Postdoctoral Fellowship in Motion-Robust Quantitative MRI for Perinatal Brain Imaging

We are seeking a highly motivated Postdoctoral Research Fellow to join the Computational Radiology Laboratory (http://crl.med.harvard.edu/, Director: Dr. Simon Warfield) in the Department of Radiology at Boston Children's Hospital and Harvard Medical School.

This position, funded by NIH (PI: Dr. Xiaoqing Wang), focuses on developing advanced, motion-robust MRI acquisition and reconstruction techniques for quantitative assessment of the fetal and neonatal brain. The fellow will work at the intersection of **MRI physics**, **non-Cartesian acquisition, image reconstruction**, **motion correction** and **deep learning**, creating methods to address the unique challenges of perinatal brain imaging and enable accurate biomarkers for early neurodevelopmental risk assessment. Our team places a strong emphasis on reproducible research, and the fellow will be strongly encouraged to contribute to open-source toolboxes such as BART and Pulseq, sharing innovations with the broader scientific community.

The successful candidate will have access to a dedicated research 3T Siemens Prisma scanner, multiple state-of-the-art clinical 3T scanners for translational studies, and high-performance GPU computing resources. This role offers a unique opportunity to work in a vibrant research environment at one of the world's leading pediatric hospitals and universities, collaborating with experts in MRI physics, engineering, computer science, radiology, and neurology.

Qualifications

- Ph.D. in electrical/biomedical engineering, medical physics, computer science, or a related field.

- Hands-on experience in MRI pulse sequence programming, motion correction, image reconstruction, and/or deep learning.

- Proficiency in Python, C/C++, and/or MATLAB is desirable.

Application

Please send the following as a single PDF to **xiaoqing.wang@childrens.harvard.edu**:

- Cover letter outlining research interests and career goals.

- Curriculum vitae (CV).

- Contact information for three references.

This is a full-time position with competitive benefits in the Boston area and is available immediately. Applications will be reviewed on a rolling basis until the position is filled.

Boston Children's Hospital is an equal opportunity employer and values diversity. We encourage applications from candidates of all backgrounds and experiences.