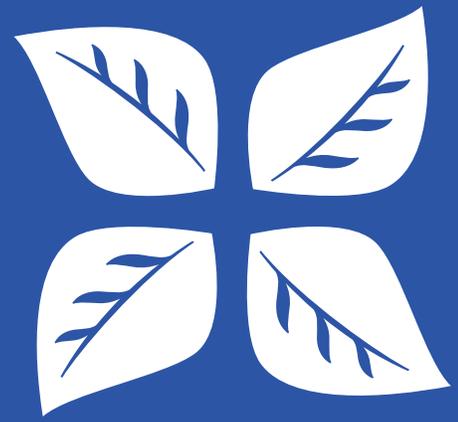


YOUR IMPACT

Community Events Progress Report

Winter 2021



TOGETHER WE ARE INVENTING THE FUTURE OF HEALTH CARE

Community has come to mean something quite different in the past two years.

At the same time that our personal circle of support has contracted, Sunnybrook's community of support has grown steadily wider. Physical distancing and event restrictions opened the door to a whole new generation of virtual, online and social media events. Without the barriers of time and distance, we welcomed many new supporters to our cause. And as in-person events slowly resumed this summer, a groundswell of friends old and new re-emerged and re-engaged in our Sunnybrook community. **Thank you for staying by our side every step of the way. Knowing we can count on you is something we never take for granted.**

We've highlighted several of your powerful stories in this report. Each story – just a selection of the many community fundraisers we celebrate – is evidence of our shared belief that when we come together as a community, anything is possible.

Thanks to you, Sunnybrook was the beneficiary of 110 community fundraising events in 2021. Altogether, you raised \$1.6 million to help advance our mission to invent the future of health care through advances in research, education and patient care.

I'll admit to yearning for a return to "normal," but I'm also inspired by what we've been able to achieve with great passion, creativity and resilience. Every community event and every individual effort, whether as an organizer or a participant, has had a major impact on Sunnybrook and our patients.

That's a definition of community we can all get behind.

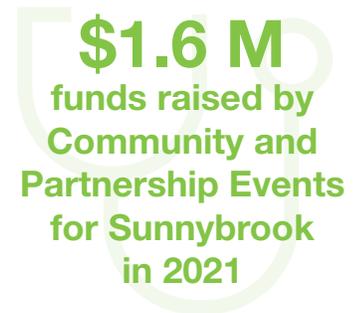
We look forward to continuing to see your fundraising events in action in the new year.

Christina Topp

Vice-President, Marketing & Community Engagement
Sunnybrook Foundation



110+
events annually
and growing



\$1.6 M
funds raised by
Community and
Partnership Events
for Sunnybrook
in 2021

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Every one of our community leaders has a story that ties them to Sunnybrook. Your generous support drives innovative research, personalized and precision treatments, and the highest quality care. Thank you.

Using his diagnosis to make a difference

When former National Hockey League player Mark Kirton was diagnosed with ALS in 2018, he figured he had two options: “I could go and hide in a corner or come out battling.”

It took him about five seconds, he says, to decide he wanted to use his diagnosis to make a difference. But he also knew he couldn’t wage the battle alone.

During ALS Awareness Month last June, Mark rallied the support of his former NHL teammates and members of the sport media community. Thirty-three hockey greats, including former Toronto Maple Leaf captains Doug Gilmour, Wendel Clark, Darryl Sittler and Rick Vaive, each recorded a video message on Twitter encouraging people to take a stand in support of ALS research and care.

Hockey Night in Canada host Ron MacLean even waved a “Help Kirts End ALS” t-shirt during Game 7 of the televised playoff match between Toronto and the Montreal Canadiens. “The reach was enormous,” Mark remembers.

So was the support. In just two months, Mark and “Team Kirts” raised more than \$100,000 for Sunnybrook and the ALS Society of Canada. At Sunnybrook, the funds are helping to advance the groundbreaking research of Dr. Lorne Zinman, Mark’s doctor and director of Sunnybrook’s ALS Clinic. Among many projects, Dr. Zinman is preparing to launch a world-first clinical trial testing the effectiveness of focused ultrasound in the delivery of a promising ALS therapeutic. The non-surgical technique has been shown to safely and temporarily open the blood-brain barrier, the cluster of cells that protects the brain from dangerous substances while also denying potential therapies access.

Knowing he has Dr. Zinman, so many friends and his beloved family – who Mark says are “my everyday heroes and have become the extension of me as I have weakened” – on his team only makes the husband and father of three want to fight even harder to change the course of the disease. (You can read more about Dr. Zinman’s research on page 8.)

“I’m going to keep pushing,” Mark says. “Team Kirts isn’t done yet. We’re not done until there’s a breakthrough.”



Mark Kirton.

“Dr. Zinman is so driven. I feel it every time I talk to him.”

- Mark Kirton

Keeping patients connected

Aaron Hou knows how important it is to stay in touch. He comes from a close-knit family and has a large group of friends he's known since high school.

So at the start of the pandemic, when the McMaster biochemistry major heard news reports of restrictions on hospital visiting policies, he knew he had to help patients stay safely connected in some way.

“I read many stories about people who were in critical care and passing away without even being able to say their last goodbyes. That was really the driving force of our fundraising effort,” Aaron says.

That’s when Aaron and his friends hatched a plan to provide Toronto hospitals with iPads, so families could video call their loved ones.

Sunnybrook, he says, was high on his list because it was where his grandmother received care, and he remembered she had a positive experience. “It was definitely one of the first hospitals I reached out to try and give back to,” he says.

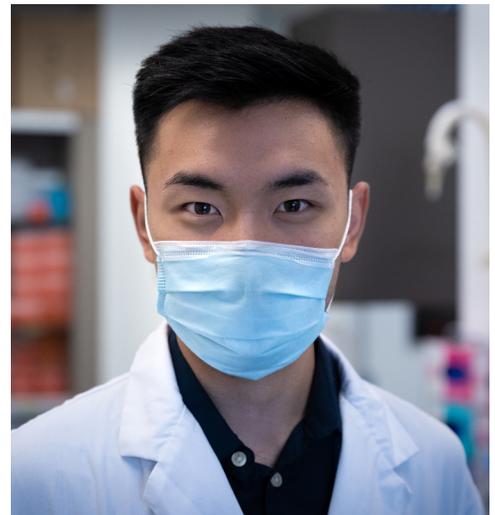
Within a matter of weeks, Aaron and his friends launched iPads for Patients. They created a GoFundMe page to solicit donations, using social media to promote the cause and connecting with telecommunications companies to get deals on refurbished iPads.

The initiative raised enough to donate more than 40 iPads to hospitals across the city. “It was so rewarding dropping off the iPads, knowing that they would go to people who would use them right away,” says Aaron.

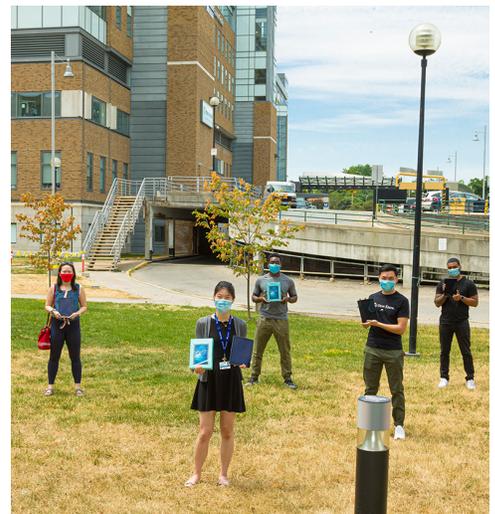
Not long after, Aaron’s grandfather was admitted to a hospital (for reasons unrelated to COVID-19) and he was relieved his family was still able to stay connected through one of those very iPads.

At the same time, Aaron has been helping advance research into COVID-19 through his work as a research assistant in Dr. Samira Mubareka’s lab at Sunnybrook. Dr. Mubareka was part of a team that collaborated to isolate the virus that causes COVID-19. And this fall, Aaron began the first placement for his nursing program at Sunnybrook’s Veterans Centre.

Aaron’s optimism and enthusiasm shine through in both his charitable and professional endeavours. “If there’s an opportunity to help other people,” he says, “I’ll more than likely grab it and try my best at it.”



In addition to fundraising, Aaron Hou recently worked as a research assistant at Sunnybrook.



Members of the iPads for Patients fundraising team hold iPads they donated to Sunnybrook.



Aaron at work in Dr. Samira Mubareka’s lab.

Cycling for life-saving care

The inaugural Ride for Project Saving Legs sent a strong message about the power of community.

Sunnybrook vascular surgeon Dr. Giuseppe Papia was at his favourite Toronto bike shop when the irony of the situation hit him. “We take our legs for granted while so many others are at risk of losing theirs,” he says.

More than 800,000 Canadians are currently living with peripheral arterial disease (PAD), a deadly buildup of plaque that can block blood flow to the limbs, often resulting in leg amputations or even death. People with diabetes are two to four times more likely to experience PAD.

“I decided then and there that I was going to create a campaign about using our legs to help others save theirs,” says Dr. Papia.

Dr. Papia partnered with Heath Cockburn, owner of The 11 Inc. bike shop, to create the Ride for Project Saving Legs, a 50- to 75-kilometre cycling event through Niagara’s wine region.

On August 27, the inaugural ride raised more than \$130,000 for Sunnybrook’s innovative program of limb-saving care.

“There are no centres for patients with PAD like there are for patients with cancer,” Dr. Papia explains. “Yet, they also require complex care involving multiple specialists.” Delays in accessing the right specialist can be catastrophic – more than 1,200 Ontarians a year lose a lower limb as a result of vascular disease.

Dr. Papia and the team launched the Vascular Limb Preservation Program (VLPP) in March 2021. More than 60 patients to date have benefitted from rapid, one-stop access to surgeons, physiotherapists, podiatrists and specialists in diabetes, wound care and infectious diseases. A specialized nurse practitioner is also available to help coordinate each patient’s care journey. The funds raised through Project Saving Legs will ensure the continuation of the VLPP. Although many treatments for PAD are covered by health care, the program itself is not. Dr. Papia and his team are relying on donor support to help save more legs and lives.

It’s a cause that bike shop owner Heath is committed to sticking behind, not just this year but for the foreseeable future. “There’s a lot of excited people motivated to continue what we started,” says Heath.





“ I was really excited to hand a big cheque to Dr. David Hwang and to know it will make a real difference for patients.”

- Bev Moir

“Crushing” her fundraising goals

Bev Moir says she has a sense of responsibility to support her community.

Bev Moir counts herself as lucky. Diagnosed with stage four lung cancer in 2019, she underwent biomarker testing at Sunnybrook – an advanced diagnostic test to identify which patients might benefit from existing therapies to target their tumour cells more precisely and effectively.

Bev’s cancer was a match, which meant that instead of chemotherapy and its many side effects, her treatment consists of a single daily pill. “I’m benefiting from scientific advancements and leading a high-quality life,” says the retired nurse and wealth management advisor.

But Bev’s acutely aware that that’s not the case for everyone. She’s advocating for regular screening tests for lung cancer akin to those currently offered for breast, colon and prostate cancer. **“I have a sense of responsibility to help those who aren’t benefiting from science,” she says. That means reaching out to her friends and loved ones to raise awareness and support for lung cancer care and research at Sunnybrook.**

In 2019, Bev collected nearly \$3,000 in donations in lieu of retirement gifts. She added another \$24,000 in 2020 through a power walking campaign tied to the virtual Scotiabank Toronto Waterfront Marathon. And then in 2021, the Crush it with Bev! golf tournament “crushed” its \$100,000 goal with more than \$150,000 in personal and corporate donations and sponsorships.

The funding was used to purchase a specialized tool for lung cancer biomarker testing. The Ion Chef instrument allows Sunnybrook’s doctors to test tumour samples faster and with greater accuracy, so more patients can receive personalized, precision diagnoses and treatments – including the nearly 20 per cent of patients who are also non-smokers and at low risk for the disease.

Still, Bev’s putting her community on notice that there’s more to be done. “I’d be ecstatic to hit the million-dollar mark over my lifetime!”

A powerful tool: Facebook Fundraising

More people are turning to Facebook Fundraising to support Sunnybrook and engage with their networks.

Did you know?

Facebook covers the processing fees so 100% of donations come to Sunnybrook.

Donors receive a tax receipt for their support.

110
people hosted
a Facebook
fundraiser
since 2020

700+
people donated
through
Facebook
fundraising

\$32,513
raised
to date



Province-wide campaign effort

When much of the world went into a pandemic lockdown in March 2020, the managers and staff of three local beer stores took action. As part of a province-wide campaign in support of COVID-19 relief, they set out to raise funds in support of Sunnybrook’s front-line workers, part of the team that cared for the first hospitalized patient with the virus in Canada.

“We were excited to support our local heroes through the generosity of our customers,” explains Mario DiPaolo, district manager of The Beer Store.

Between March and early September 2020, the three stores on Laird Drive, Roehampton Avenue and Don Mills Road raised more than \$32,000 for Sunnybrook through empty bottle returns and customer donations – an achievement that Mario says was only possible through the combined efforts of customers and staff.

“Many of our customers and staff have personal connections to Sunnybrook or have benefited from its expertise,” Mario says. “Customers were appreciative that 100 per cent of the donated funds remained in our community and our employees were happy to rally behind a local cause that has impact and influence.”

The Beer Stores’ contributions helped to support the purchase of personal protective equipment (PPE) and life-saving equipment, and to advance research to better understand COVID-19.

This summer, the three beer stores chose to again support Sunnybrook through a month-long in-store campaign that raised another \$5,983 for the hospital.

“We hope this can make a small difference to improve the experience of hospital staff and patients knowing that the community is there for them during these unprecedented times,” says Mario.

THE FUTURE HOME OF BRAIN SCIENCES IS TAKING SHAPE

With the generosity of our community, Sunnybrook is revolutionizing the future of brain and mental health care through the construction of the Garry Hurvitz Brain Sciences Centre.

The new Centre will support the Murphy Family Centre for Mental Health, the Harquail Centre for Neuromodulation, Ontario’s first Circadian Sleep Centre and several multidisciplinary clinics.

In November 2020, Sunnybrook held a symbolic ground breaking with the Premier of Ontario and the Minister of Health. Momentum continued through the winter months with critical site preparation and civil engineering work.

Then in summer 2021, the concrete form work started to breathe life into the building, giving it shape and sparking excitement across the campus.

In 2023, we plan to welcome our first patients, opening a new chapter in our community’s history.



Above: A progress photo of the construction site, taken in spring 2021. Below: A rendering of the new Garry Hurvitz Brain Sciences Centre.

“The major brain afflictions of our time – mood disorder, stroke and dementia – are all interrelated. Understanding and treating them with meaningful collaboration among specialties in the same building will amplify our continued drive for novel interventions for patients.”

- Dr. Anthony Levitt, Chief, Hurvitz Brain Sciences Program

WORLD-FIRST STUDY DELIVERS THERAPY ACROSS BLOOD-BRAIN BARRIER

In October 2021, Sunnybrook researchers published a world-first study that demonstrates the safe delivery of an antibody therapy across the blood-brain barrier using focused ultrasound.

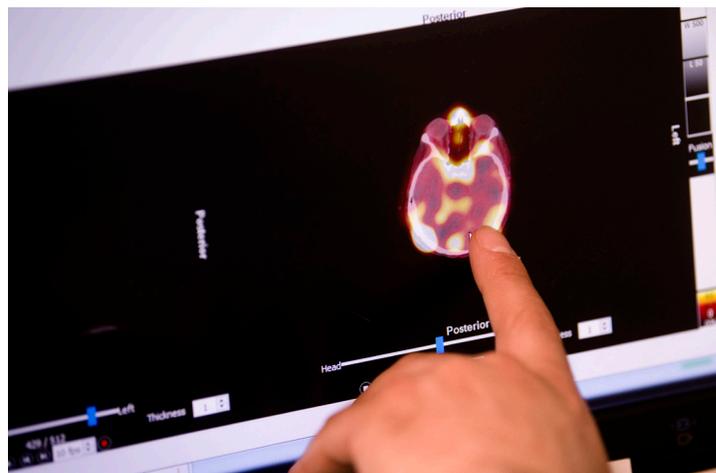
“This is a breakthrough moment in the field of focused ultrasound,” says neurosurgeon Dr. Nir Lipsman. He led the team that used ultrasound waves to noninvasively and temporarily open the protective barrier around the brain to deliver the drug Trastuzumab (also known as Herceptin) to target tumours that spread to the brain from breast cancer.

Antibody therapies like Trastuzumab can help the immune system fight cancer and are often used with radiation and chemotherapy treatment.

While these are early results, the team saw some shrinkage in the tumour size over time.

“It feels amazing to be part of something that’s a world-first and shows so much potential. It’s a good first step in being able to offer patients with metastatic breast cancer another option for treatment,” says Dr. Rossana Pezo, who is also involved in the study.

The results set the stage for the possibility of delivering a host of established and novel therapies to numerous brain conditions, including Parkinson’s and Alzheimer’s disease, that otherwise cannot gain access to the brain.



Detecting brain cancer biomarkers

Early this year Dr. Lipsman and co-investigators Dr. James Perry and Dr. Arjun Sahgal also demonstrated that MRI-guided focused ultrasound technology can improve the detection of brain cancer biomarkers.

In this world-first study, Dr. Lipsman used the technology to temporarily open the blood-brain barrier and collect a liquid biopsy from patients with glioblastoma.

A liquid or virtual biopsy is a blood test that can reveal tumour DNA. Currently the only other way to diagnose brain cancer is through invasive brain surgery.

“This is an exciting and clinically meaningful development,” says Dr. Sahgal. “As we learn more about changing genetic profiles based on treatment response, this liquid biopsy approach may allow for more personalized surgical decision making for patients.”

World-first trial to launch this winter

Dr. Lorne Zinman and his team at Sunnybrook’s ALS Clinic have refined plans for a Phase 2 clinical trial to test the effectiveness of a promising ALS therapeutic when combined with focused ultrasound in humans.

The trial will involve two groups of five patients with ALS. Patients in the first cohort will receive oral doses of the therapeutic over a two-month period while simultaneously undergoing focused ultrasound to open the blood-brain barrier over the motor cortex, the part of the brain affected by ALS. The second patient cohort will receive increased doses of the therapeutic and focused ultrasound. Before and after each treatment, the patients will undergo specialized testing to measure metabolic changes in the motor cortex and motor neuron function. With necessary approvals in place, the trial is expected to launch in Winter 2021-22.

TWO DISCOVERIES CONFIRM THE EFFICACY OF PROSTATE MRI

Dr. Laurence Klotz undertook the PRECISE trial in partnership with researchers at Princess Margaret Cancer Centre, the University of British Columbia, and Western and McGill universities. They recruited 450 men from across the country and screened each with either a transrectal ultrasound-guided (TRUS) biopsy or an MRI with a targeted biopsy of any suspicious tissues. Each procedure was followed by two years of monitoring. The results showed that an MRI before biopsy can reduce the number of unnecessary biopsies by 37 per cent, while also diagnosing clinically significant cancer in 35 per cent of the cases compared to 30 per cent in the biopsy-only group.

“To say this is welcome news would be a huge understatement. Prostate biopsies are invasive and can cause serious side effects. They can’t discriminate between high-risk and very low-risk changes in prostate tissue, so they’re often linked to overdiagnosis and over-treatment,” says Dr. Klotz.

The discovery has prompted Ontario Health (Cancer Care Ontario) to recommend new screening guidelines for prostate cancer.

A second clinical trial, meanwhile, has proved the efficacy of MRI compared to the conventional prostate-specific antigen (PSA) blood test. Head of Genitourinary Oncology Dr. Robert Nam launched the MRI Versus PSA (MVP) study in 2016 with donor support. Five hundred men with prostate cancer randomly received either the prostate MRI or the PSA test.

The prostate MRI led to a two-fold reduction in the number of unnecessary prostate biopsies and a two-fold increase in detecting clinically significant prostate cancers. **“The results of this study will have profound implications and impact in how we detect prostate cancer in the future,” says Dr. Nam.**



676

patient visits were supported on their road to recovery through the Jennifer Tory Trauma Clinic between April and September 2021.

A NEW MODEL FOR RECOVERY

Sunnybrook’s Jennifer Tory Trauma Recovery Clinic opened in April 2021

Sunnybrook’s Jennifer Tory Trauma Recovery Clinic provides an innovative model of follow-up care for trauma survivors navigating a new reality that can often include a combination of physical disability, pain, mental illness and impaired cognitive function. **So, it was somehow fitting that the clinic, the first of its kind in Canada, opened its doors in the midst of a global pandemic that demanded a rapid shift in delivery to accommodate the new reality of virtual care.**

Between the first and second quarters of the year, patient appointments have increased by 300 per cent as operations continue to ramp up.

Intake assessments and some follow-ups, including the Traumatic Brain Injury Clinic and mental health outpatient services, are all offered by videoconference, while patients in need of physical assessments and care, including occupational therapy and physiotherapy, continue to attend in-person appointments.

While not the vision he originally had for the clinic, Dr. Avery Nathens, Surgeon-in-Chief for the Tory Trauma Program, says the hybrid model offers surprising benefits that he hopes to continue to capitalize on in the months and years to come. “It’s great for patients who have to travel significant distances and can now receive the care they need without leaving their home.”

Ensuring families don't grieve alone

The Pregnancy and Infant Loss (PAIL) Network at Sunnybrook's DAN Women & Babies Program answers a great need in society. It offers a variety of peer-support services to parents and family members who have been affected by pregnancy or infant loss. Thanks to donor support, services are free of charge, and are available online across Ontario.

On average, the PAIL Network receives about 87 new family referrals each month. The goal of the program – to ensure no one grieves alone – has been more crucial than ever this year.

“Families experiencing bereavement during the pandemic do not have the same kinds of informal social support from family and friends that they would have had before the pandemic,” says Michelle La Fontaine, Program Manager of the PAIL Network.

Before the pandemic, the PAIL Network had 28 support groups that met in person in all parts of Ontario. These groups have been moved online. The network's roster of trained volunteers with lived experience of loss, which numbered around 40 in 2017, is now 100 strong.

“It is astonishing how volunteerism continues to increase, even during a pandemic,” says Michelle. “We’ve noticed volunteers are giving even more of themselves.”

In 2021, PAIL offered three customized workshops specifically for emergency department personnel. On Oct. 15, 2021, Pregnancy and Infant Loss Awareness Day, the PAIL Network sent out 700 awareness kits to families and health-care professionals.



Dr. Dennis Ko.

New possibilities for cardiac care in high-risk communities

In May 2021, Dr. Dennis Ko, director of the Schulich Heart Research Program, was announced as the inaugural Dr. Jack Tu Chair in Cardiovascular Research.

Reflecting on the chair's namesake, Dr. Ko says: “In the field of heart disease, Jack was a giant. He used big data – from a person's lifestyle to where they live, even their ethnic background – to determine the factors that affect their likelihood of getting cardiovascular disease and then surviving it after treatment. Jack saved countless lives with his discoveries and impacted many more with his brilliance, generosity and vision of a better, healthier future.”

Dr. Ko worked closely with Dr. Tu to identify optimal clinical strategies for the prevention and treatment of cardiovascular disease, especially among high-risk communities such as the elderly, underprivileged and ethnic minorities, including Chinese and South Asian populations.

As the chairholder, Dr. Ko is dedicated to realizing new possibilities for cardiac care in high-risk communities not traditionally represented in cardiac research. The COVID-19 pandemic has underscored the gap between knowledge and practice as it relates to marginalized populations. Despite being one of the most diverse countries in the world, Canada has surprisingly little data around race, ethnicity and cardiovascular disease. **“My goal as Chair is to advance understanding about these issues and to use that knowledge to inform practice and improve outcomes for more patients,” says Dr. Ko.**

Thank you

The examples highlighted in this report are a testament to the power of your generosity.

You are a valued member of our community. The time, effort and support you give Sunnybrook is behind every innovation, every personalized treatment and every breakthrough.

Thank you for your continued support and for rallying your community to drive forward life-saving research and care at Sunnybrook. We look forward to seeing your fundraising events in action next year.

Together we are inventing the future of health care.