Two post-doctoral fellowships are available in the Department of Radiology and Biomedical Imaging at UCSF, in Drs. Renuka Sriram and John Kurhanewicz’s Laboratories. The fellows will be involved in development of hyperpolarized \textsuperscript{13}C MR markers of tumor metabolism in collaboration with other leading laboratories at UCSF including Drs. Peder Larson and Dan Vigneron. The breadth of studies will encompass the chemical preparation of promising precursors and its testing in \textit{ex vivo} models, validation in cutting edge preclinical models of prostate and renal cancer, and finally clinical translation of the novel probes. The studies will utilize living cells in bioreactors, patient derived tissue slices as well as mouse models. These biologically relevant animal models will be used to identify and validate imaging markers of disease presence, severity and treatment response.

The ideal candidate should have a strong background in MR spectroscopic imaging and biological chemistry. Familiarity with dissolution dynamic nuclear polarization \textsuperscript{13}C imaging is an added bonus, but not required. Candidates with a broad experience in animal and biologic tissue and cell handling, or clinical molecular imaging will be preferred. Candidates with fervent interest in metabolism and its implication in diseases like cancer are encouraged to apply.

The UCSF Preclinical MR Imaging and Spectroscopy Core in the department of Radiology and Biomedical Imaging department on the Mission Bay Campus of UCSF occupies 1660 sq. ft. and houses two high field (500 and 600 MHz) Varian NMR spectrometers, and a low field (3T) animal imaging system and 1.5T bench top NMR (PulsarTM, Oxford Instruments) uniquely integrated with two HyperSenseTM (Oxford Instruments) DNP polarizers enabling cell and tissue culture bioreactor and animal studies. The high field magnets have complimentary features, including high-resolution magic angle spinning spectroscopy and micro-imaging capabilities. We are strategically placed adjacent to the Surbeck Laboratory for Advanced Imaging which is equipped with two GE SPINlab polarizers and a GE 3T and 7T MRI with \textsuperscript{13}C coils and capabilities. We are also funded by the P41 center grant for hyperpolarized carbon-13 MRI. The department also has facilities for chemistry, cell and tissue molecular biology, and RF coil fabrication. More details can be found at \url{https://radiology.ucsf.edu/research/core-services/preclinical_MRI_MRS_core}.

If interested, please contact Dr. Renuka Sriram (Renuka.Sriram@ucsf.edu) and/or Dr. John Kurhanewicz (John.Kurhanewicz@ucsf.edu).

\url{https://radiology.ucsf.edu/research/labs/translational-metabolic-imaging}

UCSF is an Affirmative Action/ Equal Opportunity Employer. All qualified applicants are encouraged to apply, including minorities and women. UCSF seeks candidates whose experience, teaching, research, or community service has prepared them to contribute to our commitment to diversity and excellence.