More than four decades since his iconic Marathon of Hope, Terry Fox continues to inspire people worldwide. Your generous support of cancer research has brought health and hope to millions of patients and their families across Canada. The impact of COVID-19 on cancer care throughout the country has been substantial and there is a dire need for cancer research to ensure we can combat the negative effects of disrupted screenings, surgeries, and interventions for years to come. The Terry Fox is committed to continuing to fund cancer research programs with the support of Terry Foxers across Canada to realize Terry’s dream of a world without cancer.

RESEARCH INVESTMENTS
The Terry Fox Foundation continues to be a leading national investor in cancer research, directing $16.2 million to its programs in 2021/22.

CANCER STATISTICS *Reference: 2021 Canadian Cancer Statistics*

<table>
<thead>
<tr>
<th>Year</th>
<th>5-year cancer survival rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940s</td>
<td>25%</td>
</tr>
<tr>
<td>Today</td>
<td>64%</td>
</tr>
</tbody>
</table>

The recent International Cancer Benchmarking Partnership (ICBP) study showed that Canada’s cancer survival rate ranks among the highest in the world.

Decrease in mortality rates for men and women between 1988-2021:

<table>
<thead>
<tr>
<th>Sex</th>
<th>1988-2021 Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>22%</td>
</tr>
<tr>
<td>Women</td>
<td>37%</td>
</tr>
</tbody>
</table>

A customized blood test to predict who will benefit from immunotherapy

In recent years, immunotherapy has emerged as one of the most promising developments in cancer research. This therapy harnesses the power of the immune system to fight cancer and has helped save the lives of many patients around the world—but sadly not all patients benefit from it.

Understanding who will has been one of the major goals of a group of Toronto-based researchers partly funded by the Terry Fox Research Institute. And in two landmark papers published over the last year, the team led by Drs. Trevor Pugh and Lillian Siu at the Princess Margaret Cancer Centre has made findings that set the stage for the creation of a blood test that could do just this.

These blood tests detect the DNA of tumours circulating in a patient’s blood before and after they’ve received immunotherapy and can be used to predict if that patient will have a favourable response to the treatment as early as six weeks after the therapy is given. This means that doctors could quickly pivot patients to other treatment if it isn’t working.

While it will still take a while to make tests like these available to the general public, these findings bring us one step closer to fulfilling the promise of precision medicine: to provide the right treatment at the right time for each patient, improving survival and quality of life for people living with cancer.

Supporting the next generation of leaders in cancer research

Since its inception, the Terry Fox Research Institute has been committed to supporting outstanding young scientists as they launch their careers in cancer research. Through the Terry Fox New Investigator Awards, TFRI has provided catalytic funding to dozens of promising researchers for more than a decade; many now are established leaders in cancer research in Canada and around the world.

In the last year, TFRI announced four early-career scientists in Montreal, Toronto and Vancouver as the recipients of the 2022 Terry Fox New Investigator Award. These researchers will each receive $450,000 over three years – as well as mentorship from established TFRI-funded teams – to support their ground-breaking research.

TERRY FOX NEW INVESTIGATOR AWARD RECIPIENTS

Dr. Mamatha Bhat, a liver transplant specialist in Toronto, who will search for innovative ways to treat a form of liver cancer called hepatocellular carcinoma (HCC), the cancer most rapidly increasing in incidence in Canada;

Dr. Lawrence Kazak, an adipose tissue specialist in Montreal, who will investigate how obesity may lead to liver metastasis in breast cancer patients;

Dr. Hartland Jackson, a Toronto-based researcher, who will search for ways in which the Hippo pathway, a mechanism that is often altered in cancer patients, affects the immune system’s ability to fight cancer; and

Dr. Ly Vu, a scientist in Vancouver, who will search for new therapeutic targets for acute myeloid leukemia in a poorly understood area of science: the non-coding regions of the genome.

Research projects, patients stories and more at www.tfri.ca.