



Sunday, August 7, 2016

<i>Time</i>	Event
10:30-12:00	Registration Hilton Downtown Knoxville, 2 nd Floor Lobby
12:00-12:30	Opening Ceremony Paul Langan, Oak Ridge National Laboratory
12:30-1330	Plenary Lecture
13:30-14:00	Break
14:00-1600	Session 1 Lecture: Sources and Facilities Chair: Dean Myles, Volker Urban Speaker from NSLS II – Sean McSweeney or substitute Nadia Zatsepin, Arizona State University Atsushi Nakagawa, Osaka University, Japan <i>“Spring-8 BL444XU, A beamline for Large Biological Macromolecular Assemblies”</i> Paul Langan, Oak Ridge National Laboratory
16:00	Adjourn

Monday, August 8, 2016

<i>Time</i>	Event
9:00-9:45	Plenary Lecture Michael Crowley, National Renewable Energy Laboratory (NREL)
9:45-10:15	Break
9:45-12:00	Session 2 Lecture: Drug Design Chair: Jerry Parks Jeremy Smith, University of Tennessee

	<p>Irene Weber, Georgia State University Mayank Aggarwal, Oak Ridge National Laboratory <i>“Mapping the H-Bonding Patters in Human Carbonic Anhydrase II Complexed with Clinical Drugs”</i></p> <p>Jerry Parks, Oak Ridge National Laboratory <i>“Discovery of Inhibitors of Multidrug Efflux Pumps in Gram-Negative Bacteria”</i></p>
12:00-13:30	Lunch on your own
13:00-15:00	<p>Session 3 Lecture: New Instruments and Methods Chair: Matt Cuneo</p> <p>Paul Adams, Lawrence Berkeley National Laboratory <i>Computational Methods for Neutron Crystallography in Phenix</i></p> <p>Wah Chiu, Baylor College of Medicine</p> <p>Suman Kumar Mandal, Shiv Nadar University, India <i>“Quantitative Analysis of Hydrogen Bonding in Proteins: A Charge Density Approach”</i></p> <p>Ichiro Tanaka, Ibaraki University, Japan <i>Cryoprotectant-Free High-Pressure Freezing and Dynamic Nuclear Polarization for More Sensitive Detection of Hydrogen in Neutron Protein Crystallography</i></p> <p>Richard Gillilan, Cornell University <i>“Signal and Noise: Modeling Data Quality in Biological Small Angle Solution Scattering”</i></p>
15:00-15:30	Break
15:30-17:00	<p>Session 4 Lecture: Bioenergy Chair: Hugh O’Neill</p> <p>Jochen Zimmer, University of Virginia, School of Medicine</p> <p>Yoshiki Higuchi, University of Hyogo <i>“Structural Studies of [NiFe]-hydrogenases”</i></p>
18:00-20:00	Poster Session

Tuesday, August 9, 2016

Time	Event
9:00-9:45	<p>Plenary Lecture</p> <p>Peter Moody, Leicester University <i>“Combining Cryo-Neutron & X-ray Crystallography with Single Crystal Spectroscopy to Catch Peroxidase Intermediates”</i></p>

9:45-10:15	Break
10:15-12:00	Session 5 Lecture: Macromolecular Complexes Chair: Loukas Petridis Jack Johnson, Scripps Research Institute Bret Freudenthal, University of Kansas Medical Center Frank Gabel, Institut de Biologie Structurale, Grenoble, France <i>“SANS, NMR and Crystallography: A Powerful Combination to Study Challenging Protein-RNA Complexes”</i>
12:00-13:30	Lunch on your own
13:30-17:30	ORNL Tours <ul style="list-style-type: none"> • HFIR • SNS • TITAN
19:00-21:00	ISDSB Future Planning Meeting and Awards Ceremony Ken Herwig, Oak Ridge National Laboratory

Wednesday, August 10

<i>Time</i>	<i>Event</i>
9:00-9:45	Plenary Lecture Greg Hura, Lawrence Berkeley National Laboratory
9:45-10:15	Break
10:15-12:00	Session 6 Lecture: Enzyme Mechanism and Allostery Chair: Andrey Kovalevsky Walter Chazin, Vanderbilt University Donald Ronning, University of Toledo Robert Phillips, University of Georgia <i>“Structure of the Tryptophan Indole-lyase-Oxindolylalanine Complex”</i> Yohta Fukuda, Osaka University, Japan <i>“New Hot Topics on Copper Nitrite Reductases”</i>
12:00-13:30	Lunch on your own

13:30-15:00	<p>Session 7 Lecture: Membrane Proteins Chair: Flora Meilleur</p> <p>Chuck Sanders, Vanderbilt University Geoffrey Chang, University of California, San Diego Ella Mihailescu, University of Maryland <i>“Neutron diffraction reveals conformation and interactions of a voltage-sensor toxin with lipid membranes”</i></p>
15:00-15:30	<p>Break</p>
15:30-17:00	<p>Session 8 Lecture: Membranes Chair: Shuo Qian</p> <p>John Katsaras, Oak Ridge National Laboratory <i>“Lateral membrane organization in model systems and live bacteria”</i> Michael Wiener, University of Virginia, School of Medicine <i>“Functional recognition of membrane-bound substrates by the integral membrane protein protease Ste24p”</i></p>
17:00-17:30	<p>Closing</p>