



CHEO JOINS TERRY FOX PROFYLE, A NATIONAL RESEARCH PROJECT THAT OFFERS HOPE FOR KIDS WITH RARE AND HARD-TO-TREAT CANCERS

Local support with a national impact! Thanks to the Phoebe Rose Rocks Foundation, CHEO's hospital and research staff are able to provide upfront genomic sequencing to families who have no other options.

THE CHALLENGE:

CHEO sees approximately 10 to 15 patients each year with a difficult to diagnose, refractory, or metastatic cancer. For these children there are no evidence-based therapies, and families struggle with an unknown or poor prognosis. We know that some of these children will have a genetic change in their tumour that might suggest alternative or better treatments. This type of targeted drug therapy is called precision medicine, and offers hope to families with no standard treatment options. However, tumour sequencing is not clinically available at CHEO.

OUR STRATEGY:

Terry Fox PROFYLE is a multi-institution, pan-Canadian precision medicine research program that aims to change outcomes for children, adolescents and young adults with rare and hard-to-treat cancers. Its goal is to identify and implement treatment recommendations tailored to an individual patient's cancer through better scientific analysis of their tumours.

CHEO has joined this collaboration of more than 30 pediatric cancer research and funding organizations that have come together to give patients a chance to beat their cancer. Terry Fox PROFYLE focuses on comprehensive genome sequencing of tumour samples to understand the cancer at a molecular level. Until now, this kind of testing was not often available for young cancer patients. This level of cooperation among scientists and researchers from across the country to guide diagnosis and to apply precision medicine to improve outcomes to pediatric cancer patients is unprecedented.

HOW IT WORKS:

The Terry Fox PROFYLE program provides personalized care for children with rare and difficult-to-treat cancers. We do this by sequencing a patient's blood and tumour to identify genetic risk factors that may have increased their risk of cancer and by tracking genetic changes that are driving their cancer.

DONOR IMPACT:

Thanks to the support of the Phoebe Rose Rocks Foundation, CHEO is able to directly benefit several local families who otherwise would not have answers to their questions or access to tailored treatment protocols.