

Applications Scientist for MR Guided Focused Ultrasound

The University of Maryland School of Medicine Center for Advanced Imaging Research (*umCAIR*) within the Department of Diagnostic Radiology & Nuclear Medicine is seeking highly qualified applicants to fill a **tenure-track faculty position at the level of Assistant Professor** with expertise in the area of MR-guided Focused Ultrasound (MRgFUS).

The Department of Diagnostic Radiology & Nuclear Medicine is a Focused Ultrasound Foundation Center of Excellence, and is significantly vested in the development and advancement of FUS applications for various diseases and disorders. The center has treated over 100 patients with Essential Tremor (ET) and Parkinsons Disease (PD) and has pioneered the first in human studies in the US on neuropathic pain, and blood brain barrier opening in humans. Studies on the preclinical side are facilitated by several standalone ultrasound transducers (from 400kHz-2MHz) for various applications and also a MRgFUS system from Image Guided Therapy, France which consists of two eight element 2.5 cm diameter broadband piezocomposite transducers operating at 1.5MHz and 2.5MHz respectively. The preclinical MRgFUS can be interfaced with either a 7.0 Tesla or a 9.4 Tesla Bruker small animal MRI system. Clinical MRgFUS for neuro applications is facilitated by two 1024 element transducers operating at 670 kHz and 220 kHz respectively from Insightec, Israel. Image guidance is provided by a GE 3T 750w MR scanner. In addition to the above, the center also has a research dedicated Siemens Prisma 3T system and a Siemens mMR Biograph 3.0T PET/MR system to facilitate advanced imaging research.

The ideal candidate would have a Ph.D. degree in biomedical sciences/engineering, electrical engineering, medical physics or related field with 3-5 years of experience in the area of FUS or MRgFUS. The successful applicant will have substantial track record of publications in the field of FUS on both preclinical and clinical research aspects. Experiences in the area of targeted drug delivery, blood-brain barrier opening, and neuromodulation are highly desired with a view to translate findings from preclinical studies to clinic applications. MR related experience and grant writing experience will be considered a plus.

Interested applicants should send an email to Rao Gullapalli (rgullapalli@som.umaryland.edu) and include their current CV, a research statement outlining their current research activities and interests, and contact information of three referees.

The University of Maryland at Baltimore is an AA/EOE/ADA Employer and encourages applications from women and members of minority groups.