MULTIPLE POSITIONS AVAILABLE IN MR CANCER IMAGING

The Vanderbilt University Institute of Imaging Science at Vanderbilt University Medical Center is seeking multiple candidates for positions in MR cancer imaging, including postdoctoral fellows and staff scientists. Successful candidates will work with Drs. Junzhong Xu and John C. Gore on developing, validating, and applying advanced MRI methods, particularly microstructural MRI such as MR cell size imaging, to improve cancer management, including diagnosis, prognosis, early therapeutic response assessment, and radiotherapy guidance.

These positions offer a unique opportunity to join a multidisciplinary team consisting of experts in MRI physics, biomedical engineering, radiation oncology, neuroradiology, pathology, immunology, and cancer biology. Specific studies span biophysical modeling, computer simulation, pre-clinical development and validation, and clinical application.

Facilities and environment

Vanderbilt University Medical Center is ranked No. 19 on the Best Hospitals Honor Roll by U.S. News & World Report. It is located in “Music City” Nashville, Tennessee, one of the fastest growing cities in the United States. The Vanderbilt University Institute of Imaging Science has exceptional resources including 7 research-dedicated MRI scanners (Animal: 4.7T, 7T, 9.4T, and 15.2T. Human: 3T (70cm wide-bore), 3T (60cm), and 7T), PET/CT (animal and human) and all other major imaging modalities, extensive chemistry, biology, physiology, computing, and engineering laboratories, and many other core facilities. Please visit https://vuiis.vumc.org/ for more information.

Key Quantification

The ideal candidate will have the following quantifications.

- Ph.D. in Physics, Biomedical Engineering, Computer Science, or a related field; however, strong candidates with other scientific backgrounds will also be considered.
- Experience in MRI data acquisition (e.g., diffusion MRI, pulse sequence programming) and analysis (e.g., imaging reconstruction and statistical analysis).
- Strong programming skills in MATLAB, Python, CUDA, and shell scripting are preferred.

Application

Interested applicants should send a cover letter describing their research experience, interests, and future research and career goals, as well as an up-to-date CV, to: junzhong.xu@vanderbilt.edu. Applications will be considered on a rolling basis until the positions are filled.

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