

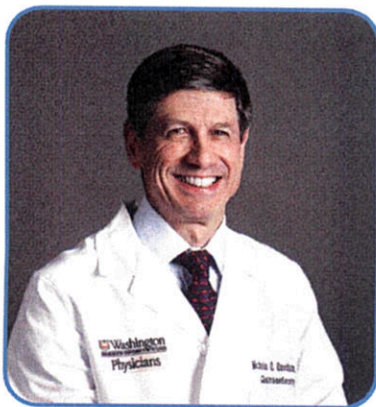
Familial and Hereditary Colorectal Cancer Fund

With the support of the Familial and Hereditary Colorectal Cancer Fund, Nicholas Davidson, MD, is able to continue his important research as part of the Familial and Hereditary Colorectal Cancer Program.

Colorectal cancer is the third most common cancer in the United States and the second leading cause of cancer deaths. It is a malignancy that begins in the colon, large intestine, or rectum. About 5 to 10 percent of all colorectal cancers are caused by a hereditary mutation—a genetic change that can be passed on from parent to child.

In the past, it has been widely accepted among physicians and researchers that colon adenomas serve as a precursor to at least a subset of colorectal cancers, with advanced adenomas representing a critical step in colorectal cancer progression. Colon adenomas are polyps made up of tissue that looks much like the normal lining of your colon. In some cases, cancer can arise in adenomas. The prevalence of both adenomas and colorectal cancer increases with age, and most recommendations advocate screening for colorectal cancer to be started between the ages of 45 to 50 years old. However, the number of incidences of adenomas among younger individuals has not been completely understood.

Funding from the Familial and Hereditary Colorectal Cancer Fund was used to support Dr. Davidson's research into describing and better understanding the clinical course of adenomas and colorectal cancer in patients younger than 45 years of age. The goal was to determine whether these younger patients with advanced adenomas represent a distinct category of patients with defined genetic risk for early-onset colorectal cancer. Working with collaborating investigators, Dr. Davidson has discovered that patients under the age of 45 with colon adenomas are not



generally affected by mutations in cancer susceptibility genes. Dr. Davidson's findings indicate that those young patients with colon adenomas are not at a greater risk for colorectal cancer and can be managed conservatively.

Through the discoveries provided by this work, Dr. Davidson and his collaborators are able to apply for additional funding to continue their work on the genetic pathways associated with colorectal cancer. Further work is planned with families that have various defined genetic conditions that predispose them to early onset colon adenomas and cancer.

