Postdoc in Anatomically-Guided Image Reconstruction.

A postdoc position is available to develop Anatomically-Guided Image Reconstruction (AGR) Algorithms for improving the speed, sensitivity and specificity of in vivo brain scans. The postdoctoral fellow will be supervised by Dr. Fernando E. Boada. The research aim is to improve the resolution of low-resolution brain scans using high-resolution anatomically information for the brain available through MRI scans. Dr. Boada’s lab has a strong focus on Neuropathology (e.g., Stroke, Brain Tumors, Sodium-ion Imbalances); the use of AGR algorithms enables techniques such as sodium MRI to be used within the confines of a clinical environment to answer questions about pathophysiology that are not properly addressed using conventional MRI techniques. We are seeking candidates with strong expertise in constrained reconstruction, advanced optimization algorithms, imaging physics, deep-learning and novel MRI pulse sequences. A Ph.D. in electrical engineering, physics, biomedical engineering, or a related field is required. The candidate should have first-hand experience in MR physics and image reconstruction algorithms. Candidates should be highly motivated and interested in working in a multi-disciplinary environment.

The position will be at the Radiological Sciences Lab (RSL) and Molecular Imaging Program at Stanford (MIPS) within the department of Radiology, with direct access to the Richard M. Lucas Center for biomedical imaging in Radiology. The Lucas Center currently houses 4 GE human MRI scanners dedicated 100% to research including a 3T MR750, a 3T Premier, a 3T PET-MRI and a 7T MRI. The close proximity of the Lucas Center to the Schools of Medicine and Engineering fosters a truly transdisciplinary approach to research. This position will provide 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.

Informal inquiries may be directed to Dr. Fernando E. Boada (fdboada@stanford.edu). Interested applicants should send a C.V., statement of your research experience and interests, and contact information of three referees. Please have “Postdoc Application: Your Name” in the e-mail subject line.

Stanford is an equal opportunity employer and all qualified applicants will receive consideration without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, veteran status, or any other characteristic protected by law.