Postdoctoral Research Fellow

Position Information

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Department	Bioengineering
Alternate Department Description	
Criminal Background Check	Standard Background Check
Motor Vehicle Background Check	No
Statement of Economic Interest	Not Applicable
Job Category	Postdoctoral Faculty
Role (State) Job Title	Postdoctoral Research Fellow
Working Title	Postdoctoral Research Fellow - Biomedical Ultrasound
Job Type	Full-Time
Position Number	F452AZ
Recruit Number	FAC7899
Working Hours	
Location	Fairfax, VA
Other Location	
Pay Band	
Salary	Commensurate with education and experience.

Web Announcement

Department of Bioengineering
Postdoctoral Research Fellow: Biomedical Ultrasound

The George Mason University Department of Bioengineering, within the Volgenau School of Engineering, is seeking a highly motivated Postdoctoral Research Fellow to work on interdisciplinary research in biomedical ultrasound. This effort is part of a DARPA-funded research consortium, Treatment and Recovery Augmented with Electrical and Ultrasound-Mediated Actuation and Sensing (TRAUMAS) program. The overall goal of this 4-year project is to develop active bandages with integrated electronics and ultrasound transducers for imaging, sensing, and modulating the wound state to improve healing of recalcitrant wounds. The desired start date for this position is January 2020. George Mason University has a strong institutional commitment to the achievement of excellence and diversity among its faculty and staff, and strongly encourages candidates to apply who will enrich Mason's academic and culturally inclusive environment.

Responsibilities:

The Fellow will spearhead the research to develop novel methods that use conformable ultrasound transducers for 2D and 3D imaging, and for wirelessly actuating drug-loaded hydrogel implants for localized drug delivery. In addition, the Fellow will interact closely with collaborators at partnering institutions (Columbia, MIT, Harvard Medical, Northwestern, Utah, Medtronics, Blackrock, and IBM) to provide support for small-animal studies and translating these methods to clinical practice.

The successful candidate is expected to take a leadership role in ongoing research projects, and will be encouraged to develop personal research aligned with the broad goals of our laboratories and collaborators. As part of the postdoctoral experience, applicants will receive mentoring for developing research proposals, and participation in career development activities will be strongly encouraged.

Required Qualifications:

The successful candidate should have a PhD in one of the following disciplines: Biomedical Engineering, Electrical Engineering, or a related field by the start date of the position. The candidate should demonstrate an academic record of scientific excellence and a strong interest in interdisciplinary research.

Preferred Qualifications:

Applicants with a strong background in diagnostic or therapeutic ultrasound will be given highest priority. Experience in small-animal research is highly desired but not required.

About the Department:

The Department of Bioengineering at Mason was established in 2010, and has rapidly grown to 15 full-time faculty. The research and educational focus areas are biomedical imaging, neuroengineering and computational neuroscience, biomechanics and nanoscale bioengineering. Bioengineering faculty conduct research funded by a number of federal agencies, including the NIH, NSF, DoD and the VA, with over $19 million in active research funding. The department faculty have active collaborations with healthcare institutions including INOVA, Children's National Medical Center, National Rehabilitation Hospital, government agencies such as the FDA, as well as federal laboratories such as the Naval Research Laboratory, NIH Clinical Center, and the National Institutes of Standards and Technology.

Our interdisciplinary research team in the Biomedical Imaging Laboratory (BMIL) has multiple ongoing collaborations in the Washington, D.C., metropolitan area, including national laboratories and hospitals, and provides a stimulating environment of translational research. BMIL has ~5,000 ft2 of lab space in Peterson Family Health Science Hall. Our laboratories are equipped with state-of-the-art instruments for imaging and functional assessment, which includes several ultrasound imaging systems, photoacoustic imaging systems, and a fNIRS system. Peterson Hall also houses a state-of-the-art 3T whole-body MR-

scanner (Seimens Prisma) dedicated for research use.

Mason Engineering: The Future of Engineering is Here

The Volgenau School of Engineering at George Mason University is a fast-growing force for innovation in research and education, with approximately 250 full-time faculty. The school boasts more than 8,170 students in 37 undergraduate, master's, and doctoral degree programs, including several first-in-the-nation offerings. Volgenau School researchers earned more than $90 million in awards over the last 12 months. Located in the heart of Northern Virginia's technology corridor, Mason Engineering stands out for its excellence in emerging areas including big data, cybersecurity, healthcare technology, robotics and autonomous systems, signals and communications, and sustainable infrastructure.

George Mason University is the largest public research university in Virginia, classified at the R1 highest research activity level, with an enrollment of over 38,000 students studying in over 200 degree programs. Mason is an innovative, entrepreneurial institution with national distinction in a range of academic fields. Mason is located in the city of Fairfax in Northern Virginia at the doorstep of the Washington, D.C., metropolitan area, with unmatched geographical access to a number of federal agencies and national laboratories. Northern Virginia is also home to one of the largest concentrations of high-tech firms in the nation, providing excellent opportunities for interaction with industry. Fairfax is consistently rated as being among the best places to live in the country, and has an outstanding local public school system.

In conjunction with Amazon's decision to establish a second headquarters in Northern Virginia, the Commonwealth of Virginia announced a multi-year plan to invest in the growth of degree programs in computing, and George Mason University has committed to accelerate its plans to grow its capacity in computing and high-tech fields. Among the exciting initiatives being undertaken by the university are the launch of the Institute for Digital InnovAtion, a university think tank and incubator to serve the digital economy, and the expansion of its Arlington Campus with a planned 400,000 square foot Digital InnovAtion Building. These initiatives reflect hundreds of millions of dollars in new investment by Mason that will rapidly elevate Mason's already leading national position in computing and related areas.

Special Instructions to Applicants	For full consideration, applicants must apply at http://jobs.gmu.edu and complete the online application for position F452AZ. Applicants must also submit a cover letter describing career goals and research interests, a submit CV, and contact information for three professional references. For full consideration applicants should apply by December 2, 2019, however the review of applications will continue until the position is filled.
For Full Consideration, Apply by:	January 15, 2019
Posting Date	10/04/2019
Job Close Date	
Open Until Filled?	Yes

Telework Friendly?

Mason Ad Statement   Great Careers Begin at Mason!

George Mason University is an innovative, entrepreneurial institution with national distinction in both academics and research. Mason holds a top *U.S. News and World Report* "Up and Coming" spot for national universities and is recognized for its global appeal and excellence in higher education.

Mason is currently the largest and most diverse university in Virginia with students and faculty from all 50 states and over 135 countries studying in over 200 degree programs at campuses in Arlington, Fairfax and Prince William, as well as at learning locations across the commonwealth. Rooted in Mason's diversity is a campus culture that is both rewarding and exciting, work that is meaningful, and opportunities to both collaborate and create.

If you are interested in joining the Mason family take a look at our current opportunities and catch some Mason spirit at jobs.gmu.edu/!

George Mason University, Where Innovation is Tradition.

Equity Statement   George Mason University is an equal opportunity/affirmative action employer, committed to promoting inclusion and equity in its community. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability or veteran status, or any characteristic protected by law.

Campus Safety Information   Mason's Annual Security and Fire Safety Report is available at http://police.gmu.edu/annual-security-report/

Supplemental Questions

Required fields are indicated with an asterisk (*).

Required Documents

Required Documents

1. Cover Letter
2. CV
3. List of Professional References

Optional Documents

None