Postdoctoral Position for Biomedical Hyperpolarized Carbon-13 MRI Research
UCSF Department of Radiology and Biomedical Imaging
Hyperpolarized MRI Technology Resource Center

Postdoctoral positions are available in the Department of Radiology and Biomedical Imaging at the University of California San Francisco (UCSF) in Dr. Jeremy Gordon’s laboratory. The goal of this post-doctoral research is to lead the development and application of new hyperpolarized carbon-13 MR techniques for biomedical research studies at the UCSF Hyperpolarized MRI Technology Resource Center. These new molecular imaging methods are designed to provide novel measures to characterize both normal and pathologic states in both preclinical and human studies that are not adequately assessed with current methods.

Facilities: The UCSF Hyperpolarized MRI Technology Resource Center is a large NIH-funded NCBIB center equipped with: 1) Three pre-clinical and two GE SPINlab multi-sample human research polarizers; 2) 3T and 7T human MRI scanners; 3) Preclinical Bruker 3T and 9.4T horizontal bore MRI scanners; 4) Bruker 500, 600, and 800 MHz NMR spectrometers; 5) A pharmacy lab that prepares sterile hyperpolarized solutions for human studies. The center facilities also include an electronics shop and a machine shop.

Job Description and Responsibilities: The goal of our cutting-edge translational imaging program is to create novel techniques to acquire and analyze metabolic information to address currently unmet clinical needs in the management of patients with primary and metastatic disease (including prostate, pancreas, and brain tumors) and neurodegenerative disorders. The postdoctoral scholar will be responsible for developing novel data acquisition, reconstruction and analysis methodologies and will lead high impact translational hyperpolarized MRI studies. The successful candidate is expected to publish their research results in leading international journals and conferences. They will also have the opportunity to contribute to new project proposals, participate in funding activities, supervise Ph.D. candidates, and collaborate with scientists and clinicians from different fields.

Job Requirements:
1. The position requires a PhD in Medical Physics, Biomedical Engineering, Electrical Engineering, or a related discipline.
2. Experience with one or more of the following subjects: Hyperpolarized MRI, x-nuclei MRI, metabolic imaging, pulse sequence programming, data analysis, model-based and advanced image reconstruction.
3. Proven ability to communicate novel research findings through conference presentations and journal publications
4. Ability to work in a highly collaborative environment

Preferred Characteristics:
1. Experience with data analysis/post-processing using R, Python, or Matlab
2. Experience acquiring, processing, and analyzing human MRI data
3. Experience with pulse sequence programming on GE scanners

Please Apply to: Prof. Jeremy Gordon: Jeremy.Gordon@UCSF.edu
And cc: Jenny Che: jenny.che@ucsf.edu
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Candidates should provide the following: Curriculum vitae (CV), Statement of research interests, & references.

The University of California San Francisco is an affirmative action, equal opportunity employer and complies with all applicable laws and regulations. All qualified applicants are encouraged to apply, including minorities and women.