Nanoscale Biophysics Subgroup 2017 Symposium Saturday, February 17, 2018 San Francisco, California 12:30 PM- 6:00 PM

Esplanade Room 160

Subgroup Chair: Wesley Wong, Harvard University

12:30 PM Opening Remarks

12:35 PM

Volkmar Heinrich, University of California, Davis

Nano-to-Microscale Immunophysics: Sprawling Frontier and Foundation for Transformative Advances in Biomedicine

1:05 PM

Ozgur Sahin, Columbia University

Studying Nanoscale Mechanics of Single Molecules and Cells with Atomic Force Microscopy

1:35 PM Student/ Postdoc Talk

Fidan Sumbul, Inserm & Aix-Marseille University

Effect of cantilever response time on single molecule unfolding forces

1:50 PM Student/ Postdoc Talk

Alex Diezmann, Stanford University

A polar matrix microdomain constrains diffusion and regulates intracellular signaling

2:05 PMStudent/ Postdoc Talk

Melody Di Bona, Italian Institute of Technology and University of Genoa

Probing chromatin organization by sorting of short sequence Fluorescence Correlation Spectroscopy

2:20 PM Student/ Postdoc Talk

Jason Hon, Columbia University

High Temporal- and Spatial-Resolution Studies of a Helix-to-Coil Transition that Controls the Switching Mechanism of a Riboswitch

2:35 PM Student/ Postdoc Talk

Julene Madariaga-Marcos, National Center for Biotechnology (CNB), Spanish National Research Council (CSIC)

Lateral Magnetic Tweezers to study DNA: protein interactions

2:50 PM Break

3:20 PM

Jens Gundlach, University of Washington

Enzyme Studies with Single-Molecule Picometer Resolution Nanopore Tweezers, SPRNT

3:50 PM

Naomi Ginsberg, University of California, Berkeley

Cathodoluminescence-activated Imaging of Nanoscale Dynamics by Resonance Energy Transfer

4:20 PM

Hendrik Dietz, Technical University of Munich, Germany

Precision Measurements of Biomolecular Structures and Interactions, Supported by DNA Origami

4:50 PM

Stephen Kowalczykowski, University of California, Davis Watching Individual Molecules: Understanding Biology from Stochastic Behavior

5:20 PM Business Meeting

6:00 PM Subgroup Dinner

The Nanoscale Biophysics Subgroup is grateful for support from the following companies:





