A postdoctoral fellowship position is available in Dr. Im’s research team (https://projects.iq.harvard.edu/neuroim) in the Fetal-Neonatal Neuroimaging & Developmental Science Center at Harvard Medical School and Boston Children’s Hospital. Dr. Im’s project has focused on developing and analyzing quantitative neuroimaging (structural, diffusion, and functional MRI) features in human fetuses and patients with genetic brain malformations and psychiatric/neurological brain disorders. Our research goal is to provide unique and biologically relevant imaging biomarkers that help us better understand normal and abnormal brain development and aid in the detection and diagnosis of disease. To achieve that goal, we aim to develop advanced fetal/neonatal MRI processing techniques.

A postdoctoral researcher will develop a novel fetal structural/diffusion/functional MRI processing or analytic method using advanced mathematical, statistical, or deep learning techniques; investigate fetal/neonatal brain development (e.g., cortical plate and subplate thickness and cortical surface growth, brain development prediction) using surface-based and deep learning-based methods. The Im lab is in the Fetal-Neonatal Neuroimaging and Developmental Science Center (https://www.fnndsc.org) where world-renowned professional researchers study brain development using various neuroimaging techniques such as MRI, Magnetoencephalography (MEG), and Near-Infrared Spectroscopy (NIRS) in fetuses, neonates, infants, and patients with developmental brain disorders. Thus, the postdoctoral researcher will also have great opportunities for various collaborations.

The candidates should have
- Ph.D degree in engineering or computer science
- Proficiency in programming, such as C++, Python, and Matlab
- Proficiency in a Linux environment, scripting.
- Strong publication record and high self-motivation
- Expertise in structural MRI processing and analysis (Experience of diffusion/functional MRI analysis is a plus) or machine learning/deep learning

To apply for this position, please send your CV, the list of 2~3 references with contact information, and a cover letter describing your research interests, most notable publications, and career goals to Kiho Im, Kiho.Im@childrens.harvard.edu

You can find more information about our research and publications from the link below https://connects.catalyst.harvard.edu/Profiles/display/Person/89430