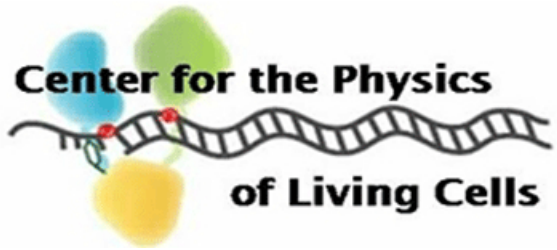
PLEASE POST

Postdoctoral Fellow Search

University of Illinois, Urbana-Champaign



Closing date: December 2, 2011

Qualified applicants are invited to fill several postdoctoral fellowships in experimental and theoretical biophysics at the National Science Foundation's "Center for the Physics of Living Cells" (CPLC) (http://www.cplc.illinois.edu) at the University of Illinois, Urbana-Champaign. Fellowships are available for the coming academic year, starting September 2012, for a minimum period of two years.

Mission: The mission of the CPLC is to catalyze major advances in single-molecule manipulation techniques, live cell imaging, and computational methods, to create a truly quantitative physical picture for the fundamental processes at the core of cellular life. The CPLC is predominantly experimental in character, but is tightly coupled to a substantial and novel theoretical component to support the interpretation of experiment.

Research falls into one of four themes:

1. *Maximizing information content of single molecule experiments;*
2. *Using synthetic nanostructures for high speed single molecule spectroscopy;*
3. *Observing individual events within single cells;* and
4. *Extending computation to biologically relevant timescales, and theory to greater biological realism.*

CPLC Fellows will use state-of-the-art experimental and theoretical biophysical tools to accomplish these goals: optical tweezers, single-molecule fluorescence microscopy, fabrication of synthetic nanostructure, high-speed, low-noise electrical measurements, live cell imaging, microscopic and coarse-grained molecular simulations, stochastic modeling, as well as the standard methods of molecular and cellular biology and genetics. Research will involve both development and improvement of experimental and computational techniques and the application of these techniques to particular biological processes such as replication, transcription, translation, cell transport and motility.

Since projects are collaborative endeavors between several labs, Fellows will have the opportunity to be jointly advised by two or more faculty members of the CPLC. Fellows will also be expected to participate in education and outreach activities of the CPLC.

Qualifications for this position: Candidates must have a Ph.D. in the physical sciences, life sciences, or related disciplines, and must be highly qualified in one of the experimental or theoretical areas. Excellent oral and written communication skills are required.

How to apply: Web-based applications, submitted via https://my.physics.illinois.edu/join should arrive no later than December 2, 2011, and should include: cover letter; curriculum vita; research statement; publications list; and contact information for three references. Applications received after the December 2, 2011 deadline may not be considered. For more details, visit: http://www.cplc.illinois.edu/opps/postdocs.asp

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The University of Illinois is an equal opportunity/affirmative action employer, and welcomes applications from minority and women candidates.