

## **GRADUATE RESEARCH ASSISTANTSHIPS AND POSTDOCTORAL POSITIONS AT PURDUE UNIVERSITY**

**WHERE:** AT THE BINDLEY BIOSCIENCES CENTER IN PURDUE UNIVERSITY'S DISCOVERY PARK (<http://discoverypark.purdue.edu/wps/portal/Bioscience>).

**WHEN:** JAN 07 OR AFTER FOR POS DOC AND FALL 07 ADMISSIONS FOR PH.D

**QUALIFICATION:** A DEGREE IN ONE OF THE FOLLOWING OR RELATED AREAS - BIOOPTICS/BIOPHOTONICS, CELL BIOLOGY, CELL PHYSIOLOGY, PHYSICAL CHEMISTRY, BIOPHYSICS, PHYSICS, EE, OR A RELATED DISCIPLINE.

**TASKS:** DEVELOP TOOLS TO ENHANCE EXISTING STATE-OF-THE-ART SINGLE MOLECULE SPECTROSCOPY/MICROSCOPY INSTRUMENTATION AT BINDLEY BIOSCIENCE CENTER, DEVELOP THEORETICAL FOUNDATIONS BASED ON BIOPHYSICAL CONCEPTS TO FURTHER UNDERSTAND BASIC CELLULAR and BIOMOLECULAR PROCESSES INCLUDING TRANSPORT, PROTEIN INTERACTIONS, GENE INTERACTIONS, MOLECULAR MOTOR MECHANISM ETC. WILL WORK CLOSELY WITH PURDUE CANCER CENTER AND INDIANA UNIVERSITY'S MEDICAL CENTER.

**WORK ENVIRONMENT:** MULTIDISCIPLINARY, MOTIVATING AND GEARED TO EXCEL, ACCESS TO STATE OF THE ART LABORATORY FACILITIES AND TOOLS INCLUDING THE BIRCK NANOTECHNOLOGY CENTER.

**ADDITIONAL SKILLS:** RESEARCH EXPERIENCE IN CELLULAR BIOLOGY, BIOPHYSICS, BIOOPTICS, BIOPHYSICAL METHODS FOR STRUCTURAL ANALYSIS, BIOINSTRUMENTATION OR RELATED; COMMUNICATION AND WRITING SKILLS.

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DETAILS OF ASPECTS OF OUR CURRENT RESEARCH AND INSTRUMENTATION CAN BE FOUND AT: <http://www.purdue.edu/dp/psf/joseph.php>