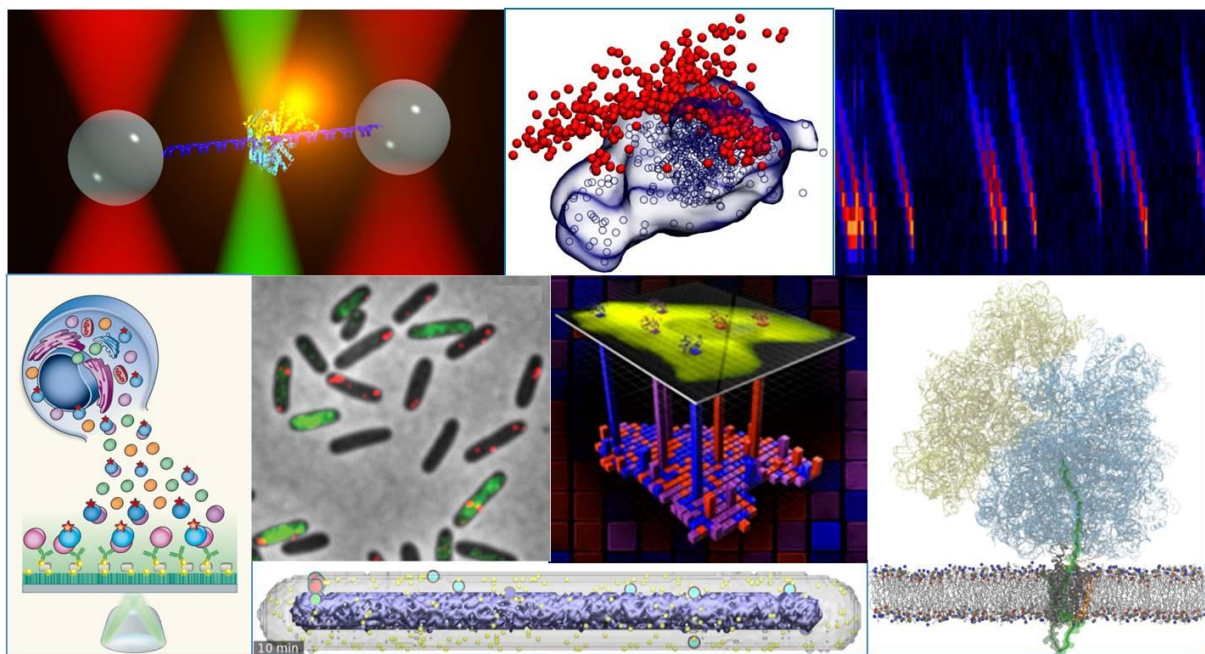


Announcing the

PHYSICS OF LIVING CELLS SUMMER SCHOOL

An NSF Physics Frontier Center at the
University of Illinois at Urbana-Champaign (UIUC)

July 30 – August 4, 2012



The Center for the Physics of Living Cells (CPLC) laboratories at the University of Illinois are using the latest single-molecule, live-cell experimental and computational biophysical tools to investigate biological processes such as molecular mechanisms of protein motor translocation, genome maintenance and translation machinery, and dynamics of protein folding and gene expression in living cells.

PARTICIPATING FACULTY

UIUC

Alek Aksimentiev
Yann Chemla
Martin Gruebele
Taekjip Ha
Zan Luthey-Schulten
Sua Myong
Klaus Schulten
Paul Selvin

Baylor College of Medicine

Ido Golding
Anna Sokac

The 2012 CPLC Summer School will offer training in the following areas:

- ❖ *Computational Analysis of Ribosome Structure, Function, and Networks*
- ❖ *Fast Relaxation Imaging: Heat Shock Response Dynamics in Living Cells*
- ❖ *Following Transcription Kinetics in Individual Cells*
- ❖ *Membrane Dynamics In Living Fruit Fly Embryos*
- ❖ *Optical Trapping & Fluorescence Imaging of Individual Swimming Cells*
- ❖ *Optical Trapping: Single-Molecule Force Spectroscopy of Protein-DNA Interaction*
- ❖ *SiMPull: Single-Molecule Pull-Down*
- ❖ *Single-Molecule FRET*
- ❖ *Single-Molecule FIONA*
- ❖ *Super-Resolution Fluorescence Microscopy*

This summer school is designed for graduate students, postdoctoral fellows, and researchers in chemical & life sciences, biophysics, physics and engineering who seek to expand their research skills into these areas. The workshop will comprise an initial period of 'basic training' on technique/software fundamentals followed by a four-day 'advanced laboratory module' on a selected topic.

www.cplc.illinois.edu/summerschool2012

Registration Fee*: \$75 students; \$150 postdocs; \$250 all others;
Housing and all course materials will be provided.

Application Deadline: April 1, 2012

Selection and notification of Participants to be completed by late April, 2012

*Registration Fee is due from Selected Participants by May 7, 2012.