Description:

Postdoctoral Fellow positions are available at the University of Rochester Medical Center (School of Medicine and Dentistry). The research in our research lab is focused on the design and development of novel diagnostic and therapeutic methodologies, algorithms, and instrumentation, in particular ultrasound and optical (i.e. photoacoustic) based techniques. The selected fellow will contribute to one or more of our ongoing projects: : (1) Design and implement advanced endoscopic ultrasound and photoacoustic theranostic systems; (2) Design and development of an all-acoustic image-guided mild hyperthermia system for enhanced cancer treatment; (3) Ultrasound and photoacoustic guided interventional procedures; (4) Implement advanced AI and machine learning algorithms for ultrasound and photoacoustic image analysis.

For more information, you can refer to the research lab website https://www.pureresearchlab.com/ or contact us at Mehrlab@URMC.Rochester.edu.

The activities include design and implementation of imaging hardware (system level design), data acquisition, development of advanced image formation and image processing algorithms, conducting experiments (ranging from tissue mimicking phantoms to *in vivo* animal models), data processing and analysis, and writing manuscripts and reports.

Required qualifications:

1- A PhD degree in Electrical and Computer Engineering, Bioengineering (instrumentation), Mechanical Engineering, Computer Science, Physics, Biomedical Physics, or a relevant field.

2- Strong track record of publications (minimum of two journal publications in accredited journals as the first author.

3- Experience in experimental biomedical ultrasound, acoustic, or optical imaging are preferred.

4- Experience with: image reconstruction algorithms and associated coding, Machine Learning/Deep Learning.

5- Applicants must have expertise in engineering programming languages such as MATLAB.

6- Background in design and development of biomedical instrumentation (including data acquisition and signal processing) is a key requirement for this position.

7- Strong communication skills, both verbal and written.

How to apply:

Please send their detailed CV, journal publications (2), and contact information for 2 references to:

Mehrlab@URMC.Rochester.edu.