

Team Progress Updates

Pancreatic Cancer Collective Research Team:

"Computational Approaches to Identifying High-Risk Pancreatic Cancer Populations Identification of Genomic and Immune Factors in High-Risk Populations for Pancreatic Cancer"

This interdisciplinary, multi-institutional, and international team will develop a collection of biomarkers for pancreatic cancer which will be obtained from large clinical and molecular datasets with multiple cohorts. Specifically, they will look at rare gene variants, or modifications of the DNA, in specific regions which, when analyzed together, will predict an individual's risk of developing pancreatic cancer. The datasets include the UK Biobank, European Study on Digestive Illnesses and Genetics, The Cancer Genome Atlas, and International Cancer Genome Consortium. This approach will be complemented with the examination of tumor microenvironmental factors which are associated with pancreatic cancer risk, including gene expression patterns and response to bacterial and viral infections. This is a high-risk, high-reward project that, if successful, will integrate clinical, genetic, and microenvironmental factors to revolutionize screening and risk-prediction for pancreatic cancer.

This team started its work in March 2019; progress notes will be posted after its first review.