## **Programme**

## Monday June 10, 2019

10:00 Optional Excursions

15:00 Registration

#### 17:30 Opening of the Symposium & Welcome Address

Dr Yves P. AUBERSON (NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, Basel, Switzerland)

#### **Session Chair**

Prof. Katarzyna KIEC-KONONOWICZ (JAGIELLONIAN UNIVERSITY, Krakow, Poland)

# 17:45 Derivatives of 1,3,5-triazine as a New Trend in the Search for the 5-HT<sub>6</sub> Receptor Ligands with Therapeutic Perspectives (PL01)

Prof. Jadwiga HANDZLIK (MEDICAL COLLEGE OF JAGIELLONIAN UNIVERSITY, Krakow, Poland)

18:30 Welcome Reception

### **Programme**

## Tuesday June 11, 2019

#### 08:00 Registration

Matrix Metallo-Proteinases

#### **Session Chair**

Prof. Krzysztof JOZWIAK (MEDICAL UNIVERSITY OF LUBLIN, Lublin, Poland)

# 09:00 Libraries of Fluorogenic Substrates with Natural and Unnatural Amino Acids as a Tool in Design of Active and Specific Probes for Investigation of Proteolytic Enzymes (IL01)

Specific Probes for investigation of Proteolytic Enzymes (

Prof. Marcin DRAG (WROCLAV UNIVERSITY OF TECHNOLOGY, Wroclaw, Poland)

#### 09:30 MMP-9 at the Synapse in the Brain and Mind (IL02)

Prof. Leszek KACZMAREK (NENCKI INSTITUTE OF EXPERIMENTAL BIOLOGY, Warsaw, Poland)

# 10:00 Metalloproteinase Cleavage Control of Interferon Alpha and Gamma Dampens Inflammation and Anti-Viral Immunity (IL03)

Prof. Christopher OVERALL (UNIVERSITY OF BRITISH COLUMBIA, Vancouver, Canada)

#### 10:30 Coffee Break and Exhibition

**Genomics in Drug Discovery: Roles for Chemistry** 

### **Session Chair**

Prof. Terry MOORE (UNIVERSITY OF ILLINOIS, Chicago, IL, United States)

#### 11:00 Designing Synthetic Gene Regulators (SynGR) (IL04)

Prof. Aseem ANSARI (UNIVERSITY OF WISCONSIN-MADISON, Madison, United States)

#### 11:30 Exploring Bacterial Genomes for Natural Product Discovery and Development (IL05)

Prof. Alessandra S. EUSTAQUIO (UNIVERSITY OF ILLINOIS AT CHICAGO, Chicago, United States)

## 12:00 Integrative Screening Identifies a Novel Node in the Oncogenic YAP/HIPPO Pathway (IL06)

Dr Mathias FREDERIKSEN (NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH (NIBR), Basel, Switzerland)

#### 12:30 Lunch and Exhibition

**Advances in Protein Degradation Technologies** 

**Session Chair** 

## **Programme**

Prof. Daniel HARKI (UNIVERSITY OF MINNESOTA, Minneapolis, MN, United States)

### 14:00 Targeted Protein Degradation with Small Molecules: how PROTACs Work (IL07)

Prof. Alessio CIULLI (UNIVERSITY OF DUNDEE, Dundee, United Kingdom)

#### 14:30 The Ubiquitin System (IL08)

Prof. Huib OVAA (LEIDEN UNIVERSITY MEDICAL CENTER, Leiden, The Netherlands)

#### 15:00 Small-Molecule Modulation of Cereblon Protein Level (OC01)

Dr Christian STEINEBACH (UNIVERSITY OF BONN, Bonn, Germany)

# 15:15 Drugging Challenging E3 Ligases: A Novel Multidisciplinary Approach to Identify Small-Molecules that Bind FBW7 (OC02)

Ms Miriam MARTINEZ CARTRO (UNIVERSITY OF BARCELONA, Barcelona, Spain)

#### 15:30 Coffee Break and Exhibition

#### **Session Chair**

Prof. Andrzej BOJARSKI (INSTITUTE OF PHARMACOLOGY POLISH ACADEMY OF SCIENCES, Krakow, Poland)

## 16:00 Systems Pharmacology Links GPCRs with Retinal Degenerative Disorders (PL02)

Prof. Krzysztof PALCZEWSKI (CASE WESTERN RESERVE UNIVERSITY, Cleveland, United States)

#### 16:45 First Time Disclosure

The Discovery of LML134, a Histamine H3 Receptor Inverse Agonist for the Clinical Treatment of Excessive Sleep Disorders (IL09)

Dr Yves P. AUBERSON (NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, Basel, Switzerland)

#### 17:15 Poster Session 1

(Posters with odd numbers)

#### 18:15 City Tour

## **Programme**

## Wednesday June 12, 2019

#### 08:59 GPCRs: a Discovery Powerhouse

#### **Session Chair**

Dr Yves P. AUBERSON

(NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, Basel, Switzerland)

#### 09:00 G Protein-Coupled Receptors: the Structural Basis for their Pharmacology (IL10)

Dr Chris TATE

(MRC LABORATORY OF MOLECULAR BIOLOGY, Cambridge, United Kingdom)

#### 09:30 Design of Orexin 1 Receptor Selective Antagonists (IL11)

Dr Uta LESSEL

(BOEHRINGER INGELHEIM PHARMA GMBH & CO KG, Biberach an der Riss, Germany)

#### 10:00 Next Generation GPR119 Agonists as Potential Treatment for Cardiometabolic Diseases (IL12)

Dr Lothar SCHWINK

(SANOFI, Frankfurt Am Main, Germany)

#### 10:30 Coffee Break and Exhibition

### **Specific and Multi-Targeted Drugs**

#### **Session Chair**

Prof. Andrzej BOJARSKI (INSTITUTE OF PHARMACOLOGY POLISH ACADEMY OF SCIENCES, Krakow, Poland)

## 11:00 Charting New Paths in Multi-Target Drug Discovery for Alzheimer's Disease (IL13)

Prof. Maria Laura BOLOGNESI

(UNIVERSITY OF BOLOGNA, Bologna, Italy)

#### 11:30 Multiple Targeting - The Histamine H3 Receptor Pharmacophore as Central Element (IL14)

Prof. Holger STARK

(HEINRIČH HEINE UNIVERSITY DÜSSELDORF, Duesseldorf, Germany)

## 12:00 Chemical Biology for Drug Discovery: A Click and Play Approach Exemplified by ERK1/2 Probes (OC03)

Dr Charlotte GRIFFITHS-JONES

(ASTEX PHARMACEUTICALS, Cambridge, United Kingdom)

### 12:15 Identification and in-vivo Efficacy Studies of a Nicotinamide Derivative as Novel NNMT Inhibitor (OC04)

Dr Sven RUF

(SANOFI-AVENTIS DEUTSCHLAND GMBH, Frankfurt am Main, Germany)

#### 12:30 Lunch and Exhibition

Opioid, Pain, Endo-Cannabinoid

#### **Session Chair**

Prof. Katarzyna KIEC-KONONOWICZ (JAGIELLONIAN UNIVERSITY, Krakow, Poland)

## **Programme**

20:00

**Symposium Banquet** 

| 14:00 | Cannabinoid Receptor Type 2 Modulation to Improve Outcomes for Cartilage Repair in the Osteoarthritic Joint (IL15)  |
|-------|---|
|       | Prof. Katarzyna STAROWICZ-BUBAK (INSTITUTE OF PHARMACOLOGY, POLISH ACADEMY OF SCIENCES, Krakow, Poland)   |
| 14:30 | Potential of Natural Cannabinoids and Synthetic Cannabinoids in Neuroprotection (IL16)  |
|       | Prof. Rafael FRANCO<br>(UNIVERSITY OF BARCELONA, Barcelona, Spain)  |
| 15:00 | Discovery of Best in-class, Novel, Selective, Potent and Peripheral FLT3 Inhibitors, a New Way to Treat Neuropathic Pain (OC05)   |
|       | Dr Dominique SURLERAUX<br>(BCI PHARMA, Liège, Belgium)  |
| 15:15 | The Discovery and Development of the Clinical FAAH Inhibitor JNJ-42165279 (OC06)  |
|       | Prof. James BREITENBUCHER (UNIVERSITY OF CALIFORNIA SAN FRANCISCO, San Francisco, United States)  |
| 15:30 | Coffee Break and Exhibition   |
|       | Session Chair   |
|       | Prof. Terry MOORE (UNIVERSITY OF ILLINOIS, Chicago, IL, United States)  |
| 16:00 | Next Generation Pain Therapeutics for the Opioid Crisis: Design of Bifunctional Nociceptin/Mu Opioid GPCR Ligands as non-Addicting Analgesics (PL03)  |
|       | Dr Nurulain ZAVERI<br>(ASTRAEA THERAPEUTICS, Mountain View, United States)  |
| 16:45 | Pharma Research Highlights in Poland  |
| 16:45 | Discovery of OAT-2068 - A Potent, Selective, Orally Bioavailable Inhibitor of Mouse Chitotriosidase and its In Vivo Activity in the Bleomycin-Induced Pulmonary Fibrosis Model in Mice (OC07) |
|       | Dr Agnieszka BARTOSZEWICZ<br>(MOLECURE S.A, Warszawa, Poland)   |
| 17:00 | DPD-inspired Small Heterocyclic Libraries Characterized as Novel LsrK Kinase Inhibitors: an Opportunity to Fight Antimicrobial Resistance (OC08)  |
|       | Dr Anna KARAWAJCZYK<br>(SELVITA, Krakow, Poland)  |
| 17:15 | Poster Session 2 (Posters with even numbers)  |
| 18:15 | End of Poster Session   |

## **Programme**

## Thursday June 13, 2019

**Chemical Biology Tools & Target Engagement Technologies** 

#### **Session Chair**

Prof. Edgars SUNA (LATVIAN INSTITUTE OF ORGANIC SYNTHESIS, Riga, Latvia)

# 09:00 Protein-Ligand Interactions: How Medicinal Chemistry Contributes to the Understanding of Molecular Recognition (IL17)

Dr Marc NAZARE (FMP, Berlin, Germany)

# 09:30 Adventures in Targeting Protein Lipdation: Breaking Drug Resistance Using Fragment Deconstruction and Chemical Biology (IL18)

Prof. Edward TATE (IMPERIAL COLLEGE LONDON, London, United Kingdom)

#### 10:00 Tankyrase Inhibitors: Evidence for Therapeutic Potential in Immuno-Oncology

Dr Luc VAN HIJFTE (MERCACHEMSYNCOM, Nijmegen, The Netherlands)

#### 10:30 Coffee Break and Exhibition

**Targeted Covalent Inhibitors** 

#### **Session Chair**

Dr. Anders KARLÉN (UPPSALA UNIVERSITY, Uppsala, Sweden)

### 11:00 Safety First: Covalent Inhibitors from a Safety Perspective (IL20)

Dr Mickael MOGEMARK (ASTRAZENECA, Mölndal, Sweden)

## 11:30 Adventures in Functional Assignment and Inhibition of Metallo-Enzymes (IL21)

Prof. Christopher J. SCHOFIELD (UNIVERSITY OF OXFORD, Oxford, United Kingdom)

#### 12:00 Mining the Protein Kinase Cysteinome (IL22)

Dr Tjeerd BARF (ACERTA PHARMA BV, Oss, The Netherlands)

#### 12:30 Lunch and Exhibition

Adding AI to the Drug Discovery Tool Box

#### **Session Chair**

Dr Carolyn DZIERBA (BRISTOL-MYERS SQUIBB, Cambridge, MA, United States)

#### 14:00 Learning the Art of Chemical Synthesis with Deep Neural Networks and Discipline Scale Data (IL23)

## **Programme**

Prof. Mark WALLER (UNIVERSITY OF WOLLONGONG, Wollongong, Australia)

## 14:30 Applications of Artificial Intelligence in Drug Discovery – Separating Hype From Utility (IL24)

Dr Patrick WALTERS (RELAY THERAPEUTICS, Cambridge, MA, United States)

## 15:00 Augmented Intelligence for Compound Design (OC09)

Dr Michal WARCHOL (ARDIGEN, Krakow, Poland)

## 15:15 Capturing and Applying Knowledge to Guide Compound Optimisation (OC10)

Dr Nick FOSTER (OPTIBRIUM, Litlington, United Kingdom)

### 15:30 Closing Remarks