Amit Pathak, Ph.D.
Assistant Professor,
Mechanical Engineering & Materials Science
Biomedical Engineering

Postdoctoral Position in Cell Mechanobiology

A one-year postdoctoral position with possible extension up to five years is open in the Cellular Mechanobiology Lab 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 grouped cells, such as collective cell migration and EMT. The successful candidate will have established experience in following areas: (a) imaging techniques such as fluorescence, confocal, and multi-photon microscopy, (b) biomaterials, soft lithography, and hydrogel synthesis, and (c) cell culture and molecular biology. The successful candidate is expected to publish papers in high profile peer-reviewed journals and present results at conferences/workshops.

Education/Experience requirement:
A recent Ph.D. (within past 3 years) in biomedical engineering or a related field. Course work in biology/physiology and biomaterials. Experience with cell culture, microscopy, polymer/hydrogel synthesis, and data analysis (Excel, MATLAB, ImageJ). Experience in following areas is a plus: microfabrication techniques, hydrogel (PDMS, PEG, or polyacrylamide) synthesis, and molecular cell biology.

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