Two post-doctoral fellowships are available in the Department of Radiology and Biomedical Imaging at UCSF, in Dr. John Kurhanewicz’s Laboratory. The fellow will be involved in hyperpolarized $^{13}$C MR metabolism and physiology studies involving cutting edge preclinical models of prostate and renal cancer. The studies will utilize living cells in bioreactors, patient derived tissue slices as well as transgenic mouse models. These biologically relevant animal models will be used to identify and validate imaging markers of disease presence, severity and treatment response.

The studies will utilize a variety of animal models of cancer including but not limited to orthotropically modeled cancer using human derived cells and patient derived tissues as well as transgenic 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 magnetic resonance spectroscopic imaging. Familiarity with dissolution dynamic nuclear polarization carbon-13 imaging is an added bonus, but not required. Candidates with a broad experience in animal handling, placing intravenous catheters and general mouse procedures will be preferred. Candidates with fervent interest in metabolism and its implication in diseases like cancer are encouraged to apply.

The Biomedical NMR Laboratory within the NMR Lab 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 three HyperSenseTM (Oxford Instruments) DNP polarizers enabling cell and tissue culture bioreactor and animal studies. The high filed magnets have complimentary features, including high-resolution magic angle spinning (HR-MAS) spectroscopy capabilities, and micro-imaging capabilities. In addition, the facility has two 3T and 7T GE whole body MR scanners,
coupled with two SpinLab polarizers suitable for human studies. The department also has facilities for cell and tissue molecular biology and RF coil fabrication.

If interested, please contact Dr. John Kurhanewicz (John.Kurhanewicz@ucsf.edu).

*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.*