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MESSAGE FROM THE PRESIDENT & CEO

Over the past few years, we have faced many challenges—ones that have tested our resilience, our strength and our spirit. From sickness to strife, natural disasters to economic turmoil, we have all felt the weight of these challenges. But where there is hardship, there is also hope.

At London Health Sciences Foundation, we know we are at our best when we support one another. When we practice active empathy for our neighbours. When we exercise tolerance for what we may not fully understand.

Hope is everywhere, and at its very most centre is you, our donors who empower our community through compassion and gratitude. Your unwavering commitment to our mission is both inspiring and meaningful. Your support has enabled us to bring in state-of-the-art equipment, fund innovative research and develop groundbreaking treatment options to improve the lives of patients every single day.

We are honoured to stand alongside you as we usher in a healthier tomorrow. Your staunch dedication to health care combined with the visionary talent at LHSC is a true testament to the power of collaboration, and for that we are forever grateful.

This past year, we have seen an incredible outpouring of kindness and generosity toward several major health initiatives. You have allowed our physicians and researchers to pursue and develop advancements in medicine which, not so long ago, would have seemed impossible. Thanks to you, we are better positioned to meet the needs of the thousands upon thousands of patients who visit LHSC every year.

Because investing in health care is investing in people. It's lifting others up and building upon the values inherent to our great community. We believe every patient deserves exceptional care, and it is because of your generosity that we can deliver on this promise.

As we look to the future, we remain hopeful and optimistic, knowing our community will always rally together in the face of adversity. So, let us continue doing what we do best: let us believe; let us hope; and let us build a tomorrow worthy of our dreams and the dreams of all those we have vowed to help.

Yours,

John H. MacFarlane, BBA, LL.B, MPA
President & CEO
London Health Sciences Foundation



THE HOCKEY GAME THAT CHANGED A LIFE: DAVID HILL'S STORY



David Hill is a healthy, active, 61-year-old man with many interests and hobbies.

Recently retired, he is an avid skier who loves travelling with his wife and two grown children, especially to the Colorado mountains or the great cities of Europe, rich with history. He enjoys time at the cottage, waterskiing, golf and tennis. And for the past few years, he has been playing at least three games of hockey per week.

Then one Sunday, while on the ice at Medway Arena, everything changed. With his team short a player, David was working hard to bring home a win. He had been playing for nearly an hour when the team wrapped up and headed to the dressing room. But something didn't feel right. He was overheated and needed to lie down on the locker room floor. Seeing this, his teammate, Brian, quickly called 911. Had it not been for him, David says his story may have turned out much differently.

It took about four minutes for help to arrive, and right then, David's heart stopped. Although he doesn't like to use the word, the reality was his heart had completely arrested—David was dead. Luckily, his teammate, Shaun, knew first aid and performed CPR while EMS got set up. Between Brian, Shaun and EMS, this heroic team was able to start David's heart back up.

It took another five minutes to get David to University Hospital, and by the time he arrived he had regained consciousness. He was brought to the Cardiac Cath Lab right away where he met Dr. Michael Ward, who explained the procedure necessary to save David's life.

David had a 100% blockage of his left anterior descending artery—what's known as the 'widowmaker.' Fortunately, the procedure could be done right then and there, without having to open him up. Dr. Ward and team went through an artery in the wrist to insert a stent into David's heart, keeping him awake and aware the entire time.

Having sustained some damage to his heart, David is now on the road to recovery. He's drastically changed his diet, prioritizes a good night's sleep and walks 10,000-17,000 steps per day. His children have also involved themselves in his recovery, setting reminders on his Apple Watch.

"Dad, it's time to get ready for bed," it chimes.

As for David, he can't think of a better person to keep him motivated than Dr. Ward.

"Maybe it's because he's a downhill skier too," David jokes. "But it wasn't just Dr. Ward. There wasn't one staff member I met who I felt didn't care about me."

David considers himself a lucky man. Lucky his teammates were swift to act; lucky the arena where he was playing was mere minutes from University Hospital; lucky he survived a complete cardiac arrest without any brain damage; lucky his procedure was minimally invasive.

"Most of all, I'm just so grateful we have this world-class hospital right here in London," he says. "I feel like I was treated by the best team out there."

Despite his whole ordeal, David feels good about the future. Family, friends and health specialists have all rallied around him to help him through to the other side. He's even back at the rink again, only this time supporting his team with boisterous, encouraging cheers from the stands.



FLUSHING CANCER AWAY: IMMUNO-ONCOLOGY RESEARCH

Meet Dr. Saman Maleki, an award-winning Translational Immuno-Oncology Scientist whose out-of-the-box thinking has opened the doors for a visionary approach to cancer treatment using fecal microbiota transplantation (FMT) right here at London Health Sciences Centre (LHSC).

A NOVEL PATH TO RECOVERY

Microbiomes in the digestive system can affect how each patient responds to cancer drugs and immunotherapy, and by using specific bacteria found in fecal matter – yes, poop – Dr. Maleki has found we can trigger a favourable immune response, reducing side effects and enabling more effective treatments. Once considered unconventional, he has confidently pushed forward, mobilizing this pioneering research into the “gut microbiome” and leading the way for the groundbreaking application of FMT to help improve outcomes for cancer patients.

THE TRAILBLAZING DR. MALEKI

One of only seven Londoners to receive the Investigator Award from the Ontario Institute for Cancer Research (OICR), and one of only two Canadians to be selected as the Society for Immunotherapy of Cancer Sparkathon awardee.

“At first, using fecal matter to treat cancer wasn’t something that garnered a lot of buy-in, but our early research and its positive results speak for themselves. We are now at the beginning of an exciting era for microbiome research in oncology, one started right here in Southwestern Ontario, which has put us on the international stage, empowering incredible results for future patients.”

Dr. Saman Maleki
Translational Immuno-Oncology Scientist



THEORY INTO PRACTICE

In 2019, Dr. Maleki conducted one of the first human trials on patients with advanced melanoma, resulting in less toxicity and an improved treatment response rate of 65 per cent (compared to the standard 30-40 per cent).

REACHING FURTHER

Plans to expand these trials for patients with pancreatic, kidney and even lung cancers are underway, driving a multidisciplinary effort with experts in microbiomes, cancer, immunology and infectious diseases.

WHAT’S NEXT?

Dr. Maleki is committed to amplifying the impact of this research by building a fully-fledged immuno-oncology research centre at LHSC, combining the best talent and technology to drive advances as a premier centre in Canada.



Click to learn about Andy & Helen Spriet’s transformative gift toward Immuno-Oncology research at LHSC



Established LHSC’s very first stool biobank, where samples are collected from both patients with cancer and healthy individuals to fuel research into FMT and better understand how it can be applied across various types and stages of cancer.

Principal investigator at the Maleki Lab, a translational immuno-oncology research lab located on the fourth floor of LHSC’s London Regional Cancer Program studying novel approaches in sensitizing hard-to-treat cancers to immunotherapy.



SOME HEROES EXUDE COMPASSION

RACHAEL | NURSE | DONOR | LONDON, ON

Donations to LHSF are essential for nurses like Rachael to help provide patients with the care they need through life-saving treatments, personalized care and groundbreaking research.

BE A HERO. Donate today at lhsf.ca/heroes



**London Health
Sciences Foundation**

UNLOCKING HOPE
FOR HEALING:
**JULIE
SCOPEL'S
STORY**



While patients with cancer may share similar journeys, their unique genetic makeup means their symptoms, prognoses and even treatment responses can vary drastically. And with each variation comes new worries.

But now, through London Health Sciences Centre's (LHSC) pioneering Verspeeten Clinical Genome Centre (VCGC), researchers are identifying these hidden genetic markers and using them to design more effective and targeted treatments for patients with cancer—patients like Julie Scopel.

Recently retired, Julie loves hiking, reading and golfing. However, all her life she'd been prone to bowel concerns of one sort or another. Then in 2020, her situation worsened with aggravating symptoms bringing her to LHSC. After a series of tests, including colonoscopies,

CT scans and MRIs, Julie received a diagnosis she could never have prepared for: stage 4 colorectal cancer that had metastasized to her liver.

"I won't lie, I was terrified," Julie admits. "Beyond the physical challenges, cancer is a mental and emotional struggle. There are so many questions. So much uncertainty. But the team at LHSC immediately filled me with confidence."

Julie was referred to the VCGC, where she underwent a 5-fluorouracil toxicity test to determine how her body might respond to chemotherapy or whether a different course of treatment was required. But this was just the tip of the genetic iceberg.

The VCGC employs the latest in molecular testing and gene sequencing to inform innovative new cancer treatments, with the ability to detect more than 100 syndromes and counting. By identifying and mapping epigenomic biomarkers, the team can better understand a patient's diagnosis and how their cancer will progress, opening doors for more personalized care and, ultimately, improved treatment outcomes.

As her chemotherapy began in April 2021, Julie agreed to participate in a molecular research study at the VCGC. Through a liver biopsy and examination of the biomarkers in her tumour, the team identified a genetic mutation—the G12D KRAS mutation—which presents in only 10 per cent of colorectal patients and causes uncontrollable cell growth in tumours. And though specific treatments were not yet available in Canada, Julie was inspired by the possibilities.

"The mere fact that we can access this testing means there is so much promise for the future of cancer care. This research will buy people time, leading them to exactly the type of treatment they need much sooner."

New testing capabilities, state-of-the-art technology and novel studies bringing genomic profiling to more patients are helping the VCGC maintain its momentum. It is now the first or only site to offer certain tests in Canada or, in some cases, even the world. With more advancements and cutting-edge research on the horizon, VCGC is actively helping patients today while making way for the discoveries and innovations of tomorrow.

By July 2022, having undergone surgery in December to remove her tumours in conjunction with chemotherapy, Julie was finally deemed in remission. And while her experience with the VCGC was brief, Julie looks at its groundbreaking work with one overpowering feeling: hope.

"LHSC and the VCGC made a scary situation much better. Thanks to the care I received, I'm looking forward to new adventures and creating new memories with my family."

LHSF PRESENTS: VIRTUAL TOURS AT LHSC

HEAD & NECK VIRTUAL TOUR



Go behind the scenes for a glimpse of the future of head and neck cancer research at LHSC.

Watch the
Head & Neck
Virtual Tour



PROSTATE CANCER VIRTUAL TOUR



LHSF does a deep dive with scientists at LHSC who are innovating new care strategies for those living with prostate cancer.

Watch the
Prostate Cancer
Virtual Tour



SOME HEROES NEVER PIT STOP

TAYLOR RAYNOR | AMATEUR RACECAR DRIVER | PATIENT & DONOR | LONDON, ON



**London Health
Sciences Foundation**

RACING AWARENESS: TAYLOR RAYNER'S STORY

Meet Taylor Rayner: financial advisor, racing enthusiast and advocate for mental health awareness.

For as long as he can remember, Taylor has always tried putting others first. An individual hyperaware of his surroundings, negative perceptions or comments would often be taken as personal affronts. As if the classic, fork-tongued devil was sitting idly on his shoulder, waiting for the faintest hint of criticism before whispering, "Did you hear what they just said about you?"

This internal narrative, constantly running through his mind, would fester until it boiled over into chest-tightening panic attacks. As a young man in his early twenties, he was frustrated and embarrassed at his inability to control his own thoughts.

"I had mood swings that were all over the place," says Taylor. "I was filled with doubt. I doubted myself. I doubted others. I doubted my capacity to get the help I needed."

Taylor's struggle with mental health was incredibly disruptive, affecting his studies as well as his personal relationships. A complicated and, oftentimes strained home life compounded the fears and anxieties plaguing him day after day, before he eventually took it upon himself to move in with friends. But still, the thoughts persisted.

After speaking with his family doctor, Taylor was pointed to the experts at London Health Sciences Centre's (LHSC) First Episode Mood and Anxiety Program (FEMAP), who specialize in exactly the sort of issues he was experiencing.

"The counselling I got was amazing," he says with enthusiasm. "I'm evidence that FEMAP can literally change your life. At a time when I felt so vulnerable and alone, they were warm and welcoming. They got me to open up."

Speaking with the counsellors at FEMAP helped Taylor begin taking control of his thoughts. Mindfulness techniques and other self-care strategies were provided, keeping him focused and able to better manage how he processed events which might otherwise have triggered his anxiety. Armed with these new coping strategies, his love for racing had a rather unexpected benefit.

"When I'm behind the wheel, it's a lot like meditation. I'm there. I'm focused and in the moment."

Taylor says his passion for time trial racing has been integral toward overcoming his struggles with mental health. However, it's also put things into stark perspective for him as he reflects on friends who've lost their lives chasing that same rush, and another who took his own.

"Things are never going to get better until you admit when you need help," Taylor says. He's also cognizant about the stigma still revolving around mental health issues, despite society's best efforts. Taylor wants to ensure everyone knows there are people and resources out there who can help, such as those at FEMAP.

"Suicide's not the answer. Drugs aren't the answer. If people need help, it's important they feel empowered to seek it out and not ashamed for feeling the way they do."

Therefore, in the spirit of acceptance and normalizing the conversation, Taylor plans on combining his two passions by promoting the work of FEMAP during future time trials. Through social media and by being an advocate in his community, Taylor wants others to know ignoring the problem doesn't make it go away. Every second counts. Now's the time to take control.



Click to view the Faces of Heroes: Taylor's Story





FREEDOM OF MOTION: PETER LASS'S STORY

After nearly two decades of persistent, debilitating joint issues, Peter Lass was a man who – prior to these issues – enjoyed life as a high-energy dad, dairy farmer and athlete.

“I forgot what life was like without pain,” Peter says.

At 42 years old, he should have been enjoying the fruits of all his hard work he’d put into building a great life. But, with each passing year, Peter came to realize his chronic condition had robbed him of even his most basic freedoms. Unable to walk and unwilling to live another agony-filled day, Peter sought medical help, which resulted in a referral to the orthopaedics program at London Health Sciences Centre (LHSC).

There, Peter met the celebrated surgeon, Dr. James Howard, who after reviewing Peter’s x-rays, confirmed the need for hip surgery to restore a normal range of motion. While it’s difficult for anyone to feel overjoyed about requiring a medical procedure, Peter found the entire ortho team’s level of professionalism extremely reassuring.

“Meeting Dr. Howard was like meeting your pilot and knowing, with full confidence, this is the person you want working on you. Someone you can put your full faith in,” Peter explains. “I was absolutely shocked when he showed me how innovative hip replacement procedures had become. Life-changing results with only a three-inch incision? I didn’t believe it was possible.”

But Peter became a believer on June 28, 2021, when he experienced first-hand the expertise and technological capabilities of LHSC.

Dr. Howard performed Peter’s hip replacement as a minimally invasive day surgery, which allowed him the luxury of sleeping in his own bed the very same night. While the anterior incision is small, for Peter, the impact has been immeasurable.

Despite beginning his care journey during the height of Covid-19, Peter always felt secure in his treatments and the people delivering them. From Dr. Howard’s team who he refers to as caring, fantastic and knowledgeable, through to the physiotherapists who supported him to get back on the golf course after only six weeks, Peter has been thoroughly impressed by the ease of his transition toward a new lease on life.

Every day following his surgery, Peter gained back a few more of the freedoms his injured hip had previously denied him. Now, at 58 years old, he is back to biking 10 km a day and enjoying the life he thought would always remain a distant memory. Peter is eager to raise awareness about LHSC’s orthopaedics program because he wants other people to know there is a way forward from a life of suffering – and that will begin by accessing care within London’s world-renowned care facility.

“I want to encourage other people not to be fearful. They can reclaim what pain has taken away, but they need to seek help,” Peter shares. “I never should have put this off. It was truly a gift. I hope others recognize how fortunate we are to have access to this wonderful hospital. The care staff there can help you get back to living without having to fight the urge to reach for pain meds every single day.”

Have a memorable health care story at LHSC? We want to hear from you! If you have a wellness journey you’d like to share, please contact LHSF’s marketing team at LHSFComm@lhsc.on.ca

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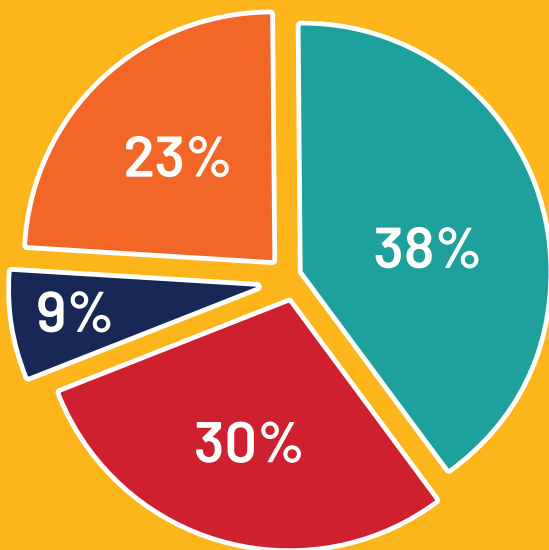


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