

# 3rd Alpine Winter Conference on Medicinal and Synthetic Chemistry

## Programme

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Keynote Speakers

# 3rd Alpine Winter Conference on Medicinal and Synthetic Chemistry

## Programme

### Monday 24/01/2022

#### Session Methodologies to Understand Cellular Target Interaction

##### Session Chair

Prof. Per ARTURSSON  
(UPPSALA UNIVERSITY, Uppsala, Sweden)

##### 13:15 Opening Ceremony

Dr Klemens HOEGENAUER (NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, Basel, Switzerland)  
Dr Karl Heinz KRAWINKLER (NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, Basel, Switzerland)  
Dr Antonia F. STEPAN (F. HOFFMANN-LA ROCHE LTD, Basel, Switzerland)

##### 13:30 IL01 - Intracellular Oligonucleotide Distribution and Protein Binding

Dr Alice GHIDINI  
(ASTRAZENECA, Gothenburg, Sweden)

##### 13:50 IL02 - Monitoring Drug Selectivity and Target Engagement Across Systems – Thermal Shift Assay in Drug Discovery

Dr Anna RUTKOWSKA-KLUTE  
(GSK, Heidelberg, Germany)

##### 14:10 Break

##### 14:25 IL03 - Molecular Chameleonicity and Cell Permeability of Drugs and PROTACs in the bRo5 Space

Prof. Jan KIHLEBERG  
(UPPSALA UNIVERSITY, Uppsala, Sweden)

##### 14:45 IL04 - Lessons in Transcellular Membrane Permeability Re-Learned

Dr Mike HANN  
(GSK MEDICINES RESEARCH CENTRE, Stevenage, United Kingdom)

##### 15:05 Session Discussion

##### 15:25 End of Session

#### Session Networking & Exhibition

#### Session Targeting Unstructured Proteins

##### Session Chair

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

##### 15:55 Introduction

##### 16:00 IL05 - Innovative Strategies to Target Non-Coding RNAs with Synthetic Ligands

Dr Maria DUCA  
(UNIVERSITY OF CÔTE D'AZUR, Nice, France)

##### 16:20 IL06 - Targeting Transcription Factors for Treating Human Cancers and Auto Immune and Inflammatory Diseases

Dr Dorian FABBRO  
(CELLESTIA BIOTECH AG, Basel, Switzerland)

##### 16:40 Break

##### 16:55 IL07 - Drugging RNA – A Structure-based Approach

Dr Jacques DUMAS  
(ARRAKIS THERAPEUTICS, Boston, United States)

##### 17:15 IL08 - Design of Zotatifin (eFT226), a First-in-Class Inhibitor of the RNA Helicase eIF4A

Dr Christian NILEWSKI  
(GENENTECH, South San Francisco, United States)

##### 17:35 KL01 - Attenuating Oncogenic Transcription with Small Molecules

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(SANOFI-AVENTIS DEUTSCHLAND GMBH)

Prof. Angela KOEHLER (MIT KOCH INSTITUTE FOR INTEGRATIVE CANCER RESEARCH, Cambridge, United States)

**18:15 Session Discussion**

**18:45 End of the Day**

# 3rd Alpine Winter Conference on Medicinal and Synthetic Chemistry

## Programme

Tuesday 25/01/2022

**Session Poster Session I - Odd Numbers  
Networking & Exhibition**

**Session Automation and Machine Learning Applications for Medicinal Chemistry**

**Session Chair**

Dr Michael WLEKLINSKI  
(MERCK & CO., INC., Kenilworth, United States)

**13:15 Introduction**

**13:20 IL09 - Enabling Fragment-based Drug Discovery (FBDD) with Automated Synthesis Technologies**

Dr Rachel GRAINGER  
(ASTEX PHARMACEUTICALS, Cambridge, United Kingdom)

**13:40 IL10 - Rapid Development of Robust Reactions and Multi-Step Syntheses**

Prof. Alexei LAPKIN  
(UNIVERSITY OF CAMBRIDGE, Cambridge, United Kingdom)

**14:00 Break**

**14:15 IL11 - High-Throughput Experimentation Capabilities to Accelerate Discovery Chemistry**

Dr Iulia STRAMBEANU  
(JOHNSON AND JOHNSON, King of Prussia, United States)

**14:35 Session discussion**

**14:55 End of Session**

**Session Networking & Exhibition**

**Session Increasing sp<sup>3</sup> Fragment Options: Advances in the Synthesis of Small Ring Systems**

**Session Chair**

Dr James MOUSSEAU  
(HALDA THERAPEUTICS, New Haven, United States)

**15:25 Introduction**

**15:30 IL12 - Exploring and exploiting propellanes**

Prof. Ed ANDERSON  
(UNIVERSITY OF OXFORD, Oxford, United Kingdom)

**15:50 IL13 - The Next Generation of BCPs: Exploring Substitutions on the Bridge**

Dr Xiaoshen MA  
(MERCK & CO., INC, Boston, United States)

**16:10 Break**

**16:25 IL14 - Synthesis and Functionalization of Cyclopropane Derivatives**

Dr Sophie ROUSSEAU  
(UNIVERSITY OF TORONTO, Toronto, Canada)

**16:45 IL15 - No Strain, No Gain: Advances in the Synthesis and Design of New Classes of Building Blocks**

Prof. Kevin BROWN  
(INDIANA UNIVERSITY, Bloomington, United States)

**17:05 Session Discussion**

**17:25 End of the Day**

# 3rd Alpine Winter Conference on Medicinal and Synthetic Chemistry

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### Wednesday 26/01/2022

#### Session Understanding PK and PK/PD relationships in drug discovery - Target Mediated Drug Disposition

##### Session Chair

Dr Stephanie HARLFINGER  
(ASTRAZENECA, Cambridge, United Kingdom)

13:15 **Introduction**

13:20 **IL16 - General Introduction to TMDD**

Dr David FAIRMAN  
(GSK, Cambridge, United Kingdom)

13:40 **IL17 - Concept of Pharmacologic Target-Mediated Drug Disposition (TMDD) in Large-Molecule and Small-Molecule Compounds**

Prof. Guohua AN  
(THE UNIVERSITY OF IOWA COLLEGE OF PHARMACY, Iowa City, United States)

14:00 **Break**

14:15 **IL18 - Understanding the PKPD and ADME of PF-07059013: An Allosteric Modulator of a High Abundance Target**

Dr Kevin BEAUMONT  
(ASTRAZENECA, Cambridge, United Kingdom)

14:35 **IL19 - Importance of Mechanistic Models in AHD Prediction (IL)**

Dr Birgit SCHOEBERL  
(NOVARTIS INSTITUTE FOR BIOMEDICAL RESEARCH, Cambridge, MA, United States)

14:55 **Session Discussion**

15:15 **End of Session**

#### Session Networking & Exhibition

#### Session Drug Discovery Tales (I)

##### Session Chair

Dr Nadia M. AHMAD  
(CHARLES RIVER LABORATORIES, Harlow, United Kingdom)

15:45 **Introduction**

15:50 **OC01 - Design and Synthesis of Novel RNA Binders for Therapeutic Applications**

Ms Maurinne BONNET  
(ICN, NICE, France)

16:10 **OC02 - Is Resistance Futile? Discovery of Clinical Candidate AZD3229, A Pan-Mutant C-KIT Inhibitor**

Dr James SMITH  
(ASTRAZENECA, Cambridge, United Kingdom)

16:30 **Break**

16:45 **KL02 - Drug Discovery: Where are we Headed?**

Dr Wendy YOUNG  
(MPM CAPITAL, Brisbane, CA, United States)

17:25 **Session Discussion**

17:45 **End of the Day**

# 3rd Alpine Winter Conference on Medicinal and Synthetic Chemistry

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**Thursday 27/01/2022**

### Session Poster Session II - Even Numbers Networking & Exhibition

#### Session Drug Discovery Tales (II)

##### Session Chair

Dr Nadia M. AHMAD  
(CHARLES RIVER LABORATORIES, Harlow, United Kingdom)

**13:15 Introduction**

**13:20 OC03 - Discovery of a Selective ALK2 Kinase Inhibitor for the Treatment of a Rare Genetic Bone Disease**

Dr Thomas ULLRICH  
(NOVARTIS PHARMA AG, Basel, Switzerland)

**13:40 OC04 - Dissociative Inhibitors of Thymidylate Synthase Homodimer Accelerate its Proteasomal Degradation and Inhibit Cancer Growth in Vivo**

Prof. Maria Paola COSTI  
(UNIVERSITY OF MODENA AND REGGIO EMILIA, Modena, Italy)

**14:00 Break**

**14:15 OC05 - Rational Design of Light-Controlled Bioactive Compounds for Photopharmacology**

Mr Piermichele KOBAURI  
(UNIVERSITY OF GRONINGEN FSSC, Groningen, The Netherlands)

**14:35 OC06 - Towards the Design of Cell Division Cycle 25 Phosphatases Inhibitors as Anticancer Agents**

Dr Carmen CERCHIA  
(UNIVERSITY OF NAPLES FEDERICO II, Naples, Italy)

**14:55 Session Discussion**

**15:15 End of Session**

#### Session Networking & Exhibition

#### Session Covalent Targeting: Innovating for the Future

##### Session Chair

Dr Vishal VERMA  
(GENENTECH, INC., South San Francisco, United States)

**15:45 Introduction**

**15:50 IL20 - Lysine-Targeting Covalent Inhibitors**

Dr Matthew CHEESEMAN  
(THE INSTITUTE OF CANCER RESEARCH, Sutton, United Kingdom)

**16:10 IL21 - Reversible-covalent Inhibitors of the Kinase Activity of FGFR4**

Dr Robin FAIRHURST  
(NOVARTIS, Basel, Switzerland)

**16:30 Break**

**16:45 IL22 - Studies with Cyanamide-Based Janus Kinase 3 (JAK3) Covalent Inhibitors**

Dr Agustin CASIMIRO-GARCIA  
(PFIZER, United States)

**17:05 Session Discussion**

**17:25 End of the Day**

# 3rd Alpine Winter Conference on Medicinal and Synthetic Chemistry

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Friday 28/01/2022

### Session The "Catalytic Cycle" of Complex Molecule Synthesis and Methodology Development

#### Session Chair

Prof. Tanja GAICH  
(UNIVERSITY OF KONSTANZ, Konstanz, Germany)

13:00 Introduction

13:05 **IL23 - Flow-based Methods for Chemical Peptide and Protein Synthesis".**

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

13:25 **IL24 - Prins Cyclization in Natural Product Synthesis**

Prof. Ang LI  
(SHANGHAI INSTITUTE OF ORGANIC CHEMISTRY, Shanghai, China)

13:45 Break

14:00 **IL25 - Taming Multifaceted Nickel Catalysts: An Academic Fascination**

Prof. Ruben MARTIN  
(INSTITUTE OF CHEMICAL RESEARCH OF CATALONIA, Tarragona, Spain)

14:20 **IL26 - Computationally Augmented Total Synthesis**

Dr Timothy NEWHOUSE  
(YALE UNIVERSITY, New Haven, United States)

14:40 **KL03 - Functionalization of N-Heterocycles using Li, Mg, and Zn Organometallics**

Prof. Paul KNOCHEL  
(LUDWIG MAXIMILIANS UNIVERSITY, Munich, Germany)

15:20 Session Discussion

15:50 Closing Ceremony

16:00 End of Alpine Winter Conference 2022