

VANDERBILT  UNIVERSITY  
MEDICAL CENTER



**Postdoctoral Fellowship in Medical Imaging**

Vanderbilt University Institute of Imaging Science (VUIIS), VUMC, Nashville, TN, USA

**Position Description:** We are seeking a post-doctoral researcher to work in the Vanderbilt University Institute of Imaging Science (VUIIS) (<http://vuiis.vumc.org>). This position will focus on the development of novel molecular imaging methods (CEST, NOE, MT, and MRSI) tailored for preclinical and clinical applications in tumors and multiple neurological disorders. These projects are funded by multiple NIH grants. The candidate will be mentored by Dr. Zhongliang Zu, associate professor of Radiology and Radiological Sciences in VUMC.

**Requirements:** This position requires a Ph.D. in Bioengineering, Biophysics, Physics, Electrical Engineering, biological sciences, or related disciplines with proficiency in MATLAB and/or computer programming. Research experience in MR physics and pulse sequence development is required. Additional experience with the molecular MR imaging methods, CEST, MT, and/or MRSI, would be highly beneficial. The candidate should be self-motivated, enthusiastic and able to work independently in a collaborative team.

**Research Environment:** VUIIS is a University-wide interdisciplinary initiative that unites scientists whose interests span the spectrum of imaging research—from the underlying physics of imaging techniques to the application of imaging tools to address problems such as understanding brain function. The VUIIS has a core program of research related to developing new imaging technology based on advances in physics, engineering, and computer science. VUIIS is equipped with three research-dedicated whole body MRI systems (two 3.0T/94cm bore Philips Intera Achieva, and one 7.0T/90cm bore Philips Achieva), and four horizontal-bore small animal MRI systems (7.0T/16cm and 15.2T/11cm Bruker Biospec, and 4.7T/31cm and 9.4T/21cm Varian/Agilent Direct Drive). In addition to the high-field MRI, the VUIIS offers state-of-the-art options for small animal imaging in all modalities including optical imaging, ultrasound, X-ray, CT, PET, and SPECT. In 2007 Vanderbilt completed a four-floor, state-of-the-art facility adjacent to Medical Center North to house the VUIIS. The \$28 million project (\$21 million for construction) provides a 42,000-square-foot facility to integrate current activities in imaging research and provide research space for 42 faculty members and more than 80 graduate students and postdoctoral fellows in biomedical science, engineering, and physics.

**How to apply:** Please email your CV, a brief statement of research experience and interests, and a list of three references with contact information to Dr. Zhongliang Zu, [zhongliang.zu@vumc.org](mailto:zhongliang.zu@vumc.org)