



University of Massachusetts  
Amherst

**Department of Electrical and  
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**Subject:** Ph.D. and Postdoc Openings

To whom it may concern,

Guangyu Xu Research Group: Integrated Nanobiotechnology Laboratory in the Department of Electrical and Computer Engineering, University of Massachusetts Amherst has now Ph.D./postdoc positions available starting from Spring 2016 (<http://people.umass.edu/guangyux/>). Successful candidates will be fully financially covered for tuition, stipend, and health insurance, in the form of fellowship, teaching assistantship or graduate research assistantship.

We seek self-driven Ph.D students/postdoctoral scholars with research interest in bioelectronics, nanodevice, and cell imaging in a highly multidisciplinary research lab. Qualified candidates with solid background in nanofabrication, device engineering, circuit design, applied physics, material science, physical chemistry, molecular biology, cell imaging, and neuroscience are preferred. Excellent candidates not in these areas, however, are also welcome to contact us. If you are interested in joining, please email Dr. Guangyu Xu (guangyux AT umass.edu) your CV and research statement, and we could schedule an appointment for possibilities.

### **Research Overview**

Personal health offers consumer-centric healthcare experience, which benefits from tool advancement in telemedicine, point-of-care service, and mobile health. Our lab builds multi-functional molecule detection and cell imaging tools that aim to provide new capabilities in biomedical applications, such as portable device, self-powered implants, and sub-cellular imaging. We seek solutions based on integrating multiple disciplines, such as nanodevice, bioelectronics, and synthetic biology, to gain combined strengths of each individual field. We enjoy the bandwidth our work spans over and the problem-oriented way of thinking.

Current projects include: I. Portable, multi-functional detection platform: early disease prediction – Applications: genetic test, cancer detection, lab-on-chip; II. High-content, multi-functional cellular analysis: view, identify, and cure – Applications: cellular dynamics, neuroimaging, disease model.

### **About UMass Amherst**

UMass Amherst, the flagship campus of the University of Massachusetts system, sits on nearly 1,450-acres in the scenic Pioneer Valley of Western Massachusetts, 90 miles from Boston and 175 miles from New York City. The campus provides a rich cultural environment in a rural setting close to major urban centers. A large number of universities and technology companies/start-ups in the Northeast form an ideal research and working environment. A number of regional facilities provide outstanding collaboration opportunities including the Pioneer Valley Life Sciences Institute, the University of Massachusetts Medical School, and Baystate Medical Center.