

Humber Robotics

Spark the light that transforms healthcare.

Help Expand Robotics at Humber River Hospital



For decades, our Surgery Program has been at the **forefront of innovation**. Fuelled by our trailblazing spirit, we've been able to treat more patients, in less time, and with better outcomes using robotic surgical innovations.

The centrepiece of our program is the da Vinci Surgical Robot, a sophisticated piece of equipment made possible by a transformational gift from Helen Hull and her late husband Murphy in 2012. We then added ROSA®, a robot used for same-day knee replacements. For the past decade, thousands

of patients with the most complicated and risky medical needs have travelled from far and wide to receive precision treatment from our talented surgeons guiding the robots.

As we look to the future, it's time to expand our Robotic Surgery Program to help even more Canadians. With your help, we can upgrade our da Vinci Surgical Robot to the newest Xi model, bring a second ROSA® to Humber, and add Intellijoint HIP for total hip replacements, continuing our journey of innovation and helping Canadians get back to their lives quicker.

What Your Support Can Do

100% donor funded	Complete 4x the surgeries	Save \$1,400 per day	Improve patient's quality of life	Bring the best to Humber
Help fund Humber's	Help fund a second	Help reduce a	Help reduce pain,	Help Humber
innovative Robotic	ROSA®, a new	patient's time in	scarring, and risk of	become a training
Surgery Program,	da Vinci Xi and	hospital, saving	infection, allowing	hub for talented
which is completely	Intellijoint HIP to	\$1,400/day and	patients to enjoy	surgeons who wish
funded by our	quadruple the	millions a year.	life sooner.	to be trained on
generous donors.	robotic surgeries			the best surgical
	we can perform			robots in the GTA.
	per year.			
A CONTRACTOR OF THE THE THE		SHEW CALLS IN THE		

How Robotic Surgery Helps Humber River Hospital

In addition to providing better care for our patients, robotic surgery creates capacity at Humber, allowing us to see more patients in less time.....



Complex surgeries done by surgeons using the da Vinci Surgical Robot and ROSA® allow for less invasive techniques..



QUICKER RECOVERY.

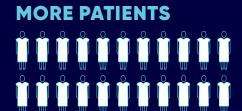
This leads to quicker recovery times and fewer post-operative complications.

GO HOME FASTER



Patients go home in 1/3 of the time compared to traditional surgery, with many avoiding the inpatient unit altogether. .

NE CARE FOR



This leaves more beds available for acute care vear-round. Our teams can operate on more people (even during a pandemic) because the hospital is not at full capacity.

How Much Robotic Surgery Can Save Humber River Hospital



Reducing a patient's stay by one day saves \$1,400/day per patient.

Reducing one readmission to the hospital saves approximately \$5,000 to \$12,000/year.

The Past, Present and Future of **Humber's Robotic Surgery Program**



Humber surgeons complete Canada's first ventral hernia repair with the da Vinci.



Use of da Vinci grows and surgeons begin to use it for gynaecological procedures like hysterectomies.



With your help we'll increase our volume in current procedures and expand to others, like complex lower rectal cancers.

2012

2017

2020

2022

2023

2021

The first da Vinci arrives at Humber and is used primarily for urology procedures.



We launch our same-day knee replacement program with SKiP, and the first ROSA® arrives at Humber. Together, they reduce recovery time with many patients going home the same day.



Canada's first Intellijoint HIP arrives at Humber, revolutionizing how we perform hip replacements.



A Closer Look at the ROSA® Knee System

The next generation in surgical planning and execution, ROSA® robotically guides surgeons during total knee replacements, allowing far greater accuracy in positioning.

Why ROSA®?

- Allows for greater precision and flexibility
- The ROSA® knee implant comes in both standard and narrow sizes to match various patient ethnicities, genders, and statures
- Patients have a greater range of motion and fewer complications
- Adapts to surgeon workflow with intuitive user interface
- Includes features to assist with bone resections and assessing the state of the soft tissues to facilitate implant positioning intraoperatively
- Gives surgeons data-driven intelligence to aggregate and analyze results



\$1.5 million (covers the cost of the robot, training clinical teams, and funding consumables for three years)



Dr. Sebastian Rodriguez-Elizalde, Orthopaedic Surgeon and Co-Chair, Robotics Program

"ROSA® has allowed us to evaluate and personalize the decisions that we make intraoperatively, which has changed clinical outcomes for patients. We're seeing that people require less physiotherapy, they're discharged earlier, because they're doing better."

Dr. Justin Chang, Orthopaedic Surgeon

"A second ROSA[®] would help us immensely. It would allow all our surgeons who do knee replacements to have the opportunity to use ROSA," which would benefit the entire patient population that we serve."



ROSA



"I was struck when John came home after the second surgery. I was all ready to help him, support him, and help him walk, but within a day he was not using a walker or cane. The general care from the beginning to end, everybody at the Hospital – the surgeons and staff were wonderful to deal with and it makes a difference."

-Brenda, grateful wife of patient John

What a new ROSA® will do

Besides doubling the number of knee surgeries we can perform every year, a second ROSA® will make Humber River Hospital the first hospital in Canada to have two of these robots. All knee surgery performed here will be performed using the precision of a robotic approach, setting yet another industry standard in Orthopaedics.

A Closer Look at the da Vinci Surgical Robot

This year, we're upgrading to the new da Vinci Xi, the most versatile surgical robot on the market. Compared to our current da Vinci model, the next generation da Vinci Xi allows our talented surgeons to operate on an entirely new level, launching our surgical program 10 years into the future.

Why da Vinci Xi?

- The most advanced instrumentation of any da Vinci model
- Allows our surgeons to have a better range of motion
- Magnified 3DHD visualization for areas not able to be seen by the naked eye
- Setup automation and guidance to support ER efficiency
- Integrated table motion
- Minimal scarring
- Greater precision
- Reduced risk of infection and complications
- Shorter time in hospital
- Quicker return to normal life

COST

\$7 million (covers the cost of the robot, training clinical teams, and funding consumables for three years)



Dr. Luke Fazio,
Division Head, Urology and Co-Chair, Robotics Program

"We improve patient care and patient lives every time we use the da Vinci. The benefit is there every time."

"Bringing mom home after her hysterectomy, I was amazed at how mobile she was. She was up on her feet, washing her face and brushing her teeth the next day. There is no way she would have been able to do that without robotic surgery.

And when I looked at her incision, there were only three tiny dots!"

-Sylvia, grateful daughter to patient Miren

What a new da Vinci will do

The new da Vinci Xi will allow us to operate on more patients and expand our surgery offerings to include treatment for prostate cancer, kidney cancer, and complex lower rectal cancers, as well as ventral hernia repair and hysterectomy. People across the province with complex medical needs who have no other options will be able to have surgery at Humber.



A Closer Look at Intellijoint HIP

Another first-in-Canada, Humber River Hospital introduced the Intellijoint HIP in 2022, thanks to funds raised by our generous donors. This state-of-the-art navigation system enhances the accuracy of incisions and implant placement during hip replacement procedures.

Why Intellijoint HIP?

- Improved patient outcomes
- Decreased risk of future complications
- Cuts down on the probability of years-later revision surgery
- Reduces the average length of stay for patients, saving money and freeing up beds
- Accurate cup placement and leg length corrections to the degree and millimetre
- Allows surgeons to stop using intra-operative x-rays

COST

\$1.5 million (covers the cost of the robot, training clinical teams, and funding consumables for three years)



Dr. Barry Cayen, Orthopaedic Surgeon

"Surgical technology is always changing, and it's up to us as physicians to stay at the forefront of this change. We do it because it's the best thing for our patients. If we can improve overall outcomes, even incrementally, it's worth it."

"The outcome exceeded my expectations. My pain before surgery was 9 out of 10. Immediately after surgery, the pain was down to about 0.5 out of 10. I was blown away, truly."





What a new Intellijoint HIP will do

Marking the first time this kind of technology has been available in the public medical landscape, Intellijoint HIP will create efficiencies as Humber continues to ramp up hip surgeries through the next phase of the COVID-19 pandemic.



Donate to our Robotic Expansion Campaign and Help Change Lives.

We have an exciting goal: to raise \$10 million to expand our innovative Robotic Surgery Program – a program that simply would not exist without donors like you. The impact we make on our patients' lives, their families' lives, and on the national landscape of surgical innovation, is entirely funded by your generosity.

Your support today will help us save lives and give patients a second chance at life. Humber River Hospital is working every day to light new ways in healthcare. Without our generous donors, this would be impossible. Together we can turn on a light that will never, ever go out.

Be the light. Be the change. Be a Humber River Hospital donor.

Left to right: Dr. Luke Fazio, Division Head, Urology and Co-Chair, Robotics Program, Dr. André LaRoche, Chief of Obstetrics and Gynaecology and Physician Medical Director of the Maternal Child Program, Dr. Grace Yeung, Gynaecologist, Dr. Stephen Halman, Chief of Surgery and Orthopaedic Surgeon, Dr. Sebastian Rodriguez-Elizalde, Orthopaedic Surgeon and Co-Chair, Robotics Program, Jhanvi Solanki, Vice President, Clinical Programs, Dr. Barry Cayen, Orthopaedic Surgeon, Dr. Quoc Huynh, Division Head, General Surgery, Dr. Justin Chang, Orthopaedic Surgeon, and Dr. Martin Heller, Orthopaedic Surgeon.



Lighting New Ways in Healthcare"



Contact me today and let's start making an impact.

Rob Peacock

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The information, statistics and funding priorities included in this document are accurate at time of distribution and are subject to change and verification by Humber River Hospital Foundation.











