



**London Health  
Sciences Foundation**

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# YOUR IMPACT

Another year gone; more lives changed. Welcome to YOUR IMPACT 2023, winter edition! Big things are brewing at London Health Sciences Centre (LHSC). You can feel the anticipation building like a slow rolling electrical current. At London Health Sciences Foundation, our donors have always enjoyed front row seats to the future of health care. But soon, each and every one of you will have the opportunity to influence the very framework upon which that care is built.

Therefore, in the spirit of doing things differently, we are thrilled to highlight some of the latest ideas and technological advancements helping keep LHSC at the forefront of innovation. Of course, innovation is inextricably linked to inspiration, and every year, you, our donors, continue to embolden us with your immense generosity as well as your extraordinary ability to turn hope into healing. **Thank you.**

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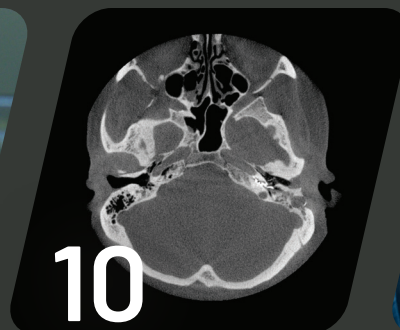
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# MESSAGE FROM THE PRESIDENT & CEO



**Journeys are never just about the destination; they're about the lessons we learn, the relationships we build and the growth we experience along the way. The seasons are a reminder of this, going from one to the next before starting all over again. It's a predictable cycle bringing with it a single promise: change.**

Change is a constant companion, but it never lingers. It waits for no one. At London Health Sciences Foundation (LHSF), we know moving forward means embracing change with open arms. Through the resilience, dedication and collective efforts of our donors and partners, we've managed to triumph over a number of different challenges, the results of which have helped shape us into a stronger and more united community. However, our world is evolving at a greater pace than ever before and it will be our ability to adapt that will determine our success.

In the coming months, LHSF, along with our partners at London Health Sciences Centre (LHSC), will be unveiling groundbreaking initiatives aimed at redefining and improving our health-care system for generations to come. These initiatives are not only a testament to our commitment to innovation but also reflect our capacity to create a positive impact on our patients and their families.

Today, we sit on the cusp of blazing an entirely new trail toward how we can deliver care. And as we navigate this path together, let us not forget what made LHSC the world-leading health provider it has become—its people. Our strength has always been grounded in a mutual support of one another, an uncompromising empathy and a diverse set of perspectives.

So, let us set our sights high. Let us continue to lead with heart and hopefulness. Most of all, let us be the driving force behind the change we know we need and not the forgotten traveller, afraid of the path ahead.

Thank you for giving us the courage to look upon these new horizons with purpose instead of panic. I am eternally grateful to be taking these next steps together.

Yours,

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

# HEARTFUL ADVANCEMENTS: **NEW ECHO EQUIPMENT RESHAPING CARDIAC CARE**





There were simply not enough machines available for the cardiac patient population. But in December 2022, London Health Sciences Centre (LHSC) received a new machine to support clinical needs of both cardiology and critical care patients. As a skilled cardiologist and one of only a handful of critical care cardiologists in the country, Dr. Daniel Durocher emphasizes the significance of the new machine.

“We needed this new machine to support clinical needs of cardiology and critical care patients,” Dr. Durocher says.

The cardiac echo machine is an advanced piece of imaging technology with the ability to explore the inner—and intricate—workings of the heart. With its state-of-the-art features, cardiologists and cardiac surgeons can now better diagnose and treat ailments affecting the heart’s chambers, assess pumping function and identify areas for surgical intervention.

A series of unique characteristics, including portability, sets the new machine apart, enabling increased flexibility in delivering care to patients across various units. Although cardiac surgeons do not operate these machines directly, they do rely on the crucial information provided by cardiologists who are trained to read the data from the echocardiograph.

With its ability to deliver precise measurements and assessments, this sophisticated device ensures patients receive the most appropriate treatment for their ailment. This is particularly significant for patients experiencing cardiogenic shock—a critical condition resulting from massive heart attacks requiring specialized care in LHSC’s Cardiac Care Unit and Intensive Care Unit.

The machine’s capabilities extend beyond traditional imaging by offering 3D pictures of the heart. These images provide a more detailed visualization, allowing cardiac surgeons to navigate through various regions with enhanced precision for conditions such as valvular diseases or impaired cardiac function.



Complementing the echo machine’s cutting-edge diagnostic abilities is a brand new echocardiography bed, which donors also helped fund to make patients more comfortable during imaging procedures. The bed is specifically designed to allow patients to recline on their sides for scanning, eliminating the discomfort they would have previously experienced.

Introduction of the echo machine and echo bed showcases a comprehensive approach to patient care. These advancements have led to remarkable improvements in critical care decisions, patient outcomes and satisfaction, propelling health care at LHSC into a new era of precision and compassion.

The cardiac echo machine and the echocardiography bed have already made a major impact on the lives of patients at LHSC diagnosed with cardiac conditions. Always aspiring to meet the growing needs of its patients, LHSC hopes to acquire additional machines, further refining diagnoses, treatment plans and overall patient care.

***“These leading technologies allow for care to be brought to patients’ bedsides,” Dr. Durocher says. “This helps make life-saving clinical decisions for patients in all areas of the hospital.”***

# THE PANDEMIC NO ONE TALKED ABOUT

**Earlier this year, the World Health Organization (WHO) declared an end to COVID-19 being a public health crisis. But like a tsunami after an earthquake, its aftershocks are still being felt. One must only stroll through downtown London to see the toll it's had on our more vulnerable populations.**

"There were actually two pandemics happening at the same time," says Dr. Arash Dhaliwal, psychiatrist at London Health Sciences Centre (LHSC). "One was getting highlighted while the other was just kind of something we had to deal with."

Indeed, punctuated by social distancing, masking mandates and rapid vaccination efforts, the first couple years of the 2020s left an inerasable mark upon our collective memory. However, according to Dr. Dhaliwal, the second pandemic was the devastating rise in people who struggled with their mental health.

"More people died of an overdose and addiction related concerns during the pandemic than complications from COVID-19," Dr. Dhaliwal states.

The supports people needed access to suddenly mushroomed, quickly outpacing the availability of resources. Dr. Dhaliwal witnessed this crisis unfold firsthand in Victoria Hospital's Emergency Department (ED). And the need has not shown any sign of subsiding.

Being only a resident at the time, Dr. Dhaliwal recognized an opportunity to improve the patient handover process. Properly and accurately conveying crucial patient information from one health provider to another is a crucial moment of care. However, distancing protocols at the hospital made traditional face-to-face handover meetings difficult. With the mental health team split into two separate rooms, speaker phones were used to communicate, which proved to be a cumbersome workaround, since distortion often meant people having to repeat themselves.

After her shift one night, Dr. Dhaliwal thought there had to be a better way for the team to run handover. As she and her brother brainstormed at home, they considered introducing smart boards, which could connect to each other virtually to facilitate smoother interaction between rooms. Dr. Dhaliwal took a collaborative approach when drafting a proposal to the department and consulted with several members of the mental health team, including other psychiatrists, social workers and nurses.

Swift buy-in from leaders combined with an existing cache of donor-supplied seed funding for innovative new ideas saw the smart boards implemented into LHSC's emergency mental health team's process where video call functionality as well as a dynamic display system ensured a more seamless transfer of care.

"You're able to quickly identify who has and who hasn't been seen," Dr. Dhaliwal says.

This visual aid is especially valuable when conveying critical patient information during time-sensitive situations. Emergency mental health staff can now see patients faster and determine next steps. As the success of this initiative continues to unfold, it serves as a testament to the remarkable power of donor generosity and innovative thinking, which will hopefully calm the waves of uncertainty for such a marginalized population of our community.





2 days ago, 01:11

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Select

Dr. Arash Dhaliwal with smart board





Call 555222 for advice  
Trauma Team (T7) - General Surgery - CCIC for  
E/OT patient with a traumatic mechanism and any one of

- Systolic Blood Pressure < 90 mmHg
- GCS ≤ 12 OR Declining
- Intubated
- Traumatic arrest
- Penetrating trauma to the torso and neck
- Pedestrian struck (high energy)
- Fall > 2 stories
- Burns > 20% BSA

# READY,





# ALWAYS

At London Health Sciences Centre's (LHSC) Emergency Department (ED), no problem gets turned away. But with the strain on resources being felt in EDs all across Canada, donor support offers a vital lifeline to those providing and receiving in-the-moment care. From specialized training to advanced equipment such as Point of Care Ultrasound (POCUS) for fast, accurate diagnoses, donors help keep the team current and prepared.

With community at the heart of everything they do, the ED team is always at the ready. Their passion, skill and painstaking determination means, day or night, they stand undeterred, ensuring every crisis is met with hope. Your generosity is more than just a donation—it's a commitment to life itself.



*Scan here to learn more about LHSC's emergency department*



Before he was diagnosed with Meniere's disease in the '90s, Tom Allison found himself clutching his head in agony as an intense wave of vertigo-induced nausea washed over him. In the middle of his farm field with no one around, Tom managed to crawl more than a kilometre back to his house for help. Dr. Lorne Parnes, Otolologist and Neurotologist at London Health Sciences Centre (LHSC), remembers Tom well.

"He'd come to the clinic with his wife, Dorothy, and he'd be wearing his overalls and his galoshes," Dr. Parnes says, smiling at the memory. "He was a big man, like 6'5" or 6'6" but he was very mild-mannered and gentle."

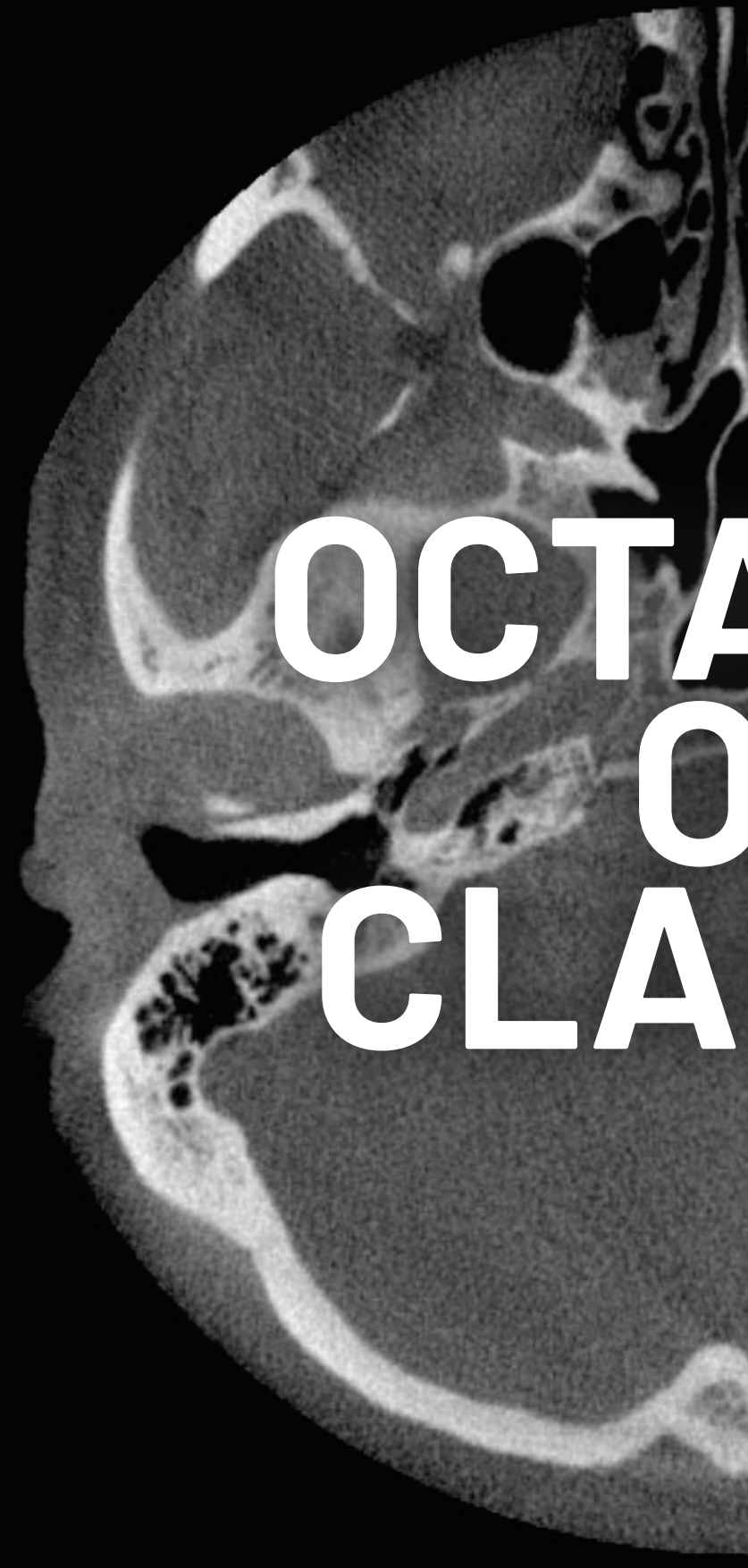
After multiple failed attempts to treat it with medication, Dr. Parnes performed a labyrinthectomy on Tom's diseased inner ear, effectively curing the vertigo but leaving him unable to hear out of that side. However, about three years later, Tom suddenly and inexplicably lost nearly all hearing in the other ear as well, rendering him virtually deaf.

Then Dorothy began showing signs of dementia. Tom feared he wouldn't be able to take care of her and became severely depressed. He even struggled with thoughts of ending his own life. But everything changed once Dr. Parnes outfitted Tom with a cochlear implant on the newly deafened ear.

"Dr. Parnes saved my life," Tom once said.

Because of how big a role our hearing plays in the way we engage with our world, losing it can be an extremely isolating experience. And of course, there are those who are born deaf—who have never heard their parents' voices or listened to a piece of music.

"To give a person back their hearing or to see someone experience sound for the first time is such an incredible feeling," says Dr. Parnes. "I'm truly privileged to do this for people."



# OCTA O CLA





# AVES OF RITY

But working with a team of surgeons, audiologists, radiologists and social workers, Dr. Parnes says he hasn't done it alone. And thanks to Tom's visionary philanthropy, arranging for generous gifts during his lifetime and through his estate planning, Dr. Parnes now has access to highly advanced equipment such as new microscopes with video capture capabilities and something known as a Cone Beam CT (CBCT) scanner.

As a machine dedicated to scanning the inner ear, the CBCT is faster but just as accurate as a standard CT, delivering only a small fraction of the radiation. Before the CBCT, diagnosing a patient and planning treatment was a cumbersome process that would take weeks of back-and-forth visits. And for patients who might have lived out of town—Tom himself lived nearly two hours away—the wait could seem excruciatingly long.

"Now, patients come into University Hospital, go up to the second floor, check in and 10 minutes later they have the scan and it's up on my computer screen for us to review together," Dr. Parnes says of the Cone Beam's improved diagnostics.

As the first hospital in Canada to be outfitted with a CBCT, LHSC is home to a world-class Otolaryngology Clinic boasting exceptional quality, convenience and safety. While Tom passed away last year at 97 years old, his life will be remembered as one spent doing anything he could for the betterment of those around him. And as for people who struggle with their hearing, his gifts represent a resounding hope to experience the world with clarity and harmony.



Dr. Lorne Parnes



**SOME HEROES LIVE TO HEAL OTHERS**

DR. PENCILLA LANG | RADIATION ONCOLOGIST | DONOR | LONDON, ON



Donations to LHSF are essential for oncologists like Dr. Lang 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](https://lhsf.ca/heroes)



**London Health  
Sciences Foundation**

# CANCER, GERD AND THE POWER OF MODERN SURGICAL INNOVATIONS

**“Esophageal and stomach cancers are on the rise worldwide,” says Dr. Mehdi Qiabi, Thoracic Surgeon at London Health Sciences Centre (LHSC) and Program Director of the Thoracic Surgery Residency Program.**

These cancers are becoming more common, in fact, that places such as Japan screen for them the same way we screen for breast cancer or prostate cancer. One of the major culprits of esophageal cancer is gastroesophageal reflux disease (GERD)—AKA, acid reflux—where stomach acid backs up into the esophagus. It’s a condition affecting approximately 10–20 per cent of Canadians today, and when left untreated, can lead to cancer.

As a thoracic surgeon, Dr. Qiabi specializes in the esophagus and stomach. He can attest to the arduous eight- to ten-hour long procedures involved in removing cancers from those areas. He says when operating on a patient’s esophagus, one false move could result in perforation, which would be catastrophic.

But thanks to donors, Dr. Qiabi is now outfitted with a state-of-the-art surgical tool designed to perform these incredibly delicate procedures more accurately and with far less risk of perforation. Dubbed the ERBEJET 2, this cancer-removing equipment provides a minimally invasive option to patients who would otherwise require extensive intervention.





“The ERBEJET 2 allows us to do microsurgery using an endoscope to remove early-stage cancer from the esophagus and stomach,” Dr. Qiabi explains.

Attached to a high-powered pump, the scope is inserted down the throat where it uses pressurized water to lift and cut layers of tissue from the inside. The technique is not only safer, but the recovery time is much faster as well. What used to be two-weeks-worth of recovery has been reduced to a staggering 24 hours.

“Our goal is to get it down to being a day procedure,” Dr. Qiabi says, anticipating continued success.

Apart from the enhanced speed and accuracy offered by the ERBEJET 2 is perhaps an even greater benefit: expanding the pool of patients who can be treated. Shortly after receiving the ERBEJET 2, Dr. Qiabi saw a patient who was extremely sick. They were suffering from liver cirrhosis, heart failure and several other ailments on top of needing cancer removed from their stomach.

“That patient had a prohibitive risk to surgery because of how sick they were,” he says. “Before, we would have had to turn them away but the minimalist approach of the ERBEJET 2 allows us to help more people and that’s what makes it so great.”

However, despite the expansion of care offered by this new machine, there remains a general lack of awareness surrounding acid reflux’s association with cancer. With obesity also on the rise in the Western world—a major cause of reflux—Dr. Qiabi says we are guaranteed to see a lot more instances of esophageal and stomach cancer.

*“A lot of people suffer in silence,” he says. “They think reflux is just a normal part of their lives. But the burning sensation characteristic of reflux is absolutely not normal, and I think people need to hear that.”*

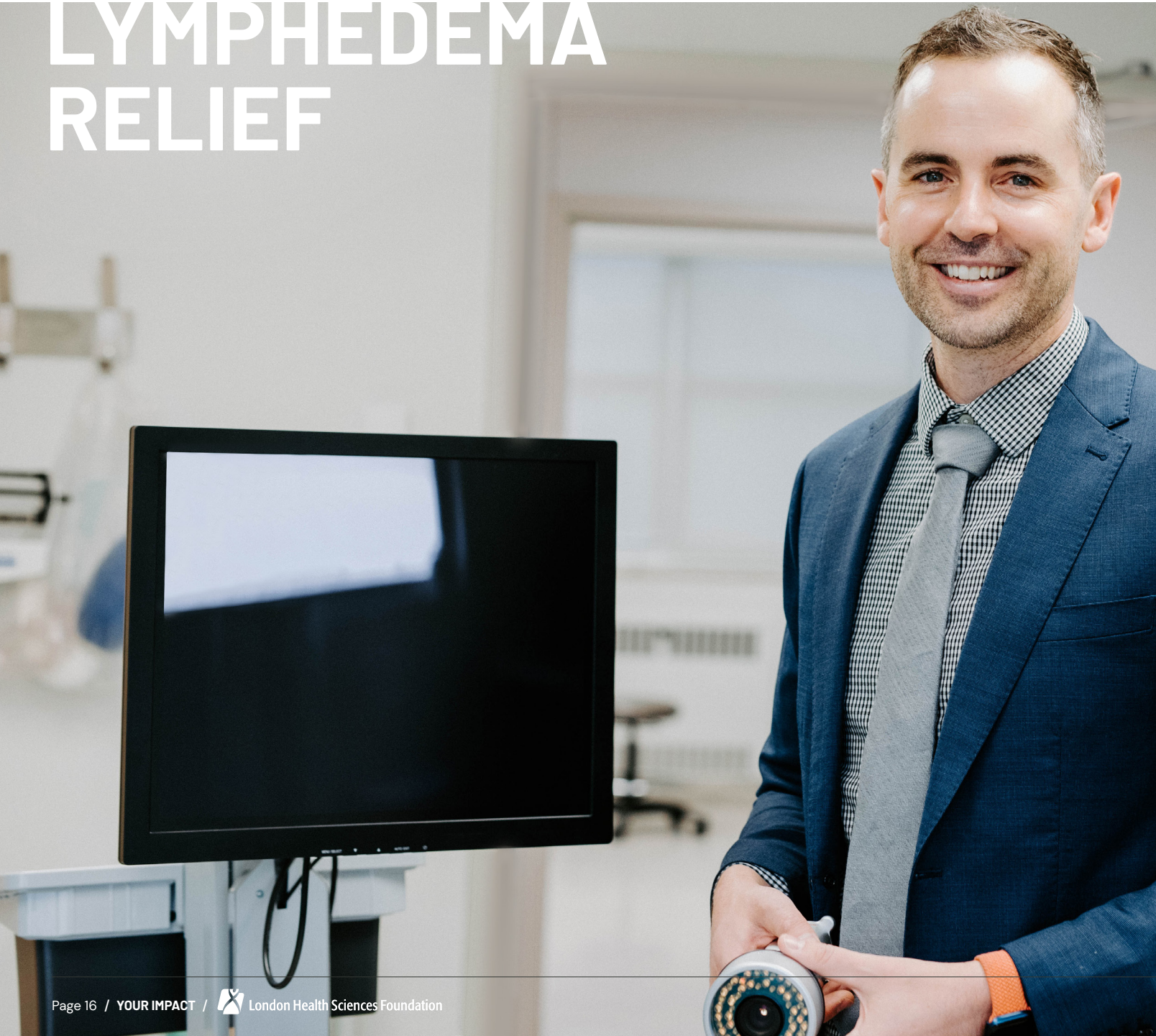
For now, Dr. Qiabi is thankful to the donors who made it possible for him to treat people with early-stage esophageal or stomach cancer. But until systems are in place to make screening more available, it’s important for people to take charge of their health and investigate should they suspect reflux.





# AFTER CANCER: A SURGICAL PATH TO LYMPHEDEMA RELIEF

Few things elicit as visceral a reaction as the word cancer. It is a disease far too common for comfort, with causes rooted in everything from cigarettes and tanning beds to home care products and the very foods we eat. There's likely not a person reading this who doesn't know of someone who's experienced cancer.





But what comes after cancer? We're all so focused on beating it, on surviving it, on throwing up bumper stickers in solidarity with those facing it that we rarely take the time to consider what follows. One such obstacle is called lymphedema and it's not so much a byproduct of cancer itself as it is a byproduct of our treatment for it.

Once cancer has made its way to the lymphatic region, radiation, surgery or a combination of the two may be needed. Cancer and its required treatment can damage the lymphatic system to the point that it cannot perform its usual function. Without the nodes and channels to carry lymphatic fluid through the body, there's nowhere left for it to go except to accumulate in the tissue. This is lymphedema, and currently, there is no cure.

As a progressive, highly distressing condition, people with lymphedema are more prone to infections, their limbs swell and may ooze fluid, and if not intensively managed can result in permanent disability.

"Patients may be told the risks before treatment, but when faced with a cancer diagnosis, it's difficult to conceptualize the swelling of a limb and how that might impact their life," says Dr. Andrew Simpson, a reconstructive plastic surgeon at London Health Sciences Centre (LHSC).

Today, Dr. Simpson helps reduce the effects of lymphedema on patients through a surgical procedure known as lymphovenous bypass in an attempt to increase their quality of post-cancer life. First, indocyanine green (ICG) dye is administered underneath the skin. Next, using a near-infrared scanning system, Dr. Simpson manipulates its camera to detect the lymphatic fluid, which fluoresces on the monitor's readout and helps in identifying patients who may benefit from the procedure and in planning surgery. With the problem area identified, Dr. Simpson schedules surgery, where he will sew lymphatic vessels to veins using sutures thinner than a human hair.

As the only physician at LHSC performing this intricate procedure—and LHSC being only one of a few health centres in Canada to offer it—Dr. Simpson is also careful to manage expectations.

"I am clear with everybody I see by telling them this is not a cure," he says. "There is no cure, but this surgery may decrease reliance on compression therapy, slow progression and reduce infections."

Thanks to donors who invested in not only the near-infrared imaging system, but some of the finest, most precise microsurgical equipment available to surgeons, Dr. Simpson can provide some respite for patients who find themselves struggling with recovery from cancer. And while it may not be a complete fix, if people feel better, if they can go about their lives without as much disruption or hardship, then Dr. Simpson says it's worth it. Because second chances shouldn't be subject to stipulations.



**Dr. Andrew Simpson**

# THE POWER OF KNOWLEDGE: FELLOWSHIPS AT LHSC

London Health Sciences Centre (LHSC) is one of the largest acute-care teaching hospitals in the country. It celebrates a rich history of innovation in health stretching back nearly 150 years with its physicians and scientists going on to make life-changing discoveries and perform world-first surgeries.

The hospital provides in-depth fellowship opportunities to help health-care professionals build upon and further cultivate expertise in their respective fields. Many of these programs are supported by London Health Sciences Foundation's incredible donors and open the doors for fellows to participate in vital research, thereby allowing them to contribute to medical advancements that could potentially lead to healthier outcomes. Through a concerted effort to demonstrate their commitment to ongoing professional development, fellows drive innovations needed to inform or even change the current standard of care.

*The greatest joy for a clinician is to see patients get better. In my first month at LHSC, I saw a patient with advanced lung cancer who was very sick and whose illness was progressing rather quickly. After adjusting their therapy, this patient successfully beat the odds. Now, I eagerly await his visits to the clinic and am heartened by how much his health continues to improve.*

*My journey as a fellow has empowered me to have a better understanding of therapeutics in lung cancer. Thanks to the donors who help make these fellowship programs possible, I am more determined than ever to pursue novel research to improve the care and well-being of patients living with this terrible disease.*

**Dr. Saurav Verma, MD, DM, Thoracic Cancer Fellow**





*I began my stroke fellowship at LHSC in July 2022. During my training, I worked on a quality improvement project, which entailed a quarterly review of the endovascular therapy (EVT) mortality data. The review challenged me to ask pertinent questions to better understand the drivers of mortality, leading to discussions that would inform appropriate, evidence-based patient selection criteria for EVT and ways to mitigate factors responsible for mortality.*

*Support of the Stroke Fellowship goes a long way toward enhancing training and preparing physicians for the future. I am grateful for the opportunities this fellowship has provided me and I am excited for the next phase of my career, helping more patients experiencing acute strokes.*

**Dr. Teye Umanah, MD, MSc, Dip-ABPN, FRCPC, Stroke Fellow**



## DID YOU KNOW?

In 2006, Canada introduced rules to encourage people to donate publicly traded securities to charities by eliminating the taxable capital gain on the securities and making a donation tax credit available. The 2023 federal budget is proposing several amendments to the Income Tax Act (ITA) potentially impacting high net worth donors and becoming effective January 1, 2024. These complex changes are part of the Alternative Minimum Tax (AMT) regime. At the time of writing, one of these proposed changes includes donations of securities. If you're planning to make a strategic donation of publicly traded securities to our Foundation in 2023, we are always happy to assist. While these proposed tax amendments may not impact all of our donors, you may wish to seek professional advice and consult with your financial advisor to determine your most effective tax planning options.

[www.lhsf.ca](http://www.lhsf.ca)

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