

Physicist Faculty Position

Position: Assistant Professor or higher, MRI Physicist

About Us:

Join our research team at The Developing Brain Institute (DBI), a part of the Center for Prenatal, Neonatal, and Maternal Health led by Catherine Limperopoulos, PhD. Our research focuses on the developing brain in utero, after birth, and through preschool. We are at the forefront of advancing quantitative magnetic resonance imaging (MRI) techniques to examine brain structure, connectivity, and metabolism in ways not achievable with conventional MRI studies. Our goal is to identify early signs of impaired brain growth, enabling more timely interventions and clinical planning.

Position overview:

We are looking for a full-time MRI physicist at the Assistant Professor level to join our team at the DBI, located at Children's National in Washington, D.C. The successful candidate will focus on both basic and clinical research in the field of fetal and newborn MRI. In this role, you will support ongoing research initiatives at the DBI while simultaneously establishing and leading your independent research projects. This entails a substantial commitment to developing innovative research ideas, manuscript writing, and grant application submissions. Collaboration is at the heart of our work, providing you with the opportunity to engage with a dynamic team of experts, including bioengineers, physicists, neuroscientists, and clinicians. Furthermore, you will actively participate in training fellows, graduate students, and MRI technicians while contributing to lab, departmental, and institutional MR image quality improvement initiatives.

Qualifications:

- Holds a Ph.D. in Physics, Engineering, Imaging Science or a related field
- Has a minimum of three years of postdoctoral research experience
- Has first-hand experience in MRI Physics, pulse sequence programming, and/or image reconstruction algorithms
- Exhibits a proven track record of high academic productivity in the field of MRI, as evidenced by publications in peer-reviewed scientific journals
- Holds knowledge of Siemens or GE MRI systems
- Shows evidence of motivation to establish an independent research program
- Has the ability to work collaboratively and collegially in a diverse environment
- Previous experience in fetal and/or newborn MRI imaging is a huge plus!
- Proficiency with the FSL, SPM, AFNI, and MATLAB programming environments is also valuable.

Application procedures:

Interested applicants should submit the following documents to jocruz@childrensnational.org.

- Cover Letter describing 1) your interest in the position, 2) your academic goals and areas of interest, 3) the qualities and expertise you can bring to the DBI, and 4) how the DBI can contribute to your career
- Curriculum Vitae (CV)
- Sample of academic writing
- Contact details of 3 referees (including email addresses)

We encourage you to join our dedicated team at the DBI, where your work will significantly impact the future of fetal, newborn, and maternal healthcare. This is an initial 1-year position with the potential for extension based on your interest and demonstrated progress.