A. Personal Statement

I am an Assistant Professor in the Department of Pediatrics at Case Western Reserve University and University Hospitals Case Medical Center. My laboratory is interested in the regulation between immune activation and tolerance that is crucial in the pathogenesis of cancer and autoimmunity. Our laboratory focuses on the development of intravital 2-photon microscopy which allows direct observation of how immune cells traffic and interact with various cells in the tumor microenvironment in real time with single-cell resolution. The long-term goal of our laboratory is to translate insights gained from basic investigations of in vivo immunity into rationally designed tumor vaccine and immunotherapeutic clinical trials, with a particular emphasis in the areas of pediatric sarcomas and other solid tumors. I have interfaced with the Case SDRC at the level of a collaborator for SDRC members and a resource for the Morphology Core. My laboratory has supported SDRC P&F recipients interested in applying 2-photon microscopy to in vivo skin imaging. I have also attended the SDRC enrichment series seminars and interacted with Dr. Kevin D. Cooper, PI of the Case SDRC.