

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO



BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO SANTA BARBARA • SANTA CRUZ

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 for two different projects in . The fellows will be involved in development of **hyperpolarized ^{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 ex vivo models, validation in cutting edge preclinical models of **prostate, bladder and renal cancer**, and **metabolic modeling of hyperpolarized signals**. The studies will utilize **living cells** in bioreactors, **patient derived tissue** cultures as well as **mouse models**. These biologically relevant models will be used to identify and validate imaging markers of disease presence, severity and treatment response. First in man studies of the novel probes are also planned.

The ideal candidate should have a strong background in MR spectroscopy or imaging. Familiarity with dissolution dynamic nuclear polarization ^{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 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 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. Clinical systems include two GE SPINlab polarizers and a GE 3T MRI with ^{13}C coils and capabilities. The department also has facilities for chemistry, cell and tissue molecular biology, and RF coil fabrication.

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