Assistant Professor - Kinesiology & IALS

Job no: 523886  
Work type: Faculty Full Time  
Location: UMass Amherst  
Department: Kinesiology  
Union: MSP  
Categories: Faculty, School of Public Health & Health Sciences

About UMass Amherst

UMass Amherst, the Commonwealth's flagship campus (http://www.umass.edu), is a nationally ranked public research university offering a full range of undergraduate, graduate and professional degrees. The University resides on ~1,450 acres in the scenic Pioneer Valley of Western Massachusetts and offers a rich cultural environment in a bucolic setting close to major urban centers. In addition, the University is part of the Five-College Consortium (also including Amherst College, Hampshire College, Mount Holyoke College and Smith College), which facilitates interdisciplinary scholarship and adds to the intellectual energy of the region.

Job Summary

The School of Public Health and Health Sciences (SPHHS) and Institute for Applied Life Sciences (IALS) seek talented applicants for a full-time, 9-month, joint tenure-track Assistant Professor position in the Kinesiology Department and IALS. We are searching for a highly motivated and collaborative individual with a strong focus on the use of magnetic resonance (MR) imaging or spectroscopy for the study of critical questions in human movement with an emphasis on translational research. Current areas of expertise and focus on human movement include Physiology, Biomechanics, Movement Neuroscience and Physical Activity & Health. UMass Amherst provides excellent benefits and a competitive salary range commensurate with qualifications and experience.

Job Description

The UMass Amherst School of Public Health and Health Sciences (SPHHS) and Institute for Applied Life Sciences (IALS) seek talented applicants qualified for a joint tenure-track
faculty position in the Kinesiology Department and IALS, at the Assistant Professor level. We are searching for a highly motivated and collaborative individual with a strong focus on the use of magnetic resonance (MR) imaging or spectroscopy for the study of critical questions in human movement with an emphasis on translational research. Current areas of expertise and focus on human movement include Physiology, Biomechanics, Movement Neuroscience and Physical Activity & Health. The successful applicant will 1) demonstrate a clear capacity to develop an outstanding research program in their area of expertise, that also contributes to the vibrant translational research environment of IALS and the department, 2) make use of our exceptional human magnetic resonance imaging and spectroscopy system, and 3) contribute to the undergraduate and graduate teaching goals of the Kinesiology Department. Post-doctoral training that has prepared the applicant for a successful research career will be important. Under exceptional circumstances, highly qualified candidates at higher professor ranks may receive consideration. This is a full-time, tenure track, 9-month appointment with excellent benefits and a competitive salary range commensurate with qualifications and experience.

**Expected Start Date:** September 1, 2025

**Requirements**

Applicants must hold a PhD or equivalent degree in kinesiology or a related field at the time of appointment. Preference will be given to candidates with evidence of the potential to develop an outstanding translational research program. The successful candidate will consistently use human MR techniques as a primary or complementary tool in their research approach. They will be supported in their research by the advanced imaging and spectroscopy techniques available in the Human Magnetic Resonance Center, as well as all other core facilities in IALS. Examples of appropriate research foci include, but are not limited to, understanding human skeletal, neural, vascular, or muscular structures and function and their responses to interventions, disease, aging, etc. Interpersonal and communication skills that encourage strong collaborations in research, teaching and program development are essential.

The faculty appointment will be in the Department of Kinesiology in the SPHHS. Position responsibilities include but are not limited to:

- Establish and develop an active, high-impact research program at UMass Amherst with an independent base of support using funds that may originate from diverse sources such as federal and state granting agencies, foundations and industry collaborations
• Be an active participant in the Center for Personalized Health Monitoring in IALS (https://www.umass.edu/cphm/, see below for description)
• Contribute to undergraduate and graduate education the Kinesiology Department
• Oversee graduate theses and dissertations, as well as undergraduate independent study and honors projects
• Serve on departmental, IALS, SPHHS and university committees; professional panels and boards; and other key service activities, as assigned or desired

About Kinesiology Department
The world-renowned UMass Amherst Kinesiology Department (https://www.umass.edu/public-health-sciences/academics/kinesiology) is one of six departments in SPHHS (https://www.umass.edu/public-health-sciences/). The department has 13 tenured/tenure-track faculty, 6 full-time lecturers, 2 research faculty, 3 administrative staff, 2 full-time undergraduate advisors, approximately 650 undergraduate majors, and >50 graduate students and postdoctoral fellows. Its research and teaching activities are organized into the areas of Biomechanics, Movement Neuroscience, Physical Activity & Health and Physiology. The Department of Kinesiology has a long history of supporting outstanding research and graduate training. We aim to promote diversity within all aspects of our program, establishing the UMass Amherst Kinesiology Department as a community of choice for students, staff and faculty from all backgrounds. Faculty are established and emerging leaders in their research fields, which range from the molecular basis of movement to community-based physical activity interventions. Current research funding comes from the National Institutes of Health, Department of Defense, Centers for Disease Control, American Heart Association, a variety of foundations and industry collaborators.

About Institute for Applied Life Sciences
IALS (http://www.umass.edu/ials) is home to three intellectual Centers comprising faculty and their academic and industry collaborators from across the life science disciplines (https://www.umass.edu/ials.centers). The new faculty hire will be a member of IALS and the highly innovative Center for Personalized Health Monitoring (CPHM; http://www.umass.edu/cphm), which engages faculty from departments across campus such as kinesiology, engineering, biology, computer science, molecular and cellular biology, polymer science, epidemiology, psychological and brain
sciences and others. Research conducted by faculty in CPHM targets basic and translational studies of metabolism, human movement, aging, fatigue and sleep, as well as the development and application of wearable sensors for the study of human behavior and health in real-world settings. Kinesiology faculty are leaders in this campus-wide enterprise. Faculty in CPHM have established clinical collaborations with investigators at the University of Massachusetts Medical School in Worcester and Baystate Medical Center in Springfield.

IALS is also home to 32 Core Facilities that provide the equipment, methodologies and staff to facilitate world-class research by investigators from both on- and off-campus. The Human Magnetic Resonance Center (hMRC; http://www.umass.edu/ials/hmrc) houses a state-of-the-art 3 Tesla, 70-cm bore Siemens MR system that has the sequences and ancillary equipment needed for exceptional-quality multi-nuclear spectroscopy and imaging ($^1$H, $^{31}$P, $^{13}$C) of body tissues. Also of relevance to this position, the resource-rich Center for Human Health & Performance (CH^2^P; http://www.umass.edu/ials/ch2p) houses a wide variety of equipment for measuring exercise interventions and outcomes, kinetic and kinematic aspects of human motion, 24-hour energy expenditure, and home-based daily activity in an apartment-style setting. Additional core facilities available in IALS include mHealth, High Performance Computing, Light Microscopy, Mass Spectrometry, Histology and Advanced Digital Design and Fabrication, among others (http://www.umass.edu/ials/core-facilities).

**Application Instructions**

As part of the online application, please submit a cover letter; curriculum vitae; statement of research expertise including accomplishments and current and future research goals; statement of teaching philosophy; statement of past and future experience and contributions to diversity, equity, and inclusion in research, teaching, and outreach; and contact information for three (3) professional references. Review of applications will begin September 15, 2024 and continue until the position is filled.

For questions about the application process, contact Amy Johnson, Kinesiology Department Administrator, (amyjohnson@umass.edu). For more information about any other aspect of this announcement, please contact Jane Kent, PhD, Search Committee Chair (jkent@umass.edu) or Richard van Emmerik, PhD, Kinesiology Department Chair (rvanemmerik@umass.edu).
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 career and degree.