UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

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Postdoctoral Position for Translational Hyperpolarized Carbon-13 MRI Research

UCSF Department of Radiology and Biomedical Imaging
Hyperpolarized MRI Technology Resource Center

A postdoctoral scholar position is available in Dr. Jeremy Gordon's laboratory in the Department of Radiology and Biomedical Imaging at the University of California, San Francisco (UCSF). The scholar will develop and apply hyperpolarized carbon-13 MRI methods to characterize tumor metabolism and assess treatment response in patients with pancreatic ductal adenocarcinoma. This position offers the opportunity to advance hyperpolarized carbon-13 MRI as a tool for characterizing tumor metabolism and assessing treatment response in patients with pancreatic cancer.

Job Description and Responsibilities: The scholar will develop and optimize MRI acquisition, reconstruction, and analysis methods for hyperpolarized carbon-13 pancreatic imaging, with opportunities to tailor the scientific emphasis to their strengths. Responsibilities include building reproducible data-processing workflows, evaluating quantitative imaging biomarkers, and integrating metabolic measurements with complementary imaging, pathology, and clinical outcomes. The scholar will participate in patient research MRI studies in collaboration with the clinical team. The position offers mentorship in translational metabolic imaging and opportunities to lead peer-reviewed publications and conference presentations, contribute to grant proposals, and prepare fellowship and career-development applications in a multidisciplinary environment.

Research Environment: The NIH/NIBIB-supported UCSF Hyperpolarized MRI Technology Resource Center provides clinical and pre-clinical polarizers, human 3T and 7T MRI scanners, preclinical 3T and 9.4T MRI scanners, and a pharmacy facility that prepares hyperpolarized solutions for human studies.

Required Qualifications:

1. PhD in medical physics, biomedical engineering, electrical engineering, or a related discipline.
2. Experience in one or more relevant areas: hyperpolarized MRI/MRS, multinuclear MRI, abdominal MRI, or quantitative imaging.
3. Strong quantitative and computational skills, including the ability to develop reproducible analysis workflows.
4. Effective scientific writing and presentation skills; ability to work independently and collaboratively in a team-science environment.

Preferred Qualification:

1. Experience with MRI or MRS data analysis using Python and/or MATLAB.
2. Experience acquiring, processing, and analyzing human MRI data.
3. Experience with dynamic metabolic imaging, kinetic modeling, or quantitative biomarker development.
4. Experience with pulse-sequence programming, particularly on GE MRI systems.

Appointment Details

This is an initial two-year appointment with the possibility of extension. The position is currently open, and the start date is flexible. Information about pay and benefits is available on the UCSF Postdoctoral Affairs website.

How to apply

Email a CV, a brief statement of research interests and relevant experience, and contact information for three professional references to Dr. Jeremy Gordon at Jeremy.Gordon@ucsf.edu, with a copy to Jenny Che at jenny.che@ucsf.edu. Please use "Postdoctoral Application: Hyperpolarized MRI" in the subject line.

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.