

The heart of advanced care



SPRING 2024 | VOLUME 9 | NUMBER 2

"For me, there are no trivial stories in trauma, only unique ones."

– Valérie Turcotte, specialized nurse practitioner in adult care

In this issue:

- > Our experts in the public eye
- > Myeloma research
- > Teaching Expertise Centre

Photographer: Éric Myre



Our nurses: a crucial asset to our medical care teams!

Valérie Turcotte is one of 17 specialized nurse practitioners (SNP) in adult care working in various care sectors at the Sacré-Cœur Hospital. However, to her knowledge, she is the only one in Quebec to be an integral part of a trauma care team. Since her residency in intensive care and her first job as a nurse, she has never left Sacré-Cœur.

The 9th season of the television series *De garde 24/7*, filmed almost entirely in Sacré-Cœur, as well as the 10th season that will air this fall, will have given the general public the opportunity to learn more about how important Ms. Turcotte's role is.

As we celebrate International Nurses' Day on May 12 each year, which is at the heart of National Nursing Week, we chose to meet this worthy representative of her profession. This interview gave us an insight into the impact she hopes to have on patients every day.

Q: What attracted you to this profession?

I've always had this desire to help. For me, nursing is a way of caring for the individual with a touch of creativity. When you care as a nurse, you take into account the whole person and their family. I might add that my mother is also a nurse and my older sister is a social worker, so I had excellent role models.

Q: Have you worked in other departments, or mainly in trauma and acute care?

I've been part of the trauma and acute care team for five years now. Before that, I worked for several years in the intensive care unit at Sacré-Cœur, and I was also part of Dr. Pierre Marsolais' team for a few years when Sacré-Cœur was an organ procurement centre. At the same time, I taught at the Université de Montréal for a short time and worked in the community sector with more vulnerable people, in drug addiction, among others. I've always practised in at least two places, so I've had my hands in everything, and I'm always eager to learn.

Q: What made you choose traumatology?

Traumatology is a truly unique specialty, in which there's as much intensity as proximity, tenderness and intimacy. Trauma is such a defining event in people's lives. People who have undergone a major trauma will generally have very specific memories of this period in their lives.

In traumatology, we deal just as much with massive adrenaline rushes during which seconds count—we have to be very vigilant and on the lookout for all the little details and have clinical judgment that is extremely sharp—as we can also personalize care and gain insight into stories that are very personal, very unique and make a difference in people's lives. I sincerely believe that I couldn't have done anything else but this specialty. My

various experiences help me to be more open-minded, especially having practiced in the community, with more marginalized populations. In the trauma sector, we see a lot of substance use disorders, mental health disorders, suicide attempts or violent trauma, so these related experiences make sense in providing the best possible care.

Q: What's the most rewarding part of your day?

There's no routine in trauma. Everything is so different that we're constantly striving to be responsive and make a difference. As far as I'm concerned, there's no such thing as a run-of-the-mill trauma story. We work with unique people and so many different stories. What's most gratifying is knowing that we'll sometimes make a difference in the lives of these people and their families. We really are a kind of bridge to rehabilitation, a return to normalcy. That's a real challenge in my daily life.

Q: What do you think has changed in the nursing profession?

I think the role of the nurse has evolved enormously, and will continue to do so. It's important to remember that our profession comes from a very feminine background, where the nurse initially had somewhat of the role of doctor's assistant. Those days when the nurse was a subordinate are long gone. Nurses are healthcare professionals in their own right, with keen clinical judgment and skills all their own. They play a crucial role in the quality of care, particularly with the arrival of specialized nurse practitioners. We're moving into an era of change, and for the better.

Q: Can you tell us more about the role of the SNP?

To become a SNP, we have to complete a master's degree in nursing, in addition to a complementary diploma in advanced nursing practice. That's what I did. It's a more clinical master's degree. We take a lot of courses in medicine, pharmacology and nursing role development. After this master's degree, we remain nurses, but we work closely with the medical teams. We don't replace doctors. We collaborate with them. We are the additional player in teams with a biopsychosocial vision that is global and holistic.

Q: Is this a growing specialty?

The role of the specialized nurse practitioner is expanding. There's interest at Sacré-Cœur and all the other trauma centres in developing this this young profession. I think in a few years' time, it may become the norm. In my opinion, it's a crucial role at the heart of trauma teams.

Q: Tell me about the training you're currently pursuing?

I'm doing a PhD in public and community health at Université Laval. My interest in pursuing this academic path stems from the fact that, although we offer very high-level trauma care at the Sacré-Cœur Hospital, there's still one sphere that's more difficult to address, the sphere of violent trauma, particularly in terms of gun violence, stabbing and everything to do with conjugal and domestic violence, among others. We're very limited in what we can offer, other than physical care.

As a tertiary trauma centre, we also have a mission to get involved in the sphere of prevention. Getting involved in Q: What do you think was important to present to prevention is very difficult, because the clinical task is so important. It's what takes all the attention of clinicians, doctors and nurses, but prevention remains a very important mandate. It's not easy, but I think that during the hospitalization period, it's a crucial time in people's lives, and the ground is fertile for bringing about changes in behaviour and living environments. I think we have a responsibility to help prevent these events from recurring. I believe that one of the ways to do this will be to act at the root with community partners and see what we can do in terms of changing the social determinants of health. We need to go straight to the source and promote health and healthy living environments to prevent this type of event. That's more or less what I've set for myself as my academic mission.

In fact, in the trauma department and with the help of several collaborators, we are currently developing a program to improve care for people who have suffered violent trauma.



Valérie Turcotte participating as a nurse in the Formula 1 Canadian Grand Prix track hospital team. For more than 35 years, the Sacré-Cœur Hospital has been the hospital of choice for medical care at this high-profile event, thanks to its recognized expertise in traumatology.

the general public with the De garde 24/7 series?

My primary intention in agreeing to take part in the series was to demonstrate to the public, and even to healthcare professionals, the impact and role that nurses play in care teams. I think we're moving towards a paradigm shift, away from the strictly biomedical model. I think it's very important to demonstrate the competence and professional rigour of other care professionals in the network. For me, it was an honor to take part in the 24/7 experience. □

One profession, different academic backgrounds

The care teams at the Sacré-Cœur Hospital and the Albert-Prévost Mental Health Hospital can count on the dedication of 1,033 nurses, who support the 535 doctors and specialists on a daily basis. Here are the roles played by these healthcare professionals, according to their training.





Nurses

Nurses with a Diploma of Collegial Studies (DCS) or clinical nurses with a Bachelor of Science in Nursing (BSN) are authorized to assess a patient's health status, plan and provide nursing care, administer prescribed treatments and collaborate with other health professionals to ensure comprehensive care.



Nursing assistants

Nursing assistants with a Diploma of Vocational Studies (DVS) in nursing are trained to provide basic patient care under the supervision of registered nurses or more experienced health professionals.



Clinical nurse specialists

Clinical nurse specialists have advanced training in nursing. They specialize in a specific area (e.g., pediatrics, geriatrics) and provide advanced care.



Specialized nurse practitioners

With a master's degree in nursing and a post-graduate diploma in advanced nursing practice, they can provide diagnoses, prescribe medication and carry out specialized procedures in their field of expertise.

ACHIEVEMENTS



Another CIUSSS first for the cardiology team

On March 4, the hemodynamics team at Montreal Sacré-Cœur Hospital inaugurated a new tool, the Micro Rx rapid exchange microcatheter, which will enable them to perform more complex procedures to improve patient care.

Thanks to this new device, the hemodynamics team will be able to treat many complicated, severe lesions

more quickly and effectively. The team of nurses, medical imaging technologists, cardiologist-hemodynamist Raja Hatem, head nurse Judith Bérubé and Biotronik representatives were very proud of this first for the CIUSSS du Nord-de-l'île-de-Montréal.

Our experts in the public eye!

Nadia Gosselin and Alex Desautels discuss excessive sleepiness



Nadia Gosselin



Dr. Alex Desautels

In an interesting article published in *L'actualité* on February 13, two Sacré-Cœur Hospital researchers, Nadia Gosselin, professor in the Department of Psychology at Université de Montréal and scientific director of the Center for Advanced Research in Sleep Medicine (CARSM), and Dr. Alex Desautels, director of the CARSM Sleep Disorders Clinic and professor in the Department of Neurosciences at the Université de Montréal, explain how excessive sleepiness can hide a number of health problems, such as narcolepsy, sleep apnea and depression, and what signs to look out for.

In French only

Another distinction for researcher Jacques-Yves Montplaisir



The Government of Canada has made Dr. Jacques-Yves Montplaisir an Officer of the Order of Canada for a second time. Founder of Canada's first sleep research centre, the Center for Advanced Research in Sleep Medicine (CARSM), located at the Montreal Sacré-Cœur Hospital, Dr. Montplaisir has been recognized by this prestigious distinction as a pioneer in sleep medicine. The researcher was made an Officer of the Order of Canada in 2021 for his "pioneering and influential research in the development and advancement of sleep medicine, which has led to improvements in the health of Canadians." As a professor at the Université de Montréal, Dr. Montplaisir is credited with crucial advances in the study of insomnia and hypersomnia, among other disorders. By identifying the causes and consequences of sleep disorders on physical and mental health, he contributed to the development of treatments that have improved the well-being of thousands of Canadians.

As an outstanding administrator, he is also renowned for directing the Centre for Advanced Research in Sleep Medicine (CARSM), the first of its kind in Canada and one of the first in the world.

Dr. Alex Desautels talks about the time change

The change to Daylight Saving Time (DST) in March of each year requires a longer period of adaptation than many people realize. That's what Dr. Alex Desautels explained on Paul Arcand's morning show on March 8. This abrupt change hits hardest on the Monday following the change, and it takes our bodies 5 to 7 days to resynchronize, which can translate into more considerable health effects.

In French only

Dr. Dominique Synnott takes a stance on Paul Arcand's show



Dr. Dominique Synnott, oncology and trauma surgeon, director of the breast clinic at the Sacré-Cœur Hospital and author of the books "Le cancer au jour le jour" and "Le cancer du sein... Tout et même plus", spoke out on Paul Arcand's 98.5 radio show on March 5 about the target age for Quebec's breast cancer screening program, and expressed that she is in favour of including women between the ages of 40 and 50. A very interesting interview.

In French only

A new scientific publication on head impacts in sport



A student from Louis De Beaumont's research team, **Géraldine Martens**, recently published an article in the National Library Of Medicine. The young woman is the latest recipient of the Fonds de recherche du Québec - Santé award. As a postdoctoral researcher at the Université de Montréal, she is part of a dedicated research team investigating the consequences of high impact head injuries of ice hockey and American football players. The findings of this publication suggest that, given the detrimental effects of reduced inhibition on motor control and balance, monitoring head impact forces at every contact game and training session could prove useful to prevent injury.

Sacré-Cœur Hospital, a major centre specializing in autologous stem cell transplants

Never heard of multiple myeloma? That's very possible. It remains a rare form of cancer, accounting for 1.5% of all cancers combined. However, thanks to the knowledge and research of a hemato-oncologist specializing in the field, Dr. Jean-Samuel Boudreault Pedneault, the Sacré-Cœur Hospital is one of two specialized centres in Montreal where patients are referred for autologous stem cell transplants, the other being at the Maisonneuve-Rosemont Hospital.

This type of autologous transplant is used as a treatment put this type of cancer, which unfortunately cannot yet be cured, in a dormant state. Approximately 60 to 70 of these autologous transplants are performed each year at the Sacré-Cœur Hospital on patients aged 70 and under, who are generally in good health. Between 300 and 400 autologous stem cell transplants are performed in Quebec every year.

Multiple myeloma is a cancer that originates in plasma cells. Plasma cells are a type of white blood cell that produce antibodies (immunoglobulins) to help fight infection. Plasma cells are found mainly in bone marrow, but also in certain other tissues and organs.

A passion for myeloma research

After completing a fellowship in Nantes, France, in a prestigious clinical research unit conducting some 100 research projects, the hemato-oncologist returned to Sacré-Cœur with the desire and intention to pursue his research into multiple myeloma. Principal investigator Dr. Boudreault Pedneault is also in charge of the stem cell program at the CIUSSS NÎM and co-founder of the Groupe des maladies plasmocytaires du Québec. With his small team, he is involved in major international studies evaluating innovative drugs, for which a few centres around the world, including Sacré-Cœur, are selected to study these new molecules administered to patients. The sheer volume of patients treated at Sacré-Cœur makes it easy to participate in international studies. A number of studies are aimed at understanding how to improve pre-transplant or post-transplant treatments to prevent patients from relapsing too early. Multiple myeloma has a 100% relapse rate, and transplantation extends life expectancy by 6 to 7 years, which is a major advance.

A challenge of resources

Currently, the hemato-oncologist and his team are conducting a research project with a highly innovative therapy that has just become available in the United States and Canada. "We're trying to determine whether giving this new drug after transplantation could improve the outcome of patients who receive transplants from us at Sacré-Cœur. It's a fairly complex study, requiring hospitalization and very close monitoring," he revealed.



Dr. Jean-Samuel Boudreault Pedneault, specialized hemato-oncologist

For him, the challenge is to have the necessary funding and human resources to collect the data properly, and he admits that he has had to give up participating in certain studies on multiple myeloma because of a lack of research nurses and a team that is too small.

"We're full of ideas for research projects," says the hematooncologist, referring to a project he's working on that involves using virtual reality headsets and integrating artificial intelligence (AI) to create a familiar and reassuring environment for patients during hospitalization and chemotherapy treatments. He explains, "the patient, who is often very stressed, could benefit from this headset to feel at home in a familiar environment. For example, if the patient is from Abitibi, he could see images of his hometown. It's an AI project. It will adapt to the patient's positive memories. We're talking about reducing the level of anxiety associated with cancer. It's a huge project," concluded Dr. Boudreault Pedneaut enthusiastically. The team working on this project was, at the time of writing, on the 3rd trial of the headset to make the necessary adjustments before testing on a patient.

Ultimately, the hemato-oncologist's hope is that this research will not only increase the life expectancy of people suffering from multiple myeloma, but ultimately lead to a cure for this type of cancer.

The Foundation invests in training for caregivers

Two new high-fidelity mannequins, named Simon and Emma, will join the five mannequins already in use by the simulation team at the Teaching Expertise Centre (TEC) at the Montreal Sacré-Cœur Hospital.

Simon, the most sophisticated SimMan 3G Plus mannequin, will enable students to confront varied and complex clinical scenarios, thanks to its intuitive interface and adaptive reactions. After testing by trainers, they will be used for teaching purposes in the coming weeks. This technology is designed to enhance team performance in a risk-free environment.

As for Emma, an EchoToddler mannequin, it will offer teams an immersive experience in pediatric care thanks to its impressive realism. This mannequin enables total immersion in pediatric care situations. Although Sacré-Cœur is a hospital for adult patients, it receives a significant number of pediatric consultations every year in its emergency department. In addition, young patients deemed too unstable by pre-hospital care are transferred to our ER for rapid management and urgent stabilization, before being transferred to a pediatric centre later on.

This realistic approach reduces stress for professionals and doctors less accustomed to treating young patients and boosts their responsiveness to future events. With the rise in respiratory viruses and overcrowding in pediatric hospitals, the number of pediatric consultations in our emergency departments is increasing rapidly. The use of this mannequin will enable our teams to prepare effectively for this growing demand, offering quality care to every patient.

"These mannequins will enable our students and teams to perfect their skills in a safe, controlled environment."

- Dr. Hai Huynh, co-director of TEC

The purchase of these mannequins was made possible thanks to the generosity of our donors and an investment of \$575,000 granted to upgrade our teaching rooms, work on which will begin in a few months, and to purchase these two mannequins. Dr. Hai Huynh, co-director of the TEC, is delighted with the arrival of these new training tools. "These mannequins will enable our students and teams to perfect their skills in a safe, controlled environment, as close as possible to the real-life situations they will encounter in a clinic setting. TEC thanks the Foundation for its unwavering support and highlights the commitment of Dr. Annie Giard and the teams involved in this project."





Dr. Hai Hyunh, co-director of the Teaching Expertise Centre, with the Simon mannequin.



Dr. Annie Giard introduces us to Emma the mannequin.



First edition of Cardio Tremco: let's pedal our hearts out!

We're delighted to announce the very first edition of Cardio Tremco, a benefit cycling event in support of Sacré-Cœur's cardiology department.

Who's behind this initiative? The two partners of Constructions Tremco: François Veilleux and Guillaume Careau, who have a special bond with the Hospital. Both Mr. Veilleux himself or someone close to Mr. Careau have witnessed the quality of care and kindness of the cardiology staff.

"Having been hospitalized at the Montreal Sacré-Cœur Hospital in 2022 myself, I'm grateful for the extraordinary staff and services provided by the cardiology department."

- François Veilleux

The bike ride will take place on **Saturday, September 7**, in the magnificent Oka region The event features two routes with different distances, at a cost of \$85 per registration. The first 100 people to register will receive a Cardio Tremco-branded water bottle!

You're invited you to join them and pedal your heart out to help Sacré-Cœur's heart experts continue to transform lives!

(Content in French only)



Interested in organizing your own fundraising event in recognition of the care you or a loved one has received?

Contact us at 514-338-2303.

YOU CAN MAKE A DONATION:

Online at fondationhscm.org
By Cheque

MONTRÉAL SACRÉ-CŒUR HOSPITAL FOUNDATION

5400, Gouin Blvd West, Montréal, Québec H4| 1C5

Phone: 514-338-2303 • Toll free: 1-866 453-3666

fondation.hsc.cnmtl@ssss.gouv.qc.ca

Founded in 1976 by the Sisters of Providence, the Montréal Sacré-Cœur Hospital Foundation has as its raison d'être to help the extended Sacré-Cœur and Albert-Prévost team constantly improve the care, treatment and environment of patients, while supporting the research and teaching activity of this major university hospital.







