

Lila Gierasch, University of Massachusetts, Subgroup Chair

**Biopolymers in Vivo Subgroup 2014 Symposium**

**Saturday, February 15, 2014**

**San Francisco, California**

**Molecular Machines and How They Function Inside Cells**

12:15 to 12:55 PM, Business meeting and announcement of T-shirt contest winners

12:55 PM to 1:00 PM, Introduction from the Program Co-Chairs, Gilad Haran and Jeffrey Skolnick

1:00 to 1:30 PM, Keynote 1: Judith Frydman, Stanford University  
*The Machines that Fold Proteins in the Eukaryotic Cytosol*

1:30 to 2:00 PM, Tania Baker, MIT  
*Unexpected Functions of the Clp AAA+ Unfoldases*

2:00 to 2:30 PM, Ron Elber, University of Texas, Austin  
*Coil-Coil Under Load: Stability of Essential Machine Component*

2:30 to 2:50 PM, Postdoctoral talk: Sarah Rouse, University of Oxford

*A Conformational Landscape for Alginate Secretion Across the Outer Membrane of Pseudomonas Aeruginosa*

2:50 to 3:15 PM, Break

3:15 to 3:45 PM, Steven Gross, University of California, Irvine  
*Starling's Law at Small Scale: Surprising Sub-cellular Adaptation of Cargo Transport to Opposition to Motion*

3:45 to 4:05 PM, Postdoctoral talk: Rudra Kafle, University of Michigan

*In Vivo Studies of Active Processes in the Escherichia Coli Nucleoid*

4:05 to 4:35 PM, Zaida Luthey-Schulten, University of Illinois, Urbana-Champaign  
*Stochastic Simulations of Cellular Processes: From Single Cells to Colonies*

4:35 to 5:05 PM, Keynote 2: Sunney Xie, Harvard University  
*Transcription Against Supercoiling*

6:00 PM Subgroup Dinner