



Close to Her Last Breath

Shana Greatrix from Port Ryerse had trouble catching her breath. Unbeknownst to her, she was dangerously close to losing her life.

“It was allergy season, so I assumed that was the cause of my breathing problems,” says Shana. “But I didn’t get better and my heart rate spiraled out of control.”

Shana’s neighbour drove her to the local emergency department. Her heart rate was at a dangerous 175 beats per minute.

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Close to Her Last Breath

(Continued from page 1) “I was frightened and thought I was going to die. I had no idea what was happening to me.”

Doctors administered medication to reduce Shana’s heart rate. Requiring specialized cardiac care, Shana was subsequently transported by ambulance to Hamilton General Hospital.

At The General, testing revealed that Shana’s aortic valve was not closing properly, causing blood to leak into her lungs. She underwent urgent open-heart surgery to replace her valve.

“Although I was hesitant about the surgery, the doctors and nursing team did an excellent job of putting my mind at ease. I’m alive today because of my valve replacement.”

Following the surgery, Shana worked with an occupational therapist to ensure she was sufficiently mobile and could walk up and down stairs before being discharged home.

“Going home and seeing my friends and family was very emotional. I’m so grateful that people like me who live in a rural community are able to receive exceptional cardiac care at Hamilton General Hospital and have a second chance at life.”

Shana required a year to fully recover, but she is back to enjoying hobbies like dancing and travelling.

“Every dollar that is donated to Hamilton Health Sciences Foundation makes a tremendous difference and is vital to ensuring that patients like me continue to receive excellent care.”



To watch a video about Shana’s story or to donate, visit hamiltonhealth.ca/shanag

A Change of Thinking about Eating Disorders

An eating disorder affects every aspect of a person’s well-being. Whether one is struggling with anorexia nervosa, bulimia or binge-eating, the potential health consequences are significant and dangerous.

“The Pediatric Eating Disorders Program at McMaster Children’s Hospital is one of the busiest in the province,”



Clinical Manager Paul Agar with Medical Co-Directors Dr. Jennifer Couturier and Dr. Natasha Johnson

explains Clinical Manager Paul Agar. “We take an evidence-based approach to care with our six-bed inpatient unit, four-bed day-treatment program and outpatient program. Both the inpatient and outpatient units have seen an ongoing increase in the number of patients who require care.”

Eating disorders are considered mental health disorders, so a patient’s way of thinking must be addressed.

“We use psychotherapy to provide patients with valuable new skills to deal with emotions,” says Dr. Jennifer Couturier, Medical Co-Director of the Pediatric Eating Disorders Program. “The therapy encourages patients to live in the moment and accept things they cannot change while also working toward goals that they can affect.”

Dr. Couturier works closely with many different specialists, including pediatricians, nurses, nurse practitioners, dietitians, psychologists and social workers to ensure that the entire family is receiving the support they need.

“It’s extremely rewarding to provide care for young patients and help them on their path to adulthood,” she says.

Historic Endowment to Fund Cutting-Edge Research

Hamiltonians Margaret and Charles Juravinski are continuing their longstanding support of health care excellence with the creation of an endowment of more than \$100 million. This will be one of the largest legacy gifts in Canadian history, and it will provide up to \$5 million a year in perpetuity to the partnered organizations.

This endowment will result in the creation of the Juravinski Research Centre, a partnership between Hamilton Health Sciences, McMaster University and St. Joseph's Healthcare Hamilton. The Centre will conduct important medical research in such diverse areas as cancer, mental health, lung and respiratory care, and diseases of aging.

Hamilton Health Sciences Foundation is grateful to Charles and Margaret for leaving an incredible legacy that will inspire others to support outstanding health care for the region.



Margaret and Charles Juravinski

A Worldwide Diabetes Study in our own Backyard

Doctors and scientists at Hamilton Health Sciences are renowned for their work as global leaders in medical research. Endocrinologist Dr. Hertzell Gerstein is just one example of this leadership.

Dr. Gerstein led a group of international academics who collaborated on the REWIND trial, a study to determine if a type of medication used to lower blood sugar could have other health benefits for patients with type 2 diabetes.

This clinical trial involved the recruitment of 9,901 people at 371 clinical centres in 24 countries who agreed to participate in a double-blind study. The research project was coordinated at Hamilton Health Sciences and all the data was analyzed in Hamilton.

“We found that people who were given medication once a week in addition to their other therapies had a 12 per cent lower risk of serious heart disease, stroke or death from cardiovascular causes compared to people who were given the placebo,” explains Dr. Gerstein. “We also found a reduced risk of kidney disease.”

Dr. Gerstein and his team continue to analyze the effect of the medication on other outcomes for patients.

“Research is so important because it changes the way we practice medicine,” he says. “It is extremely gratifying to work on a project like this that can make a real difference in the lives of patients around the world.”



Dr. Hertzell Gerstein

Enabling Mental Health Spaces for Cancer Patients

A cancer diagnosis can significantly impact a patient's mental well-being.

Proceeds from the inaugural *Illuminight* fundraiser supported the redevelopment of therapeutic spaces at Juravinski Hospital and Cancer Centre, including 12 counselling rooms and one group-therapy room, to enable the creation of a mental health program for cancer patients and their families.



Krystal Rioux, Dr. Michael Brown, Helaine Guther-James and Dr. Jessica Wasserman from the Mental Health Team

“We care for the whole person and not just their disease. Our team works with patients and families in one-on-one sessions to diagnose and alleviate any mental health concerns associated with cancer, including pain, anxiety, body image and fatigue,” explains psychologist Dr. Karen Zhang.

The redevelopment helped in the recruitment of a psychologist, two psychiatrists and a mental health nurse to address the psychological well-being of patients and families. Social workers and dietitians are also part of the inter-professional team.

“This is a highly collaborative team,” says psychiatrist Dr. Jessica Wasserman. “We’re involved with the patient throughout all phases of their treatment, from initial diagnosis to remission or end-of-life care.”

In addition to patient and family care, the therapeutic spaces also support the clinical, academic and research activities of the team.

“We’re sincerely thankful to donors for enabling spaces where our patients and families can speak openly about sensitive topics,” says Dr. Wasserman. “It’s incredibly rewarding to see the positive impact we’re already having on our patients.”

Fellowship Enables Vital Breast Cancer Research



Dr. Mira Goldberg

“I’m passionate about conducting research on the care of breast cancer patients,” says Radiation Oncologist Dr. Mira Goldberg. “The Dr. Mark Levine Fellowship has enabled me to develop an expertise in foundational research, including clinical trials and observational studies, as well as clinical care in this area.”

After she completed her residency training at Juravinski Hospital and Cancer Centre in 2016, Dr. Goldberg was awarded the Foundation-funded Fellowship and she embarked on a journey of exploration and discovery.

Dr. Goldberg’s research is focused on various aspects of patient care,

including treatment options for older patients with early breast cancer, and the development of new guidelines for radiation planning, which will be used in clinical trials.

“Under the mentorship of Dr. Timothy Whelan and Dr. Mark Levine, the Fellowship has allowed me to participate in research that can ultimately affect patient outcomes,” explains Dr. Goldberg. “I’m extremely grateful for the opportunities that the Fellowship has afforded me. This was made possible by the generous donors who support Juravinski Hospital and Cancer Centre Foundation.”

Less Pain and Scarring for Bypass Patients

Sometimes the best option for a cardiac patient is to open up the chest and bypass blocked blood vessels surgically. A new system at Hamilton General Hospital will help to reduce discomfort for these patients and help them recover quickly.

“In order to do bypass surgery, veins are often taken from the leg and used as conduits to bypass blockages in the heart,” explains Cardiac Surgeon Dr. Adel Dyub. “Traditionally, a long incision is made from the groin down to the knee, where the vein is removed.”

The leg incision is often longer than the actual chest incision, and patients often complain that the leg is more painful during recovery than the chest.

A generous donor has enabled the purchase of a new endoscopic vessel harvesting (EVH) system, which has several benefits for patients and surgeons.

“The system has a tiny camera to guide a special cutting tool that is inserted underneath the skin,” says Dr. Dyub. “Instead of requiring a long incision in the skin for the entire length of the vein, we make only two tiny incisions at the ends of the blood vessel that we need.”

The device is snaked under the skin and the vein is removed with only a small amount of cutting required. This results in quicker recovery, less pain, minimal scarring and a reduced risk of infection.

“As the leading cardiac surgical centre in Ontario, it is critical to have the latest technology to enhance patient care.”



Dr. Adel Dyub

A New Life after a Spinal Cord Injury

The spinal cord is like a highway, connecting the brain to the different parts of the body. If that pathway is damaged, the brain’s instructions cannot reach their destination.

“We see patients who have sustained injuries from traumatic events like car accidents and sports injuries, as well as patients who have degenerative conditions,” explains Stephen Patton, Clinical Manager of the Spinal Cord Injury Program at the Regional Rehabilitation Centre.

Physicians, nurses, occupational therapists, physiotherapists, social workers, dietitians and other specialists work closely with one another to provide integrated and comprehensive care.

“The team helps patients regain mobility and the ability to do day-to-day tasks like dressing and bathing,” says Stephen. “They are dealing with a significant life change and it is important to work closely with family members, who often play a caregiving role after the patient is discharged.”

The Spinal Cord Injury Program sees patients who are transferred from local hospitals throughout south-central Ontario, from Niagara Falls and Brantford to Kitchener-Waterloo and Burlington, as well as patients from the Greater Hamilton Area.

“I’m fortunate to work with such a great team. We take great pride in helping patients regain independence and quality of life.”



Suzanne Anthony, Michelle Read, Stephen Patton and Anastasia Stojakovic from the Spinal Cord Injury Team

Innovative New Procedure - A Rare Cardiac Surgery

The teams at Hamilton General Hospital are world-renowned for innovation, especially when it comes to cardiac care. For some patients, this can mean the difference between life and death. For Verna Ross of Thunder Bay, the cardiac team's willingness to think outside of the box gave her a new lease on life.



Go with the Flow

Your heart has four valves that control the movement of blood through the heart in the right direction. The mitral valve, which lies between the upper- and lower-left chambers of the heart, has two leaflets that open to let blood move forward during half of a heartbeat. They close to keep blood from flowing backward during the other half of the heartbeat.

Verna Ross was suffering from mitral stenosis, which is a narrowing of the mitral valve's opening that affects the valve's ability to function. Without treatment, Verna could have suffered a fatal heart failure.

It began when the 87-year-old experienced shortness of breath, a racing heart rate, a persistent cough and a flickering of vision. Scans revealed that she had a dangerous heart condition that required urgent care.

"I was suffering from mitral stenosis, a build-up of calcium that was preventing my valve from working properly," explains Verna. "This was also causing fluid to build up in my lungs, making it difficult to breathe."

Verna had undergone valve-replacement surgery in 2014, and now she was looking at the possibility of undergoing another valve replacement.

In June 2019, Verna was flown by air ambulance to Hamilton General Hospital, the leading cardiac surgical centre in the province. The team at The General determined that a normal valve-replacement procedure was too risky because the calcification of the valve was too severe.

Cardiac surgeons Dr. Richard Whitlock and Dr. Victor Chu, in collaboration with the Structural Heart Team, decided to try an innovative new procedure that involved implanting a new valve into the existing one to restore normal cardiac function. This procedure was so rare it was one of the first times it was tried in Canada.

After different possible procedures were simulated using advanced software, it was determined that this approach was the safest for Verna. Dr. Tej Sheth of the Structural Heart Team is an expert in the software and he teaches physicians around the world about its use.

"The doctors and staff did a great job keeping me and my family informed about what was going on," recalls Verna. "I knew I was in good hands."

The surgery went smoothly and Verna recovered at The General for the next week. She was flown back to Thunder Bay in July so she could continue her recovery closer to home.

"My breathing is much better, my cough is gone, my heart rate is back to normal and I'm slowly regaining strength in my legs," she says. "I can never thank the doctors and staff enough for the care they provided."

The use of this new procedure is just one example of how the teams at Hamilton General Hospital stay on the leading edge of patient care and continue their spirit of innovation.

Solace for the Mind and Spirit

The chapel/spiritual centre at St. Peter's Hospital is many things to many people. For some, it is an oasis where one can go for quiet reflection. For others, it is a place of inspiration where one can recharge.

"All are welcome. This is a space for spiritual and emotional healing that is open to people of all faith traditions and people who are not religious," explains Mary Fleming, a Psycho-Spiritual Practitioner (formerly known as Chaplain) at St. Peter's Hospital. "We also have a private room where we can meet with patients, families and staff to offer support as they navigate through a difficult time."

"Spiritual" care is for people of both religious and non-religious backgrounds. It is a holistic approach that helps individuals and their loved ones cope while dealing with major changes in life.

"While assisting patients with the spiritual and psychological aspects of their hospital stay, a big focus is on helping people retain a sense

of self and dignity," says Psycho-Spiritual Practitioner Femke Visser-Elenbaas. "We also coordinate the involvement of people from the community, such as faith leaders."

Sometimes patients and families simply need someone to speak with, and Mary and Femke provide a compassionate ear when needed most.



Mary Fleming and Femke Visser-Elenbaas

Standing Strong Again

Eleanor Churchill was 85 years old when she fell down a flight of stairs in her home.

"I smashed my shoulder, broke my foot and cracked some ribs. When I looked down at my arm, I could see a bone sticking through my skin," Eleanor recalls of that terrifying day in February 2019.

Since Eleanor lives alone, she gathered her strength, crawled to a phone and called for help.

The ambulance took Eleanor to her local hospital in Hagersville. She was subsequently transferred to Hamilton General Hospital, where she underwent surgery to repair her shoulder and arm.

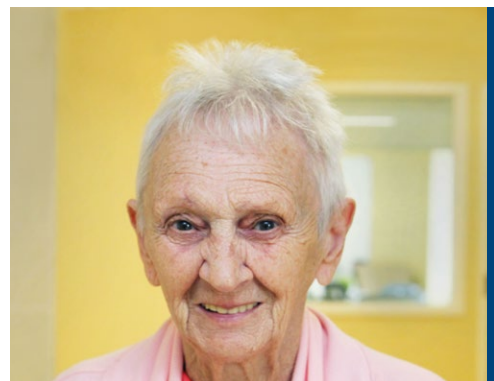
"As I recovered at The General, I found it difficult to accept that I'd

lost some of my independence. I couldn't use my left arm and I needed a wheelchair to get around," explains Eleanor.

Admitted to the Restorative Care Program at St. Peter's Hospital, Eleanor spent weeks working with a multidisciplinary team to regain strength, balance and mobility.

"Physiotherapists worked with me to get my legs working again," she says. "I often exercised on the climbing stairs and the bicycle, and soon I was able to get out of my wheelchair and use a walker."

Occupational therapists helped her regain motor control in her hands by practicing everyday tasks, such as making sandwiches, peeling vegetables and folding clothes.



Eleanor Churchill

Eleanor was discharged after two months at St. Peter's Hospital. She will always share a deep connection with the doctors, nurses and therapists who helped on her journey.

"Thanks to the care I received, I was able to get back on my feet and get back to my life," she says.

A Legacy of Life-Saving Stem Cell Transplants

Hamilton Health Sciences has an accomplished history of providing life-saving stem cell transplants for blood cancer patients. Part of Hamilton Health Sciences, Juravinski Hospital and Cancer Centre is one of only three hospitals in Ontario providing all forms of adult stem cell transplants.

In July 2019, Juravinski Hospital and Cancer Centre celebrated a major milestone when Dr. Brian Leber

performed the 1,000th allogeneic stem cell transplant. This procedure involves the infusion of stem cells that are collected from a matching donor.

“It’s a wonderful testament to how long the unit has been functioning and the many patients we have helped over the last three decades,” says Dr. Leber.

In the past, transplants required stem cells that were taken from a relative of the patient. In 1988, Dr. Irwin Walker performed the first successful Canadian transplant with an unrelated donor.

“It was a milestone in transplantation because only a minority of patients who needed a transplant actually had a matched donor,” says Dr. Walker. “Now that we’re able to use unrelated donors, 80 per cent of patients who need a stem cell transplant could receive one.”

In 2018, Juravinski Hospital and Cancer Centre Foundation achieved its \$5-million fundraising goal for the *Tomorrow Stems From You*® campaign to enable the expansion of a dedicated clinical space and the purchase of essential equipment. However, ongoing donor support is vital for the purchase of additional equipment and patient amenities.



Dr. Brian Leber (left) with Dr. Irwin Walker

Reducing the Stigma of Testicular Cancer Care

Although testicular cancer is rare, it is the most common type of solid tumour in men between the ages of 15 and 40. Juravinski Hospital and Cancer Centre provides a multidisciplinary approach to caring for patients with this form of cancer.

“Testicular cancer has a relatively high cure rate,” explains Medical Oncologist Dr. Aly-Khan Lalani. “Juravinski Hospital and Cancer Centre has highly trained experts who can provide the full range of treatment from surgery and radiation to chemotherapy.”

Patients are monitored closely during and after treatment, and optimizing their fertility is an important long-term goal.

“We strive to limit side effects and maximize the quality of life. The most rewarding part of my job is caring for these highly motivated, young patients who can go on to live full and productive lives.”

Testicular cancer is simple to diagnose, yet many men feel embarrassed to seek medical attention.

“We encourage all men to visit their physician if they notice a lump or swelling in their testes. Most men can have positive outcomes if the cancer is detected early.”



Dr. Aly-Khan Lalani



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