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Assessment of Risk for Colorectal Tumors in Canada (ARCTIC)

Status	Current
Competition	Applied Genomics and Proteomics Research in Human Health
Sector	Health
Genome Centres	Ontario Genomics Institute & Genome Quebec
Project Leaders	Brent Zanke & Tom Hudson

Project Description

Predicting people's genetic susceptibility to colon cancer

In Canada, over 16,000 new cases of colon cancer occur each year. Six thousand of these cases result in deaths. Effective early intervention could save many of these lives. Although the genes involved in colon cancer are currently unknown, we do know that it has a significant inherited component. As many as 20% of cases occur in families. By better understanding the key genetic factors that predict cancer susceptibility, researchers will be able to create tests to identify individuals at risk—and save lives.

The Assessment of Risk for Colorectal Tumors In Canada , or ARCTIC, program will develop a test to predict people's genetic susceptibility to colon cancer. Through the Ontario Familial Colorectal Tumor Registry, ARCTIC researchers have access to a large repository of colon tumor tissue and blood from families with colon tumors. In addition, the Ontario Cancer Research Network is providing over CDN \$2 million in collection and informatics infrastructure to provide thousands of additional patient samples.

Dr. Zanke and the ARCTIC team also expect that successful commercialization of this technology in Canada will be reproduced in other disease research, creating a biotechnology niche for Canada.