Global Chemical Biology Landscape
Inaugural Conference of the International Chemical Biology Society

Location:
Kauffman Foundation Conference Center
Kansas City, MO, USA
October 11-12, 2011

Tuesday 11th October 2011

7:15        Registration Opens
7:15        Shuttle Bus Departs from the Intercontinental Hotel
7:30        Continental Breakfast
8:30        Opening Remarks
             Rathnam Chaguturu, University of Kansas
8:40        Welcome
             Lesa Mitchell, Kauffman Foundation
8:50        Keynote Presentation
             Chemical Genomics and Translational Science at NIH
             Christopher Austin, NIH

Session: Current Global Chemical Biology Landscapes
Session Leader: Haian Fu, Emory University

9:20        Chemical Biology in Australia
             Jonathan Baell, Walter and Eliza Hall Institute of Medical Research
9:35        Chemical Biology Initiatives in China
             Yongjun Chen, National Natural Science Foundation of China
9:50        Chemical Biology in Europe and EU – OPENSCREEN
             Petr Bartunek, Centre for Chemical Genetics, Institute of Molecular Genetics, Czech republic
10:05       Japanese Chemical Biology Society
             Masatoshi Hagiwara, Kyoto University
10:20       Chemical Biology in New Zealand
             Paul Teesdale-Spittle, Victoria University of Wellington
10:35       Chemical Biology and Chemical Genomics in the USA
             Haian Fu, Emory University
10:50       Coffee and Comfort Break
Session: Discovery of Small Molecule Modulators – I  
Session Leader: Doug Auld, Novartis Institute for Biomedical Research

11:20  
Assessing Structure Activity Relationships Derived from Cell Based Assays  
Doug Auld, Novartis Institute for Biomedical Research

11:45  
Discovery of Small Molecule Protein-protein Interaction Inhibitors  
Yuhong Du, Emory University

12:15  
Phenotypic Screens to Identify Mechanisms Promoting Neuronal Regeneration  
Vance Lemmon, University of Miami

12:40  
Lunch

Session: Medicinal Chemistry for Chemical Biology  
Session Leader: Jeffrey Aube, University of Kansas

2:00  
Heterocyclic Libraries: From Methods to Hits to Probes  
Jeffrey Aube, NIH/MLPCN Specialized Chemistry Center

2:30  
New Approaches to Selective Kinase Inhibitors-Targeting mTor, ATM, ATR and DNA-PK  
Qingsong Liu & Nathanael Gray, Harvard Medical School

3:00  
Rapid Generation of Stereochemically Defined Natural Product like Molecules from Simple Polyene by Asymmetric Catalysis  
Hao Xu, Georgia State University

3:25  
New Cheminformatic Tools for Targeted Polypharmacology  
Philip Hajduk, Abbott Laboratories

4:00  
Coffee and Comfort Break

Session: Discovery of Small Molecule Modulators – II  
Session Leader: Masatoshi Hagiwara, Kyoto University

4:30  
Developing Allosteric Inhibitors to Glutamate Dehydrogenase to Control Insulin Disorders and as a Possible Cancer Treatment  
Thomas Smith, The Donald Danforth Center

4:55  
Regulation of Leukocyte Integrin Affinity and Conformation by Signalling, Small Molecules and Repurposed Drugs  
Larry Sklar, University of New Mexico Health Sciences Center

5:20  
NMR and Drug Discovery: A Systems Biology Perspective  
Robert Powers, University of Nebraska-Lincoln

5:45  
Identifying Inhibitors of Protein Interactions using Pocket Optimization  
John Karanicolas, University of Kansas

6:00  
Social Mixer and Poster Session I
Wednesday 12th October 2011

7:30 Shuttle Bus Departs from the Intercontinental Hotel

7:45 Continental Breakfast

8:30 Keynote Presentation

Introduction by Rathnam Chaguturu

Open Innovation: Hype or Salvation?
Bernard Munos, InnoThink Center for Research in Biomedical Innovation

Session: Small Molecules for Understanding Biology and Disease
Session Leader: Petr Bartunek, Center for Chemical Genetics, Institute of Molecular Genetics

9:10 New Therapeutics by Alteration of mRNA Expression and Processing with Small Molecules
Masatoshi Hagiwara, Kyoto University

9:35 A Chemical Biology Platform Identifies the Molecular Drivers of Adult AML
Krister Wennerberg, Institute for Molecular Medicine Finland

9:50 Synthetic and Endogenous Modulators of the Epigenome
Charles Brenner, Carver College of Medicine, University of Iowa

10:20 Antiparasitics: Target-based or Whole Cell Screening? Exemplification in the Genus Trypanosoma
Jonathan Baell, Walter and Eliza Hall Institute of Medical Research

10:45 Coffee and Comfort Break

11:05 Small Molecules as Tools for Stem Cell Biology
Petr Bartunek, Center for Chemical Genetics, Institute of Molecular Genetics

11:30 Design of Small-Molecule Modulators of Apoptosis: Therapeutic Applications and Powerful Tools for Understanding Basic Biology
Shaomeng Wang, University of Michigan

11:55 Lunch and Poster Session II

Session: Natural Products for Chemical Biology
Session Leader: Lixin Zhang, Institute of Microbiology, Chinese Academy of Sciences

1:30 Discovery of Synergistic Antifungal Inhibitors from Microbial Natural Products
Lixin Zhang, Institute of Microbiology, Chinese Academy of Sciences

1:45 Chemical Biology of Marine Bioactives from New Zealand
Paul Teesdale-Spittle, Victoria University of Wellington

2:00 Herbal Resource Chemistry
Jinao Duan, Nanjing University of Chinese Medicine
Identification of Herbal Compounds Against Cancer Cells by High-throughput Screening
Xu Zhang, Nanjing University of Chinese Medicine

Session: Academia-Industry-Government Partnerships
Session Leader: Kapil Bhalla, Kansas University Medical Centre

Herding the Cats to the Promised Land: Strategies to De-risk Open Innovation-based Precompetitive Drug Discovery Initiatives
Rathnam Chaguturu, University of Kansas

Open Innovation in Drug Discovery: Role of Non-profits
Krishna Kodukula, SRI International

Aggregating Resources with CTSA-IP as a Stimulus to Public:Private Partnership
Mark Scheideler, HumanFirst Therapeutics

A New Public-Private Paradigm for Innovative Resource Sharing in Drug Discovery
Melvin Reichman, LIMR Chemical Genomics Center

Student Awards
Award Selection Committee

Closing Remarks Rathnam Chaguturu, Haian Fu, Melvin Reichman and Petr Bartunek

ICBS Conference Organizing Committee
Haian Fu, Emory University (Chair)
Jeffrey Aubé, University of Kansas
Petr Bartunek, Center for Chemical Genetics
Rathnam Chaguturu, University of Kansas
Masatoshi Hagiwara, Kyoto University
Krishna Kodukula, SRI International
Lixin Zhang, Chinese Academy of Sciences

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Jian Ding, Shanghai Institute of Materia Medica
Haian Fu, Emory Chemical Biology Discovery Ctr
Masatoshi Hagiwara, Kyoto University
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