Session 1: Integrating Novel Chemical Modalities in Hit-to-lead: a New Paradigm for Early Drug Discovery

Discovery and Development of Macrocyclic Peptides for the Treatment of Complement-Mediated Disorders

Dr Susan ASHWELL  
(RA PHARMA, Cambridge, United States)

Impact of Structure Based Drug Design in GPCR Lead Optimisation Strategies

Dr Miles CONGREVE  
(SOSEI HEPTARES, Welwyn Garden City, United Kingdom)

Translating RNA Sequence into Lead Small Molecule Medicines

Prof. Matthew DISNEY  
(SCRIPPS RESEARCH INSTITUTE, Jupiter, United States)

Structural Approach to Identify Lead Scaffolds for Protein-Protein Interaction Targets

Prof. Kyle HADDEN  
(UNIVERSITY OF CONNECTICUT, Storrs, United States)

Protein Degradation beyond Oncology

Dr Nello MAINOLFI  
(KYMERA THERAPEUTICS, Cambridge, United States)

Integrating DNA-Encoded Library Technologies in Lead Discovery

Dr Lisa MARCAURELLE  
(GSK, Cambridge, United States)

Session 2: New Directions in Targeting DNA Damage Repair (DDR)

Discovery and Optimization of Novel PARG Inhibitors

Dr Hilary BECK  
(IDEAYA BIOSCIENCES, SOUTH SAN FRANCISCO, United States)

Discovery of Potent and Selective DNA-PK Inhibitors via Structure-Guided Virtual Screening Strategies

Dr Charlene FALLAN  
(ASTRAZENECA, Cambridge, United Kingdom)

M3541 and M4076: Discovery and Optimization of Potent and Selective ATM Kinase Inhibitors with Strong Anti-tumor Efficacy in Combination Therapies
Dr Thomas FUCHSS  
(MERCK KGAA - MERCK BIOPHARMA, Darmstadt, Germany)

**Discovery of DNA Polymerase theta (Pol?) Inhibitors: HTS to in vitro Probes**

Dr Robert HEALD  
(ARTIOS PHARMA LTD, Cambridge, United Kingdom)

**Damage Incorporated: Discovery of ATR Inhibitor BAY 1895344 with Favorable PK Properties and Promising Anti-Tumor Efficacy in Monotherapy and Combination in Preclinical Tumor Models**

Dr Ulrich LÜCKING  
(BAYER AG, Berlin, Germany)

**The Modification of Pyrazolopyrimidinones and their Effect on WEE1 Inhibition and the DNA Damage Response**

Prof. Phil REIGAN  
(UNIVERSITY OF COLORADO, Aurora, United States)

**Session 3: Hot Targets from NYC Academic and Biotech Scene**

**Designing and Combining Cancer's Off Switches**

Dr Karen AKINSANYA  
(SCHRODINGER, New York City, United States)

**Rational Design of Inhibitors of Protein-Protein Interactions**

Prof. Paramjit ARORA  
(NYU, New York, United States)

**Next Generation Drug Discovery**

Dr Steve COLLETTI  
(LODO THERAPEUTICS, New York, United States)

**Optimization of Mycobacterium Tuberculosis (Mt) Selective Inhibitors of Lipoamide Dehydrogenase (Lpd)**

Dr John GINN  
(TRI-INSTITUTIONAL THERAPEUTICS DISCOVERY INSTITUTE, New York, United States)

**Therapeutic Potential of the Gut-Brain Axis**
Confirmed Speakers

Dr Ann WEBER
(KALLYOPE, New York, United States)

Session 4: Targeting Autophagy for Cancer, Neurodegeneration, or Autoimmune Disease

The Development of Substrate Competitive and Allosteric Inhibitors of Cysteine Protease ATG4B to Prevent Autophagic Flux

Dr Jason CROSS
(MD ANDERSON CANCER CENTER, Houston, United States)

Chemical Activation of Chaperone-Mediated Autophagy for Protection against Neurodegeneration

Prof. Evripidis GAVATHIOTIS
(ALBERT EINSTEIN COLLEGE OF MEDICINE, Bronx, United States)

Activating PTEN-Induced Kinase 1 (PINK1) for Parkinson’s Disease

Dr Nicholas HERTZ
/MITOKININ, New York, United States

Unraveling Autophagy in Cancer Using Chemical Genetics

Prof. Jeff MACKEIGAN
(MICHIGAN STATE UNIVERSITY, East Lansing, United States)

Discovery of Highly Potent and Selective Vacuolar Protein Sorting 34 (Vps34) Inhibitors

Dr Jenny VIKLUND
(SPRINT BIOSCIENCE AB, Huddinge, Sweden)

Session 5: Next Generation Therapies Shaped by Clinical Data

3 Generations of RAF Inhibitors – Learnings and Improvements Based on Clinical Data

Dr Robert AVERSA
(NOVAARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, Cambridge, United States)

Discovery of Oral CGRP Receptor Antagonists for the Treatment of Migraine: Learning from (Clinical) Experience

Dr Christopher BURGEY
(MERCK & CO., INC., West Point, United States)

LPA1 Receptor Antagonists for the Treatment of IPF
Confirmed Speakers

Dr Peter CHENG
(BRISTOL-MYERS SQUIBB R & D, Hopewell, United States)

Leveraging the Human PK of PF-06882961, an Oral Small Molecule GLP-1R Agonists, in the Discovery of a 2nd Generation Candidate

Dr David GRIFFITH
(PFIZER INC., Cambridge, United States)

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

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

Evolution of Clinical PI3K Inhibitors at Genentech

Dr Steve STABEN
(GENENTECH, South San Francisco, United States)

Session 6: Lessons from Drug Hunters across Academia, NPOs and the Pharmaceutical Industry

Discovery of Novel Drug Regimens for the Treatment of Tuberculosis

Dr Christopher B. COOPER
(TB ALLIANCE, GLOBAL ALLIANCE FOR TB DRUG DEVELOPMENT, New York, United States)

Discovery of Upadacitinib: a Tricyclic Janus Kinase 1 (JAK1) Inhibitor

Dr Kristine E. FRANK
(ABBVIE, North Chicago, United States)

DSM265, a Dihydroorotate Dehydrogenase Inhibitor for the Treatment of Malaria

Prof. Meg PHILLIPS
(UNIVERSITY OF TEXAS SOUTHWESTERN MED CENTER, Dallas, United States)

Discovery of the Selective Allosteric TYK2 Inhibitor BMS-986165 for the Treatment of Autoimmune Diseases

Dr Steve WROBLESKI
(BRISTOL-MYERS SQUIBB, Princeton, United States)

Delivering Innovative Medicines: Small Changes can have a Large Effect
Confimed Speakers

Dr Wendy YOUNG
(GENENTECH, South San Francisco, United States)

Award Session

2020 IUPAC-Richter Prize

Dr John E. MACOR
(SANOFI, Waltham, United States)

2020 Division of Medicinal Chemistry Award

Prof. Shaomeng WANG
(UNIVERSITY OF MICHIGAN, Ann Arbor, United States)