Programme

Monday May 9, 2022

12:00 Registration

Session 8th NovAliX Conference - DAY 1

13:15 Opening & Welcome Address by NovAliX Conference Chairman

Dr Jean-Paul RENAUD (URANIA THERAPEUTICS, Ostwald, France)

SESSION 1:

BIOPHYSICAL APPROACHES FOR RNAS AS THERAPEUTICS AND THERAPEUTIC TARGETS

Session Chair

Dr Stefan GESCHWINDNER (ASTRAZENECA, Mölndal, Sweden)

13:25 Fluorescent Nucleobase Analogues - minimally Perturbing Labels in Nucleic Acid Biophysics and Bioimaging as well as Drug Discovery (IL01)

Prof. Marcus WILHELMSSON (CHALMERS UNIVERSITY OF TECHNOLOGY, Gothenburg, Sweden)

13:55 Structure-based Design of RNA-Binding Small Molecules and their Binding Characterization via MST, (kin)ITC and SwitchSENSE Assays (OC01)

Dr Christian KERSTEN (JOHANNES GUTENBERG UNIVERSITY, Mainz, Germany)

14:10 Exhibitor Short Presentation by Fida Biosystems

Mr Stephan KOETZNER (FIDABIO, Austria)

14:20 Binding of Small Molecules to Oligonucleotides in Drug Discovery (OC02)

(SANOFI-AVENTIS DEUTSCHLAND GMBH)
Dr Nina GROSSMANN (MERCK HEALTHCARE, Darmstadt, Germany)

14:35 Exhibitor Short Presentation by Bruker Daltonics

Dr Cyrill BRUNNER (BRUKER DALTONICS GMBH & CO. KG, Fällanden, Switzerland)

14:45 Manipulating RNA Function by Structural Dynamics (IL02)

Prof. Katja PETZOLD (KAROLINSKA INSTITUTET, Stockholm, Sweden)

15:15 Coffee Break

SESSION 2:

EMERGING TECHNIQUES FOR THE MEASUREMENT OF IN-CELL INTERACTIONS

Session Chair

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

15:45 Measuring Ligand Binding in Cells Using CETSA® (IL03)

Dr Joseph SHAW

(ASTRAZENECA, Cambridge, United Kingdom)

16:15 NovAliX Workshop:

Combining Biophysics to Enable Drug Discovery: Showcasing Structural MS and SPR

Dr Francois DEBAENE (NOVALIX, strasbourg, France) Dr Renaud MORALES (NOVALIX, Strasbourg, France)

16:45 In-cell NMR to study RNA Structure and Folding (IL04)

Prof. Harald SCHWALBE

(J.W. GOETHE UNIVERSITY FRANKFURT, Frankfurt am Main, Germany)

17:15 Observing Reversible Engagement of KRAS Hotspot Mutants at the Switch-2 Pocket in Cells (OC03)

Programme

Mr Matthew ROBERS (PROMEGA, Madison, United States)

17:30 In-cell NMR: a Powerful Approach for Drug Discovery (KL01)

Prof. Lucia BANCI (UNIVERSITY OF FLORENCE, Sesto Fiorentino, Italy)

KEYNOTE LECTURE

- 18:30 Welcome Reception for on-site participants
- 19:30 End of the Day

Programme

Tuesday May 10, 2022

08:00 Registration

Session 8th NovAliX Conference - DAY 2

SESSION 3: HOT TOPICS

Session Chair

Dr Chun-wa CHUNG

(GLAXOSMITHKLINE, Stevenage, United Kingdom)

09:00 The Use of Dual Targeted Bicycles® to Induce Localised CD137 Agonism (OC04)

Dr Peter BROWN

(BICYCLE THERAPEUTICS, Cambridge, United Kingdom)

09:15 Biophysical Methods Enabling Structure-Based Drug Discovery on Membrane Protein Targets (OC05)

Dr Michael HENNIG

(LEADXPRO AG, Villigen, Switzerland)

09:30 Exhibitor Short Presentation by Refeyn

Dr James WILKINSON

(REFEYN, Oxford, United Kingdom)

09:40 Applying Biophysical Interaction Methods to Characterize Binary and Ternary Complex Formation (OC06)

Dr Daniel SCHWARZ

(MERCK KGAA, Darmstadt, Germany)

09:55 Discovery and Characterization of Active Small Molecule Ligands Targeting the Function of Ubiquitin Specific Protease USP7 by a Catalytic Site Independent Mechanism (OC07)

Prof. Till MAURER

(IDEAYA BIOSCIENCES, South San Francisco, United States)

10:10 Coffee Break

10:40 The Biophysics in the Discovery of Potent cGAS Inhibitors (OC08)

Dr Manuel HILBERT

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

10:55 Exhibitor Short Presentation by Collaborative Drug Discovery

Mr Mark HARDING

(COLLABORATIVE DRUG DISCOVERY, Toulouse, France)

11:05 Positioning Biophysics on the Drug Discovery Map (IL05)

Dr Christine GENICK

(NOVARTIS PHARMA AG, Basel, Switzerland)

ROUNDTABLE DISCUSSION 1

11:35 Roundtable set-up

11:40 Big Data Management in Biophysics moderated by

Dr Engi HASSAAN

(NATURE COMMUNICATIONS, Berlin, Germany)

with the participation of

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

Dr Matthias FRECH (MERCK, Darmstadt, Germany)

Dr Christine GENICK (NOVARTIS PHARMA AG, Basel, Switzerland)

Dr Stefan GESCHWINDNER (ASTRAZENECA, Mölndal, Sweden)

12:25 Lunch & Networking on-site

Programme

| 13:25 | Poster Session for on-site delegates Virtual Meet & Greet for online delegates |
|-------|---|
| 14:25 | Session Chair |
| | Dr Sandra JACOB (NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, Basel, Switzerland) |
| | SESSION 4: BIOPHYSICS IN COVALENT DRUG DISCOVERY |
| 14:25 | Reactive Fragment Platforms for Covalent Hit ID (IL06) |
| | Dr Emma GRANT (GLAXOSMITHKLINE, Stevenage, United Kingdom) |
| 14:55 | Exhibitor Short Presentation by Thermo Fisher Scientific |
| | Dr Igor NEDERLOF (THERMO FISHER SCIENTIFIC, Eindhoven, The Netherlands) |
| 15:05 | Functionalizing Covalent Binders (IL07) |
| | (SANOFI-AVENTIS DEUTSCHLAND GMBH) Dr Nir LONDON (THE WEIZMANN INSTITUTE OF SCIENCE, Rehovot, Israel) |
| 15:35 | Coffee Break |
| 16:05 | Dynamic Biosensors workshop: switchSENSE® heliX®: Measuring Interactions from Small Molecules to Cells |
| | Dr Daisy PAIVA (DYNAMIC BIOSENSORS GMBH, Planegg, Germany) Dr Alice SOLDA (DYNAMIC BIOSENSORS GMBH, Planegg, Germany) |
| 16:35 | Exhibitor Short Presentation by Crelux, a WuXi AppTec Company |
| | Dr Tobias DEIMLING (CRELUX, A WUXI APPTEC COMPANY, Martinsried, Germany) |
| 16:45 | Structure-Based Design of a Phosphotyrosine-Masked, Cell Penetrant Small Molecule Covalently Targeting the E3 Ligase SOCS2 (IL08) |
| | Dr Sarath RAMACHANDRAN (UNIVERSITY OF DUNDEE, Scotland, United Kingdom) |
| 17:15 | Poster Session 2 for on-site delegates |

18:15

End of the Day

20:00 Conference Dinner at the Paulaner am Nockherberg sponsored by Dynamic Biosensors

Virtual Meet & Greet for online delegates

Programme

Wednesday May 11, 2022

Session 8th NovAliX Conference - DAY 3

SESSION 5:

USE OF BIOPHYSICAL TOOLS AND STRUCTURAL BIOLOGY TO UNDERSTAND THE MOLECULAR MECHANISM OF INDUCED-PROXIMITY AGENTS

Session Chair

Prof. Alessio CIULLI

(UNIVERSITY OF DUNDEE, Dundee, United Kingdom)

09:00 Towards Regulation of MDM2 via Stabilisation of a Complex Protein-Protein Interaction (OC09)

Mr Jake WARD

(UNIVERSITY OF LEICESTER, Leicester, United Kingdom)

09:15 Exhibitor Short Presentation by Promega

Dr Stephan KIRCHMAIER (PROMEGA, Walldorf, Germany)

09:25 Molecular Glues Stabilizing 14-3-3 Protein-Protein Interactions (IL09)

Dr Christian OTTMANN

(EINDHOVEN UNIVERSITY OF TECHNOLOGY, Eindhoven, The Netherlands)

09:55 Coffee break

10:25 MOSBRI Presentation

Dr Patrick ENGLAND

(MOSBRI - INSTITUT PASTEUR PARIS, Paris, France)

10:35 Exploration of Orthogonal E3 Ligases for Targeted Protein Degradation (IL10)

Dr Lena MÜNZKER

(BOEHRINGER INGELHEIM, Wien, Austria)

ROUND TABLE DISCUSSION 2

11:05 Roundtable set-up

11:10 Use of Biophysical Tools and Structural Biology to Understand the Molecular Mechanism of Induced-proximity Agents moderated by

Prof. Alessio CIULLI (UNIVERSITY OF DUNDEE, Dundee, United Kingdom) Dr Engi HASSAAN (NATURE COMMUNICATIONS, Berlin, Germany)

with the participation of

Dr Christian OTTMANN (EINDHOVEN UNIVERSITY OF TECHNOLOGY, Eindhoven, The Netherlands) Dr Herbert NAR (BOEHRINGER INGELHEIM, Biberach, Germany)

11:55 Poster Prizes & Closing Remarks

Dr Jean-Paul RENAUD (URANIA THERAPEUTICS, Ostwald, France)

12:05 Departure