UMassAmherst

College of Engineering

Assistant Professor of Mechanical and Industrial Engineering
Focus: Bioengineering

POSITION: The Department of Mechanical and Industrial Engineering (MIE) and the Institute for Applied Life Sciences (IALS) at the University of Massachusetts Amherst invites applications for **two tenure-track faculty positions** at the Assistant Professor level in the area of **Bioengineering—one in bioengineering approaches to, and models of, cancer; and one in either wearable medical devices or point-of-care testing**.

STARTING DATE: September 1, 2018

REQUIREMENTS AND QUALIFICATIONS: Candidates must have earned a doctorate in Mechanical Engineering, Biomedical Engineering, or a related field at the time of appointment, and can contribute to the excellence and diversity of the university. The positions are focused on the integration of fundamental research in mechanical engineering with medical and/or human health and well-being related applications as follows:

- **Position 1** - Preference will be given to candidates who can contribute in the Center for Models to Medicine (M2M) cluster within the Institute for Applied Life Sciences (IALS). We are particularly interested in candidates who will contribute to an interdisciplinary emerging area of strength: bioengineering approaches to, and models of, cancer.
- **Position 2** - Preference will be given to candidates who can contribute in the Center for Personalized Health Monitoring (CPHM) cluster within the Institute for Applied Life Sciences (IALS). We are particularly interested in candidates who will contribute to one of the emerging interdisciplinary areas of strength: wearable medical devices, point-of-care testing, and medical device manufacturing.

RESPONSIBILITIES: The successful candidates are expected to teach both undergraduate and graduate courses in the Department of Mechanical and Industrial Engineering (MIE); supervise graduate students and postdoctoral fellows; contribute significantly to the advance of basic science and engineering, as evidenced by scholarly publications; develop a nationally recognized program of sponsored research; and have an understanding of diversity issues and their educational importance.

Department, College, University, and Community: The Department of Mechanical and Industrial Engineering has 37 full-time faculty members, over 140 graduate students, and over 800

undergraduates. Research expenditures exceeded $5.3M in the last fiscal year. The Department has a long history of successful interdisciplinary research, with a growing number of cross-campus institutes and centers supporting these collaborations, including the Wind Energy Center, Center for Energy Efficiency and Renewable Energy, and Arbella Insurance Human Performance Lab. More recent, highly successful efforts include the NSF I/UCRC Center for e-Design and the NSF IGERT in Offshore Wind Energy. The emerging Biomedical Engineering thrust area involves interdisciplinary collaborations between faculty in the department and faculty in other departments in the College of Engineering and throughout the university, including the UMass Amherst Institute for Applied Life Sciences (IALS). IALS was recently capitalized with $95 million in investments from the Massachusetts Life Sciences Center and the university. It is home to three unique centers focused on translational life sciences research: Center for Bioactive Delivery, Center for Models to Medicine (M2M), and Center for Personalized Health Monitoring (CPHM). IALS features state-of-the-art facilities, $50 million in new instrumentation, cross-cutting informatics programs, education and training programs, and wide-ranging industry partnerships (precision manufacturing, medical devices, biopharma, and health IT) designed to help drive the regional economy and beyond.

The College of Engineering is ranked as the best public engineering college in New England. The fall 2016 enrollment included 2108 undergraduate and 572 graduate students. The College is host to 14 research centers, including the Institute for Cellular Engineering, with research expenditures exceeding $27.1 M in the past year. The College has an excellent record of developing new faculty with 23 of our current faculty members having received prestigious NSF CAREER awards.

The University of Massachusetts Amherst (http://www.umass.edu), the flagship campus of the University of Massachusetts system, is a nationally ranked public research university and home to over 23,000 undergraduate and 6,000 graduate students. The 1,430 acre campus is located in the scenic Pioneer Valley of western Massachusetts, 90 miles from Boston and 175 miles from New York City. UMass Amherst, along with Amherst, Hampshire, Mount Holyoke and Smith colleges, is a member of the Five College Consortium and the Academic Career network. The region boasts a rural setting with easy access to Boston, Hartford, and New York City. Amherst is nestled between the Berkshire Mountains, Holyoke Range, and Pelham Hills providing many recreational opportunities.

APPLICATION PROCESS: The search committee will begin reviewing applications on January 5, 2018. The search will continue until the positions are filled. Candidates should provide the following in their application package: 1) Cover letter indicating interest in either the **cancer** or **medical devices** position; 2) Current curriculum vitae; 3) Research plans; 4) Statement of teaching interests; 5) Representative recent original research articles; and 6) Full contact information for at least four references.

These materials should be submitted to:

http://umass.interviewexchange.com/jobofferdetails.jsp?JOBID=91085

The university is committed to active recruitment of a diverse faculty and student body. The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer of women, minorities, protected veterans, and individuals with disabilities and encourages applications from these and other protected group members. Because broad diversity is essential to an inclusive climate and critical to the University's goals of achieving excellence in all areas, we will holistically assess the many qualifications of each applicant and favorably

consider an individual's record working with students and colleagues with broadly diverse perspectives, experiences, and backgrounds in educational, research or other work activities. We will also favorably consider experience overcoming or helping others overcome barriers to an academic degree and career.

We are seeking talented applicants qualified for an Assistant Professor position. Under exceptional circumstances, highly qualified candidates at other ranks may receive consideration.