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Local Farmer Bailed out of Emergency by Family

Rare accident results in one-month stay at HSC Winnipeg



Vern Klassen (fourth adult from left) was rescued by his family when his tractor flipped over, pinning him down.

The question “Am I going to die?” isn’t one that often flashes through your mind while doing yardwork. It certainly wasn’t for Vern Klassen, a 69-year-old semi-retired farmer in Oak Bluff, Manitoba, who had time to kill after dinner before watching a hockey game on TV. Klassen hopped on his 100-horsepower tractor—just like he has done for over 50 years—to move manure to compost his garden. While backing up, Klassen kept a close eye on the bucket at the front of the tractor to ensure he didn’t hit a nearby fence.

The nanosecond when Klassen lifted the bucket while reversing down the slope of a ditch on his 15-acre property was all it took to throw the tractor’s weight off. Within the blink of an eye, Klassen’s tractor flipped over and pinned him in a foot of water.

“It happened so fast... I was concentrating on doing a job, the tractor flipped, then reality kicked in. I thought—am I going to die?” says Klassen.

Another first for Klassen was that before hopping on his tractor, he put his cellphone in his shirt pocket instead of his pant pocket. Because of this, Klassen was able to reach for his phone to call 911 while under his tractor. Despite having his leg and pelvis crushed by a 12,000-pound tractor, Klassen was alert and explained to the 911 operator what happened and where he was. “In over 50 years, this was my first major accident. They really do call them accidents for a reason,” reflects Klassen.

Thankfully, the water and mud in the ditch provided a slight cushion for his pinned body while Klassen awaited help. Even more thankfully: Klassen’s children decided to stop by for a visit.



“In over 50 years [as a farmer], this was my first major accident. They really do call them accidents for a reason,” says Vern Klassen.

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Vern Klassen, a semi-retired farmer in Oak Bluff, Manitoba, survived his 12,000-pound tractor rolling over on him.

Upon arriving at her parents' home, Klassen's daughter immediately saw the upside-down tractor and ran to the house to get her mom while her husband rushed to Klassen's aid. Klassen's wife held his body out of the water while Klassen's son-in-law hopped on another tractor with the goal of freeing Klassen. With the help of Klassen's other son-in-law, he maneuvered the bucket of a new tractor under the wheel of the flipped tractor to free Klassen.

“When I wasn’t allowed anything to eat or drink, she would give me ice chips and kept dabbing my head. If I was in pain, she would call for a nurse. Having her was crucial when I couldn’t have visitors due to COVID restrictions.”

— Vern Klassen

Shortly after, first responders, RCMP, and the Shock Trauma Air Rescue Service arrived. Within 10 minutes, Klassen arrived at HSC by helicopter air ambulance; the next day, Klassen had his pelvis operation—which included nine screws and plates. The next few weeks at HSC were taxing; in addition to pelvic surgery, Klassen had a broken leg and required reconstructive surgery on his knee.



Vern Klassen, post-operation, working on his mobility with HSC Winnipeg staff.

When asked about his one-month stay at HSC, Klassen recalls that the care was excellent—from the surgeons, physiotherapists, health care aides, nurses—and especially his sitter, an in-room companion and monitor. “When I wasn’t allowed anything to eat or drink, she would give me ice chips and kept dabbing my head. If I was in pain, she would call for a nurse. Having her was crucial when I couldn’t have visitors due to COVID restrictions,” says Klassen.

Between working diligently with at-home and in-hospital physiotherapy, Klassen can walk again. As for getting back on his tractor, Klassen didn’t let one accident stand in his way and hopped back on within a year of his accident.

“I decided early on during my recovery that I am lucky to be alive—I am thankful every day,” says Klassen.

HSC Foundation Secures \$2 Million from MPI to Support Research for Traumatic Brain Injuries

World-leading research focuses on personalized care



Dr. Frederick Zeiler's focus is to move away from a one-size-fits-all care model to instead embrace personalized medicine approaches for the reduction of death and disability in severe TBI patients.

This past October, the HSC Foundation together with Manitoba Public Insurance (MPI) and the University of Manitoba (UM), announced \$3.5 million in combined support of world-leading research led by Dr. Frederick Zeiler into severe traumatic brain injuries (TBIs).

Beausejour-born Dr. Zeiler, associate professor of surgery at the Max Rady College of Medicine, a neurotrauma neurosurgeon at HSC Winnipeg, a clinician-scientist at UM, and the current professor of MPI's Professorship in Neuroscience, will use this support to help develop more personalized care focused on reducing ongoing brain damage during the acute phase. Such discoveries and advancements carry the potential in the long term to lower fatalities, disabilities, and rehabilitation needs.

"We are once again witnessing the power of philanthropy to mobilize a community, advance research, and improve care," says HSC Foundation President and CEO Jonathon Lyon. "Progress in this area has already been made as it relates to building a framework for new drug development, risk reduction by using non-invasive technology, and more. We are thrilled to see what further advancements exist, thanks to the support from MPI and the University of Manitoba."

With these \$3.5 million in investments, the fund will be in the \$5 million range. Through this fund, the MPI

Professorship in Neuroscience can be elevated to an MPI Chair in Neuroscience, which will raise the profile of the work, attract further support, and secure its future. MPI's dedicated sponsorship will go toward cutting-edge research aimed to help develop more tailored care options, monitoring technology, and a better understanding of the various paths to recovery.

TBIs are a leading cause of death for people under 35 and are the result of damage to brain tissue due to external force. Motor vehicle collisions and motor-vehicle-related accidents are the leading cause of TBIs. In Canada, there are approximately 165,000 TBIs annually, with approximately 400 moderate-to-severe TBI patients admitted to HSC every year.

"We know many Manitobans are affected by TBIs, be it themselves directly or the loved ones who support them through their ongoing care," says MPI President and CEO Eric Herbelin.



HSC Foundation secures \$2 million from MPI to support research for traumatic brain injuries. "We are once again witnessing the power of philanthropy to mobilize a community, advance research, and improve care," said HSC Foundation President and CEO Jonathon Lyon.

"This is a great example of recruiting high-quality talent to Manitoba and being at the forefront of research excellence," says UM Vice-Provost (Health Sciences) and Dean of Rady Faculty of Health Sciences Dr. Peter Nickerson.

This funding will support costs related to research as well as operations, expansion, and personnel—and positions Manitoba as a global leader in TBI patient research.

A Powerful Microcosm

HSC surgeon shines a light on the potential of Operation Excellence

By Dr. Biniam Kidane, Thoracic Surgeon, HSC Winnipeg

Operation Excellence is a \$100 million, six-year plan to revitalize and refocus HSC as a surgical centre of excellence and innovation. The plan centres on facility upgrades and the acquisition of new, minimally invasive diagnostic and surgical technology. Some of this remarkable technology is already in use at HSC.

I will never forget December 17, 2019. The Wilf Taillieu Thoracic Surgery Clinic and Endoscopy Unit—which was funded by HSC Foundation donors—had been open for only a few months.

On that day, we performed Manitoba’s first fully outpatient endoscopic submucosal resection of esophageal cancer. We did this with no incisions and completely removed a large and deep cancer through the mouth. The patient went home in 12 hours, had no pain, and was back to regular activities the next day. We were also able to fast-track the patient’s pre-operative tests which allowed the procedure to be scheduled quickly.

“What we’re seeing in the Wilf Taillieu Thoracic Surgery Clinic and Endoscopy Unit is proof of concept. We know for a fact that the implementation of minimally invasive equipment throughout the hospital will save lives and improve recoveries.”

— Dr. Biniam Kidane

We were able to accomplish this in our clinic by using new, state-of-the-art, minimally invasive technology. Without this equipment, it would have taken twice as long to do the pre-operative tests, and the cancer removal would have required major surgery—cuts into the chest and abdomen, more pain, more risk, a hospital stay of up to 21 days, and a longer, more painful recovery at home.

The Taillieu Clinic is an important example—a powerful microcosm—of what is possible through Operation Excellence. As we embrace more minimally invasive surgeries throughout the hospital, we will undoubtedly see the same type of outcomes as we are seeing in the Wilf Taillieu Thoracic Surgery Clinic and Endoscopy Unit. It is tomorrow’s health care, today. And we will get there with your support.



Dr. Biniam Kidane, Thoracic Surgeon, HSC Winnipeg

While much of my work as a thoracic surgeon involves cancer, there are other complex and life-altering conditions that my colleagues and I treat. I recently had a 90-year-old patient suffering from Zenker’s diverticulum. Zenker’s is a condition where a pouch forms in the patient’s esophagus and food gets trapped. The patient can’t eat or drink normally and quality of life is seriously affected. In the past, resolving this would require open neck surgery and a long, painful recovery. And for a 90-year-old, the surgical risks would have been much too high.

So, we used a minimally invasive procedure called a Z-POEM. With our new equipment, we were able to see our work on a high-definition monitor. No cuts, no general anesthetic, and the patient went home 12 hours later. In a matter of days, the patient was enjoying a family barbecue.

What we’re seeing in the Wilf Taillieu Thoracic Surgery Clinic and Endoscopy Unit is proof of concept. We know for a fact that the implementation of minimally invasive equipment throughout the hospital will save lives and improve recoveries. We also know that these technologies will free up operating rooms and beds, reduce diagnostic and surgical wait times, and create remarkable efficiencies throughout the health care system.

I am very excited to see Operation Excellence move forward for the benefit of all Manitobans.

To learn more about Operation Excellence and to make your donation, visit OperationExcellence.ca.

A New Approach to Medical Research

Donor-funded research working with patient partners to understand ICU-acquired weakness



Dr. Asher Mendelson (front) and his team (left to right): Dr. Barret Rush, Dr. Marcus Blouw, and Dr. Rodrigo Villar are using advanced non-invasive tools to understand the relationship between blood flow, oxygen delivery, and exercise capacity in ICU survivors.

Up to 80 percent of intensive care unit (ICU) survivors experience long-term health issues after discharge. ICU-acquired weakness is one of the most common side effects of an ICU stay, and leaves patients with weakness in their skeletal muscle. These patients are unable to perform common tasks of daily living (e.g. climbing stairs, brushing hair), which impacts their quality of life and the lives of their family members.

Dr. Asher Mendelson's study, "Microvascular Monitoring in ICU Survivors to Evaluate ICU-acquired Weakness," is looking at how microcirculation (the smallest blood vessels in the body) might play a major role in a patient's recovery after they leave the ICU—with the help of HSC Foundation donors and patient partners.

The study's participants are ICU survivors with lived experience of critical illness, and are providing Dr. Mendelson and his team with valuable insight to help inform their study and to ensure the research aligns with their perspectives in critical illness.

"It's been an invaluable perspective, and I think this is becoming more and more essential to best research practices. Research used to be on patients, then it was for patients, but now it's doing research with patients as partners," says Dr. Mendelson. "I think that's an important step and has informed how we design our research studies and how we evaluate meaningful outcomes for our research."



Dr. Asher Mendelson is one of five recipients of a 2022 HSC Foundation General Operating Grant: "...by supporting research, you are supporting innovation and best practices in health care—and establishing HSC as a place where innovative and exciting science and health care happen together."

It is becoming increasingly important to understand the long-term effects of critical illness in order to better help ICU survivors recover after discharge. The COVID-19 pandemic only increased this need given the large numbers of patients requiring ICU admission and increased use of critical care resources.

Dr. Mendelson and his team, including clinicians and researchers from the University of Manitoba's Department of Internal Medicine and Faculty of Kinesiology and Recreation Management, are using advanced non-invasive tools to understand the relationship between blood flow, oxygen delivery, and exercise capacity in ICU survivors. These findings will be used to identify patients at high risk for long-term complications and help develop new treatment and rehabilitation strategies to avoid any complications.

"Optimizing their treatments will make it easier for patients in the long term and will also help their caregivers. It is better for the entire health care system," says Dr. Mendelson. As Dr. Mendelson states, every patient has a different trajectory of recovery, and his study will help doctors better understand and support individual patient's needs.

Dr. Mendelson is grateful for his HSC Foundation grant and the donors who made it possible. "Thank you for supporting this study and understanding that research is an integral part of health care. By supporting research, you are supporting innovation and best practices in health care—and establishing HSC as a place where innovative and exciting science and health care happen together."

This year, HSC Foundation, with the support of its donors, invested over \$355,000 in health care research.

Learn more about Dr. Mendelson's study and the other research projects funded by 2022 grants at <https://www.hscfoundation.mb.ca/about/grants/2022-grant-recipients/>.

HSC Foundation Unveils Paul Albrechtsen Interventional Radiology Suites

New facility provides better patient care, increased patient access



Paul Albrechtsen Interventional Radiology Suites. Photo courtesy of Shared Health.

Charles Schroeder is a self-proclaimed “frequent flyer” of the Paul Albrechtsen Interventional Radiology Suites because of the effects Wilson’s disease—a rare genetic disorder—has on his liver. After his tenth trip to the Suites, Schroeder can confirm they are providing patients with improved care and a safer, more comfortable experience.

At the official unveiling of the Paul Albrechtsen Interventional Radiology Suites on June 9, 2022, Schroeder said: “The people who work in interventional radiology at HSC are outstanding. The doctors, the nurses, the technicians, the clerks—everyone is focused on the well-being of the patients. Thanks to the new space and state-of-the-art equipment, these dedicated professionals can truly showcase their skills and provide exceptional care.”

The \$10.2 million project was made possible by a transformational \$5 million gift from the late Paul Albrechtsen—the last gift he made to the HSC Foundation during his lifetime, and one of the most impactful—and a \$5.2 million investment by the Province of Manitoba.

Interventional radiology uses minimally invasive techniques to diagnose and treat patients through their blood vessels and arteries. “Each new generation of equipment provides better outcomes and reduces the patients’ exposure to radiation,” says HSC Foundation

President and CEO Jonathon Lyon. “Mr. Albrechtsen recognized the critical impact the interventional radiology suites would have on patients and their families. He was a great friend to the HSC Foundation and was passionate about patient care and medical research, and fascinated by new technologies.”

Before moving the old radiology suites to HSC’s Diagnostic Centre of Excellence, and giving them their titular name, the team was able to treat 10 interventional radiology patients per day. Now, as many as 16 patients can be treated, meaning roughly 2,100 more people every year can be given the health care they need.



Charles Schroeder sharing his story at HSC Foundation’s unveiling of the Paul Albrechtsen Interventional Radiology Suites.

The interventional radiology suites are used to treat both the brain and the body, and will allow for a more collaborative approach for patients with complex vascular diseases that require multiple specialists. The suites also help to switch rooms for emergency cases when other, more conventional rooms are occupied for ongoing cases.

“We now have the same caliber of equipment that you would find in leading hospitals anywhere,” says HSC Interventional Neuroradiologist Dr. James McEachern. “The new technology includes real-time imaging that allows us to treat blood clots causing strokes and aneurysms, and perform numerous other procedures with a level of precision that wasn’t possible even a few years ago. This marks a significant improvement in patient care and is leading to better outcomes.”

You can learn more about this remarkable, life-changing facility at: <https://www.hscfoundation.mb.ca/uncategorized/hsc-foundation-unveils-paul-albrechtsen-interventional-radiology-suites/>.

“The Code Blue was me”

HSC patient commits to “gratitude for life” donations

Some called her the “Comeback Woman”; others called her the “Miracle Woman”. But Rev. Donna Smalley simply calls herself fortunate. And grateful.

In 2016, Smalley was diagnosed with achalasia, a rare condition that makes it difficult to swallow—a one in 100,000 condition. Achalasia can attack the nerves in your esophagus and, in Smalley’s case, it was accompanied by painful spasms.

“My situation got worse and worse. By March 2018, they said that my esophagus was dead. I couldn’t even get liquids down,” says Smalley.

Her HSC physicians determined that the only option was an esophagectomy, a complex open surgery that involved removing most of the esophagus and then reconstructing part of the stomach into a tube and attaching it to what remained of the esophagus. The procedure is rarely used for achalasia, but it made sense in Smalley’s case.

“My situation got worse and worse. By March 2018, they said that my esophagus was dead. I couldn’t even get liquids down.”

— Donna Smalley

“My surgeon was talking with my husband and daughter after my surgery and had to race away for a ‘Code Blue’. A patient was going into cardiac arrest,” says Smalley. “It turns out the Code Blue was me. They had to perform CPR on me in the recovery room.”

Later that evening, with Smalley seemingly stable, she was transferred to a step-down unit. A nurse noticed Smalley’s laboured breathing and some unexpected blood. It turns out that the surgeons needed to go back in to repair a leak, but before that could happen, she had another cardiac arrest. Again, she was saved by CPR.

“I had two major surgeries, two cardiac arrests, and aspiration pneumonia, all within 48 hours,” says Smalley. “My stay at HSC ended up being five weeks, fighting for my life, but I made it!”



Grateful patient, Rev. Donna Smalley: “I had two major surgeries, two cardiac arrests, and aspiration pneumonia, all within 48 hours. My stay at HSC ended up being five weeks, fighting for my life, but I made it!”

She is forever grateful for the skill and commitment of Drs. Gordon Buduhan, Rachel Eikelboom, and Andrea Darnbrough, and all of the frontline health care workers who helped her along the way. Today, she is under the ongoing expert care of thoracic surgeon Dr. Richard Liu of HSC’s state-of-the-art Wilf Taillieu Thoracic Surgery Clinic and Endoscopy Unit.

Along with the outstanding medical care, Smalley will also be forever grateful for the kindnesses shown to her while she recovered in hospital: the nurse’s aide who washed Smalley’s hair while singing to her, the charge nurse who would sit with Smalley talking through some difficult nights, and others.

“My husband and I are so grateful for the care I received, and still receive,” she says. “We are now making ‘gratitude for life’ donations in honour of the Taillieu Clinic. With much respect, I thank HSC staff and the HSC Foundation for my very life.”

Innovation HSC

An annual campaign in support of HSC, Manitoba's hospital

At HSC Winnipeg, **innovation** isn't just a word—it's a culture and a commitment to invest in health care improvements for all Manitobans.

With that driving force behind us, the Health Sciences Centre Foundation launched the 2022–2023 Innovation HSC, our annual campaign to raise funds for state-of-the-art equipment and make HSC a pillar of health care innovation.

Since its launch in 2019, nearly 4,500 donors have given over \$8 million toward this life-changing—and life-saving—initiative. This support benefits the hundreds of thousands of people who receive care at HSC.

With a target goal of **\$2,809,856** for 2022–2023, your support will continue to enrich the spirit of innovation at HSC.

Here are two examples of how Innovation HSC donors have supported better treatment options, improved patient outcomes, and have helped transform the health care landscape in Manitoba.

Video-assisted Laryngoscopes

Tiny, high-resolution cameras and digital monitors that improve the view of a patient's vocal cords, increase the success rate of intubation, reduce long-term patient complications, and reduce trauma related to breathing, swallowing, and talking.



Tiny, high-resolution cameras increase the success rate of intubation.

In-house Orthotic Creation

Software and equipment that allows custom braces to be designed digitally and manufactured at HSC. On-site creation allows braces—which can prevent deformities, amputation, surgery, and assist with movement—to be made faster and with greater accuracy than braces built and shipped from elsewhere.



Custom made braces can help prevent deformities, amputation, surgery, and assist with movement.

“Innovation in health care needs dedicated support, and donors to this campaign are trailblazers in mobilizing innovation in Manitoba. The time is now to support new technology, treatments, and processes that lead to improved patient care and outcomes.”

— Tina Jones, O.M., Chair, HSC Foundation Board of Directors, and Jonathon Lyon, President and CEO, HSC Foundation

Your support allows HSC to:

- implement changes to systems and facilities to reduce wait times and improve outcomes as the health care needs of Manitobans change;
- acquire the latest technology to diagnose and treat patients more quickly; and
- initiate and advance important health care research, and create opportunities to keep leading medical talent in Manitoba.

Know that your support will help HSC deliver tomorrow's health care, today. Please give generously. For your family. For you. For all Manitobans.

To make your donation today, visit hscfoundation.mb.ca
or call **204-515-5612** or **1-800-679-8493** (toll-free).

At the HSC Foundation, we prioritize reducing our environmental footprint. To receive our newsletter in your inbox instead of your mailbox, please email info@hscfoundation.mb.ca.

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