

Post-Doctoral Fellow
Diffusion Tensor Imaging Techniques
Magnetic Resonance Research Center
Department of Diagnostic Radiology & Nuclear Medicine
University of Maryland School of Medicine
Baltimore, MD 21201

The Magnetic Resonance Research Center at the University of Maryland School of Medicine is seeking a Post-Doctoral Researcher to assist with the development of advanced imaging techniques to understand the structure and dynamic function of the tongue in order to understand speech production and to assess the relationship between glossectomy surgery and its impact on speech production. The prospective fellow will be collaborating with a multi-disciplinary group of experts including speech biologists, and image processing experts at the Johns Hopkins University to jointly develop novel MRI techniques including diffusion tensor MRI and tagged MRI for motion tracking of the tongue during speech.

A Ph.D. degree in electrical engineering, biomedical engineering, medical physics or a related major is required. The successful candidate will be self-driven, strongly motivated researcher with good knowledge of MR physics, MR pulse sequence development and image reconstruction experience. Experience with Diffusion weighted MRI and related image analysis, as well as with accelerated imaging methods are preferred. Siemens IDEA/ICE programming experience is highly desirable. Strong expertise in C/C++, and/or Matlab are essential. The responsibilities of this position will include but are not limited to planning, designing, writing pulse sequences and image analysis for this project.

The MRRC hosts a 3.0 Tesla research dedicated Siemens Prisma^{FT} scanner. The successful applicant will also have access to other research facilities including a GE 750 wide bore system and a 7T Bruker animal system. In addition, a wide range of clinical MRI and diagnostic imaging equipment at the University of Maryland Medical Center and at the Baltimore VA medical center are also accessible. The candidate will also have the opportunity to collaborate with other investigators including scientists from industry and interdisciplinary teams of medical physicists and clinicians. Significant opportunities exist to advancing towards an independent research career.

To apply for this position, please send your curriculum vitae, a letter describing your interest, background, and qualifications, and a list of three references to Jiachen Zhuo (jjzhuo@umm.edu) or Rao Gullapalli (rgullapalli@umm.edu).

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

