2014 UC Berkeley Amgen Scholars Summer Research Program

Oral Presentations Session Two- Wednesday, August 6, 2014



### 9:00 a.m. University of Alabama, Tuscaloosa

Faculty Lab: Daniel Fletcher, Ph.D.

Sarah McFann

Title: Automated, Mobile, Tablet-Based Microscope for Imaging Growth and Behavior of 3D Culture Models of Breast Epithelial Cells



#### 9:15 a.m. **Richard Murdock** University of Central Florida

Faculty Lab: Seung-Wuk Lee, Ph.D.

Title: Development of a Biomimetic Virus-Based Colorimetric Sensor for Bisphenol A Detection



9:30 a.m. Apurva Shah (HHMI) University of Maryland, Baltimore County Faculty Lab: Carlos Bustamente, Ph.D.

Title: Elucidating the Folding Pathways of Calcium-Binding Proteins

University of Maryland, Baltimore County

Faculty Lab: Danielle Tullman-Ereck Ph.D.

Title: Observing the Movement of Bacterial



# Joel Sanchez University of California, Riverside

Microcompartments in S. enterica

Vanessa Mackley

Faculty Lab: Wenjun Zhang, Ph.D. Title: Heterologous Expression of Antimycins in E. coli



Ivan Kuznetsov Johns Hopkins University Faculty Lab: John Dueber, Ph.D.

Title: Applying Mutant Enzymes for Increased Xylose Utilization in Saccharomyces cerevisiae



10:30 a.m. Lee Korshoj University of Nebraska, Lincoln Faculty Lab: Jay Keasling, Ph.D.

Title: Post-translational Reconstitution of 6-Deoxyerythronolide B Synthase Expressed in Escherichia Coli Using Split Inteins



# Marianne Sleiman

10:45 a.m.

University of Massachusetts Amherst

Faculty Lab: David Schaffer, Ph.D.

Title: Directed Evolution of Site-Specific Nucleases & Optimization of AAV Delivery Systems for *Neurodegenerative Diseases* 



Gillie Agmon 11:30 a.m. University California, San Diego

Faculty Lab: Niren Murthy, Ph.D.

Title: Competitive Inhibitor for Enhanced CRISPR-Cas9 Precision



Lydia Pazienza (CRSB) 11:45 a.m. University of Chicago

Faculty Lab: Jennifer Doudna, Ph.D.

Title: RNA Dynamics in the CRISPR-Cas9 Complex



9:45 a.m.

10:00 a.m.

10:15 a.m.

## **Emily Powers** Ithaca College

12:00 noon

Faculty Lab: Nicholas Ingolia, Ph.D.

Title: Regulation of SR Protein Levels Through Ultra-Conserved Elements



Kelsie Rodriguez (CRSB) 12:15 p.m. California State University Monterey Bay

Faculty Lab: Jamie Cate, Ph.D.

*Title:* Role of Phosphorylation Sites of eIF3j Towards Its Stability and Effect on Cell Proliferation in Neurospora crassa and Human Cells



Joshua D. Garcia The University of New Mexico 12:30 p.m.

12:45 p.m.

Faculty Lab: Andrew Dillin, Ph.D.

Title: The Biochemical Analysis of Proteostasis in Aging Mitochondrial Proteomes



Jolie Carlise University of California, Berkeley Faculty Lab: Michael Shapira, Ph.D.

Title: Characterization of the Age-Dependent Reversal in the Protective Capacity of KGB-1 Expression in *Caenorhabditis elegans* 

Come and join us in supporting our Scholars and learn about their summer research!