OGI
(NANOTEMPER TECHNOLOGIES, Karlsruhe, Germany)

Combinatorial SEC, AUC and TEM Approach for the Characterization of mAb Dimers (PL13)

Dr Arne RUFER
(F. HOFFMANN-LA ROCHE LTD., Basel, Switzerland)

Closing Remarks and Departure