There is a critical need to identify new therapeutics that can more effectively block tumor growth and metastasis in pancreatic cancer. This team has identified a subpopulation of cells in pancreatic cancer that have some characteristics of stem cells and display the capacity to drive disease progression and therapy resistance. A particular regulator of inflammation and the immune response has been found to be highly enriched in pancreatic cancer stem cells and critically required for their ability to drive tumor growth and progression.

Based on these findings, the team is testing whether delivery of a pharmacological inhibitor can block growth and progression of pancreatic cancer in genetically engineered models of the disease. This work has the potential for rapid translation and high impact because these inhibitors are already in clinical trials for autoimmune diseases, including two that are delivered orally. Thus, this Team’s studies will pave the way for a clinical trial testing of the efficacy of targeting a regulator of inflammation and the immune response in pancreatic cancer therapy.

This team started its work in November 2018; progress notes will be posted after its first review.