

**TERRY FOX FOUNDATION INVESTS IN SUNNYBROOK ULTRASOUND RESEARCH:  
*Award is part of a national cancer research investment, the Terry Fox New Frontiers Program Project Grants Competition at CIHR, leading up to the 30<sup>th</sup> Anniversary of the Marathon of Hope.***

Toronto (September 16, 2010) – The [Terry Fox Foundation](#) awarded Sunnybrook researchers \$2.7 million over 3 years to help continue innovative work in ultrasound for cancer therapy to develop and enhance the use of ultrasound techniques to improve cancer treatment, as part of a national research investment through a new partnership with the [Canadian Institutes of Health Research](#) (CIHR) announced today.

“We are tremendously grateful for this investment from the Terry Fox Foundation,” says Dr. Gregory Czarnota, a clinician-scientist and lead investigator of the research at Sunnybrook. A scientist in the discipline of Imaging at [Sunnybrook Research Institute](#) and a radiation oncologist at [Sunnybrook’s Odette Cancer Centre](#), Dr. Czarnota is collaborating with radiation and medical oncologists at Sunnybrook, and other researchers at Ryerson University and Princess Margaret Hospital.

“I’d like to express my appreciation for our enduring partnerships with both the CIHR and the Terry Fox Foundation, which stretch back many years. Their sustained investment into cancer research at Sunnybrook has enabled us to make fundamental discoveries, knowledge on which we are now building,” says Dr. Michael Julius, vice-president, research, Sunnybrook Health Sciences Centre.

Ultrasound is non-invasive (no contrast dye is needed for the patient), inexpensive and portable. The Sunnybrook researchers are developing the use of novel ultrasound methods to better and faster assess cancer therapies through more metabolic monitoring of tumour response and the detection of programmed tumour cell death or apoptosis.

In clinical trials being conducted in collaboration with medical oncologists, the research is being translated into earlier and faster tracking of treatment effectiveness in hours versus days, and will result in better tailored treatment for the patient as less effective therapies can more rapidly be switched to more efficacious ones.

The team is also developing novel ultrasound-based and microbubble therapy methods to enhance the effects of radiation treatment. Microbubbles are used to disrupt the vasculature of endothelial cells in tumours, and the Sunnybrook researchers have shown that radiation sensitivity can be enhanced by more than ten-fold.

Today’s announcement is part of the *Terry Fox New Frontiers Program Project Grants Competition at CIHR*. The Terry Fox Foundation generously supports long-term projects at Sunnybrook led by Sunnybrook imaging scientists Drs. Stuart Foster, Martin Yaffe, Peter Burns and Kullervo Hynynen.