# Thursday November 16, 2023

### Registration

### **Opening Ceremony**

Dr Yves P. AUBERSON (NOVARTIS & EFMC, Basel, Switzerland) Prof. Maja KÖHN (UNIVERSITY OF FREIBURG, Freiburg, Germany)

# PL01 - Moving Undruggable Discoveries into the Drug Discovery Pipeline with Chemical Biology

Dr John TALLARICO (NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, Cambridge, United States)

Session 1: Chemical Proteomics in Drug Discovery

### **Session Chair**

Dr Sebastian ESSIG (BAYER AG, Wuppertal, Germany)

# KL01 - Chemoproteomics Approaches and their Contributions to Drug Discovery

Dr Marcus BANTSCHEFF (CELLZOME/GSK, Heidelberg, Germany)

# Coffee Break, Networking & Exhibition

### IL01 - Towards Covalent Inhibitors Addressing Diverse Amino Acids

Dr Stephan HACKER (LEIDEN UNIVERSITY, Leiden, The Netherlands)

### IL02 - ABPP and its Impact on Drug Discovery - Successful Examples from the MAGL Program

Dr Uwe GRETHER (F. HOFFMANN-LA ROCHE, Basel, Switzerland)

# OC01 - Lessons for Covalent Drug Development from Deep Chemoproteomic Profiling of Approved Covalent Drugs

Dr Micah NIPHAKIS (LUNDBECK, San Diego, CA, United States)

# Lunch, Networking & Exhibition

### Company Workshop by WuXi AppTec Emerging Modalities in Drug Discovery

Dr Tao GUO (WUXI APPTEC, St Pauls, United States)

### Session 2: Computational Chemical Biology (LS-EuChemS Session)

## **Session Chair**

Dr Sonsoles MARTIN-SANTAMARIA (CIB-CSIC, Madrid, Spain)

### KL02 - Unravelling the Molecular Mechanism of Pre-mRNA Splicing via All-atom Simulations

Prof. Alessandra MAGISTRATO (CNR-IOM, Trieste, Italy)

### IL03 - Challenges in Simulating Molecular Recognition Using Coarse-grain Models

Prof. Manuel MELO (UNIVERSITY NOVA DE LISBOA, Oeiras, Portugal)

# OC02 - Molecular Binding Studies in G Protein Coupled Receptors: Insights for Drug Discovery

Prof. Vittorio LIMONGELLI (UNIVERSITÀ DELLA SVIZZERA ITALIANA USI, Lugano, Switzerland)

Coffee Break, Networking & Exhibition

**Session 3: Chemically Induced Proximity** 

### **Session Chair**

Prof. Gonçalo BERNARDES (UNIVERSITY OF CAMBRIDGE & IMM LISBOA, Cambridge, United Kingdom)

# OC03 - Molecular Glues for the 14-3-3 Interactome

Dr Richard DOVESTON (UNIVERSITY OF LEICESTER, Leicester, United Kingdom)

# **IL04 - Tumor Targeting**

Prof. Dario NERI (ETH ZÜRICH, Zürich, Switzerland)

### IL05 - Small Molecule Therapeutics Targeting Fibroblast Activation Protein in the Tumor Microenvironment

Dr Samuele CAZZAMALLI (PHILOCHEM AG, Otelfingen, Switzerland)

# KL03 - Chemogenetic and Optogenetic Technologies for Probing Molecular and Cellular Networks (Virtual Lecture)

Prof. Alice TING (STANFORD UNIVERSITY, Stanford, United States)

Poster Session I (Odd), Networking & Exhibition

Welcome Reception & Poster Session I (Odd), Networking & Exhibition

**End of the Day** 

# Friday November 17, 2023

### Chair

Prof. Gianluca SBARDELLA (UNIVERSITY OF SALERNO, Fisciano, Italy)

### PL02 - Ribozymes Meet RNA Modifications

(SOPLVIAS AG (WAS FUJIFILM))
Prof. Claudia HÖBARTNER (UNIVERSITY OF WÜRZBURG, Würzburg, Germany)

Session 4: Target Engagement and Mechanism of Action Determination

#### **Session Chair**

Dr Andrew ZHANG (ASTRAZENECA, Waltham, United States)

### KL04 - Mechanistic Insight in Drug Discovery: Past Tense of Future Direction? (Virtual Lecture)

Dr Rachel GRIMLEY (CANCER RESEARCH UK), Cambridge, United Kingdom)

### Coffee Break, Networking & Exhibition

# **IL06 - Biophysical Proteomics**

Dr Mikhail SAVITSKY (EUROPEAN MOLECULAR BIOLOGY LABORATORY, Heidelberg, Germany)

# IL07 - Proteomics Profiling of PROTACs and E3 Modulators to Identify Mechanistic Biomarkers and Substrates

Dr Meha SINGH (ASTRAZENECA, Waltham, United States)

### OC04 - Morphological Profiling of Small Molecules Using the Cell Painting Assay

Dr Slava ZIEGLER (MAX PLANCK INSTITUTE OF MOLECULAR PHYSIOLOGY, Dortmund, Germany)

# Lunch, Networking & Exhibition

Session 5: Protein Conformations: Beyond the Ground State

# **Session Chair**

Dr Wolfgang JAHNKE (NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, Basel, Switzerland)

# KL05 - Evolution of Energy Landscapes and its Exploitation for Drug and Enzyme Design

Prof. Dorothee KERN (BRANDEIS UNIVERSITY, Waltham, United States)

### IL08 - Low Molecular Weight Inhibitors of IL-1?: from a 19F NMR Fragment Hit to a Cellular Proof of Concept

Dr Anna VULPETTI (NOVARTIS, Basel, Switzerland)

IL09 - NMR Provides Unique Insight into the Role of Disorder in Highly Dynamic Viral Replication Assemblies

# EFMC-ISCB 2023

# **Programme**

Prof. Martin BLACKLEDGE (INSTITUT DE BIOLOGIE STRUCTURALE (IBS), Grenoble, France)

# OC05 - Spatiotemporally Controlled Generation of NTPs as A Versatile Tool for Single-Molecule Studies

Prof. Sebastian DEINDL (UPPSALA UNIVERSITY, Uppsala, Sweden)

Coffee Break, Networking & Exhibition

Session 6: Targeting Metabolism (ICBS Session)

### **Session Chair**

Prof. Zaneta NIKOLOVSKA-COLESKA (UNIVERSITY OF MICHIGAN, Ann Arbor, United States)

# KL06 - Understanding the Role of Metabolism in Cancer

Prof. Matthew G. VANDER HEIDEN (MIT, Cambridge, United States)

### IL10 - Chemical Biology of Sterol-mediated Processes

Dr Luca LARAIA (TECHNICAL UNIVERSITY OF DENMARK, Kgs. Lyngby, Denmark)

# OC06 - The Hidden Activator Within the Inhibitor: Regulated Tissue-Selective Inhibition and Activation of the Sugar Tolerance Transcription Factor ChREBP

Dr Maren HEIMHALT (LUDWIG MAXIMILIAN UNIVERSITÄT, Planegg-Martinsried, Germany)

Poster Session II (Even), Networking & Exhibition

**End of the Day** 

**Symposium Banquet** 

# Saturday November 18, 2023

### Chair

Prof. Dennis GILLINGHAM (UNIVERSITY OF BASEL, Basel, Switzerland)

### PL03 - The Second Dimension of the Genetic Code

Prof. Thomas CARELL (LUDWIG-MAXIMILIANS-UNIVERSITY, München, Germany)

### Session 7: Chemical Immunology & Checkpoint Inhibitors

#### **Session Chair**

Prof. Nina HARTRAMPF (UNIVERSITY OF ZURICH, Zürich, Switzerland)

# KL07 - Fluorescent Amino Acids and Peptides for Translational Imaging of Infection and Inflammation in Humans

Prof. Marc VENDRELL (UNIVERSITY OF EDINBURGH, Edinburgh, United Kingdom)

### Coffee Break, Networking & Exhibition

### IL11 - Chemoenzymatic and Metabolic Protein Labeling Strategies

Dr Kimberly BONGER (RADBOUD UNIVERSITY, Nijmegen, The Netherlands)

# IL12 - Chemical Immunology Tools for Synthetic Adjuvant and Vaccine Development

Dr Alberto FERNÁNDEZ-TEJADA (CIC BIOGUNE, Derio (Bizkaia), Spain)

### OC07 - Collectin-11 Antagonists in a Therapeutic Approach to Minimize Complement-Mediated Immune Injury

Dr Rachel HEVEY (UNIVERSITY OF BASEL, Basel, Switzerland)

### Lunch, Networking & Exhibition

### Session 8: New Understandings of Post-translational Protein Modifications

### **Session Chair**

Prof. Christian A. OLSEN (UNIVERSITY OF COPENHAGEN, Copenhagen, Denmark)

### **KL08 - Chemical Approaches to Studying Chromatin**

Prof. Tom MUIR (PRINCETON UNIVERSITY, Princeton, United States)

# IL13 - Beyond Phosphorylation - Protein Pyrophosphorylation by Inositol Pyrophosphate Messengers

Prof. Dorothea FIEDLER (LEIBNIZ-FORSCHUNGSINSTITUT FÜR MOLEKULARE PHARMAKOLOGIE (FMP), Berlin, Germany)

### IL14 - Decoding PTM Signaling from Chromatin to the Cytoskeleton

Prof. Beat FIERZ (ECOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE, Lausanne, Switzerland)

# OC08 - PhotoCrot: a Precise Photo-Chemical Approach to Selectively Identify Crotonylated Proteins

Dr Rita PETRACCA (UTRECHT UNIVERSITY, Utrecht, The Netherlands)

### Coffee Break, Networking & Exhibition

### Session 9: EFMC-WuXi AppTec Award for Excellence in Chemical Biology

### **Session Chair**

Prof. Rui MOREIRA (UNIVERSITY OF LISBON, Lisbon, Portugal)

### **Award Ceremony**

Prof. Rui MOREIRA (UNIVERSITY OF LISBON, Lisbon, Portugal) Dr Tao GUO (WUXI APPTEC, St Pauls, United States)

# PL04 - EFMC-WuXi AppTec Award for Excellence in Chemical Biology Lecture: Translational Chemical Biology

Prof. Gonçalo BERNARDES (UNIVERSITY OF CAMBRIDGE & IMM LISBOA, Cambridge, United Kingdom)

# **Poster Prizes Ceremony**

Prof. Yimon AYE (ECOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE (EPFL), Lausanne, Switzerland)

### **Closing Remarks**

Dr Yves P. AUBERSON (NOVARTIS & EFMC, Basel, Switzerland)

# **End of the Symposium**