

Interdisciplinary Research Seminar
sponsored by the Institute for Biophysical Dynamics
Center for Integrative Science W301/303

Fall, 2005

- Sept 27 **Amy Keating, Ph.D.**, MIT, "Decoding the protein-protein interaction specificity of bZIP transcription factor coiled coils: measurements and computational predictions"
- Oct 4 **Stephen J. Kron, Ph.D.**, University of Chicago, "Chromatin Dynamics in DNA Damage Response"
- Oct 11 **Clare Waterman-Storer, Ph.D.**, Scripps, "Cytomechanical Systems Integration in Directed Cell Migration"
- Oct 25 **Stuart F.J. Le Grice, Ph.D.**, National Cancer Institute – Frederick, "Chemical Biology and Reverse Transcription: Not 'Star Trek', but possibly 'The Next Generation'"
- Oct 28 **Laurie Parker, Ph.D.**, Kron and Kent Groups, "How to understand & represent your proteomics data: new software tools from the Institute for Systems Biology"
- Nov 1 **Matt Runyon**, Ismagilov Group, Using Chemistry and Microfluidics to Understand the Complex Reaction Network of Blood Clotting
- Nov 8 **Eric Siggia, Ph.D.**, Rockefeller, "Fluctuations and the Cell Cycle in Budding Yeast"
- Nov 15 **George Church, Ph.D.**, Harvard Medical School, "Synthesizing and sequencing genomes"
- Nov 22 **David Craik, Ph.D.**, Institute for Molecular Biosciences, University of Queensland, "Nature's Peptide Rings & Knots: Discovery & Applications of Circular Proteins"
- Nov 29 **Ao Ma, Ph.D.**, Dinner group, "Theoretical approaches to understanding biomolecular dynamics"
- Dec 6 **Bulent Aydogan, Ph.D.**, Radiation and Cellular Oncology' "Computational modeling of radiation interaction with DNA in radiotherapy"

Winter, 2006

- Jan 10 **Jim Norris, Ph.D.**, "Investigations of Human Eye Cells and Human Protein Using Time-Domain EPR"
- Jan 17 **Eduardo Perozo, Ph.D.**, Institute for Molecular Pediatric Science, U of C, "Physical and Molecular Principles of Mechanosensitive Channel Function"
- Jan 24 **Alessio Accardi, Ph.D.**, Brandeis University, "Early insights in the transport mechanism of a CLC Cl-/H+ exchanger"
- Jan 31 **Hassane Mchaourab, Ph.D.**, Vanderbilt, "Watching Multidrug Transporters Work"
- Feb 7 **Nathan Baird**, Pan/Sosnick Labs, "Insights into RNA folding and thermostability at the atomic level"
- Feb 14 **Adam Hammond, Ph.D.**, Cornell Membrane, Structure and Dynamics: How do we fill the gap between models and cells?
- Feb 21 **Eugene Losev**, Glick Lab, Golgi Maturation Visualized in Living Yeast
- Feb 28 **Leigh Plant, Ph.D.**, Goldstein Lab, A polymorphism in the cardiac sodium channel, SCN5A, associated with Sudden Infant Death Syndrome.
- Mar 7 **Sanjib Dutta**, Koide Group, "Exploring the protein sequence space by high-throughput stability analysis"

Spring, 2006

- Apr 4 **Paolo De Los Rios Ph.D**, Institute of Theoretical Physics, University of Lausanne, Switzerland, "Entropic Pulling: The Mechanism of Hsp70 Chaperones in Protein Translocation and Disaggregation"
- Apr 11 **Justin Jureller Ph.D**, Uof C, Nanobiology Research Core Facility, "Rapid Stochastic Scanning Microscopy for Imaging of Transport"
- Apr 18 **Eugene Shakhnovich Ph.D**, Harvard, Chemistry and Chemical Biology, "Darwinian evolution from first principles"
- May 2 **Melina Hale Ph.D**, Organismal Biology and Anatomy, "Cells, circuits and swimming: using functional imaging to examine the neuromechanics of movement in the zebrafish"
- May 9 **John Marko Ph.D**, UIC Physics, "Single-DNA analysis of DNA-folding proteins"
- May 16 **Yuji Ishitsuka**, Uof C, Lee Group, "How can Peptides Kill Bacteria? Membrane Selectivity and the Disordering Mechanism of Antimicrobial Peptide Protegrin-1"
- May 23 **Stephen Lippard Ph.D**, MIT, "Chemical and Biological Studies of Platinum Anticancer Drugs"
- May 31 **Hagan Bayley, Ph.D.**, University of Oxford, "Observing single molecules in a protein nanoreactor: from mechanistic chemistry to stochastic sensing" (**Seitz Lecturer**)