
A post-doctoral position is available at Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Harvard Medical School, Boston, USA, to develop novel MR imaging and spectroscopic methods to image metabolic and molecular biomarkers of brain cancer and neurological diseases. The main objectives of the project are to improve the spatial resolution, brain coverage, acquisition times, data quality, quantification and robustness that will enable precision medicine in patients. These methods will be implemented at 3T and 7T, and will be integrated with novel MR hardware developed at Martinos Center or with other modalities such as MR-PET. This project is part of an NIH funded academic-industry partnership between Massachusetts General Hospital, HMS and Siemens Medical Solutions, USA.

We are looking for candidates that have experience with pulse sequence programming and image reconstruction, preferably for Siemens IDEA and ICE programming environment. In particular, experience with low rank and sparse reconstructions are considered as strong qualifications. Candidates need to have a proven track record of publications related to these topics.

Successful candidates should hold a Ph.D. degree in physics, electrical engineering or computer science. Very good programming skills in Matlab, C/C++, and Linux are essential. Experience with neuroimaging analysis (FSL, Freesurfer, MINC, AFNI, SPM) and spectroscopy (LCModel, jMRUI) software are desirable.

Candidates should be able to solve problems, overcome technical challenges during development and have the potential to integrate the latest advancements in image reconstruction, including deep learning algorithms. We are interested in highly motivated individuals with excellent analytical and interpersonal skills, attention to detail, organizational capability, able to handle multiple tasks and strong written communication skills. The post-doctoral fellow is expected to work independently as well as part of a multidisciplinary team at a fast pace. The post-doctoral fellow will have opportunities to develop new ideas, advance their own research interests and career in an excellent academic and industry environment.

MGH is an equal opportunity and affirmative action employer. Salary is commensurate with experience. Start date from 1st January 2018.

Application: Interested candidates should send their CV, cover letter with research interests and 3 letters of recommendation to Dr. Ovidiu C. Andronesi, MD, PhD, Assistant Professor of Radiology, Massachusetts General Hospital, Harvard Medical School, Thirteenth Street, Building 149, Suite 2301, Charlestown, MA 02129, USA, (oandronesi@mgh.harvard.edu).