

# POST-DOC AND GRADUATE STUDENT SYMPOSIUM PROGRAM

Center for the Physics of Living Cells

Thursday, August 26<sup>th</sup>, 2010

1005 Beckman Institute

University of Illinois at Urbana-Champaign

## **8:30 – 9:00 a.m.**      *Continental Breakfast*

9:00 – 9:15 a.m.	Bo Liu	Interplay of L1 stalk and tRNA
9:15 – 9:30 a.m.	Kiran Girdhar	In vivo protein folding dynamics and statistical analysis of swimming behavior in zebrafish embryos
9:30 – 9:45 a.m.	Elijah Roberts	Noise contributions in an inducible genetic switch: A whole-cell simulation study
9:45 – 10:00 a.m.	Taejin Lance Min	Bacterial chemotaxis studied using optical traps
10:00 – 10:15 a.m.	Tyler Earnest	Kinetic modeling of PCNA assisted replication clamp assembly
10:15 – 10:30 a.m.	Hannah Deberg	Measuring ion channel intersubunit distances
10:30 – 10:45 a.m.	Shyamal Subramanyam	Keeping recombination in check: Regulation of Rad51 recombinase by posttranslational modifications
10:45 – 11:00 a.m.	Tao Jiang	MD simulation study of transition between apo-RecA and ATP-RecA states

## 11:00 – 11:45 a.m.      *Break – Food and Beverages Provided*

11:45 – 12:00 p.m.	Mike Brenner	Fluorescence-force spectroscopy of repeat protein motifs
12:00 – 12:15 p.m.	Rogan Carr	The role of water in protein binding to functionalized inorganic surfaces
12:15 – 12:30 p.m.	Fangfu Ye	Relation between the flagellar number and tumbling frequency of Escherichia coli
12:30 – 12:45 p.m.	Xuefeng Wang	Single-molecule immunoprecipitation (SiMPull) based on single cells
12:45 – 1:00 p.m.	Divya Srinivasan	Single viral RNA, host protein interaction in cells
1:00 – 1:15 p.m.	Zhenyu Wang	Game theory and the social life of microbes