



OUR IMPACT

Driving cancer research innovation together

2022/23 Research Impact Report



Canadian
Cancer
Society

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A year of high-performance, person-centred research

In this report, you will read about how your support of cancer research in 2022/23 enabled us to invest in world-leading research that is saving and improving the lives of all those affected by cancer.

Throughout the year, we remained focused on our vision to fund scientifically excellent, high-performance and person-centred research that improves cancer outcomes and drives the greatest progress. Thanks to your generosity, we invested an incredible \$50.1 million in cancer research and innovation programs across cancer types and spanning the entire cancer continuum.

In 2022/23, we launched new research competitions, continued our support for hundreds of ongoing exciting research projects and clinical trials, and completed critical foundational work as we prepared to publicly launch our bold new research strategy. Importantly, we deepened our commitment to putting people at the core of cancer research, engaging an expanded network of cancer patients, survivors and caregivers in various stages of the research and funding process. These efforts are ensuring that the unique and critical needs of people impacted by cancer are reflected in the research we support.

None of this would have been possible without the incredible community of people who care about cancer and cancer research – from donors, supporters and funding partners to researchers, people with cancer, healthcare practitioners and cancer care delivery experts. Because of you, we are fuelling discoveries that are shaping how we prevent, diagnose, treat and live with and beyond cancer.

Thank you – we are deeply grateful for your support. Together, we are transforming the future of cancer.



Andrea Seale

Chief Executive Officer
Canadian Cancer Society



Dr Stuart Edmonds

Executive Vice President
Mission, Research and Advocacy
Canadian Cancer Society



Dr Christine Friedenreich

Scientific Chair
Advisory Council on Research
Canadian Cancer Society

A snapshot of our research impact

As the largest national charitable funder of cancer research, the Canadian Cancer Society (CCS) is funding world-leading research and uniting and inspiring all people in Canada to take control of cancer. Thanks to your support of cancer research, in 2022/23 we:

INVESTED
\$50.1M

IN HIGH-IMPACT RESEARCH
AND INNOVATION

ENABLED
3,665 

PEOPLE TO ACCESS
POTENTIALLY LIFE-CHANGING
CLINICAL TRIALS

SUPPORTED
394 

RESEARCH PROJECTS
ACROSS THE CANCER
CONTINUUM

ENGAGED
61 PEOPLE

WITH LIVED CANCER
EXPERIENCE TO INFORM
RESEARCH DECISIONS

COLLABORATED WITH
11 FUNDING PARTNERS
TO MAKE DONATIONS
GO FURTHER

SUPPORTED
42
RESEARCH INSTITUTIONS
ACROSS ALL
10 PROVINCES 



“ CCS funding helps to support cutting-edge research programs. Thanks to the generosity of donors, we’re advancing science innovation now, which can help to save lives in the future. ”

Dr Rayjean J. Hung, CCS-funded researcher, Lunenfeld-Tanenbaum Research Institute, Sinai Health

Stories of research impact

CCS-funded researchers are making tremendous progress in finding innovative and person-centred approaches to preventing, detecting and treating many cancers and improving quality of life for people living with or beyond cancer. Here are a few examples of the impact our research is making.

Saving lives with the right diagnosis at the right time – Dr Torsten Nielsen

An innovative test developed by clinician-scientist Dr Torsten Nielsen with funding from CCS is making it easier to accurately diagnose different soft tissue cancers, resulting in life-changing outcomes for people like Kieren O’Neil.

When he was 9 years old, Kieren struggled with constant pain and a lump in his left arm. For a while, his diagnosis was unknown because his cancer wasn’t being detected through typical tests.

“Kieren was sick for a long time and was suffering so much. We were all trying to figure out what was going on. It was scary,” says Sharon, Kieren’s mother. “Our family spent months going back and forth between doctors and the hospital, but no one could determine exactly what it was.”



Dr Torsten Nielsen



Kieren O’Neil

It was through using a sarcoma diagnostic molecular test developed by Dr Nielsen with CCS funding that Kieren was diagnosed with synovial sarcoma, a rare type of cancer that can appear in many soft tissues, including tendons, muscle and nerves. The test also determined which sequence of surgery, radiation or chemotherapy was the best treatment for Kieren.

“Our discovery made; a critical difference in Kieren’s treatment,” says Dr Nielsen, who runs a research lab at the University of British Columbia and works as a pathologist at Vancouver General Hospital (VGH). “It’s part of the reason he has a fully functional arm and is alive today.”

Now 22 years old, Kieren can enjoy cycling, kayaking and curling without pain and is completing a bachelor of science in physics at Thompson Rivers University. Like him, roughly half of the people with synovial sarcoma today can be cured by surgery and radiation because their cancer was detected early enough through the test developed by Dr Nielsen.

The pansarcoma fusion assay test is now regularly used as the first line of testing for sarcomas at VGH and for increasing numbers of referral cases from other Canadian institutions. Thanks to CCS funding, what would have taken 3 to 4 weeks and cost more than \$1,000 to test can now be done within 3 days for \$300, bringing people living with cancer answers sooner and relieving strain on the healthcare system.

Dr Nielsen and his team are now working on 2 additional tests for other sarcoma types, including one for liposarcomas that has recently been accredited and is now in use at VGH.

These advancements wouldn't be possible without the generosity of our donors.



Dr Aisha Lofters

Creating a richer, more equitable cancer care system – Dr Aisha Lofters

Dr Aisha Lofters is a clinician, scientist, teacher and mentor recognized across Canada and internationally as a leader in health equity cancer research. Her work focuses on evaluating and understanding inequities in cancer care experienced by systemically marginalized populations and identifying solutions to enhance care and improve cancer outcomes.

Improving survival for people with pancreatic cancer – Canadian Cancer Trials Group

An international clinical trial has changed the way doctors treat pancreatic cancer around the world. Led by the Unicancer Group in France and the Canadian Cancer Trials Group (CCTG), a CCS national program, the groundbreaking study tested a new 3-drug chemotherapy combination to improve outcomes for people whose pancreatic cancer was removed by surgery and found that it was more effective than the current standard of care.



Dr Daniel Renouf

“The trial showed that the new drug combination improved the patients’ survival rate significantly,” says Dr Daniel Renouf, a medical oncologist at BC Cancer and co-chair of CCTG’s pancreatic cancer disease working group. “Those who received this new treatment after surgery are considerably more likely to remain cancer-free after 5 years.”



Gayle Archibald was one of the trial's participants. She has been cancer-free for 10 years. It was Thanksgiving 2012 when Gayle experienced acid reflux and flu-like symptoms. Soon she noticed a change of colour in her urine and stool. A CT scan later confirmed she had pancreatic cancer. She was 53 years old.

"I thought it was nothing at first," she recalls. "Four days later, I had an operation where they take out parts of your pancreas, intestine, gallbladder and stomach." Following surgery, Gayle learned about the clinical trial from her doctors. "Being told that I had pancreatic cancer was very scary, especially learning that this type of cancer has such a low 5-year survival rate," she says. "So, when I was offered the chance to participate in a clinical trial, I thought, 'If it can extend my life, then I will definitely do it.'"

Today, Gayle hopes that by sharing her experience, more people will consider participating in clinical trials to help advance cancer research.

"You thank your lucky stars, but I'm still here and that's the main thing," she says. "If you don't do the trials, we'll never get any further ahead of what works and what doesn't."

Since the results of the trial were initially published, the treatment Gayle received has been approved and fully funded as the new standard of care. It has also been included in provincial guidelines of recommended treatments for people with pancreatic cancer. The improved long-term outcomes of the trial were confirmed and published last year in *JAMA Oncology*.

To further advance the groundwork from this research, CCTG is now testing the same 3-drug combination before surgery in a new trial in Canada co-led by Dr Renouf. The study is assessing whether this chemotherapy will result in better outcomes if it is given to patients earlier.

"We know there's more we can learn to help improve treatment, for example, what's the best timing of using the chemotherapy?" Dr Renouf says. "And it's critical that organizations like the Canadian Cancer Society and their donors are funding these important trials, which would not have been possible otherwise."



" CCS is creating space for diverse perspectives in health, not just research on equity, but funding opportunities that are more inclusive, encourage a diversity of methodologies and research questions that benefit specific populations or communities. We will all benefit from that diversity. "

Lori Chambers, CCS patient partner

New CCS-funded grants and awards

Each year, with donor support, we seek out and fund the very best science through a wide range of grant programs that contribute to a balanced and well-rounded funding portfolio, covering all pillars of research. The grants are co-created, reviewed and selected by a diverse group of researchers, patient partners and other stakeholders with research and healthcare delivery and policy experience, as well as lived experience with cancer. In addition to funding high-impact research that is relevant to people affected by cancer, we recognize Canada's leading cancer researchers for their outstanding achievements. Here are a few highlights from 2022/23.

Transforming low-survival cancers

In partnership with the Canadian Institutes of Health Research, Brain Canada, the Cancer Research Society and the Lotte & John Hecht Memorial Foundation, we are funding 10 CCS Breakthrough Team Grants, the largest ever collective effort in Canada focused on changing outcomes for 6 low-survival cancers. Together, we are investing more than \$55 million in these promising projects to accelerate progress against pancreatic, esophageal, brain, lung, liver and stomach cancers.

Reducing cancer-related health inequities

Cancer can affect anyone, but not everyone has the same experience. To ensure everyone in Canada has a fair and just opportunity to prevent, detect, treat and survive cancer, we launched the inaugural CCS Health Equity Research Grants. In total, we are investing \$1.6 million in 6 promising projects that address specific health inequities in cancer prevention, detection, treatment and survivorship.

Fast-tracking research discoveries

To help people with cancer benefit from research discoveries sooner, we launched the inaugural Accelerator Grants, investing nearly \$2 million in 13 research teams across Canada. This funding opportunity is intended to stimulate the implementation of evidence-based programs, practices and policies (i.e. interventions), within 2-5 years, that will improve the lives of people affected by cancer.

Improving cancer data in Canada

To address concerns related to accessibility, completeness, quality, and timeliness of cancer data in Canada, we launched the Data Transformation Grants, investing \$1.8 million in 15 promising projects that have the potential to be instrumental in improving cancer data in Canada, ultimately leading to more equitable and timely access to innovative and affordable, high-quality cancer care.

Ensuring ongoing access to impactful clinical trials

In 2022/23, CCS renewed support of the Canadian Cancer Trials Group (CCTG) with a 5-year \$30-million commitment to CCS's national clinical trials program. With an international reputation for running Canada's most impactful cancer clinical trials, CCTG is testing cancer therapies, supportive care and prevention interventions to benefit not just people with cancer in Canada but around the world. The grant renewal represents a continuation of CCS's largest program investment supporting CCTG strategic objectives as well as the development and conduct of trials.

Recognizing leading cancer researchers

We were thrilled to celebrate the accomplishments of 6 remarkable researchers whose leadership and contributions have played an important role in advancing cancer research in Canada. The recipients of the 2021 CCS Awards for Excellence in Cancer Research were:

- Dr Tak Mak (Princess Margaret Cancer Centre) – Lifetime Contribution Prize
- Dr Aisha Lofters (Women’s College Hospital) – Inclusive Excellence Prize
- Dr David Malkin (Hospital for Sick Children) – O. Harold Warwick Prize
- Dr Michael Taylor (Hospital for Sick Children) – Robert L. Noble Prize
- Dr Trevor Pugh (Princess Margaret Cancer Centre) – Bernard and Francine Dorval Prize
- Dr Robin Urquhart (Dalhousie University) – William E. Rawls Prize



“ For me, donating to an organization like the Canadian Cancer Society is an important act. I support cancer research to improve the lives of those with cancer by helping to fund researchers who are seeking a cure for this terrible disease. ”

Diane Campbell, CCS donor
(pictured here with her husband, Wes Campbell)

Patient engagement

Evidence shows that engaging people with lived experience of cancer in the research funding process can more closely align research with patient priorities, resulting in improved health outcomes. In 2022/23, we finalized our first Patient Engagement in Cancer Research plan. Co-developed with a team of patients, survivors, caregivers and researchers, the plan is helping us ensure the voices of people affected by cancer are embedded in decision-making and capacity-building across our research programs from planning to implementation and evaluation.

“ Being involved with research is a meaningful and healing experience. Despite the hardships we have faced, we are able to channel our pain into work that will improve outcomes for others who are impacted by cancer. ”

Cathy P., CCS patient partner



Our research strategy

We are committed to accelerating research progress that could save and improve lives. In 2022/23, we laid the foundation for our public launch of a new research strategy. The strategy takes a bold and exciting approach to supporting research – one that puts people at its core.



The power of research partnerships

Mutually beneficial research collaborations enable CCS and our partners to expand the scope, depth and focus of our funded research. Through our partnerships, we can support more high-quality and potentially life-changing research projects than we could fund alone. Last year, CCS worked with 11 federal and provincial government organizations as well as other health charities and foundations. We are committed to continuing to collaborate with funding partners to maximize our impact.

Thank you

The future of cancer research has never been more promising. Together with our donors, partners and supporters, we are uniting and inspiring all people in Canada to take control of cancer.

To learn more about our research or to make a donation, visit cancer.ca or call 1-888-939-3333.