



Research

PANCREATIC CANCER ACTION NETWORK

ADVANCE RESEARCH. SUPPORT PATIENTS. CREATE HOPE.

www.pancan.org | 877.272.6226

GRANT SNAPSHOT

2012 Samuel Stroum – Pancreatic Cancer Action Network – AACR Fellowship

Grantee: Florencia McAllister, MD
Institution: Johns Hopkins University
Research Project: *Role of Inflammatory Cells in Early Pancreatic Tumorigenesis*
Award Period: July 1, 2012 – June 30, 2013
Amount: \$45,000

Biographical Highlights



Originally from Pergamino, Buenos Aires, Argentina, Dr. McAllister received her MD at National University of Rosario Medical School in Rosario, Santa Fe, Argentina. Avid to pursue basic science research training, she moved to US and joined Dr Jay Kolls's Immunology Laboratory at Louisiana State University and later at the University of Pittsburgh, where she stayed for her medical residency. She then pursued a Medical Oncology and Clinical Pharmacology Fellowships at Johns Hopkins. In 2006, she lost her mother to pancreatic cancer and since then she found the focus of her career. She is currently working on a project that links Immunology and Pancreas Biology with two mentors: Dr Drew Pardoll and Dr Steven Leach.

In addition to her research and clinical experience, Dr. McAllister also has had several opportunities to teach, as well as an impressive list of publications and presentations given about her work. Dr. McAllister is able to constantly integrate her laboratory research with her clinical oncology experience, never losing sight of the clinical relevance and translational opportunities of her research.

Project Overview

An activating mutation in the gene K-Ras is known to be an early event in the progression of pancreatic cancer. In fact, about 30 percent of precancerous pancreatic abnormalities, known as pancreatic intraepithelial neoplasms, or PanIN lesions, already express mutant K-Ras, and the frequency goes up to nearly 100 percent in advanced pancreatic cancer. Mice genetically engineered to express mutant K-Ras in their otherwise normal pancreas are known to develop PanINs. This process is accelerated in the presence of pancreatitis, or inflammation of the pancreas, leading to progression to pancreatic cancer.

Dr. McAllister seeks to understand the relationship between pancreatitis and development and progression of pancreatic cancer. Specifically, her focus will be on a type of inflammatory cells called TH17 that are known to be pro-inflammatory, and hypothesized to play a part in the early stages of pancreatic cancer. She will use several approaches to determine whether the role of this cells in pancreatic cancer formation. Overall, Dr. McAllister hopes that this approach will shed light on the potential of preventing pancreatic cancer using a targeted immuno-suppressive approach.