Award & Prize Lectures

PROUS INSTITUTE-OVERTON AND MEYER AWARD FOR NEW TECHNOLOGIES IN DRUG DISCOVERY
Activity-Based Proteomics - Protein and Ligand Discovery on a Global Scale

Prof. Benjamin CRAVATT
(THE SCRIPPS RESEARCH INSTITUTE, La Jolla, United States)

NAUTA AWARD FOR PHARMACOCHEMISTRY
Tools and Drugs for Purine Targets - Important Players in Inflammation and Cancer

Prof. Christa MÜLLER
(UNIVERSITY OF BONN, Bonn, Germany)

UCB-EHRLICH AWARD FOR EXCELLENCE IN MEDICINAL CHEMISTRY
How Best to Discover Bioactive Small Molecules?

Prof. Adam NELSON
(UNIVERSITY OF LEEDS, Leeds, United Kingdom)

Plenary Lectures

The Therapeutic Challenge of the New Era: Developing and Making Available Life Changing Treatment to Patients with Rare Diseases

Dr Diego ARDIGO
(CHIESI GROUP, PARMA, Italy)

Zika Virus: An Old Virus with a New Face

Prof. Tatjana AVSIC-ZUPANC
(UNIVERSITY OF LJUBLJANA, Ljubljana, Slovenia)

Sugars & Proteins: Glycomimetics to Target Infectious Disease

Prof. Benjamin DAVIS
(OXFORD UNIVERSITY, Oxford, United Kingdom)

It's a Small-Molecule World: Medicinal Chemistry Challenges and Opportunities for the Next Decade

Dr Bayard HUCK
(MERCK BIOPHARMA, Darmstadt, Germany)

Smart Chemical Probes: from Bromodomain Ligands to Natural Products
Confirmed Speakers

Prof. Cristina NEVADO
(UNIVERSITY OF ZURICH, Zurich, Switzerland)

Development of Non-Nucleosidic Compounds against DNA Viruses of the Herpes Group. The Era After Nucleosides: Letermovir and Pritelivir

Dr Helga RÜBSAMEN-SCHAEFF
(AICURIS GMBH & CO. KG, Wuppertal, Germany)

Synthetic Glycoconjugate Vaccines against Bacterial Infections

Prof. Peter H. SEEBERGER
(MAX PLANCK INSTITUTE OF COLLOIDS AND INTERFACES, Berlin, Germany)

Invited Speakers

Intracellular DNA Sensing in Health and Disease

Prof. Andrea ABLASSER
(EPFL, Lausanne, Switzerland)

Beyond Single-Target Activities: Using Polypharmacology and Systems Readouts for Compound Selection and Mode-of-Action Analysis

Prof. Andreas BENDER
(UNIVERSITY OF CAMBRIDGE, Cambridge, United Kingdom)

Stuck in a Rut with Old Chemistry

Dr Jonas BOSTRÖM
(ASTRAZENECA, Mölndal, Sweden)

In silico Polypolpharmacology

Dr Giovanni BOTTEGONI
(HEPTARES THERAPEUTICS, Welwyn Garden City, United Kingdom)

Use of Cyclic Dinucleotides (CDNs) to Induce Stimulator of Interferon Genes (STING)-Dependent Antitumor Immunity

Dr Cedric BOULARAN
(INVIVOGEN, Toulouse, France)

Towards the Development of Novel Inhibitors for Chikungunya Virus Infection: Approaches in Structure-Activity-Metabolism Relationship (SAMR) Studies
Prof. Christina CHAI  
(NATIONAL UNIVERSITY OF SINGAPORE, Singapore, Singapore)

Targeting 'Undruggable' Transcription and Translation Factors for Degradation with Low Molecular Weight Cereblon Modulators

Dr Philip CHAMBERLAIN  
(CELGENE, Alameda, United States)

"Micro-Pharmacokinetics": How Local Drug Concentration Influences Observed Binding Kinetics

Prof. Steven CHARLTON  
(UNIVERSITY OF NOTTINGHAM, Nottingham, United Kingdom)

Asymmetric Synthesis of Statin API as the Hypolipidemic Agents: The Evolution from the Chemical Kinetic Resolution to the Asymmetric Catalytic Technology (An Odessy)

Prof. Fener CHEN  
(FUDAN UNIVERSITY, Shanghai Shi, China)

Modification of Cyclic Dinucleotides to Enhance Modulation of the Innate Immune Response

Dr Diane COE  
(GLAXOSMITHKLINE, Stevenage, United Kingdom)

Target Binding Kinetics and its Relevance in the in vivo Context

Dr Liesbeth DE LANGE  
(UNIVERSITY OF LEIDEN, Leiden, The Netherlands)

Unravelling the Mysteries of the Sphinx: Novel Targets and Small-Molecule Therapeutics from the Sphingolipid Synthesis and Signaling Pathway

Prof. Bernard FLYNN  
(MONASH UNIVERSITY, Parkville, Australia)

Capturing Biological Activity in Natural Product Fragments by Chemical Synthesis

Prof. Karl GADEMANN  
(UNIVERSITY OF ZÜRICH, Zürich, Switzerland)

PET Molecular Imaging – an Overview

Prof. Antony GEE  
(KING'S COLLEGE LONDON, London, United Kingdom)
Confirmed Speakers

First Time Disclosure of BI 409306, a First in Class PDE9 Inhibitor for the Treatment of CNS Diseases

Dr Riccardo GIOVANNINI  
(BOEHRINGER INGELHEIM, Biberach, Germany)

Nonpeptidic Selective Inhibitors of Immunoproteasome

Prof. Stanislav GOBEC  
(UNIVERSITY OF LJUBLJANA, Ljubljana, Slovenia)

Novel Hybrid Macrocyclic Modalities for Structure-Based Protein Mimetics

Dr Stephanie GUERET  
(ASTRAZENECA-MAX PLANCK INSTITUTE SATELLITE UNIT, Dortmund, Germany)

Discovery of a Novel Oral NO- and Heme-Independent sGC Activator BAY 1101042

Dr Michael G. HAHN  
(BAYER HEALTHCARE, Wuppertal, Germany)

Allosteric Modulation of the mGlu2 Receptor: from Structure-Kinetic Relationships to in vivo Efficacy (2017 MedChemComm Emerging Investigator Lectureship)

Dr Laura HEITMAN  
(UNIVERSITY OF LEIDEN, Leiden, The Netherlands)

Breaking the Limits in Analyzing Carbohydrate Recognition by NMR

Dr Jesus JIMENEZ-BARBERO  
(CIC BIOGUNE, Derio, Spain)

Tankyrase Inhibitor Development: Evidence for Potential in Cancer Immune Therapy

Prof. Stefan KRAUSS  
(UNIVERSITY OF OSLO, Oslo, Norway)

The Discovery of Semaglutide - A Journey from Ala Scan to Structural Design of GLP-1 Analogues

Dr Jesper LAU  
(NOVO NORDISK, Maaloev, Denmark)

EGFR Triple Mutant L858R_T790M_C797S Recent Set-Backs and New Hope in Fighting Mutant Non-Small Cell Lung Cancer

Prof. Stefan LAUFER  
(UNIVERSITY OF TÜBINGEN, Tübingen, Germany)

Artificial Intelligence. Not Just Another Name for in Silico Design
Dr David E. LEAHY
(THE DISCOVERY BUS LTD, Macclesfield, United Kingdom)

Multi-Functional Treatments for Multi-Factorial Neurodegenerative Disorders: the Challenge of Alzheimer's Disease

Dr Mark J. MILLAN
(INSTITUT DE RECHERCHES SERVIER, Croissy-sur-Seine, France)

A Multidisciplinary Strategy to Synthetic Carbohydrate-Based Conjugates for Vaccination against Shigella: from Concept to First-in-Human Study

Dr Laurence MULARD
(PASTEUR INSTITUTE, Paris, France)

Recent Advances in Bifunctional Degrader Molecules (e.g. SNIPER) for Targeted Protein Degradation via the Ubiquitin Proteasome System; Status and Outlook

Dr Mikihiko NAITO
(NATIONAL INSTITUTE OF HEALTH SCIENCES, Tokyo, Japan)

Activity-Based Glycosidase Profiling in Biomedicine and Biotechnology

Prof. Hermen OVERKLEEFT
(LEIDEN UNIVERSITY, Leiden, The Netherlands)

Obeticholic Acid, Leading in the NASH Race. History and Perspectives

Prof. Roberto PELLICCIARI
(TES PHARMA SRL, Corciano, Italy)

Discovery of LOU064, a Covalent BTK Inhibitor with Best in Class Selectivity

Dr Robert PULZ
(NOVARTIS PHARMA, Basel, Switzerland)

Synthesis and Fungicidal Activity of a New Family of Oxysterol Binding Protein Inhibitors

Dr Laura QUARANTA
(SYNGENTA AG, Basel, Switzerland)

Small Molecule Immune Checkpoint Antagonists for Cancer Therapy

Dr Murali RAMACHANDRA
(AURIGENE DISCOVERY TECHNOLOGIES LTD, Bangalore, India)
Confirmed Speakers

Discovery of RG7916, a Selective SMN2 Splicing Modifier for the Treatment of Spinal Muscular Atrophy

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

Natural Products as Leads in Agrochemistry

Dr Joachim RHEINHEIMER
(BASF, Ludwigshafen am Rhein, Germany)

An Iron Hand over Cancer Stem Cells

Dr Raphaël RODRIGUEZ
(INSTITUT CURIE, Paris, France)

Controlling Sphingosine-1-Phosphate Levels as a Therapeutic Strategy

Dr Webster L. SANTOS
(VIRGINIA TECH, Blacksburg, United States)

Design and Rationale for Exquisite Selectivity of Preclinical and Clinical Kinase Inhibitors

Dr Laurent SCHIO
(SANOBI, Vitry sur Seine, France)

PET in Neuroscience Drug Discovery and Development

Dr Magnus SCHOU
(KAROLINSKA INSTITUTE, Stockholm, Sweden)

Computer-Aided Synthesis Planning

Mr Marwin SEGLER
(BENEVOLENTAI, London, United Kingdom)

C-Natriuretic Peptide Agonists for Cardiovascular Disease

Prof. David SELWOOD
(UNIVERSITY COLLEGE LONDON, London, United Kingdom)

Design and Synthesis of Congener of Cyclic ADP-Ribose, a Ca2+-Mobilizing Second Messenger, Toward Identification of the Target Protein

Prof. Satoshi SHUTO
(HOKKAIDO UNIVERSITY, Sapporo, Japan)
Confirmed Speakers

**Design, Synthesis, and Mechanism of \(\beta\)-Glucocerebrosidase Activators for Gaucher’s and Parkinson’s Diseases**

Prof. Richard B. SILVERMAN  
(NORTHWESTERN UNIVERSITY, Evanston, United States)

**New Chemical Libraries in Exploration of Chemical Space**

Prof. Jurij SVETE  
(UNIVERSITY OF LJUBLJANA, Ljubljana, Slovenia)

**Cell Permeability with Beyond ‘Rule of 5’ Modalities – Do We Understand How This Works?**

Dr Nick TERRETT  
(MERCK SHARP & DOHME RESEARCH GMBH (MSD), Kriens, Switzerland)

**In vivo Anti-Viral and -Tumor Effect Of 3’3’-cAMP STING Activation**

Dr Martin K. THOMSEN  
(AARHUS UNIVERSITY, Aarhus C, Denmark)

**The Zinc-Degrome**

Dr Nicolas THOMÄ  
(FRIEDRICH MIESCHER INSTITUTE FOR BIOMEDICAL RESEARCH, Basel, Switzerland)

**Discovery of JNJ-64619178 as a Potent and Selective PRMT5 Inhibitor for the Treatment of Lung and Hematologic Cancers**

Dr Jan Willem THURING  
(JANSSEN PHARMACEUTICA NV, Beerse, Belgium)

**Tricyclic Peptides via Templated Tandem CLIPS/CUAAC Cyclizations**

Prof. Peter TIMMERMAN  
(PEPSCAN THERAPEUTICS, Lelystad, The Netherlands)

**All Bugs are Shallow: Open Source Drug Discovery**

Prof. Matthew TODD  
(UNIVERSITY COLLEGE LONDON, London, United Kingdom)

**Targeting the Monomeric Intrinsically Disordered Structural State of Tau and Alpha-Synuclein by Small Molecules as a Potential Therapeutic Strategy for Alzheimer’s and Parkinson’s Disease**
Dr Gergely TOTH  
(CANTABIO PHARMACEUTICALS INC., Sunnyvale, United States)

Cyclic Dinucleotide STING Agonists as Anti-Tumor Agents

Dr Wes TROTTER  
(MSD, Boston, United States)

Discovery of LJN452 (Tropifexor), a Highly Potent, Non-Bile Acid FXR Agonist for the Treatment of Cholestatic Liver Diseases and NASH

Dr David TULLY  
(NOVARTIS, Emeryville, United States)

Positive Allosteric Modulators of the GABA-B Receptor

Dr Sean C. TURNER  
(ABBVIE, Ludwigshafen am Rhein, Germany)

The Value of Orthogonal Techniques for Elucidating Binding Site(s) of GPCR Allosteric Modulators: a Case Study With Positive Allosteric Modulators of Dopamine Receptors

Dr Anne VALADE  
(UCB, Braine-l’Alleud, Belgium)

New Modalities for Complex and Unprecedented Biological Targets

Dr Eric VALEUR  
(ASTRAZENECA, IMED BIOTECH UNIT, Cambridge, United States)

Re-Energising Small Molecule Drug Discovery

Dr Willem VAN HOORN  
(EXSCIENTIA, Dundee, United Kingdom)

Synthesis of MedChem-Relevant Gem-Difluorocycloalkane Building Blocks

Prof. Dmytro VOLOCHNYUK  
(ENAMINE LTD, Kyiv, Ukraine)

A New Target in Fungal Protein Biosynthesis: Shared Learnings for AgChem and MedChem

Dr Franz VON NUSSBAUM  
(BAYER, Monheim, Germany)

Targeting of Cancer Specific Glycopeptide Epitopes
Confirmed Speakers

Prof. Hans WANDALL
(UNIVERSITY OF COPENHAGEN, Copenhagen, Denmark)

Active Site Inhibitors of Sphingosine 1-Phosphate Lyase - Exploring Novel Biology with Tool Compounds

Dr Sven WEILER
(BASILEA PHARMACEUTICA INTERNATIONAL LTD., Basel, Switzerland)

PET for Oncology Drug Discovery and Development

Prof. Bert WINDHORST
(VU UNIVERSITY MEDICAL CENTER, Amsterdam, The Netherlands)

Discovery of Peptidomimetics Targeting Protein-Protein Interactions of Alpha-Synuclein

Dr Wolfgang WRASIDLO
(UNIVERSITY OF CALIFORNIA SAN DIEGO, La Jolla, United States)

Small Molecule Immunomodulators that Target Toll-Like Receptors

Prof. Hang YIN
(TSINGHUA UNIVERSITY, Beijing, China)

Practical Asymmetric Hydrogenation

Prof. Xumu ZHANG
(SOUTHERN UNIVERSITY OF SCIENCE AND TECHNOLOGY, Guangdong, China)

Understanding Aggregation Inhibition of Alpha-Synuclein and Tau by Small Molecules

Prof. Markus ZWECKSTETTER
(MAX PLANCK INSTITUTE FOR BIOPHYSICAL CHEMISTRY, Göttingen, Germany)

Oral Communications

Discovery and Clinical Evaluation of MK-8150, a Novel Nitric Oxide Donor with a Unique Mechanism of Nitric Oxide Release

Dr Amjad ALI
(MERCK & CO. INC., Kenilworth, United States)

Brain-Penetrant Autophagy Modulators for Treating Neurodegenerative Diseases
Dr Steve ANDREWS  
(UNIVERSITY OF CAMBRIDGE, Cambridge, United Kingdom)

**Discovery of AZD4573, a Potent and Selective Inhibitor of CDK9 that Enables Transient Target Engagement for the Treatment of Haematological Malignancies**

Dr Bernard BARLAAM  
(ASTRAZENECA, Cambridge, United Kingdom)

**First Disclosure of the Clinical Candidate BAY-840, a Potent And Selective hBradykinin B1 Antagonist for the Treatment of Chronic Inflammatory Diseases, Generated within the Bayer-Evotec Strategic Alliance**

Dr Stefan BÄURLE  
(BAYER AG, Berlin, Germany)

**Metabotropic Glutamate Receptor Type 2 Positive Allosteric Modulators (mGlu2 Receptor PAMS) as a Transformational Epilepsy Treatment**

Dr Jose CID  
(JANSSEN R&D, Toledo, Spain)

**Targeting Non Essential Bacterial Targets as a Novel Route to Counteract Bacterial Resistance**

Prof. Gabriele COSTANTINO  
(UNIVERSITY OF PARMA, Parma, Italy)

**EFMC Prize for a Young Medicinal Chemist in Industry**  
**The Challenges of Restoring Programmed Cell Death Through MCL1 Inhibition**

Dr Marton CSEKEI  
(SERVIER RESEARCH INSTITUTE OF MEDICINAL CHEMISTRY, Budapest, Hungary)

**Discovery of Candidates for PET Molecular Imaging of Pathological TDP-43 Aggregates in Frontotemporal Dementia and Amyotrophic Lateral Sclerosis Patients**

Dr Vincent DARMENCY  
(AC IMMUNE SA, Lausanne, Switzerland)

**New Small-Molecule Immune Checkpoint Inhibitors: A Step Forward in Cancer Immunotherapy**

Ms Ana Rita DE CARVALHO ACURCIO  
(UNIVERSITY OF LISBON, Lisbon, Portugal)

**Potency and Patents, New Arenas for Matched Molecular Pair Analysis in the AI World**
Dr Al DOSSETTER  
(MEDCHEMICA LIMITED, Macclesfield, United Kingdom)

**Synthetic Small-Molecule RNA Ligands: Scope and Therapeutic Applications**

Dr Maria DUÇA  
(UNIVERSITE CÔTE D'AZUR, Nice, France)

**Chemical Probes for New Therapeutic Concept Discovery**

Dr Peter ETTMAYER  
(BOEHRINGER-INGELHEIM, Vienna, Austria)

**Identification of New Antimalarial GSK607: An Example of Adaptive and Differentiated Early Drug Development**

Dr Esther FERNANDEZ  
(GLAXOSMITHKLINE, Tres Cantos, Spain)

**Development of Potent, Selective, CNS Penetrant Small Molecule Inhibitors of Notum to Potentiate Wnt Signaling for the Maintainance of Synaptic Function in Alzheimer's Disease**

Prof. Paul FISH  
(ARUK UCL DRUG DISCOVERY INSTITUTE, London, United Kingdom)

**Drugging the Fbw7 E3 Ligase with a Combined Computational and Biophysical Approach**

Dr Carles GALDEANO  
(UNIVERSITY OF BARCELONA, Barcelona, Spain)

**Buruli Ulcer and the mTOR Pathway: Total Synthesis, Structure-Activity and Target Elucidation Studies of Mycolactones**

Dr Matthias GEHRINGER  
(UNIVERSITY OF TUEBINGEN, Tuebingen, Germany)

**Large-Scale Analysis of Kinase Inhibitors' Target Binding Kinetics and its Implications for Drug Discovery**

Ms Victoria GEORGI  
(BAYER AG, Berlin, Germany)

**Discovery of the TYK2 Selective Inhibitor PF-6826647 for the Treatment of Crohn's Disease, and Other Autoimmune Conditions**
Dr Brian GERSTENBERGER  
(PFIZER, Cambridge, United States)

**Integrated System for the Expedited Generation and Characterization of Drug-Like Libraries for Hit-to-Lead Explorations**

Prof. Antimo GIOIELLO  
(UNIVERSITY OF PERUGIA, Perugia, Italy)

**IUPAC-Richter Prize Lecture**  
**Discovery of CFTR Modulators For The Treatment of Cystic Fibrosis**

Dr Peter GROOTENHUIS  
(VERTEX PHARMACEUTICALS, San Diego, United States)

**ASTX660, the First Fragment-Derived IAP Antagonist in the Clinic**

Dr Steven HOWARD  
(ASTEX THERAPEUTICS, Cambridge, United Kingdom)

**Glycoside Antagonists of Bacterial Lectins: New Treatment Options for Recurrent and Antibiotic Resistant UTI**

Prof. James JANETKA  
(WASHINGTON UNIVERSITY IN SAINT LOUIS, Saint Louis, United States)

**Discovery of First-in Class, Selective and Noncovalent Small Molecule Inhibitors of DNMT1**

Dr Allan JORDAN  
(CANCER RESEARCH UK MANCHESTER INSTITUTE, Manchester, United Kingdom)

**Discovery of GDC-0077: A Highly Selective Inhibitor and Degrader of Mutant PI3K-Alpha**

Dr Jamie KNIGHT  
(CARLS RIVER, Harlow, United Kingdom)

**The Discovery of CNP520, an Amino-1,4-Oxazine BACE Inhibitor in Prevention Studies**

Dr Rainer MACHAUSER  
(NOVAHIS PHARMA AG, Basel, Switzerland)

**A Dual Modulator of Farnesoid X Receptor and Soluble Epoxide Hydrolase to Treat Non-Alcoholic Steatohepatitis**  
(EIFMC-YMCS Presentation Prize)
Confirmed Speakers

Dr Daniel MERK  
(ETH ZÜRICH, Zürich, Switzerland)  
Development of Small-Molecule Inhibitors of Adipose Triglyceride Lipase (ATGL)

Ms Anna MIGGLAUTSCH  
(TU GRAZ, Graz, Austria)  
Development of Novel Sialyltransferase Inhibitors via Computer Aided Drug Design

Mr Andrew MONTGOMERY  
(UNIVERSITY OF WOLLONGONG, Wollongong, Australia)  
Small-Molecule Stabilization of Protein-Protein Interactions by Natural Products, Supramolecular Ligands, Fragments and Macrocycles

Dr Christian OTTMANN  
(EINDHOVEN UNIVERSITY OF TECHNOLOGY, Eindhoven, The Netherlands)  
AMPA Receptor Positive Allosteric Modulators Based on New Scaffolds: Design, Synthesis, and Studies

Dr Vladimir A. PALYULIN  
(LOMONOSOV MOSCOW STATE UNIVERSITY, Moscow, Russia)  
Charting the Structure-Resistance Landscape of Novel Antibiotics

Mr Tamas REVESZ  
(BIOLOGICAL RESEARCH CENTRE, HUNGARIAN ACADEMY OF SCIENCES, Szeged, Hungary)  
Small Molecules Inhibiting PD1-PDL1 Immune Checkpoint

Dr Shabnam SHAABANI  
(UNIVERSITY OF GRONINGEN, Groningen, The Netherlands)  
Anti-HBV Drug Discovery Enabled by Structure-Based Drug Design and Phenotypic Screening

Dr Hong SHEN  
(ROCHE INNOVATION CENTER, Shanghai, China)  
Mechanisms of HIV-1 Nucleocapsid Protein Inhibition by Small Molecules Targeting RNA

Dr Alice SOSIC  
(UNIVERSITY OF PADOVA, Padova, Italy)
Confirmed Speakers

Discovery and Optimization of Non-Covalent, Selective, and Bioavailable Small Molecule Inhibitors of the KEAP1-Nrf2 Pathway

Dr Hauke SZILLAT  
(SANOFI, Frankfurt, Germany)

EFMC Prize for a Young Medicinal Chemist in Academia  
Carbohydrate-binding Proteins as Targets for Anti-Infectives and Diagnostics: ESKAPE pathogen Pseudomonas aeruginosa and its Lectins

Dr Alexander TITZ  
(HELMHOLTZ INSTITUTE FOR PHARMACEUTICAL SCIENCES, Saarbrücken, Germany)

Discovery of SPL-707: A Potent, Selective, and Orally Bioavailable SPPL2a Inhibitor

Dr Juraj VELCICKY  
(NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, Basel, Switzerland)

The First Class of Orally Available Mono-Saccharide Galectin-3 Inhibitors for Treatment of Fibrosis (NASH) and Cancer

Dr Fredrik ZETTERBERG  
(GALECTO BIOTECH, Gothenburg, Sweden)