

THE UNIVERSITY OF BRITISH COLUMBIA



January 19, 2009

Physics and Astronomy
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Re: Graduate Student / Post Doc Openings in the UBC Applied Biophysics Laboratory

Dear colleague,

The UBC Applied Biophysics Laboratory (UBC ABL) is recruiting new graduate students and post docs for the fall of 2009.

The UBC ABL is a highly interdisciplinary lab, composed of students and staff in the fields of Engineering Physics, Biophysics, Engineering, Chemistry, and Molecular Biology. Our goal is to apply our broad skills to solving technology challenges in high risk, high impact areas of the health and life sciences. Our research group is engaged in a range of activities from single molecule analysis methods using nanopores, to novel electrophoresis technologies for DNA purification. We collaborate with GenomeBC groups, the BC Cancer Agency Genome Sciences Centre, Stanford University, and the University of California Santa Cruz. More information on the UBC ABL can be found at: <http://www.physics.ubc.ca/abl/>

We are seeking students interested in the development of bionanotechnology methods for the detection and analysis of single cells and biomolecules. In particular, the successful candidate will be involved in the continued development of our method of force spectroscopy using nanometer-scale pores for DNA sequence detection, and specifically to implement the technique on solid-state nanopores, for eventual incorporation into a solid-state nanopore-based device for rapid clinical genotyping. The successful candidate will also be exposed to work using nanopore force spectroscopy to probe the structural domains of prion proteins (proteins responsible for a class of fatal neurodegenerative diseases) to elucidate the kinetics of prion protein structural transitions important in disease.

Prospective students and post-docs should have a strong background in either physics, engineering physics, chemistry, or biochemistry, and ideally have experience with instrumentation and software development.

Graduate students interested in applying will need to apply to UBC graduate studies in the department most relevant to their background. We are able to cross-supervise students at UBC, so enrollment in Graduate Studies in the Department of Physics and Astronomy is not required. Notwithstanding, both graduate students and post doc applicants should email andre@physics.ubc.ca with a CV and (for graduate student applicants only) an undergraduate transcript.

Sincerely,

A handwritten signature in black ink, appearing to read 'AM'.

Andre Marziali, Ph.D., P.Eng.
Director, Engineering Physics
Associate Professor