

Agenda at a Glance

Monday, November 17, 2014

7:30 a.m. – 7:00 p.m.	Registration
9:00 – 9:15 a.m.	Opening Remarks James Wells, <i>University of California, San Francisco, USA</i>
9:15 – 10:00 a.m.	Keynote Lecture <i>SynBio-driven Potential for Reviving Natural Products Legend</i> Zixin Deng, <i>Shanghai Jiaotong University, China</i>
10:00 – 10:15 a.m.	Refreshment Break with Exhibitors
10:15 a.m.	Session I: Chemical Probing of the Ubiquitin Proteasome System Chair: TBD
10:20 – 10:50 a.m.	<i>Is Induction of Proteotoxic Crisis a Broadly Applicable Approach to Therapy of Cancer?</i> Ray Deshaies, <i>California Institute of Technology, USA</i>
10:50 – 11:05 a.m.	<i>Debranching Ubiquitin Chains with Ubiquitin C-Terminal Hydrolases</i> Eric Strieter, <i>University of Wisconsin, Madison, USA</i>
11:05 – 11:20 a.m.	<i>Targeting Protein-protein Interactions in the Ubiquitin-proteasome System</i> Kamyar Hadian, <i>Helmholtz Center Munich, Germany</i>
11:20 – 11:35 a.m.	<i>Lenalidomide Promotes CRBN-mediated Ubiquitination and Degradation of IKZF1 and IKZF3</i> Monica Schenone, <i>Broad Institute of MIT and Harvard, USA</i>
11:35 a.m. – 1:00 p.m.	Lunch on Own
1:00 p.m.	Session II: Probing Protein Homeostasis & Chaperones Chair: Matthew Shoulders, <i>Massachusetts Institute of Technology (MIT), USA</i>
1:05 – 1:35 p.m.	<i>Targeting Protein-protein Interactions in the Heat Shock Protein 70 (Hsp70) Complex</i> Jason Gestwicki, <i>University of California, San Francisco, USA</i>
1:35 – 2:05 p.m.	<i>The Hsp70-40-Nucleotide Exchange Factor Folding Pathway Hastens Transthyretin Folding and Alters the Resulting Structure Rendering it Kinetically More Stable</i> Jeff Kelly, <i>The Scripps Research Institute, USA</i>
2:15 p.m.	Session III: Tools for Epigenetics Chairs: Masatoshi Hagiwara, <i>Kyoto University, Japan</i>
2:20 – 2:50 p.m.	<i>Chemical Probes to Antagonize Readers and Writers Methyl Marks</i> Cheryl Arrowsmith, <i>SGC-Toronto, Canada</i>
2:50 – 3:20 p.m.	<i>Chromatin-mediated Regulation of Histone Demethylases</i> Danica Fujimori, <i>University of California, San Francisco, USA</i>
3:20 – 3:35 p.m.	<i>Development of Small Molecule Menin-MLL Inhibitors for Epigenetic Regulation in Cancer</i> Jolanta Grembecka, <i>University of Michigan, USA</i>
3:35 – 3:50 p.m.	<i>Design, Development, and Functionalization of Chemical Probes for the Lysine Methyltransferases EZH2 and G9a</i> Kyle Konze, <i>University of North Carolina, Chapel Hill, USA</i>
3:55 – 4:10 p.m.	Refreshment Break with Exhibitors

Agenda at a Glance

Monday, November 17, 2014 (continued)

4:10 p.m.	Session IV: Identifying and Probing Protein Targets with Chemical Approaches Sponsored by 
	Chair: Zaneta Nikolovska-Coleska, <i>University of Michigan, USA</i>
4:15 – 4:45 p.m.	Activity-based Proteomics – Applications for Enzyme and Inhibitor Discovery Benjamin Cravatt, <i>The Scripps Research Institute, USA</i>
4:45 – 5:15 p.m.	A Chemical Biology Approach to Understanding Protein Quality Control Surveillance Mechanisms in Eukaryotic Cells Tom Wandless, <i>Stanford University, USA</i>
5:15 – 5:30 p.m.	From Computational Chemogenomics to Target Deconvolution of Phenotypic Screens Vladimir Chupakhin, <i>Janssen Pharmaceutical Company of Johnson & Johnson, Spain</i>
5:30 – 5:45 p.m.	Small Molecule Probes to Quantify the Functional Fraction of a Specific Protein in a Cell with Minimal Folding Equilibrium Shifts Xin Zhang, <i>The Scripps Research Institute, USA</i>
6:05 – 7:00 p.m.	Poster Briefing I
7:00 – 8:30 p.m.	Opening Mixer, Exhibitor and Poster Reception I

Tuesday, November 18, 2014

7:30 a.m. – 7:15 p.m.	Registration
8:00 a.m.	Session V: Engineering Biology with Synthetic & Unnatural Proteins Chair: Bradley Pentelute, <i>Massachusetts Institute of Technology (MIT), USA</i>
8:05 – 8:35 a.m.	Engineering Light-responsive Proteins David Lawrence, <i>University of North Carolina, USA</i>
8:35 – 8:50 a.m.	Labeling the Bacterial Outer Membrane Transporter LptD Using an Antimicrobial Peptide by Chemical Cross-linking Gloria Andolina, <i>University of Zurich, Switzerland</i>
8:50 – 9:05 a.m.	Chemical Biology that Controls DNA Structure and Function: DNA Origami and Artificial Genetic Switch Hiroshi Sugiyama, <i>Kyoto University, Japan</i>
9:05 – 9:20 a.m.	Pneumococcal Neuraminidase Substrates Identified Through Chemoenzymatic Labeling Janet McCombs, <i>University of Texas Southwestern Medical Center, USA</i>
9:30 – 9:45 a.m.	Refreshment Break with Exhibitors

Agenda at a Glance

Tuesday, November 18, 2014 (continued)

9:45 a.m.	Session VI: Controlling Cell Fate, Models & Systems Biology Chair: Christian Ottmann, <i>Eindhoven University of Technology, Netherlands</i>
9:50 – 10:20 a.m.	A Chemical Approach to Controlling Cell Fate Sheng Ding, <i>Gladstone Institute of Cardiovascular Disease, USA</i>
10:20 – 10:35 a.m.	Small-molecule Modulation of Apoptosis via Direct Targeting of Pro-apoptotic BAX Evripidis Gavathiotis, <i>Albert Einstein College of Medicine, USA</i>
10:35 – 10:50 a.m.	Targeting Sensors and Molecular Probes: Oxidative Stress and Aging Richard Hartley, <i>University of Glasgow, United Kingdom</i>
11:00 a.m.	Keynote Lecture Modulating Signaling via Polypharmacology of Kinases and RAS Kevan Shokat, <i>University of California, San Francisco, USA</i>
11:45 a.m. – 12:15 p.m.	Lunch on Own
12:15 – 1:15 p.m.	Panel Discussion: Meet Editors of Chemical Biology Journals Chair: Mirella Bucci, PhD; <i>Nature Chemical Biology</i> Panelists: Jason Gestwicki, <i>ACS Chemical Biology</i> Kevan Shokat, <i>Chemistry & Biology</i> Andrew Napper, <i>Assay & Drug Development Technologies</i> Rathnam Chaguturu, <i>Combinatorial Chemistry & HTS</i> Stephen Traynelis, <i>Molecular Pharmacology</i>
1:15 p.m.	Session VII: Perturbing & Observing Biology in Living Cells Chair: Petr Bartůněk, <i>Institute of Molecular Genetics of the ASCR V.V.i, Czech Republic</i> Michiyuki Matsuda, <i>Kyoto University, Japan</i>
1:20 – 1:50 p.m.	Deprotection Chemistry-mediated Protein Activation in Living Cells Peng Chen, <i>College of Chemistry and Molecular Engineering, China</i>
1:50 – 2:20 p.m.	Long-term Activity Imaging in Cells and Mice by Transposon-mediated Stable-expression of FRET Biosensors Michiyuki Matsuda, <i>Kyoto University, Japan</i>
2:20 – 2:35 p.m.	New Chemical Probes for Imaging Glycolipid Trafficking Liam Cox, <i>University of Birmingham, United Kingdom</i>
2:35 – 2:50 p.m.	Small Fluorogen-activating Protein Tags for Protein Imaging in Living Cells Arnaud Gautier, <i>Ecole Normale Supérieure, France</i>
2:50 – 3:05 p.m.	Development of a Red Fluorescence Probe for Monitoring Dynamics of Cytoplasmic Calcium Ion Kenjiro Hanaoka, <i>The University of Tokyo, Japan</i>
3:05 – 3:20 p.m.	A Spontaneously Blinking Fluorophore Based on Intramolecular Spirocyclization for Live-cell Super-resolution Imaging Shinnosuke Uno, <i>The University of Tokyo, Japan</i>
3:25 – 3:45 p.m.	Refreshment Break with Exhibitors
3:45 p.m.	Session VIII: Central Nervous System & Neurobiology Chair: Melvin Reichman, <i>LIMR Chemical Genomics Center, USA</i>
3:50 – 4:20 p.m.	Chemical Biology of Ligand-gated Ion Channels for Causal Neuroscience Scott Sternson, <i>Janelia, Howard Hughes Medical Institute, USA</i>

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Tuesday, November 18, 2014 (continued)

4:20 – 4:50 p.m.	Context-dependent NMDA Receptor Inhibition Stephen Traynelis, <i>Emory University School of Medicine, USA</i>
4:50 – 5:05 p.m.	An Unbiased Multidimensional Profiling Method to Study the Biology of Parkinson's Disease Marie-Laure Vial, <i>Eskitis Institute for Drug Discovery-Griffith University, Australia</i>
5:10 p.m.	Special Session I: Enabling Chemical Biology Chair: Xu Zhang, <i>Nanjing University of Chinese Medicine, China</i>
5:15 – 5:45 p.m.	How to Run a Research Laboratory from the Beach Kevin Lustig, <i>Assay Depot, Inc., USA</i>
5:45 – 6:00 p.m.	A European Research Infrastructure for Chemical Biology "EU-OPENSREEN" Ronald Frank, <i>Leibniz-Institut für Molekulare Pharmakologie, Germany</i>
6:05 – 7:15 p.m.	Poster Briefing I
7:15 – 8:30 p.m.	Exhibitor and Poster Reception II

Wednesday, November 19, 2014

7:30 a.m. – 6:00 p.m.	Registration
8:00 a.m.	Session IX: Tackling Challenging Diseases Chair: Michael Varney, <i>Genentech, USA</i>
8:05 – 8:35 a.m.	The Discovery and Early Development of the PI3K Inhibitor GDC-0032 Michael Varney, <i>Genentech, USA</i>
8:35 – 9:05 a.m.	Black and White Facts Underlying Depigmenting Disorder Vitiligo Rajesh Gokhale, <i>CSIR-Institute of Genomics & Integrative Biology of India, India</i>
9:05 – 9:20 a.m.	A Chemical Biology Approach Identified a New Inhibitor of LIM Kinases Laurence Lafanechère, <i>CNRS, France</i>
9:25 – 9:55 a.m.	Refreshment Break with Exhibitors
9:55 a.m.	Session X: Novel Chemistry for Discovery Chair: David Fairlie, <i>University of Queensland, Australia</i>
10:00 – 10:30 a.m.	Heterocycles as Tuning Forks to Modulate Cell Signaling David Fairlie, <i>University of Queensland, Australia</i>
10:30 – 11:00 a.m.	Chemical Tools for Imaging Cellular Fatty Acylation Rami Hanoush, <i>Genentech, USA</i>
11:00 – 11:15 a.m.	A Chemoselective Tool for Lys-phosphorylation Jordi Bertran-Vicente, <i>Leibniz-Institut für Molekulare Pharmakologie (FMP), Germany</i>
11:15 – 11:30 a.m.	Targeted-diazotransfer Reagents to Site-selectively Introduce Azides on Proteins Martin Witte, <i>University of Groningen, The Netherlands</i>
11:35 a.m. – 1:05 p.m.	Lunch on Own

Agenda at a Glance

Wednesday, November 19, 2014 (continued)

1:05 p.m.	Session XI: Natural Product and Synthetic Biology Chairs: Lixin Zhang, <i>Institute of Microbiology, China</i> Ronald Quinn, <i>Exkitis Institute for Drug Discovery, Griffin University, Australia</i>
1:10 – 1:40 p.m.	<i>Anti-infective and Anti-tumor Natural Products Discovery and Biosynthesis from Marine Actinomycetes</i> Jianhua Ju, <i>South China Sea Institute of Oceanology, Chinese Academy of Sciences, China</i>
1:40 – 1:55 p.m.	<i>Unique RNA Binding Properties of Some DNA Binding Naturalalkaloids</i> Gopinatha Suresh Kumar, <i>CSIR Indian Institute of Chemical Biology, India</i>
1:55 – 2:10 p.m.	<i>Anti-cancer Effects and Mechanisms of Piperlongumine in Brain and Liver Tumors</i> Xiaoqian Chen, <i>Huazhong University of Science and Technology, China</i>
2:10 – 2:25 p.m.	<i>Fragment-Based FTMS Screening of a Unique Natural Product Library</i> Ronald Quinn, <i>Exkitis Institute for Drug Discovery, Griffith University, Australia</i>
2:30 – 3:30 p.m.	Special Session II: Rising Stars of Chemical Biology Chair: Haiyan Fu, <i>Emory University, USA</i>
3:30 – 4:00 p.m.	ICBS Annual Business Meeting and Refreshment Break
4:00 p.m.	Session XII: Reproducibility & Transparency in Biomedical Research Chairs: David Vaux, <i>The Walter and Eliza Hall Institute, Australia</i> Rathham Chaguturu, <i>iDDPartners, USA</i>
4:05 – 4:35 p.m.	<i>Reproducible Research - What Should you Look For, and Who Can You Trust?</i> David Vaux, <i>The Walter and Eliza Hall Institute, Australia</i>
4:35 – 5:05 p.m.	<i>Data Reproducibility in the Post Genomics Era: Death of a Noble Technology</i> Hakim Djaballah, <i>Institut Pasteur, Korea</i>
5:10 p.m.	Keynote Lecture <i>Systems Chemical Biology of Drug Action and Drug Transport</i> Giulio Superti-Furga, <i>CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences, Austria</i>
5:50 – 6:30 p.m.	Closing Remarks