Staff Scientist Position in Rapid Brain MRI acquisition

A staff scientist position to develop rapid brain MRI acquisition techniques is available at the Athinoula A. Martinos Center for Biomedical Imaging. The main responsibility for this position will be to develop pulse sequence and image reconstruction software for cutting-edge and novel efficient acquisition methods that will improve the speed, sensitivity and specificity of *in vivo* brain imaging for both neuroscientific and clinical applications. The techniques will include parallel imaging, Simultaneous Multi-Slice imaging, compressed sensing and other fast imaging schemes. This work will be carried out using state-of-the-art hardware systems available at the Martinos Center, which include multiple 3 Tesla MRI scanners as well as a 7 Tesla system, the “Connectom” MRI scanner with ultra high gradient performance, and large-channel-count receive arrays. The technologies being developed should enable highly detailed brain data at unprecedented temporal and spatial resolutions, with a wealth of quantitative information about brain structure and physiology.

The Athinoula A. Martinos Center for Biomedical Imaging is a world-renowned brain-imaging center, home to more than 200 research faculty, post-doctoral fellows and graduate students. This position provides a valuable opportunity to work and collaborate with a diverse group of researchers developing cutting edge technology that will impact both the neuroscience and clinical research communities. This role will also involve a strong academic-industrial partnership with Siemens Healthcare in translating new technologies into commercial products. An example of technology that has been successfully translated is in the Simultaneous Multi-Slice (SMS) imaging technique, which we have developed and distributed to a large number of research and clinical sites worldwide [http://www.nmr.mgh.harvard.edu/software/c2p/sms](http://www.nmr.mgh.harvard.edu/software/c2p/sms), and is now a Siemens clinical product on their MRI scanners. Such technology is now changing how diffusion and functional MRI are being performed today. More information on some of our recent rapid brain MRI acquisition technologies/developments can be found in the following presentation: [http://goo.gl/66xLLj](http://goo.gl/66xLLj)

The advertised position is for a senior staff scientist but we also encourage strong applicants at a more junior level. Salary will be based on qualification and experience. A Ph.D. in electrical engineering, physics, biomedical, or a related field is required. The candidate should have first-hand experience in MR physics, pulse sequence programming and image reconstruction algorithms. It is expected that the candidate has had experience with the Siemens IDEA/ICE environment or equivalent on other platforms. Experience with the MATLAB programming environment is also desired. Candidates should be highly motivated and interested in working in an interdisciplinary environment.

**APPLICATION**

Informal enquiries may be directed to Dr. Kawin Setsompop ([kawin@nmr.mgh.harvard.edu](mailto:kawin@nmr.mgh.harvard.edu)). Interested applicants should send a full C.V., cover letter and contact information of three referees.

The position is full-time with benefits and is available immediately. A two-year time commitment is required. The Massachusetts General Hospital is an Equal Opportunity/Affirmative Action Employer.