Distinguished Post-Doctoral Research Associate in “Scanning Probe Microscopy”

The Northwestern University International Institute for Nanotechnology (IIN) and the Department of Material Science and Engineering at Northwestern University seek a “Distinguished Post-doctoral Research Associate” in Scanning Probe Microscopy” to develop modules for quantitative nanomechanical analysis and demonstrate their potential for the study of individual cell mechanics, sub-cellular structures and effect of drug vehicle on cell mechanics. Strong expertise in advanced applications of scanning probe microscopy is required for this position. The applicants should have training in cell tissue culture, microscopy, and assays for probing the mechanical properties of cells (fixed and live), such as atomic force microscopy, force volume spectroscopy and normal modes of operation in AFM. The position involves expertise in developing advanced AFM methods and combining these nanotools with fluorescence, genetics and cell biology approaches to address the cell surface and its nanomechanical properties. The position encourages opportunities for participation in teaching and conducting short courses.

The candidate will work with both Vinayak Dravid (http://vpd.ms.northwestern.edu/) and G. Shekhawat and should have excellent AFM skills in both Physical and Biomedical engineering with significant cellular biomechanics focus. Candidates will be working in a highly dynamic, multidisciplinary research environment including faculty at Northwestern University and with “The Institute for Personalized Respiratory Medicine (http://www.uic.edu/labs/iprm/), University of Illinois Medical Center, Chicago.

The position offers a very competitive salary; candidates will have the opportunity to develop their career by writing first author publications and grants and must therefore have excellent written and oral communication skills.

Applicants should forward their CV (pdf) along with three references to Dr. Gajendra Shekhawat (g-shekhawat@northwestern.edu) directly. The position will be filled as soon as possible.