

Sunnybrook's Odette Cancer Program is

SPECIAL



A message of gratitude from Sunnybrook

Summer is a season of growth, and so it is timely that we share a report about your impact on Sunnybrook's Odette Cancer Program. As you'll read throughout these pages, the Odette Cancer Program has been growing in so many ways over the past year, thanks to you.

Whether it is expanding our ability to deliver personalized care with new approaches in our Cancer Ablation Therapy Program; surpassing more than 40,000 patients served remotely by increasing our virtual cancer care program; or building our teams with the next generation of leaders – the Odette Cancer Program is blooming.

All of this remarkable growth is possible because of donor support. Your generosity is improving Sunnybrook's research, clinical care and patient experiences for people facing cancer.

Growth doesn't just mean bigger – it also means better. When we expand our treatment offerings, it means patients and families have more options for personalized care. When we grow our research, it means more breakthroughs that lead to better outcomes and greater hope for people who previously had few options.

At the helm of this steady growth has been Dr. Calvin Law, who has recently concluded his term as Chief of the Odette Cancer Program after a decade of exemplary leadership.

We are pleased to uphold Dr. Law's legacy as an outstanding physician, surgeon, researcher and educator with the newly created Patient Experience Acceleration Fund. Established by Dr. Law and made possible by donors, this endowed fund will support initiatives that enhance patients' entire well-being during their cancer journeys. The fund will ensure we continue to transform patient-centred care and sustain the empathetic leadership exemplified by Dr. Law.

As we honour Dr. Law, we are also pleased to welcome the incoming Chief of the Odette Cancer Program, Dr. Monika Krzyzanowska. Bringing a wealth of experience and expertise, Dr. Krzyzanowska is dedicated to building on patient-centred care and Sunnybrook's continued role as a leader in cancer care in the years ahead. And it will only be possible with you, our donors, by our side.

Sincerely,



Kelly Cole

President and CEO
Sunnybrook Foundation



Sunnybrook welcomes Dr. Monika Krzyzanowska, incoming Chief of the Odette Cancer Program

We are pleased to introduce Dr. Monika Krzyzanowska, who began her term as Chief of the Odette Cancer Program and Regional Vice President of Ontario Health, Cancer Care Ontario on June 1, 2024.

Dr. Krzyzanowska joins Sunnybrook with a distinguished medical and academic background. Starting in 2004 as an attending physician in medical oncology at Princess Margaret Cancer Centre, Dr. Krzyzanowska has held numerous leadership positions since then focused on advancing the quality of care.

Since 2018, she has also served as the Department Division Director of Medical Oncology at the University of Toronto, and has authored more than 200 journal articles in peer-reviewed publications.

In the toughest moments, Sunnybrook is the place to be. Whether it's facing a cancer diagnosis, supporting a family member through treatment or navigating cancer recovery, that place is Sunnybrook's Odette Cancer Program. This is all thanks to our donors.



Teeing up: How Bev Moir is raising awareness and funds for lung cancer research

Five years after her diagnosis with stage four lung cancer, Bev Moir (pictured above and on cover) is grateful for the scientific advances in biomarker testing and targeted therapy that Sunnybrook specialists have used as part of her treatment plan.

Lung cancer is the leading cause of cancer-related deaths among Canadians, yet lung cancer research is underfunded.

In 2019, Bev began to raise awareness and funds for Sunnybrook's lung cancer research, launching the Crush It with Bev! golf tournament in 2021. To date, Bev's efforts have secured more than \$500,000 for cancer research technologies, testing and treatments. Her ultimate goal is to raise \$1,000,000 to help invent the future of lung cancer care. In addition to fundraising, Bev is also working for change, and strongly advocating for more awareness and access to lung cancer screenings.

"I have a sense of responsibility to raise awareness of lung cancer and advocate for those who are not benefiting from the current science," says Bev. "A daughter, son, or grandchild, anyone can be diagnosed with lung cancer, there are many different causes. It's important to be able to support further research."

Odette Cancer Program in 2023:

173,863

outpatient visits

41,513

visits through our Virtual Cancer Care

1,200

average number of patients receiving care in clinical trials at any given time

145

active clinical trials to explore novel treatments

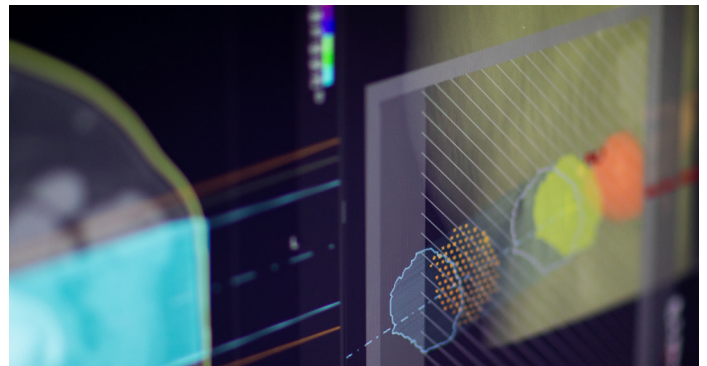
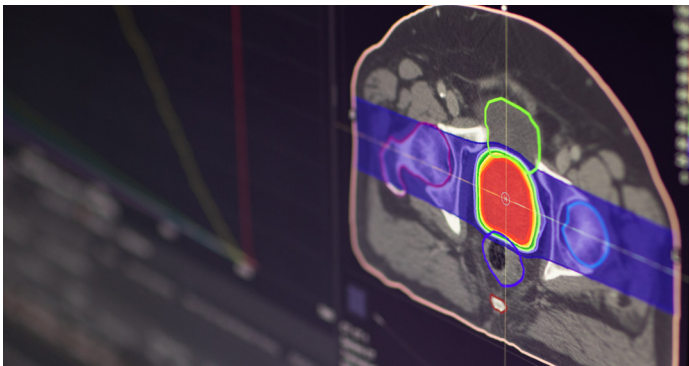
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members of the cancer program research team

Trailblazing patient care

CANCER ABLATION THERAPY PROGRAM

Sunnybrook's Cancer Ablation Therapy Program harnesses three donor-funded precision radiation technologies to destroy tumours without the need for invasive surgery. As we continue to evolve the program thanks to the generosity of donors, we are introducing new adaptive technologies and techniques that promise to save and improve even more lives.



Above left and right: RayStation, Sunnybrook's new adaptive radiation treatment software. The photos depict RayStation's high-quality imaging of treatment areas in real time.

RayStation advanced treatment planning technology launching soon

The RayStation treatment planning system has arrived at Sunnybrook, thanks to our donors.

When paired with Sunnybrook's 10 of 13 linear accelerators, the new system will allow radiation oncologists to deliver personalized treatments to patients who could benefit from adaptive radiation.

This offers an alternative to patients who don't require daily MRIs on the MR-Linac, Sunnybrook's donor-funded technology that merges radiation therapy and high-resolution magnetic resonance imaging, to track their progress.

The increased efficiencies that RayStation offers will enable our physicians to spend even more precious time with patients.

The hardware and software are installed and are now being tested, and Team Sunnybrook is developing new workflows and training modules to support the new standard of care. The first patient is expected to receive treatment using the RayStation by the end of the year.

“Nowhere at Sunnybrook has technology transformed care as dramatically as within the Cancer Ablation Therapy Program.

With your generous support and Dr. Arjun Sahgal's leadership, our high-performing team has advanced therapies, many the first of their kind in Canada and the world, that are prolonging and saving lives.

Donors like you make us special.”

**Dr. Andy Smith, President & CEO
Sunnybrook Health Sciences Centre**



Expanding the potential of our world-first image-guided radiation therapy

Sunnybrook is accelerating ideas into action with the world's first MR-Linac focused ultrasound device, made possible thanks to early investment from our donors.

The groundbreaking new technology (pictured above) combines the power of focused ultrasound with Sunnybrook's donor-funded MR-Linac, the first machine in the world to combine radiation therapy and high-resolution magnetic resonance imaging.

When integrated within the MR-Linac, the portable focused ultrasound device will allow teams to use sound waves and microbubbles to target the blood vessels surrounding a tumour.

Soon, only small doses of image-guided radiation will be required to achieve tremendous results.

"This new technology represents the beginning of what could be a transformative breakthrough in cancer care," says Dr. Arjun Sahgal, Director of Sunnybrook's Cancer Ablation Program and Chief, Radiation Oncology Program.

"With Sunnybrook's expertise and the MR-Linac focused ultrasound device, we have the potential to start changing cure rates," adds Dr. Sahgal.

Dr. Gregory Czarnota, Radiation Oncologist and Senior Scientist at Sunnybrook Research Institute, is on the brink of launching the first in-human trials to test this technology after promising preclinical results. Dr. Czarnota and his team will treat 40 patients with breast cancer with focused ultrasound and MR-guided radiotherapy, and then measure the efficacy of the treatment and its outcomes compared to standard radiation therapy.

Supporting people with few treatment options

A first-in-Canada treatment for bile duct cancer is having a positive impact on the quality of life of patients who are often palliative or with few options.

Sunnybrook's donor-funded MRI-Brachytherapy Suite is home to the innovative therapy that involves snaking a catheter into the bile duct to deliver high-dose radiation directly into the tumour.

So far, 31 patients have received the treatment and approximately 50 per cent have no need for further interventions, says Radiation Oncologist Dr. Amandeep Taggar.

Dr. Taggar believes the data will show that brachytherapy "can help keep the bile ducts open for longer periods of time, improve patient quality of life and, in some cases, even delay the need for chemotherapy treatment."

"High-risk, high-reward care" with Sunnybrook's Gamma Knife Icon

Thanks to donor support, the Gamma Knife Icon has offered life-extending care to several patients with previously untreatable brain tumours from across Canada. Radiation oncologists used the technology to precisely target and destroy the tumours in critical areas of the brain without damaging the patients' memory, cognitive functioning or quality of life.

"We take calculated risk of serious side effects in order to control the tumours and prolong life," explains Dr. Sahgal. He adds: "It's a delicate balance, but ultimately we were able to stop tumours that grew through all other treatments. It's high-risk, high-reward care and donors are making it happen at Sunnybrook."

Navigating complexity

OUR VIRTUAL CANCER CARE PROGRAM

Thanks to donor support, virtual cancer care is transforming the patient experience for the better, reducing the volume of time-consuming in-person appointments and giving people more time with their families.

For Ruby Bola, Project Manager of Strategic Initiatives at Sunnybrook's Odette Cancer Program, nothing says success like donor support, which opened up virtual care services to 41,513 patients with cancer in the past fiscal year.

An innovative and positive outcome of the COVID-19 pandemic was the launch of the virtual cancer care program, which has grown to more than 60 virtual clinics offering Zoom video consultations with Virtual Care Coordinators leading patient sessions.

The success of this program has been noticed by neighbouring regional cancer centres, as the Odette Cancer Program team has been invited to share learnings with these partners.

"We're so thankful for donor support to deliver care in this way," says Ruby. "Ultimately, we are empowering patients to make a choice by giving them more options in the way they want their care delivered."

Building a team of Virtual Care Coordinators was key to the program's success, as they ironed out tech glitches and missed appointments during early days of the program. Now, the team calls patients to remind them of upcoming appointments and fix any tech issues as they arise, giving people a face to connect with and making the process efficient, punctual and similar to an in-person interaction. Patients can also connect with interpreters if needed.

According to Ruby Bola, access to timely virtual services helps to improve patients' overall outcomes, as they can undergo more care at home.

What's more, virtual care supports integrated teams of oncologists, nurses and other health-care professionals, bringing together a comprehensive group to collaborate on better care for patients.

"Virtual care is definitely here to stay, as we've all seen the way forward," says Ruby.



Ruby Bola, Project Manager of Strategic Initiatives at Sunnybrook's Odette Cancer Program, has helped oversee the successful rollout of virtual care for cancer patients since the COVID-19 pandemic.

"Donor support is empowering patients to make a choice by giving them more options in the way they want their care delivered."

Ruby Bola
Project Manager of Strategic Initiatives
Odette Cancer Program

Accelerating ideas into action

RESEARCH THAT ADVANCES NOVEL TREATMENTS

Researchers across the Odette Cancer Program and Sunnybrook Research Institute are driving innovations from bench to bedside. With donor support, our teams are leading world-first breakthroughs to improve cancer care.

New ways to diagnose neuroendocrine tumours

Researchers from Sunnybrook Health Sciences Centre, Queen's University and University Health Network have discovered a biomarker that opens the way to developing a blood test to diagnose neuroendocrine cancers.

Dr. Hon Leong, the Sunnybrook scientist co-leading the project, says the miR-375 marker can turn benign neuroendocrine pancreatic tumours malignant. Donor support has been critical to the success of this project.

Developing tumour models to test new treatments

Sunnybrook researcher and Tier 2 Canada Research Chair Dr. Iacovos Michael has established a bench-to-bedside research program for patients with neuroendocrine and central nervous system cancers. Dr. Michael is using chicken embryos and organoids – tumour models cultivated in the lab – to test potential new drugs. Helping him in his research is the high volume of patients undergoing treatment for cancer at Sunnybrook.

“Donor support is a game-changer,” says Dr. Michael. “It is a stepping stone that allows us to apply for grants from organizations like the Canadian Institutes of Health Research and the Terry Fox Research Institute.”

Promising therapeutic for a common brain tumour

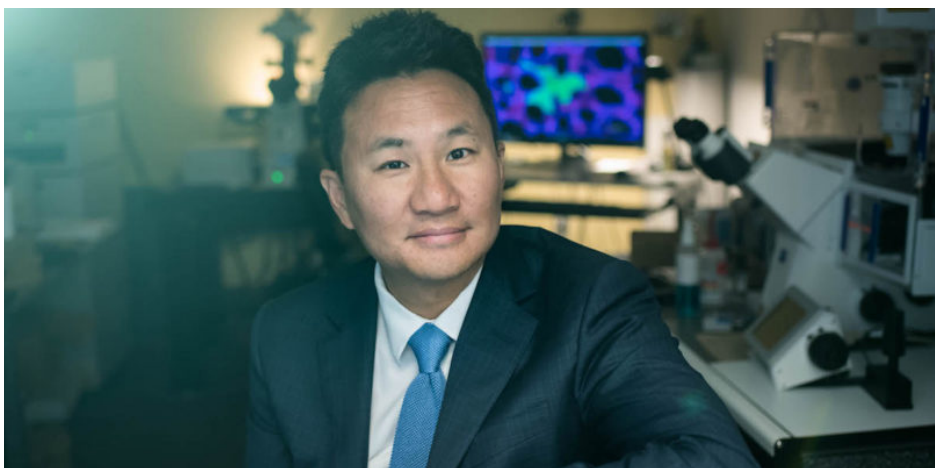
Treatment with the tumour-targeting drug vorasidenib, taken in pill form, significantly slows the growth of a common type of brain tumour. A multi-centre study published in 2023 by an international team of researchers, including Sunnybrook neuro-oncologist Dr. James Perry, demonstrated this promising finding. The results represent “the first-ever targeted therapy for low-grade gliomas,” says Dr. Perry.

Celebrating leaders: Our Canada Research Chairs

Among the highest honors to be bestowed upon a researcher, Canada Research Chairs represent the country's top level of innovation and discovery.

Sunnybrook is proud to be home to 16 Canada Research Chairs, including three who are driving breakthroughs in cancer:

- **Dr. Jesse Chao**
Tier 2 Canada Research Chair in Precision Cancer Diagnostics and Artificial Intelligence;
- **Dr. Natalie Coburn**
Tier 1 Canada Research Chair in Cancer Outcomes;
- **Dr. Iacovos Michael**
Tier 2 Canada Research Chair in Tumour Biology and Precision Oncology.



Left: Dr. Hon Leong, the Sunnybrook scientist co-leading the discovery of a new biomarker that can shape the diagnosis of neuroendocrine cancers.

NEXT-GENERATION LEADERS IN CANCER CARE

Our high-performing teams make Sunnybrook special. Across disciplines and specializations, our dedicated staff is vaulting cancer care into the future.



Guiding young women through their breast cancer journeys

Supported entirely by our donor community, Sunnybrook's PYNK: Young Women with Breast Cancer Program provides personalized care to women aged 40 and younger with breast cancer.

2023 marked a significant turning point in the delivery of PYNK's unique model of care. To help support a growing and increasingly complex patient population, the PYNK team brought on a physician assistant, Sandy Vuong. A certified health-care professional who works under the supervision of a licensed physician, Sandy performs a wide range of clinical tasks and procedures, from patient assessment, diagnosis and education to minor procedures.

"My job is to see the whole picture and ensure every aspect of a young woman's unique physical and emotional health is taken into consideration," says Sandy.



Making a global impact with a fellowship in otolaryngology

When Dr. Joaquin Ulloa returns to his role as a surgeon at Chile's largest hospital, he will be the first with specialized training in head and neck oncology and microsurgery, thanks to donor support.

Dr. Ulloa is completing a two-year clinical fellowship in U of T's Department of Otolaryngology – Head & Neck Surgery, which includes rotations with Sunnybrook's head and neck surgeons. "The plan is to work together to change the way head and neck surgeries are treated across South America," says Dr. Ulloa.

Donor support has enabled Sunnybrook to partner with the University of Toronto and its head and neck oncology fellowship program, one of the most renowned in the world. Fellows like Dr. Ulloa also expand Sunnybrook's clinical capacity, enabling our teams to treat more patients and drive forward innovative ideas.

SPECIAL THANKS

Sunnybrook is special because of our donors. Your generosity is transforming cancer care for our patients, families and community. Thank you.

