



Washington University in St. Louis

JAMES MCKELVEY SCHOOL OF ENGINEERING

Mechanical Engineering and Materials Science

Postdoctoral Position in Computational Mechanobiology

A postdoctoral position in the area of computational modeling of cell-matrix interactions is open in the Cellular Mechanobiology Laboratory of Dr. Amit Pathak at Washington University in St. Louis. The research project aims to understand how biomechanical cues present in the extracellular matrix regulate the responses of single and grouped cells. The computational models are aimed to simulate cell migration and matrix deformations. The successful candidate will have training in cellular biophysics or related areas.

Education/Experience requirement:

A recent Ph.D. (within past 3 years) in engineering, physics, applied mathematics or a related field. Course work in physics, biology, engineering, computer programming, and mathematics. Expert in at least one programming language, such as MATLAB, Python, C/C++. Priority will be given to candidates with research experience in: biophysics and computational modeling of cells and matrices; vertex-based modeling; cellular-Potts; discrete modeling of cells and/or matrices.

Interested applicants must submit a CV (including a list of all published and submitted publications) and contact information of at least two referees. Application should be emailed directly to Dr. Pathak (email address available on the lab webpage: <http://pathaklab.wustl.edu>).