



**Research**

**PANCREATIC CANCER ACTION NETWORK**

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## GRANT SNAPSHOT

### 2011 Pancreatic Cancer Action Network – AACR Career Development Award

Grantee:	Dimitrios Iliopoulos, PhD
Institution:	Dana-Farber Cancer Institute
Research Project:	<i>Identification of Novel Molecular Circuits in Pancreatic Cancer Stem Cells</i>
Award Period:	July 1, 2011 – June 30, 2013
Amount:	\$200,000

## Biographical Highlights



After completing his bachelor's degree at Aristotle University in Greece, Dr. Iliopoulos pursued his PhD in Cancer Biology at Ohio State University. From there, he did a postdoctoral fellowship at Harvard Medical School, working in the field of Cancer Immunology. Dr. Iliopoulos remained at Harvard, and is currently an Assistant Professor in the Department of Cancer Immunology and AIDS at the Dana-Farber Cancer Institute.

Dr. Iliopoulos is interested in identifying how intracellular inflammatory stimuli and perturbations in the tumor microenvironment contribute to the transformation of pancreatic normal cells into cancer cells. Furthermore, his research is focused on the identification and molecular characterization of pancreatic cancer cell subpopulations with stem cell properties. Dr. Iliopoulos has published his research in top tier scientific journals, including *Cell*, *Cancer Cell*, *Molecular Cell*, *PNAS*, and *Cancer Research*.

## Project Overview

Previous studies have shown that chronic (constant) inflammation of the pancreas, known as pancreatitis, may be a risk factor for pancreatic cancer. Despite this knowledge, the relationship between inflammation and cancer initiation is not fully understood. It has also been shown that some cells within a pancreatic tumor, known as cancer stem cells (CSCs), are thought to have initiated the tumor, and carry the ability to regenerate the tumor. These cells have also been observed to be extremely resistant to chemotherapy treatment.

Preliminary research in Dr. Iliopoulos's laboratory has suggested that an inflammatory circuit may be active specifically in the pancreatic CSCs. Dr. Iliopoulos therefore proposes to better understand the inflammatory processes taking place within the cell, and also the tumor cells' relationship with other cell types involved in inflammation. The overarching goal of Dr. Iliopoulos's work is to determine whether the inflammatory network in pancreatic cancer stem cells could be a therapeutic target, and provide a novel treatment method for pancreatic cancer.