



People of The
Moncton Hospital
ANNUAL CAMPAIGN 2017-2018

ADVANCING HEALTHCARE AT THE MONCTON HOSPITAL

Every year, thousands of patients from across South East New Brunswick receive exceptional care at The Moncton Hospital. Gifts to the Friends of The Moncton Hospital Foundation help our

hospital remain at the forefront of medicine by acquiring leading-edge medical equipment, greatly improving and changing the lives of patients facing health care challenges.

You have helped us achieve this!

This year, with your help, the Foundation aims to invest \$600,000 for warm and comfortable specialized beds for newborns, a device to control bleeding during endoscopic procedures and first-rate, innovative Operating Room (OR) technology that will improve accuracy during surgery—all critical tools for our medical team.

PROGRESSIVE BABY CARE

Newborn babies have amazing abilities, yet they are completely dependent on others for feeding, warmth and comfort. Two modern **Giraffe Infant Warmers** for newborns will make the Labour and Birthing (L & B) Unit at The Moncton Hospital their new home.



Babies can't regulate their body temperature as effectively as kids and adults because their bodies have more surface area by weight, causing faster heat loss. Babies also don't have as much insulating body fat, especially sick or premature babies. These warmers will provide a warm, comfortable and developmentally supportive environment for newborn babies who experience difficulties immediately after birth.

Christa Wheeler-Thorne, Administrative Director for the Women's and Children's Health Program at The Moncton Hospital, says these novel devices are light years ahead of what is on the Unit now. The current warmers are outdated and come in three different pieces; light/heater, bed and oxygen delivery system on the wall. The new inclusive units will make it much easier for our medical team to provide immediate care to babies born prematurely or term infants needing additional care.

Right now, if a baby develops complications requiring a transfer to the Neonatal Intensive Care Unit (NNICU) for more specialized care, the baby has to be moved from the warmer in L & B to one in the NNICU which can cause unnecessary trauma, as well as an interruption in care. New portable units will alleviate the need for babies to be moved in preparation for transfer.

Currently, there are 1,300 – 1,500 deliveries at The Moncton Hospital every year. 60% of the newborns require the use of a warmer immediately following birth. Southeastern New Brunswick is the fastest growing region in the province and is expected to have an increase in the number of babies born as a result of that.

IMPROVED PRECISION AND CONTROL IN ELECTROSURGERY

A PROCEDURE USING A HIGH-FREQUENCY ELECTRIC CURRENT TO HEAT AND TO CUT TISSUE WITH GREAT PRECISION

Also on the shopping list are two **ELECTROSURGICAL UNITS (ESU) with Argon capability** for endoscopic procedures (a nonsurgical test used to examine a person's digestive tract) in the Gastrointestinal (GI) Clinic. Even the simplest of procedures improve and impact patient care.

Many of the everyday procedures performed in the GI Clinic require ESU technology. The most common procedures performed include the removal of tumours and polyps (abnormal tissue growth) to prevent the development of cancer, "treatment of watermelon stomach" (an uncommon cause of chronic gastrointestinal bleeding), and other GI disorders. Bleeding is fairly common in many of these endoscopic procedures requiring use of Argon to immediately bring it under control.

The Argon-enhanced option will allow physicians to be more precise, quick and efficient with blood clotting, resulting in less tissue damage for the patient, prevention of further medical complications and the decreased need for surgery, blood transfusions and admission to hospital.

The GI Clinic requires two more of these Units so that each of its four procedure rooms will have their own.

"Equipping each procedure room with an ESU with Argon capability will give staff and physicians the ability to stop areas of bleeding that we find in the GI system, immediately and without delays in trying to locate a Unit in another area, losing precious time", notes Dr. Robert Berger, Gastroenterologist and Chief of Gastroenterology at The Moncton Hospital.

There are approximately 10,000 patients a year who undergo endoscopic procedures using an ESU; of those, between 4,000 – 5,000 would require the use of Argon gas to control (cauterize) bleeding.

GAME-CHANGING EQUIPMENT IN THE OR

Neurosurgeons at The Moncton Hospital will be equipped with the latest high-tech digital technology, allowing them to see three-dimensional images of the spine while performing surgery—an absolute game changer in the OR.

The **O-Arm Surgical Imaging System** will make our surgeons' painstaking work more efficient, accurate and much safer. The O-Arm can take a 3D scan of a patient undergoing surgery in seconds and provide high-quality images to the surgeon while the operation is underway.

Its portability is an immense asset as it can easily be moved from one OR to another when separate procedures are underway simultaneously. That could be hugely beneficial for unexpected trauma and other emergencies.

INSIGHT AND PRECISION OPTIMIZED IN THE OR

Dr. Charbel Fawaz, Chief of Neurosurgery at The Moncton Hospital, says the high-quality, real-time images show the bony anatomy much more clearly than regular X-rays. He adds, "not only does it reduce surgical time, hardware placement (pins or rods) is more accurate and there's less anaesthetic time and blood loss, all of which equal less risk for patients."

Improved accuracy in the placement of spine instrumentation will result in reduced revision (second surgery) rates as well.

While it will be mostly used for spinal surgery, such as degenerative spine disease (i.e. herniated discs, spinal stenosis), trauma (i.e. fracture or dislocation), removal of tumours, spinal deformity, Scoliosis and chronic pain treatment, it can also be less commonly used for repairing broken bones, including pelvic fractures and other orthopedic injuries. Dr. Fawaz is optimistic that in the future, the O-Arm will be used for other neurological procedures such as deep brain stimulation for Parkinson's disease.



Dr. Charbel Fawaz, Neurosurgeon and Chief of Neurosurgery at The Moncton Hospital, standing alongside the sophisticated O-Arm Imaging System.

It is estimated that the O-Arm will reduce the length of spinal instrumentation surgery by 15-20%. Not only will that benefit patients and OR efficiency generally, it also reduces the radiation exposure of everyone in the OR.

The Moncton Hospital joins the Saint John Regional Hospital and the QEII Hospital in Halifax, as the only centres in the Maritimes with this technology.

The team of four neurosurgeons at The Moncton Hospital have an extremely busy spinal practice. It is projected that more than 300 patients a year will benefit from this technology.

MAY 24TH, 2017

CHANGED LIFE

AS 18-YEAR OLD JACOB ROBERTSON KNEW IT



Jacob Robertson had discovered a passion for motocross racing in his mid-teens. This would be his first year to competitively race and he was practicing a lot. This day, he was practicing at Riverglade Motocross Park with several others.

In simplest terms, when motocross racing, you often 'climb walls' with your bike, then soar with your bike up in the air before coming down and landing on the other side of the hill. There is a lot of skill involved and it is definitely considered an extreme sport/recreational activity, perceived as involving a high degree of risk. These activities often involve speed, height, a high level of physical exertion and highly-specialized gear.

After quite a bit of practice that day, Jacob was 'climbing a wall' that was about 10-15 feet high. As he was opening up full throttle in 3rd gear, he realized he was experiencing what they call 'whiskey throttle' (when your throttle hand and forearm starts to go numb and you basically can't control your throttle very well). He was about 30 feet in the air and when he came down on his bike his feet missed the pegs.

His backside landed full force on the bike seat just before he bounced off and flew about 10 more feet, smashing the left side of his body into a nearby ditch.

IN THE TIME IT TOOK TO COME TO A COMPLETE STOP IN THE DITCH, JACOB KNEW SOMETHING WAS SERIOUSLY WRONG.

"The entire crash probably took all of 30 seconds, but it felt like I was going in slow motion and while I was still in the air, I knew this wasn't going to end well as I was already aware that I could feel nothing from the waist down."

“I was on call that night when I had the call from our ER for Jacob around 9:30pm. When I arrived, Jacob was in the trauma room and just came back from the CT-Scan machine. We did a few CT-Scans to assess the extent of the injuries. He had a few injuries, the most dangerous one being a severe ‘burst’ type fracture at T12. Burst fractures are often caused by compression of the spine (or also called axial loading) for example, falling from a significant height and landing on your buttocks or back. Jacob had a very bad fracture and it was crushing his spinal cord at T12.

On our initial assessment, Jacob had no motor or sensory function from the waist down (this is what we call a COMPLETE spinal cord injury in medical terms). In that situation, the only option we really had was to fix it surgically.

In Neurosurgery, we have a saying, “Time is brain.” It means that in some situations time is of the essence and in Jacob’s situation, time meant potential for his spinal cord function to recover, or in simple terms, a chance for a young man to walk again.

So, we took him to the OR that night. We finished around 2 a.m. and everything went great.”

**Charbel Fawaz
MD, MSc, FRCSC Chief,
Department of
Neurosurgery**

As luck would have it, an off duty first responder was riding behind him. He immediately checked him and emphasized the importance of not moving. In true parent fashion, his grandma and mom, Natasha, actually beat the ambulance to the scene of the accident. They followed the ambulance to The Moncton Hospital where Jacob was immediately placed in trauma care at about 8 p.m. that night.

Numerous CAT-Scans later, Neurosurgeon Dr. Fawaz, confirmed that Jacob had broken his spine (the T12, the last vertebrae before his lumbar), told his family that even a successful operation gave no guarantees and there was a good chance he might never walk again.

Jacob said his biggest fear was actually, “going under” (having anaesthesia for the first time) and he wasn’t really thinking about the potential outcome of his surgery which Dr. Fawaz performed at 10:30 p.m. that evening.

The spinal surgery was considered a complete success, everything had gone well and Jacob was told there was a slight chance he might walk again. This is all Jacob needed to hear, he made up his mind then and there that he would give it all he had to achieve this.

Jacob remained in The Moncton Hospital, healing and learning how to adjust to sitting again. He started with trying to sit up for just two minutes at a time, maybe twice a day. He also was healing from a second surgery a few days after his spinal surgery to repair a broken collarbone from the accident and was learning to navigate a power wheelchair. Jacob took these adjustments in stride. “It sucks obviously but sitting in bed every day crying won’t solve anything.”

He was able to attend his Riverview High School prom and graduation which perked him up. And when it was time to go for intense, full-time rehabilitation at the Stan Cassidy Centre in Fredericton, he was more than ready to, “get this show on the road.”

Visiting Jacob about six weeks in to his rehab, we find him happy with his progress to date. He proudly asserts that he doesn’t know if it was his stubbornness or determination but he was walking after just one week. He cites busy days with physiotherapy, occupational therapy, dietitian visits and more but never once complains or says, “why me?”



Instead, he explains that he has feeling once again from the waist down to his ankles. However, he still has paralysis in both feet and acknowledges that he really should have some sort of movement in them by now if that was going to change. He shrugs and says, "I am not giving up just yet BUT if leg braces can help me walk, I don't care. I truly am very happy and believe I have one of the best-case scenarios out of the entire ordeal that I could and for that I am truly grateful."

Jacob will continue outpatient rehabilitation at The Moncton Hospital when he returns home at the end of the summer for as long as necessary. He had planned on deferring a year anyway before attending St. Thomas University in the fall of 2018 to study criminology and will take this next year to continue to heal and gain strength back.

In terms of his care at The Moncton Hospital, Jacob says that they (all the staff) are amazing, from Dr. Fawaz to the physiotherapists and the nurses. "I have nothing but good things to say about them. I was taken such good care of and their patience and support while I was recovering from my surgeries was beyond expected." When asked if he had a favourite, he grinned and said, "well if I have to choose one person it would be Kellie Bliss in rehab, she simply rocks!"

And the answer to the question he is so often asked is YES, he plans on getting back on his bike as soon as he can. Asked what his parents think of that, he says they HATE the idea but adds that he is only 18 years old and although he will be nervous, he refuses to let it stop him or hold him back from doing what he loves. "I might not race competitively but I will definitely ride again."

"My first impressions on Jacob were that he was quite mature for his age, a fine young man with a positive attitude. I think this is very important because staying positive and determined makes a huge difference in recovery.

Before going to Stan Cassidy, Jacob stayed a couple of weeks at our Rehab Unit at The Moncton Hospital to be able to attend his graduation first.

He worked with a team of physiotherapists, occupational therapists, nurses, etc. I think their role is crucial in our patients' recovery.

Jacob will most likely stay a couple of months in rehab until he is ready to be back in the community and our outpatient rehab team at The Moncton Hospital can start working with him again at that point."

**Charbel Fawaz
MD, MSc, FRCSC Chief,
Department of
Neurosurgery**

WE CONTINUE TO NEED YOUR SUPPORT

Together we can help advance health care for people just like Jacob and many others at The Moncton Hospital.

Your collaboration will touch and change the lives of thousands and make an incredible impact on the health and well-being of our families, neighbours and friends. Thank you for making your contribution today.

Sincerely,



Linda Saunders, CFRE
President & CEO

P.S. You can make turnarounds like Jacob's possible by donating today!
Thank you for your commitment to saving and improving lives.



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135 MacBeath Avenue, Moncton, NB E1C 6Z8
Tel: (506) 857-5488 Fax: (506) 857-5753

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