Postdoctoral Position

Sodium & Proton MRI Data Processing

Description
Applications are invited for a postdoctoral position at the Center for Biomedical Imaging (CBI) at New York University (NYU) School of Medicine. The successful candidate will join a multidisciplinary team of researchers and physicians on an NIH-funded project on the development of simultaneous sodium ($^{23}$Na) and proton ($^{1}$H ) MRI at 7T. The postdoctoral fellow will mainly work on data post-processing, multi-modal data fusion, super-resolution techniques, and data quantification, but will also be involved in data acquisition and in biological modeling. Salary is commensurate with experience and includes a comprehensive benefits package. Subsidized housing within walking distance to the CBI will be offered depending on availability. A two-year time commitment is expected, with a possible extension of another one or two years.

Requirements
The position is open to candidates with a PhD in biomedical engineering, physics, data science, mathematics, or related fields. Candidates with a background in data/image processing, including good knowledge of machine/deep learning are strongly encouraged to apply. Experience in MRI data acquisition and processing is a plus, but not required. A record of peer-reviewed journal publications is strongly recommended. Motivated individuals will have the opportunity to engage in independent research within the context of the study. Self-driven work attitude is a must.

Research Center
The CBI is located in midtown Manhattan, New York City. It hosts the Center for Advanced Imaging Innovation and Research (CAI$^2$R), and is embedded within the NYU Department of Radiology. This arrangement brings together a vast amount of human and technological resources in basic MR science (physics, engineering, mathematics) and clinical applications (radiology, medicine, neurology, etc.). Four Siemens MRI scanners are available on-site (two 3T scanners, one 7T scanner, and one 3T PET-MR scanner), as well as a cyclotron, a wet lab, and a dedicated RF laboratory.

Application
Formal application should include, in pdf format:
1. CV.
2. Short statement of research interests in the context of prior work.
3. Contact information of 2-3 references.

The application, or any informal request for additional information, can be sent to the Principal Investigators of this project, Dr Guillaume Madelin and Dr Martijn Cloos, at the email addresses below:

**Guillaume Madelin, PhD**
guillaume.madelin@nyumc.org

**Martijn Cloos, PhD**
martijn.cloos@nyumc.org