

9th NovAliX Conference | Hybrid Event

Program

Wednesday 26/04/2023

18:00 Registration

Session 9th NovAliX Conference - DAY 1

19:00 Opening & Welcome Address by NovAliX Conferences Chairman

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

SESSION 1: EMERGING TECHNOLOGIES - NEW BIOPHYSICAL APPROACHES FOR MEASURING MOLECULAR INTERACTIONS

Session Chair

Dr Chaohong SUN
(ABBVIE, North Chicago, United States)

19:10 Kinetic Characterization of Ligand and Antibody Binding to Cell Surface Expressed CCRL2 Using Surface Plasmon Resonance Microscopy (SPRM) (IL01)

Dr Jonathan BROOKS
(PFIZER, Cambridge, United States)

19:40 Single-Molecule Analysis of Drug-Target Interactions Using a Molecular Forceps (OC01 - virtual presentation)

Prof. Terence STRICK
(ECOLE NORMALE SUPÉRIEURE, Paris, France)

19:55 Exhibitor Short Presentation
Single Molecule Microscopy-Based Platform for Biophysical Characterization of Drug Candidates (ESP01)

Dr Tim P. KAMINSKI
(INSINGULO SOLUTIONS AB, Mölndal, Sweden)

20:05 NMR Reporter Assays for the Quantification of Weak-Affinity Receptor–Ligand Interactions (OC02)

Dr Reto WALSER
(ASTEX PHARMACEUTICALS, Cambridge, United Kingdom)

20:20 Exhibitor Short Presentation
heliX® Biosensors: Measuring Interactions from Small Molecules to Cells (ESP02)

Dr Antonio DI MECO (DYNAMIC BIOSENSORS GMBH, Woburn, United States)
(SANOFI-AVENTIS DEUTSCHLAND GMBH)

20:30 High-Throughput Protein Analysis and Binding Assays Enabled by IR-MALDESI-MS (IL02)

Dr Nathaniel ELSEN
(ABBVIE INC., North Chicago, United States)

21:00 Coffee Break & Exhibition on-site

SESSION 2: COVALENT DRUG DISCOVERY

Session Chair

Dr Daniel WYSS
(MERCK & CO., INC., Morristown, United States)

21:30 Developing Covalent Small Molecules for Protein Targets from Kinases to Transcription Factors (IL03)

Dr Tinghu ZHANG
(STANFORD, Stanford, United States)

22:00 Covalent Screening and Hit Characterization Methods for Efficient Covalent Drug Discovery (OC03)

Dr Mela MULVIHILL
(GENENTECH, INC., South San Francisco, United States)

22:15 In-Cell Covalent Inhibitors Discovery (IL04)

Dr Brent MARTIN
(SCORPION THERAPEUTICS, Boston, United States)

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- 22:45** **Exhibitor Short Presentation**
Biophysical and Structural Biology Methods Enable Fragment-Based Covalent Ligand Discovery (ESP03)
Dr Tobias DEIMLING
(CRELUX, A WUXI APPTec COMPANY, Martinsried, Germany)
- 22:55** **Discovery of the KRAS G12C Covalent Drug Adagrasib and Beyond (OC04)**
Dr Robin GUNN
(MIRATI THERAPEUTICS, San Diego, United States)
- 23:10** **Exhibitor Short Presentation**
NovAliX: Drug Discovery from Stand-Alone to Integrated Projects (ESP04)
Dr Jonathan SETHNA
(NOVALIX, Philadelphia, United States)
- KEYNOTE LECTURE**
- 23:20** **Sequence-Based Design of RNA-Targeted Small Molecules (KL01)**
Prof. Matthew DISNEY
(UF SCRIPPS, Jupiter, United States)
- 00:20** **Welcome Reception for on-site participants**
Sponsored by ALPX
- 01:30** **End of the Day**

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Thursday 27/04/2023

14:00 Registration

Session 9th NovAliX Conference - DAY 2

SESSION 3: HYBRID METHODS AND TECHNIQUE COMBINATIONS

Session Chair

Dr Holly SOUTTER
(BROAD INSTITUTE, Cambridge, United States)

15:00 ***Leishmania* Translation Initiation Factor IF4E: a Potential Target for Antiparasitic Drug Development (IL05)**

Dr Mélissa LÉGER-ABRAHAM
(BLAVATNIK INSTITUTE | HARVARD MEDICAL SCHOOL, Boston, United States)

15:30 **Drug Discovery for the Oncogenic Protein KRAS on a Model Membrane (OC05)**

Dr Fenneke KLEINJAN
(UHN, Toronto, Canada)

15:45 **HDX-MS Use as a Complementary Technique to X-ray Crystallography and Cryo-EM to Better Understand Small Molecule Binding Events (OC06)**

Dr Fabrice CIESIELSKI
(NOVALIX, Illkirch, France)

16:05

Coffee Break & Exhibition on-site

16:35 **Integration of Biophysics and Simulation to Drive Drug Discovery (IL06)**

Dr Holly SOUTTER
(BROAD INSTITUTE, Cambridge, United States)

17:05 **Biophysical Characterization of Allosteric Cooperativity in PRMT5 (OC07)**

Prof. Till MAURER
(IDEAYA BIOSCIENCES, South San Francisco, United States)

17:20 **Exhibitor Short Presentation**

Integrated Use of Biophysics to Improve Data and Decision Quality in Drug Discovery (ESP05)

Dr Stoyan MILEV
(MALVERN PANALYTICAL INC., Westborough, United States)

17:30 **Identification and Characterization of Modulators of DEAH-Box Helicase DHX9 (OC08)**

Dr Ann BORIACK-SJODIN
(ACCENT THERAPEUTICS, Lexington, United States)

KEYNOTE LECTURE

17:45 **How Ligand-Binding Biophysics can Advance a Small-Molecule Neuroscience Portfolio (KL02)**

Dr Laura SILVIAN
(BIOGEN, Cambridge, United States)

18:45

Lunch, Networking & Exhibition on-site

19:45

In-person delegates: Poster Session 1

Virtual delegates: Meet & Greet discussion with Exhibitors

SESSION 4: BIOPHYSICAL ASSAYS FOR PROTACS AND MOLECULAR GLUES

Session Chair

Dr Claudio CIFERRI
(GENENTECH, South San Francisco, United States)

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- 20:30 An Integrated Biophysical Approach to Discover Ligands for a Novel E3 Ligase (IL07)**
Dr Nichole O'CONNELL
(KYMERA THERAPEUTICS, Watertown, United States)
- 21:00 Exhibitor Short Presentation**
Cube Biotech Combines Seamless Gene-to-CryoEM Structure Service with its Detergent-Free Membrane Protein Stabilization Platform Technology Native Nanodiscs (ESP06)
Dr Barbara MAERTENS
(CUBE BIOTECH, Monheim, Germany)
- 21:10 Targeted MDM2 Degradation Reveals a new Vulnerability for P53-Inactivated Triple Negative Breast Cancer (OC09)**
Dr Joseph SALVINO
(THE WISTAR INSTITUTE, Philadelphia, United States)
- 21:25 Coffee Break & Exhibition on-site**
- 21:55 Capturing the Flexibility of CRBN Protacs with Cryo-EM (OC10)**
Dr Daniel PETER
(BOEHRINGER INGELHEIM, Vienna, Austria)
- 22:10 Exhibitor Short Presentation**
How Cryo-EM is Transforming Drug Discovery (ESP07)
Dr Zuben BROWN
(THERMO FISHER SCIENTIFIC, Hillsboro, United States)
- 22:20 A Covalent BTK Ternary Complex Compatible with Targeted Protein Degradation (IL08)**
Dr Matthew CALABRESE
(PFIZER, Groton, United States)
- 22:50 Round Table set-up**
- 22:55 Round Table Discussion:**
Biophysics and Structural Biology Studies to Assist the Development of PROTACs, Molecular Glues and Beyond
Moderated by
Dr Katarzyna MARCINKIEWICZ
(NATURE COMMUNICATIONS, New York, NY, United States)
- 23:40 In-person delegates: Poster Session 2**
Virtual delegates: Meet & Greet discussion with Exhibitors
- 00:30 End of the Day**
- 01:00 Conference Dinner on-site (subject to prior registration)**

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Friday 28/04/2023

Session 9th NovAliX Conference - DAY 3

SESSION 5: SMALL MOLECULES TARGETING RNA / UNDERSTANDING SMALL-MOLECULE SELECTIVITY TOWARDS RNA

Session Chair

Dr MariJean EGGEN
(ELI LILLY, Indianapolis, United States)

15:00 Exploring the Undiscovered Country of RNA as a Drug target — Finding Bioactive Ligands against XIST RNA with Affinity-selection MS Screening (IL09)

Dr Elliott B. NICKBARG
(MERCK & CO., INC., Boston, United States)

**15:30 Exhibitor Short Presentation
Atropisomers in Kinase Inhibitors (ESP08)**

Mr Branden LEE
(BIRDO TECH, San Diego, United States)

**15:40 Exhibitor Short Presentation
Developments in Sample Preparation and Handling Technology for Crystallography and Cryo-EM (ESP09)**

Ms Joyce FRANK
(MITEGEN, Ithaca, United States)

15:50 Coffee Break & Exhibition on-site

**16:20 Exhibitor Short Presentation
Automated Protein Crystallography for Structure Determination and Expert Small-Molecule Screening (ESP10)**

Dr Andrea PICA
(ALPX, Grenoble, France)

16:30 A Structure-based Approach to Discovering RNA-targeted Small Molecules (IL10)

Dr Elena MENICHELLI
(ARRAKIS THERAPEUTICS, Waltham, United States)

KEYNOTE LECTURE

17:00 Reimagining Druggability using Chemoproteomic Platforms (KL03)

Prof. Daniel NOMURA
(UC BERKELEY, Berkeley, United States)

18:00 Poster Prizes & Closing Remarks

18:10 Departure