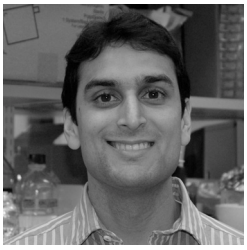
GRANT SNAPSHOT

2010 Tempur-Pedic Retailers – Pancreatic Cancer Action Network – AACR Pathway to Leadership Grant

Grantee:	Zeshaan Rasheed, MD, PhD
Institution:	Johns Hopkins University
Project Title:	Are Cancer Stem Cells Relevant in Pancreatic Adenocarcinoma?
Award Period:	July 1, 2010 – June 30, 2015
Amount:	$600,000



Biographical Highlights

Currently, Dr. Rasheed is a medical oncology fellow at The Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University School of Medicine. He earned his MD and PhD in Cellular and Molecular Pharmacology from University of Medicine and Dentistry of New Jersey – Robert Wood Johnson Medical School and Graduate School of Biomedical Sciences. His doctoral thesis investigated topors, a novel tumor suppressor protein. Dr. Rasheed completed an internship and residency in Internal Medicine at the Mount Sinai School of Medicine in New York. His research interests focus on the clinical relevance of cancer stem cells in pancreatic cancer. Dr. Rasheed has published his research findings in several scientific journals, including *Clinical Cancer Research*, *Molecular Cancer Therapeutics, Oncogene* and *Journal of the National Cancer Institute.* For this later work, Dr. Rasheed received an Outstanding Clinical Scholar Award from the American Association for Cancer Research.

As a physician, Dr. Rasheed has cared for a significant number of patients with pancreatic cancer. The lack of effective treatments for these patients has been the motivating force for him to study the biology of this aggressive disease in order to help develop better therapies and improve patient outcomes.

Project Description

It has become clear that not all cells in a tumor are the same. Within the heterogeneous tumor cell population, it is believed that certain cells, designated cancer stem cells (CSC), may have initiated the tumor, and have a greater ability to sustain the growth of the tumor and facilitate its spread elsewhere in the body. Dr. Rasheed's pivotal studies are aiming to identify and analyze the CSC population within pancreatic tumors.

Dr. Rasheed and colleagues have previously identified several candidate CSC populations within pancreatic tumors, with distinct molecular profiles. Dr. Rasheed's first aim, therefore, is to determine whether a hierarchy exists whereby certain CSCs can give rise to any cell type, or only generate certain types of cells, such as replicates of themselves. Dr. Rasheed further questions whether regular non-CSC cancer cells have the ability to become CSCs in response to particular external stimuli. These studies have great potential clinical relevance, as a better understanding of the CSC presence will allow future investigation on how to target these highly aggressive cells within a pancreatic tumor cell population.