Immunotherapy has the potential to become the new paradigm of cancer treatment. While anatomic imaging has been the gold standard to monitor treatment efficacy based upon decreases in tumor size, patients treated with immunotherapies often present with a period of apparent tumor growth before prolonged regression. Due to the high cost and delayed response time, there exists a compelling need to accurately predict which patients are most likely to benefit from immune based treatment strategies. Aaron hopes to develop a molecular imaging toolkit including novel software, hardware, and biological wetware to improve monitoring of cancer immunotherapies in the clinic. He is advised on this project by Dr. Sam Gambhir. Aaron brings with him experience in multi-modality molecular imaging of cancer from his time spent under the mentorship of Dr. Efstathios Karathanasis and Dr. Mark Griswold at the Case Center for Imaging Research in Cleveland, Ohio. After graduating from CWRU, Aaron spent a year in Switzerland as a Fulbright Fellow at the Ecole Polytechnique Federale de Lausanne (EPFL) where, with the guidance of Dr. Melody Swartz and Dr. Jeffrey Hubbell, he utilized imaging tools to better understand the mechanisms of therapeutic cancer vaccines.
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