

**Cancer Imaging Program Grants – CIP 2015**

“Preliminary evaluation of RSI MRI for whole body cancer detection.”

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This project addresses a major clinical gap – the current inability to detect and monitor cancer throughout the entire body using clinically available scanners and without contrast agents. Restriction Spectrum Imaging (RSI) is a novel MRI technique providing functional information about tumor cellularity. This project will gather basic information regarding the utility of RSI-MRI in whole body cancer detection. Potential applications include a short, non-invasive, radiation-free whole body protocol that could be used for rapid staging and monitoring cancer patients or for screening people at risk of cancer. The application is aligned with institutional priorities, has the potential to exert major impact on clinical care at UC San Diego within 1-2 years, and has high likelihood of leading to an R01 application.