Martin Gruebele, University of Illinois at Urbana Champaign, Subgroup Chair

Biopolymers in vivo Subgroup 2016 Symposium Saturday, February 27, 2016 Los Angeles, California 10:45 AM - 6:45 PM

Title: Translation Dynamics and Nascent Proteome Behavior **Program Chairs:** *Christian Kaiser*, Johns Hopkins University, *Ed O'Brien*, Penn State University

10:45 AM Subgroup Business Meeting

11:45 AM Lunch Break

1:15 PM Introductions

1:20 PM *Jonathan Weissman,* University of California, San Francisco Monitoring Translation in Space and Time with Ribosome Profiling

1:50 PM Zoya Ignatova, University of Hamburg, Germany Probing Dimensionality Beyond the Linear Sequence of mRNA

2:20 PM *Helmut Grubmüller,* Max Plank Institute for Biophysical Chemistry, Germany Low Energy Barriers and a Dynamic Contact Network between Ribosomal Subunits Enable Rapid tRNA Translocation

2:50 PM *Jody Puglisi,* Stanford University *Dynamics of Translation*

3:20 PM Coffee Break

3:50 PM *Shu-ou Shan*, California Institute of Technology *Accurate Decision Making at the Ribosome During Protein Biogenesis*

4:20 PM *Thomas Miller*, California Institute of Technology *Regulation of Sec-facilitated Protein Translocation and Membrane Integration*

4:50 PM *Gunnar von Heijne,* University of California, San Francisco *Co-translational Protein Translocation, Membrane Insertion and Folding Probed by Arrest-peptide Mediated Force Measurements*

5:20 PM Judit Perales-Calvo, King's College London, UK

5:35 PM Ken Dill, Stony Brook University Some Cell Behavior is Encoded in Proteome Physics

6:05 PM Closing Remarks

6:45 PM Dinner