8th Texas Enzyme Mechanisms Conference  
January 3-4, 2020  
College of Pharmacy  
The University of Texas at Austin  

Program  

Friday, January 3, 2020  

7-9 pm  **Reception** – Iron Cactus Mexican Restaurant  
606 Trinity St  

Saturday, January 4, 2020 (Pharmacy, PHR 3.106)  
7:30  **Packet Pickup & Continental Breakfast (outside PHR 3.106)**  
8:00  **Welcome:** Chris Whitman (The University of Texas at Austin)  

**Session 1: Enzymes and Disease**  

Chair: Ben Liu (The University of Texas, Austin)  

8:05  JOSEPH W. LaMATTINA  
Pfizer Worldwide Research and Development, La Jolla, CA  
"Substrate Context Alters the Kinetic Mechanism of Protein Arginine Methyltransferase 7 (PRMT7) and Affects Inhibitor Potency"  

8:35  BRENDA MEDELLIN  
Department of Molecular Biosciences, University of Texas at Austin, Austin, TX  
"Modulation of Restrictive Element 1 Silencing Transcription Factor REST/NRSF Activity through Allosteric Covalent Inhibition of Small CTD Phosphatase 1"  

8:55  INCHUL SHIN  
Department of Chemistry, University of Texas at San Antonio, San Antonio, TX  
"A Novel His-ligated Heme-dependent Enzyme Family"  

9:15  RADHIKA MEHTA  
Department of Chemistry, University of Texas at Austin, Austin, TX  
"Fluorescent Probes for New Delhi Metallo-β-lactamases to Explore Bacterial Zinc Homeostasis"  

9:35  **Coffee Break (Hallway outside PHR 3.106)**  

**Session 2: From Enzymes to Complex Biological Systems**  

Chair: Adrian Keatinge-Clay (The University of Texas, Austin)  

10:00  DAT P. TRUONG  
Department of Biochemistry and Biophysics, Texas A&M University, College Station, TX
"The Important Role of a Second-shell Amino Acid in Determining N-Succinylamino Acid Racemase Reaction Specificity"

10:20 TAKESHI MIYAZAWA
Departments of Molecular Biosciences and Chemistry, University of Texas at Austin, Austin, TX
"An In Vitro Platform for Engineering and Harnessing Modular Polyketide Synthases"

10:40 SANJOY ADAK
Department of Chemistry, Texas A&M University, College Station, TX
"Identification of Flavin-N5-Oxide in Bacterial Dibenzothiophene, Uracil, and Hexachlorobenzene Catabolic Pathway"

11:00 JIAWEI ZHANG
Department of Chemical Biology and Medicinal Chemistry, University of Texas at Austin, Austin, TX
"Characterization of SpeY, a Radical SAM-dependent Dehydrogenase in Spectinomycin Biosynthesis"

11:20 BRIANNA NORBURY
Department of Chemistry and Biochemistry, Texas State University, San Marcos, TX
"Ligand Discrimination by the N-terminal Region of the RNA-binding Protein LARP6"

11:40 Box Lunch (Second and Third Floor Hallways, Pharmacy Building)

Session 3:

Chair: Tadhg Begley (Texas A&M University)

1:00 J. TRAE HAMPTON
Department of Chemistry, Texas A&M University, College Station, TX
"Phage-assisted Active-Site Directed Ligand Evolution of Peptides"

1:20 DRAKE MELLOTT
Department of Biochemistry and Biophysics, Texas A&M University, College Station, TX
"Post-translational Modification of Mycobacteria: Insight into the Regulation of Key Metabolic Enzymes"

1:40 Emily Balas Kas
Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA
"Enzyme Discovery in the Microbial World"

3:30-5:30 Poster Session (Biomedical Engineering Building Lobby).