

MONTRÉAL SACRÉ-CŒUR

HOSPITAL FOUNDATION



# Dr. Ronald Denis "This is my lifelong dream!"

- Dr. Ronald Denis, Director of the Trauma Program

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- > The start of a great adventure at the new ITC
- > The new, long-awaited Mother-Child Unit
- > Endoscopy is on the move



## The new ITC: The start of a great adventure!

The new Integrated Trauma Centre (ITC), which recently opened its doors, was born of a dream: to create a unique place in Canada where doctors, researchers and trainers would be brought together to offer the best of their knowledge to the patients of the Montréal Sacré-Cœur Hospital. Imagine the incredible power of bringing together the knowledge of all these experts to improve patient care and quality of life.

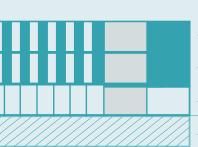
How did it come about? Thanks to the perseverance, determination and team spirit that is the foundation of this innovative concept and that characterizes the Sacré-Cœur teams. Thank you to the generous donors who believed in this project and who gave \$10 million to see it become a reality.

The Foundation wishes a great start to all these caring experts and great success to these teams who will work together for the 2 million people who are likely to be entrusted to Sacré-Cœur if their health condition becomes precarious.

### THE NEW CONSTRUCTION INCLUDES:

- > 16,323 m<sup>2</sup> in total, including the technical room on the 4<sup>th</sup> floor
- > a 3,500 m<sup>2</sup> Integrated Trauma Centre
- > 58 single rooms
- > **4** research laboratories
- > 6 simulation and teaching laboratories

Total project cost: \$155 million for the entire project



#### LEVEL:

- G3 Mother-Child Unit
  G2 Intensive Care Unit
  G1 Trauma Program, Research and Teaching
- SS Endoscopy Department





## "This is my lifelong dream!"

- Dr. Ronald Denis, Director of the Trauma Program

Dr. Ronald Denis is a well-known figure at the Montréal Sacré-Cœur Hospital. He leaves no one indifferent. He has been working at Sacré-Cœur since the age of 19 and is very attached to the hospital. He completed his trauma specialization in Detroit in the US in 1983. A leading surgeon for almost 37 years, Dr. Denis is deeply committed to his community and to improving the health and well-being of patients and their families.

Dr. Denis has been a builder in the field of trauma. As Director of the Trauma Program, he was the first to implement a tertiary trauma program based on interdisciplinarity in 1988. His perseverance and passion are credited with the creation of the Integrated Trauma Centre, a project that he and a few colleagues have strongly supported.

## Q: What made trauma a focus of excellence at Sacré-Cœur?

A: Dr. Henri Atlas founded the first trauma unit in Quebec, probably even in Canada, in 1976. In 1997, when I took over the Department of Surgery, our academic situation was very precarious. Our affiliation with the Université de Montréal was not assured. We had to find a discipline in which we could excel. We said to ourselves, trauma is where we can do it! So we put together a team.

### Q.: How were you perceived at the time?

A: We were creative. We dedicated a shift to trauma. We also brought psychiatry into the team, which seemed a little crazy at the time. It's fine to fix limbs, anything that's broken and needs to be put back together, but what's going on between the right ear and the left ear deserved very special attention. That's how it all started. If we didn't have trauma, there would be no university affiliation, meaning no research and teaching going on at Sacré-Cœur.

## Q: How did the dream of having an integrated trauma centre come about?

A: It was in 2005, with Gilles Lavigne and Patrick Bellemare and later Marc Giasson, that we started to think about what we needed to do to be able to not just compete with other trauma centres, but to offer the best. And that's when we came up with the idea of combining clinical (care), research and teaching. If you only knew how much we had to fight to integrate research and teaching into this project. I had experienced this approach in the United States when I did my trauma specialization of applying research directly to the clinic and to teaching. It really hit me.



The core group of ITC project supporters: Dr. Michel Garner (emergency), Dr. Patrick Bellemare (critical care), Dr. Ronald Denis (trauma), Mrs. Marie St-Amour (retired and consultant for the Trauma Program until recently), Dr. Marc Giasson (teaching) and Dr. Gilles Lavigne (research).

## Q: How will patients benefit from the creation of this Centre?

A: The fact that all the players are in the same place and rubbing shoulders with each other will allow us to treat patients better and move forward. For example, my contacts with Gilles Lavigne, who specializes in research on pain, sleep and trauma, have made me treat better and give better medication, especially for my patients who have undergone bariatric surgery. He taught me how to give better postoperative medication. It's clear that in the new ITC, there will be other such collaborations between researchers and health care teams that will be beneficial.

Trauma at Sacré-Cœur is a large team. We're talking about 150 physicians working together and 500 nurses working on trauma. Together we can achieve something. We're not doing this project for ourselves. We're doing it for the patients.

### Q: You believe that the use of new technologies is essential to improve the quality of care. You were the driving force behind Sacré-Cœur's purchase of the first Da Vinci surgical robot in 2003. What technologies will be implemented at the ITC?

A: The simulation labs may allow us to use more robotics in trauma. This could be useful, since in trauma the notion of intervention time is very important and currently the set-up time for surgery with robotics prevents us from using this technology in cases where it would be very useful. This is just one example. The technology related to artificial intelligence will allow us to use the data collected in the research in this area that will take place in the ITC for several applications to be used each day.

### Q: How do you see the future of trauma?

A: In 1992, when the Quebec adult trauma network was set up, the mortality rate after a severe trauma was 52%. Today, this rate is less than 6%. We will never be able to reduce this percentage to 0. However, with all the research being done at the ITC on sleep, pain, 3D imaging, simulation labs, and the use of artificial intelligence, we will be able to give a patient and their loved ones a better future and greatly increase their quality of life. And that's why we knocked on every door possible to make this project a reality. Now that we have beautiful spaces, another challenge awaits us: implementing the philosophy behind the word integrated so that our dream can come true.

In Quebec, 101 hospitals can accommodate trauma patients. The Sacré-Cœur Hospital and the Montreal General Hospital share a large territory in which 4 million people reside. However, as soon as there is a polytrauma patient, he or she is immediately sent to Sacré-Cœur. Sacré-Cœur is one of two hospitals, along with the Centre universitaire de Sherbrooke, where all medical and surgical specialties are available on site. Sacré-Cœur was also designated to treat spinal cord injuries because of its great expertise in pneumology, since this type of patient very often requires assisted ventilation.



LEVEL 1

# Research and teaching: The heart of the ITC

The need to increase knowledge to better treat the most complex trauma cases that come to Sacré-Cœur makes the research and teaching teams valuable allies for the medical and care teams.

"The researchers become part of the clinical process and see the reality of the patients. And clinicians open their doors to them. It's an asset and it's rare to have this much openness and collaboration," said Louis De Beaumont, Scientific Director, Physical Health at Sacré-Cœur.



According to De Beaumont, more than 50% of research recruitment at Sacré-Cœur Hospital is related to trauma (brain and spinal cord trauma). The Sacré-Cœur team is a leader in trauma in Canada.

Louis De Beaumont admits that he is looking forward to being able to bring together several research teams and care teams in one place. "Currently, what is greatly lacking are corridor discussions, exchanges, because everyone is scattered. The lack of proximity is hurting interactions."

One interesting fact that sets this new location apart from other research facilities is that the equipment will be owned by the ITC, not the researchers. It will be shared. Researchers who are just starting out or who have less funding will have access to great resources and a range of services.

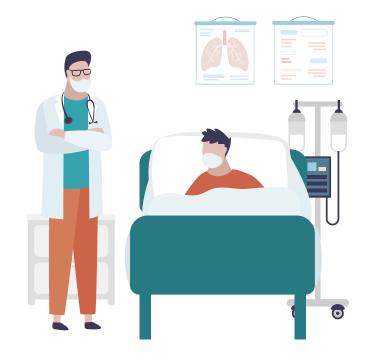
As well, the ITC's new state-of-the-art technologies will allow researchers to move forward more quickly and to recruit leading experts in their field. The motor function evaluation lab (spinal cord and brain trauma), the brain and spinal cord stimulation equipment, the neurology lab and the artificial intelligence lab, as well as the 25 unassigned spaces available for research students, will facilitate the advancement of certain research projects.

### The ITC: A cradle of artificial intelligence

"Artificial intelligence will allow us to predict whether the patient who has experienced a trauma can recover and with what quality of life. The prognosis is currently based on the clinician's intuition. We will be able to have a biological signature of patients who are doing well versus those who are not doing well," said Louis De Beaumont.

It should be noted that the ITC will become the home of the new Chair in Artificial Intelligence, for which the Foundation, one of the project's partners, hopes to raise \$3 million through its current fundraising campaign. "What also makes us strong is the quality of the data collected thanks to the excellent clinicians, particularly in trauma and sleep," added Louis De Beaumont. The quality of the data, the number of trauma patients and the recruitment of a leading expert in his field to process the information give Louis De Beaumont, who is above all a passionate researcher, all possible hope.

According to Louis De Beaumont, the integration of research into care is a major innovation in the field and will bring about major changes.



LEVEL 2

# An intensive care unit that will foster teamwork

It was in the 1990s that intensive care and trauma began to work together and share patient management. Trauma became the exclusive domain of intensive care.

The uniqueness of the Integrated Trauma Centre is that it has brought together critical care physicians, pharmacists, researchers, teachers, interns, and trauma professionals in one place. The idea is to promote the sharing of information and expertise, to take advantage of the strengths of each person and to create a real synergy between the multidisciplinary teams, all for the benefit of the patients.

Sacré-Cœur's Chief of Critical Care, Dr. Patrick Bellemare, is convinced that the new ITC is a concept that will allow us to go even further in the teamwork that has historically made this hospital successful, and particularly the development of critical care.

He also believes that the new, more adequate and spacious environment will be more conducive to patient recovery. "What kind of sleep can a patient get on a Friday night at 11 p.m. when the average sound is 92 decibels in the ICU?" he said. "Bottom line is we're extending the stay." In an interview prior to the opening of the new unit, he confessed to looking forward to walking into a patient's room, who slept through the night, without tripping over equipment, wires or furniture. "The new ICU was designed to allow for complex care while fostering a caring and quiet environment for the patient and their family. The design will also allow the interdisciplinary team to be more efficient on a daily basis," said Adélaïde de Melo, Assistant Executive Director, General and Specialty Physical Health Program.

"Our main challenge will be to continue to innovate and distinguish ourselves. To demonstrate the real and measurable added value of research and teaching," said Dr. Bellemare.

Co-chairs, campaign cabinet and committed donors

The Foundation would like to thank the two co-chairs of the campaign and figures of the business community, Mr. Daniel Lamarre and Mr. Normand Legault. The Foundation would also like to acknowledge the contribution of the members of the Integrated Trauma Centre campaign cabinet and its president, Mr. André Bérard, who helped raise over \$10 million in just one year to make this project a reality.

## Members of the campaign cabinet

- Mr. Robert Bastien Mr. Serge Boucher Dr. Ronald Denis Mr. Gabriel Groulx Mr. Denys Laberge Mr. Daniel Lamarre Mr. Michel Larivière Mrs. Fabienne Larouche
- Dr. Gilles Lavigne Mr. Normand Legault Mr. Michel Ostiguy Mr. François Rozon Mrs. Marie St-Amour Mr. Louis A. Tanguay Mr. Michel Trudeau

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Major donors of \$100,000 or more

(in alphabetical order) to this campaign

# A long-awaited Mother-Child Unit

The obstetrics and gynecology team performs more than 2,000 deliveries annually at the Montréal Sacré-Cœur Hospital. Although specialists are available to deal with more complex issues, a large proportion of family physicians also do pregnancy follow-ups and deliveries. These physicians must deal with the fact that nearly 70% of the clientele who give birth at Sacré-Cœur were born outside of Canada or one of the parents was born outside of Canada. This is a real cultural asset.

### More advantages for patients

Sacré-Cœur is also the only tertiary trauma centre in Quebec with an integrated maternity ward. The new space will allow for the addition of services, the enhancement of neonatology (for high-risk pregnancies) and, above all, to offer client and family-centered care. Special attention was given to the layout, decoration and choice of furniture. The new rooms are designed according to a new model adopted by several newer hospitals: the LDRP model (labour, delivery, recovery, postpartum), which provides for all these stages to take place in the same room throughout the stay.

One of the advantages of the new Mother-Child Unit is that the patient will no longer be transferred from one place to another in the unit, but rather the staff will move to her. As well, the clientele will finally be entitled to a space that meets current standards and where the privacy of families is encouraged. The addition of a permanent lactation consultant (previously a part-time resource) will increase the range of services. Also, with new technologies and room configurations, comes a series of trainings for the nursing staff.

"We are going to have physical spaces that correspond to the overall quality of care that we want to provide. We hope to have a better retention of the clientele in our territory with this new Mother-Child Unit. Currently, out of the total number of deliveries in our CIUSSS territory, only 34% to 40% of mothers-to-be choose to deliver here at Sacré-Cœur," indicated the Chief of the Obstetrics and Gynecology Department, Dr. Sonia Gagnon, shortly before the opening.



Dr. Sonia Gagnon, Chief of the Obstetrics and Gynecology Department



The new space will allow the Obstetrics and Gynecology teams to hold group meetings. For example, we kept a meeting room for the gestational diabetes clinics. After the pandemic, for example, a nutritionist could provide information to the entire clientele and allow for networking—an important element for clients who sometimes just arrived in the territory and feel isolated.



A project to renovate the Mother-Child Unit has been in the air since at least 2004. It was repeatedly postponed until it was included in the ITC construction project. The Obstetrics and Gynecology teams, family physicians and several donors contributed to this project with \$2.4 million raised by the Foundation through a fundraising campaign. The funds have since been set aside for this new Mother-Child Unit.

thank? for your donation!

The Foundation wishes to acknowledge the contributions of \$100,000 and more made during its 2005-2009 major campaign for the construction of the new Mother-Child Unit.

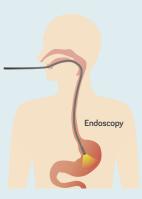
Alimentation Couche-Tard Bell Canada Family of Raoul Blouin Mirella and Lino Saputo Foundation



## More endoscopy rooms and up-to-date technology

The relocation of endoscopy services to the new building at the Montréal Sacré-Cœur Hospital in November will provide a larger intervention area with five procedure rooms, including three for gastroenterology (gastroscopy and colonoscopy), one for pneumology and one for urology. The department will also include a multi-service room for advanced techniques under fluoroscopy, as well as a recovery room with 18 stretchers (14 standard and 4 in isolation).

Double-door passthrough, equipped with alarms, have been designed into the construction plans of the new endoscopy department to allow for quicker handling of soiled endoscopes by the reprocessing team, directly from the examination room. Considering that each endoscope must be picked up within a maximum of 60 minutes after use, the



proximity of the reprocessing service to the procedure rooms is a novelty that the department is eager to take advantage of.

Also, as of fall 2020, endoscopy services are working to computerize endoscopic exam reports. Users who visit for a pulmonary or gastroenterology procedure now leave with a clear report in their hands following their procedure. These reports are also electronically sent directly to the requesting physician.

The next step in computerizing the urology exam reports, and then integrating the photos of the exam into the report, is in the new endoscopy services facility. This will require the processing of 12,000 exams per year.

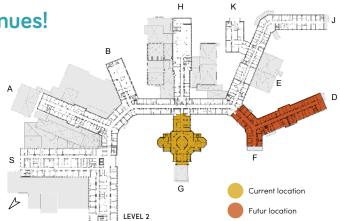


## The transformation of Sacré-Cœur continues!

Once the first patients have arrived in the new building and all the moves have been completed in November 2021, it will be possible to renovate other sectors that are much needed in this hospital that is only a few years away from being 100 years old. **The Dialysis Unit is one of those areas that is in dire need of renovation and relocation.** 

The Integrated Renal Support Centre project consists of moving the 27 current dialysis stations at Sacré-Cœur and the 12 stations at the Bois-de-Boulogne clinic and bringing them together in a single location, the premises occupied until recently by the Mother-Child Unit.

This project, which will be financed entirely by the Foundation and for which we are counting on the generosity of donors, will allow for the creation of premises adapted to current needs and standards. The cost of the investment is \$5 million.



The new Centre will offer patients the possibility of receiving treatment in an environment that respects their privacy. Finally, it will be able to respond to the growing needs of an aging population that will increasingly use this type of care.

### FUNDRAISING CAMPAIGN



## Isabelle Rhéaume: A fine example of courage

Isabelle Rhéaume could be described as an example of courage. Despite the great trials she has experienced since her breast cancer diagnosis in June 2019, she has not given up. On the contrary, she has been able to deal with each difficult situation to grow even more.

Approached by Solange Roussel, her pivot nurse at Sacré-Cœur's Hemato-Oncology Department, Ms. Rhéaume, after surgery, chemotherapy and radiation therapy, got back into shape. This year, she has set herself the challenge of participating in the Vélo-Onco day and riding 1,000 km over a period of one month. In addition, she decided to hold her own fundraiser which raised \$2,550. If she succeeded in her challenge, she also promised to shave her hair for the cause. She did just that on the last weekend of the challenge, which ended on July 12.



"If the money raised can give a little comfort to people with cancer during their treatments, I will be very happy," said Ms. Rhéaume after her 1,019 km ride. As a lover of sports and cycling, she has every intention of participating in another edition next year.

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