

**Institute for Biophysical Dynamics**  
**2013-2014 Interdisciplinary Research Seminars**  
**Gordon Center for Integrative Science W301/303 at noon (unless otherwise noted)**

Autumn, 2013

Monday, 23 September

**Mingjie Zhang, PhD** Life Sciences, Hong Kong Univ of Science & Technology  
*Scaffold Proteins in Neuronal Development and Signaling: a structural biologist's view*

Tuesday, 24 September

**Bil Clemons, PhD** Biochemistry, Cal Tech  
*A mechanistic understanding of membrane protein biogenesis*

Tuesday, 15 October

**Vijay Pande, PhD** Chemistry, Stanford,  
*Some surprises in the Biophysics of Protein Dynamics*

Tuesday, 22 October

**Christian Hackenberger, PhD** Leibniz-Institut für Molekulare Pharmakologie,  
*Chemoselective reactions for the synthesis of functional peptides & proteins*

Monday, 28 October

**Iksoo Chang, PhD** Center for Proteome Biophysics, DGIST, Korea  
*Atom-level insight on pH-driven Histidine switch uncovered in NAC protein*

Tuesday, 29 October

**Feng Zhang, PhD** Broad Institute, Harvard & MIT  
*Neuroengineering: Molecular & Optical Axes of Control*

Tuesday, 12 November

**Jarek Majewski, PhD** Los Alamos National Laboratory  
*Neutron and x-ray scattering of bio-related interfaces: from lipid layers to living cells*

Tuesday, 19 November 2013

**Carl Wu, PhD** Janelia Farms Research Campus, HHMI  
*ATP-dependent chromatin remodeling & the dynamics of histone variant H2A.Z*

Tuesday, 26 November 2013

**Larry A. Nagahara, PhD** Office of Physical Sciences-Oncology, National Cancer Institute, NIH  
*How Can a Physical Sciences Perspective Bring Novel Insight into Cancer Research?*

Winter, 2014

Tuesday, 21 January

**Ji-xin Cheng, PhD** Biomedical Engineering, Purdue  
*In situ & in vivo molecular analysis by microsecond time scale spectroscopic imaging*

Tuesday, 4 February

**David A. Agard, PhD** HHMI, Biochemistry & Biophysics, Univ Calif, San Francisco  
*The Structure & Mechanism of the Hsp90 Molecular Chaperone: A Ubiquitous Facilitator of Folding & Signaling*

Tuesday, 18 February

**Kou-Juey Wu, MD/PhD** Biochemistry and Molecular Biology, National Yang Ming University, Taipei  
*Epigenetic and post-translational regulation of hypoxia-induced epithelial-mesenchymal transition*

Tuesday, 25 February

**Clare M. Waterman, PhD** National Heart, Lung and Blood Institute, National Institutes of Health  
*Myosin II mediates cellular branching morphogenesis & migration in 3D by minimizing cell surface curvature*

Thursday, 27 March

**Patricia Bassereau, PhD** Institut Curie  
*Effect of membrane curvature on lipid & protein distribution*

Spring, 2014

Tuesday, 8 April

**Qiu-Xing Jiang, PhD** Cell Biology, UT Southwestern  
*CryoEM study of the intracellular RNA-sensing pathway*

Wednesday, 9 April, 4:00 PM, BSLC 109

Frederick Seitz Lecture

**Jennifer A. Doudna, PhD**  
HHMI, Molecular & Cell Biology and oChemistry, Univ Calif, Berkeley  
*The Biology of CRISPRs: From Genome Defense to Genetic Engineering*

Tuesday, 15 April

**Bianxiao Cui, PhD** Chemistry, Stanford  
*Exploring the Bio-Nano interface: integrating live cells with nanosensors*

Wednesday, 16 April

**Ewa Paluch, PhD** MRC Laboratory for Molecular Cell Biology, University College London  
*Plasticity & Physical Mechanisms of Cell Migration in Confinement*

Tuesday, 27 May

**Julie S. Biteen, PhD** Chemistry, University of Michigan  
*Peering into Cells One Molecule at a Time: Single-molecule studies of biomolecular structure, cooperativity & dynamics in living bacteria*

Tuesday, 10 June

**Vinzenz M. Unger, PhD** Molecular Biosciences, Northwestern University  
*When Structures Talk: Case Studies from the Exploration of Membrane Interfaces by CryoEM*