

Postdoctoral Fellow Position in Fetal/Neonatal MRI Research

**Developing Brain Research Laboratory
Diagnostic Imaging & Radiology/Fetal and Transitional Medicine
Children's National Medical Center, Washington DC**

Postdoctoral position is available immediately at Children's National Medical Center in Washington DC. Our laboratory is a multidisciplinary team of biomedical engineers, computer scientists, MRI physicists, neuroscientists, neurologists, radiologists, neonatologists, and cardiologists. Our research goal is to develop novel MRI acquisition and image analysis techniques that can allow us to detect early and reliable biomarkers of injury to the developing brain and placenta. Facilities include three human MRI systems (Two 1.5 T and one 3.0 T GE Discovery scanners), and a 20-node computational cluster running Linux, each equipped with multicore CPUs and GPU capabilities.

Successful candidate will focus on development and validation of novel in-vivo, non-invasive MR imaging of the fetal brain and placenta. Specific research projects include perfusion, diffusion, oxygenation, resting-state fMRI, and susceptibility imaging using non-contrast imaging techniques such as ASL and BOLD. Successful candidate will also develop high-resolution anatomical imaging using rapid imaging methods (e.g. FSE or SSFP) and/or motion correction.

Candidates are expected to have a PhD in electrical engineering, biomedical engineering, physics or related field with a strong understanding of MR physics. The candidate must have a solid background in MR pulse sequence design and MR image reconstruction algorithms. Knowledge of MATLAB programming and Unix/Linux computers is required. Experience with MR pulse sequence programming or knowledge of C/C++ is preferred. Ability to run an MR scanner is also a plus.

To apply, please send a recent CV and a personal statement outlining your interests to Zungho (Wesley) Zun, PhD via email (zzun@childrensnational.org).