Postdoc in Theoretical and Computational Biophysics

Do you have the ability and ambition to take on a challenging project that can profoundly impact the future of science, technology and medicine? Funded through Revolutionary Genome Technology grants from the National Human Genome Research Institute, theoretical and computational biophysics group in Urbana, IL is looking for highly motivated and capable individuals to make a major contribution to the development of a revolutionary technology for sequencing DNA. The goal of the project is to design a physical measurement method that can detect the sequence of a DNA molecule moving through a genetically engineered biological or nanofabricated synthetic nanopore. Using state-of-the-art computational technology, you will be directly in charge of designing and testing the sequencing method. The project is being carried out in close collaboration with the leading experimental groups, with whom you are expected to interact on a daily basis.

The biophysics group in Urbana has state of the art computational facility and access to vast computational resources through large allocations at the national supercomputer centers. One of the centers (www.ncsa.illinois.edu) is located on campus and will host the largest publicly available petascale computer Blue Water. The Department of Physics is ranked among the best in the country. Numerous research opportunities beyond the sequencing project are available through recently established NSF Physics Frontier Center (www.cplc.illinois.edu). Champaign-Urbana is a home to the University of Illinois – a major research university employing over 40,000 people. The university environment provides plenty of opportunities for recreation and sports and has a larger density of like-minded individual at your stage of career than any major metropolitan area.

Qualifications:
Candidates for this postdoctoral position must have a Ph.D. in the physical sciences, life science, or related disciplines, strong background in either biophysics, soft and condensed matter physics, or molecular simulations, and excellent oral- and written-communication skills. Candidates with prior experience in a computer-intensive research project, in particular, large-scale biomolecular simulations, are especially encouraged to apply.

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

How to apply:
Applications should be submitted electronically via https://my.physics.uiuc.edu/join. Applications will be reviewed on a weekly basis until the position is filled.

Your application should include, in a PDF format:
(1) A cover letter.
(2) A curriculum vita.
(3) A research statement, summarizing your past and ongoing research.
(4) A publications list, including papers and preprints with their URLs. For any papers or preprints that are not readily available via the internet, applicants should upload electronic copies as “supporting documents”.
(5) Applicants should provide contact information for three references from whom letters of recommendation can be requested. References should be prepared to submit their letters of recommendation within three weeks from the request. Letters can be submitted electronically (PDF preferred), or, if necessary, mailed to the following address:

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