I am an Assistant Professor of Medicine (Oncology) in the Stanford University School of Medicine. As a physician-scientist, my research mission is to drive medical advances at the intersection of cancer and data science research. Specifically, I aim to innovate state-of-the-art technologies to extract clinically useful knowledge from heterogeneous multi-scale biomedical data to improve diagnostics and therapeutics in cancer. I am a board-certified hematologist-oncologist and informaticist with specialized training in basic science, health services, and translational research. My clinical background in oncology and PhD training in Biomedical Informatics position me to develop and apply data science methodologies on heterogeneous, multi-scale cancer to extract actionable knowledge that can improve outcomes in cancer. My ongoing research to develop and apply cutting-edge knowledge and skills to pioneer new robust methodologies for analyzing cancer big data is being supported by an NIH K01 Career Development Award in Biomedical Big Data Science. My research focuses on developing and applying machine learning frameworks and radiogenomic approaches for the integrative analysis of heterogeneous, multi-scale data to accelerate discoveries in cancer diagnostics and therapeutics. Projects include prediction model development and treatment response, biomarker discovery, cancer subtype discovery, and identification of new therapeutic targets.