GRANT SNAPSHOT

2014 Pancreatic Cancer Action Network – AACR Career Development Award

Grantee: Florencia McAllister, MD
Institution: MD Anderson Cancer Center
Research Project: Targeting IL-17 signaling axis in pancreatic ductal adenocarcinoma
Award Period: July 1, 2014 – June 30, 2016
Amount: $200,000

Biographical Highlights

Dr. McAllister has been appointed Assistant Professor, tenure track, in the Department of Clinical Cancer Prevention at MD Anderson Cancer Center. She will assume this position on June 1, 2014. Currently, she is a postdoctoral fellow at Johns Hopkins University. In 2012, Dr. McAllister received a Fellowship Award from the Pancreatic Cancer Action Network, generously funded in memory of Samuel Stroum. She is the first Pancreatic Cancer Action Network grant recipient to receive an award as a postdoctoral fellow and then also get a grant as an independent researcher.

Originally from Pergamino, Buenos Aires, Argentina, Dr. McAllister received her MD at National University of Rosario Medical School. She next moved to the US and joined an Immunology Laboratory at Louisiana State University and later moved to the University of Pittsburgh, where she stayed for her medical residency. She then pursued Medical Oncology and Clinical Pharmacology Fellowships at Johns Hopkins. At MD Anderson, she plans to continue her line of work in pancreatic cancer at the intersection of tumor immunology and cell biology. From a clinical perspective, Dr. McAllister aims to develop novel strategies for pancreatic cancer immune-prevention in high risk populations. In 2006, she lost her mother to pancreatic cancer and since then she found the focus of her career.

Project Overview

Dr. McAllister’s postdoctoral work focused on a protein called IL-17 that gets secreted by inflammatory cells. Dr. McAllister determined that IL-17 expression is increased in the presence of pancreatitis, or inflammation of the pancreas, and IL-17 acts on normal pancreas cells to stimulate and accelerate their transformation into precancerous abnormalities known as pancreatic intraepithelial neoplasms, or PanINs. She further found that the cells’ response to IL-17 is mediated by mutant K-RAS, the most commonly mutated gene in pancreatic cancer.

For this project, Dr. McAllister seeks to determine the role and significance of IL-17 on pancreatic cancer cells as the tumor progresses from a PanIN to invasive and ultimately metastatic disease. She will study the inflammatory cells that secrete IL-17, and the cellular compartment upon which IL-17 acts. Further, Dr. McAllister will analyze whether blocking IL-17 activity will have an impact on the growth or progression of pancreatic tumors. Understanding the definitive role of IL-17 signaling axis in pancreatic cancer would be essential as the backbone for the use of FDA monoclonal antibodies for prevention and treatment of pancreatic cancer.