

CENTRE DE
RECHERCHE



2024-2025

Annual Report

Our
KNOWLEDGE
brings
HOPE

DISCOVERIES OF THE YEAR

CANCER: BIOLOGY, PROGNOSIS AND DIAGNOSIS AXIS

Creating Viruses to Fight Cancer

What if viruses could be used... to treat cancer? This is the bold premise of virotherapy, an approach that involves engineering certain viruses to target cancer cells while sparing healthy tissue.

Until recently, designing such customized viruses was highly complex. However, **Taha Azad** and his team have developed a rapid and efficient solution. Their [approach](#) enables the creation of “armed” viruses capable of stimulating the immune system to more effectively recognize and eliminate cancer cells.

The results are striking: In preclinical models of skin cancer, tumours were eradicated. This represents a major breakthrough that could pave the way for new, more powerful and targeted anticancer therapies.

DIABETES, OBESITY, AND CARDIOVASCULAR COMPLICATIONS AXIS

Improving the Prediction of Gestational Diabetes

Gestational diabetes affects approximately one in seven pregnant women worldwide. It can complicate pregnancy and delivery, as well as increase health risks for the child, including high birth weight and a greater likelihood of developing obesity and diabetes later in life.

In collaboration with **Luigi Bouchard** and a team of colleagues, **Dr. Marie-France Hivert** discovered that a placental protein known as IGFBP1 may play a [key role in the development of gestational diabetes](#). Consequently, this protein may also help regulate blood glucose levels during pregnancy.

By analyzing blood and placental samples from 1,200 women, the researchers observed that IGFBP1 levels could serve as an early biomarker to identify pregnant women who are at higher risk, even before the onset of the disease.

This discovery could lead to the development of a simple blood test, enabling earlier screening for gestational diabetes and improved prevention of related complications. It represents a promising advance for the health of pregnant women and their children.

MEDICAL IMAGING AXIS

Hope for Earlier Detection of ALS

Amyotrophic lateral sclerosis (ALS) is a neurodegenerative disease that destroys motor neurons, leading to progressive muscle weakness and paralysis over time. In the absence of a definitive diagnostic test, ALS is often diagnosed late, when the disease is already at an advanced stage.

To address this challenge, **Brigitte Guérin** and her team developed a [new medical imaging tool](#) capable of detecting an abnormal protein associated with ALS. When tested in mice with a genetic form of the disease, this approach yielded promising results. The findings suggest that earlier screening and more accurate monitoring of disease progression may be possible in the near future.

Conducted in collaboration with pharmaceutical company AL-S Pharma AG, this research also led to the filing of an international patent, paving the way for the development of a clinical tool for people living with ALS. This major advance offers renewed hope!

DISCOVERIES OF THE YEAR

INFLAMMATION-PAIN AXIS

More Accurate Sensors for Real-Time Physiological Monitoring

What if we could monitor what is happening inside the body in real time? This is the promise of biosensors, small devices capable of highly targeted molecular detection.

Some of these sensors, known as E-AB sensors, rely on aptamers, which are short strands of DNA or RNA designed to bind to a specific target molecule. However, not all regions of these sequences are directly involved in detection. By shortening aptamers, researchers believe they can improve the sensors' sensitivity and precision, as molecular recognition would occur closer to the electrode surface.

Philippe Dauphin-Ducharme and his team investigated [how these aptamers interact with their targets](#) using nuclear magnetic resonance, a technique that enables detailed observation of molecular behaviour. By combining these experimental data with computational modelling, they identified the regions that are most critical for effective detection.

The outcome is a deeper understanding of sensor function and the potential to design devices that are more efficient, faster to develop, and less costly—paving the way for more reliable real-time monitoring within the human body.

MOTHER-CHILD AXIS

Early Exposure to Screens: What is the Real Impact?

It is well known that young children are particularly attracted to tablets, but what is their true impact on early development? **Caroline Fitzpatrick** and **Gabrielle Garon-Carrier** investigated this question.

Their research showed that [children who frequently used a tablet around the age of 3.5 years tended to display higher levels of anger and frustration one year later](#), at 4.5 years old. Moreover, children who were more prone to anger at 4.5 years were also those who used tablets even more frequently by the age of 5.5 years. These findings suggest a potential vicious cycle: The earlier children are exposed to screens, the more challenges they may face in regulating their emotions, which in turn may lead to increased screen use over time.

Overall, the results highlight the importance of supportive, balanced, and developmentally appropriate guidance regarding screen use from an early age.

HEALTH: POPULATIONS, ORGANIZATION AND PRACTICE AXIS

Rethinking Access to Alcohol

Binge drinking—defined as the rapid consumption of large amounts of alcohol—primarily affects young adults and is associated with adverse health outcomes. In Canada, each province regulates alcohol sales through its own policies and distribution systems.

Martine Shareck and **Stephanie Sersli** examined [how the density and accessibility of alcohol outlets influence drinking behaviours among young adults in Quebec and British Columbia](#). The study revealed an unexpected finding: Greater access to alcohol was associated with lower levels of binge drinking in British Columbia, but with a slightly higher risk of binge drinking in Quebec. These results indicate that the impact of alcohol access is not uniform and depends on local context and patterns of consumption.

Such findings provide valuable insights for the development of tailored public policies that consider the specific social and regulatory realities of each province.



HIGHLIGHTS

Major Funding to Ease the Burden for Individuals with Asthma

Thanks to a joint program between the Ministry of Health and Social Services and AstraZeneca Canada, [funding](#) of over CAD 500,000 will enable **Dr. Simon Couillard** and his team to launch an innovative project.

The team will employ a novel approach combining the use of inflammometry, a technique that measures inflammation in the body, with blood testing to prioritize individuals at higher risk of developing asthma. The goal is to reduce diagnostic delays and optimize access to specialized care for those most at risk.

Standardizing Practices to Improve Critical Care

Each year, thousands of patients in intensive care units across Canada receive platelet transfusions, often as a preventive measure against bleeding prior to medical procedures. However, these transfusions carry potential risks, and their effectiveness in critically ill patients remains uncertain. As a result, the optimal platelet transfusion threshold has yet to be clearly defined.

To address this question, **Dr. François Lamontagne** and his colleagues are participating in an international study involving more than 2,500 participants, comparing five different transfusion thresholds.

Supported by over one million dollars in [funding](#) from the Canadian Institutes of Health Research, this project aims to harmonize clinical practices and improve the quality of critical care delivered to patients nationwide.

At the Forefront of Brain Research

Maxime Descoteaux is continuing his work on tractography, an advanced medical imaging technique that enables the visualization of bundles of nerve fibres in the brain. These fibres allow information to circulate between different areas of the brain, functioning much like communication highways.

In November 2024, he co-edited the publication of a book on the subject, [Handbook of Diffusion MR Tractography](#). He also co-organized a [scientific retreat](#) in Corsica, gathering approximately 60 experts from around the world. Drawing on these collaborations and his recognized expertise, he co-founded the [International Society for Tractography](#), which he now leads as president.

A Boost for Youth Mental Health

Pasquale Roberge, Helen-Maria Vasiliadis and **Patrick Boissy** have received a grant of more than CAD 350,000 from the Canadian Institutes of Health Research. This funding will be used over the next two years to assess the acceptability and feasibility of a pilot study evaluating a cognitive behavioural therapy program for adolescents living with anxiety or depression.

Delivered online through the [Équilia platform](#), the program aims to make mental health care more accessible, personalized, and better aligned with young people's actual needs.

A New Method to Harmonize Medical Imaging

Magnetic resonance imaging (MRI) systems do not always produce identical results depending on the model or manufacturer, even when the same acquisition parameters are used. This variability makes it difficult to compare or combine images obtained across multiple hospitals or research centres.

To address this issue, **Maxime Descoteaux**, **Pier-Marc Jodoin** and their team developed an innovative method known as ClinicalComBAT. This technology enables the harmonization of MRI images, ensuring comparability regardless of where the scans were acquired.

ClinicalComBAT is currently the only method ready for use in a clinical setting. It is in the process of receiving approval from the Food and Drug Administration and will be integrated into the commercial ANDI software, developed and marketed by Imeka.



HIGHLIGHTS

Toward Personalized Treatments for Prostate Cancer

Brigitte Guérin and her team followed 98 patients with advanced prostate cancer using a novel medical imaging approach that combines three radiotracers. This method enables improved detection of the different forms of the disease, allowing for more precise targeting and effective treatment.

The results of this study pave the way for more personalized and effective therapies for men living with metastatic prostate cancer. The team's work was also highlighted by [Radio-Canada](#), underscoring its significant contribution to cancer research.

An Innovative Project to Make 3D Radiography Safer

Réjean Fontaine has received major [funding](#) through the Fonds de recherche du Québec Stratégia program to carry out an ambitious interdisciplinary and intersectoral project. His team will work on the co-development of a next-generation 3D radiographic imaging system.

This system will measure the flight time of photons, particles of light used to generate images, between the source and the detectors. With this technology, scattered photons that degrade image quality can be eliminated, while also reducing the X-ray dose received by patients.

This advancement could make 3D radiography safer, especially for children and for adults with overweight or obesity, while also improving overall image quality.

Research Supporting Families and Genetic Health

Luigi Bouchard as received CAD 416,098 in [funding](#) through Genome Québec's Genomics Integration Program – Human Health stream. Thanks to this support, he will work over the next two years to improve access to genetic testing for people from the Saguenay-Lac-Saint-Jean, Charlevoix, and Haute-Côte-Nord regions.

The project aims to develop and assess the social acceptability of a new screening test capable of rapidly and cost-effectively identifying 20 rare genetic diseases that are more prevalent in these regions.

The objective is to provide families with clear and reliable information to support informed decision-making prior to family planning, while also promoting improved prevention in genetic health.

A Safer Prenatal Test for Detecting Severe Genetic Disorders

Sébastien Lévesque has received CAD 444,190 in [funding](#) from Genome Québec to carry out an innovative project. The initiative aims to validate the reliability of a test capable of detecting certain severe genetic disorders in the fetus using a simple blood sample collected from the pregnant woman.

This test could provide a safer alternative to invasive procedures such as amniocentesis, which carry risks and are sometimes declined by parents. This approach represents a significant step toward prenatal screening that is safer, more accessible, and more respectful of family choices.

The First Phase 1 Clinical Research Unit in Oncology in the Eastern Townships

Under the leadership of **Drs Michel Pavic** and **Frédéric Lemay**, a new Phase 1 clinical research unit, also known as an early-phase unit, has been established in the Eastern Townships. This unit represents a critical step in the development of new cancer drugs and therapies, as it corresponds to the first stage of clinical trials conducted in humans.

During this phase, researchers administer a novel treatment to patients for the first time in order to evaluate its safety and to study dose-related responses.

Since spring 2024, people in the Eastern Townships living with advanced cancer and who have exhausted all existing treatment options have been able to access promising new therapies directly in their region.



HIGHLIGHTS

Improving the Understanding and Treatment of Congenital Heart Disease (CHD) Through Data

Dr Frédéric Dallaire is leading the data valorization cross-cutting theme as part of three major research teams who have received grants totalling more than CAD 5 million over five years. The funding, provided by the Canadian Institutes of Health Research, the Heart and Stroke Foundation of Canada, and Brain Canada, will support several research initiatives focused on congenital heart disease, structural heart anomalies present at birth.

Focused on improving understanding of disease progression and enhancing the quality of life of people living with CHD, the projects include:

- [*Precision health for patients with univentricular hearts across the lifespan*](#) – to better characterize the care trajectories of individuals born with a single functional ventricle and to enable more personalized clinical management.
- [*Lifespan brain health trajectories in congenital heart disease : the role of sex and gender*](#) – to better understand how these conditions influence brain health across the lifespan, with consideration of sex- and gender-related factors.
- [*Optimizing care transitions across the lifespan in congenital heart disease*](#) – to improve continuity of care at every stage of life, from childhood through adulthood.

RESEARCH CHAIRS

Canada's First Research Chair in Organ Donation

Dr Frédéric D'Aragon is the holder of Canada's first [research chair](#) dedicated to organ donation. This chair supports projects aiming to increasing both the number and quality of organs recovered, with the goal of improving successful transplantation outcomes.

The research chair also seeks to better understand and support donor families—an essential human dimension of the organ donation process.

Established through a partnership between the Justin Lefebvre Foundation, the CHUS Foundation, and the Université de Sherbrooke Foundation, this chair sets the stage for further advances to improve both transplantation practices and family support.

A New Research Chair to Better Understand the Impact of Quebec Policies on Pregnant Women and Youth

José Ignacio Nazif-Munoz is leading the [CRMUS Research Chair on the Evaluation of Public Policies Regulating Alcohol and Cannabis Use in Quebec](#). This chair aims to better understand how these policies influence the health and well-being of vulnerable population groups, including pregnant women and young people.

By analyzing the real-world effects of laws and regulations, this research seeks to inform policymakers and promote public policies that are more equitable, effective, and protective, contributing to more just and evidence-based social policies.

A Research Chair to Better Understand and Support Behavioural Addictions

Magaly Brodeur holds the [CRMUS Research Chair in Behavioural Addictions and Harm Reduction](#).

Her research will focus on improving public policies, health care, and social services for people living with behavioural addictions, such as gambling, excessive screen use, and cyber addiction, as well as for their families and loved ones.

The objective is to enhance prevention and understanding of these conditions in order to reduce their impact on health and overall well-being.

A Research Chair Advancing Digital Health

Through the [Cerebrovascular Brain Imaging Research Chair](#), **Kevin Whittingstall** will develop new computer-assisted methods capable of analyzing cerebral blood vessels from brain angiography images without human intervention.

These tools could enhance the understanding and detection of cerebrovascular disorders, contributing to improved prevention and treatment of conditions such as stroke and dementia.

DISTINCTIONS

National Recognition for a Promising Researcher

Marie Brunet has received the [New Investigator Award](#) from the Canadian National Proteomics Network (CNPN). This award recognizes her outstanding contributions to advancing knowledge in proteomics, a field that studies the full set of proteins produced by cells to better understand their role in health and diseases.

Through her research, Marie Brunet is developing innovative tools that could one day lead to new treatments for currently incurable pediatric cancers. This well-deserved recognition highlights the remarkable promise of her scientific career.

An Exceptional Career Recognized by the Scientific Community

Dr Jean-Paul Praud has received the [Lifetime Achievement Award in Pediatric Pulmonology from the Canadian Thoracic Society](#). This prestigious honour recognizes his remarkable career dedicated to advancing care and research in pediatric respiratory health.

This well-deserved acknowledgement highlights the lasting impact of his work in pediatric pulmonology in Canada and internationally.

Scientists Honoured for Their Commitment to Society

Christiane Auray-Blais and **Luigi Bouchard** have received the [King Charles III Coronation Medal](#), an [honorary distinction](#) recognizing their exceptional contributions and commitment to the well-being of Canadian society.

This acknowledgement highlights the important role of research and science in improving public health and overall quality of life.

A Member of Our Community Honoured for His Contribution to Research

Each year, the Fonds de recherche du Québec presents its Excellence awards to recognize the outstanding contributions of research personnel in supporting scientific advancement, training the next generation of researchers, and supporting research teams.

This year, **Jean-François Beaudoin**, an engineer at the Sherbrooke Molecular Imaging Center, received the [Second Award of Excellence in the Health sector](#). This distinction acknowledges his essential role in innovative research projects and his commitment to scientific excellence within our institution.

Improving Data Accessibility to Advance Research

Simon Décarv has been appointed Academic Director of the [Quebec Interuniversity Centre for Social Statistics](#), affiliated with the Institut de la statistique du Québec Research Data Access Centre, as well as with the Canadian Research Data Centre Network.

These key roles enable him to promote the coordination of and secure access to research data at the provincial and national levels, accelerating the generation of new knowledge that supports the public interest.

Recognition of a Promising Scientific Career

Denis Blondin has received the [2025 Jean-Davignon Young Investigator Award](#), presented by the CMDO Network in collaboration with Novo Nordisk and the Institute of Nutrition, Metabolism and Diabetes.

This distinction highlights his excellence and dynamism, as well as significant contributions to advancing knowledge in metabolic health.

A Community Expert at the Centre of Policy Development on Access to Care

Mylaine Breton is one of three experts appointed by the Government of Quebec to support the development of the province's first governmental policy on primary health care services.

This group is tasked with formulating recommendations that may shape this policy and ultimately improve access to care for all Quebecers.

Spotlight on 2024–2025 Distinguished Researchers and Notable Contributors

Once again this year, we highlighted the [outstanding talent](#) in our community.

Johane Patenaude and **Claude Asselin** received the titles of Distinguished Researcher, the highest honour awarded by the Centre, in recognition of their remarkable careers and lasting contribution to research.

Dre Marie-France Hivert and **Gabrielle Garon-Carrier** were named Researchers of the Year. **Gabriel Richard** and **Zineb El Yamani** were recognized as Research Professional and Student of the Year for 2024–2025.

The Centre also honoured **André Gaudreau** posthumously, naming him Patient Partner of the Year, for his outstanding commitment and significant contributions to diabetes research over the past decade.

OUTREACH

How Do Bones Regenerate After an Amputation?

Appearing on Radio-Canada's [Moteur de recherche](#), Dr. Frédéric Balg provided a clear and accessible explanation of the complex biological mechanisms that enable bones to repair and regenerate following an amputation.

A Trained Brain: the Key to Success

Dr David Fortin has been actively engaging with the media, including an article in [Le Bel Âge](#) magazine and appearances on [Radio-Canada](#), to discuss strategies for preventing dementia and the importance of keeping the brain active throughout life.

In [his most recent book](#), he also promotes a preventive approach to brain health, emphasizing that caring for overall health is essential to maintaining an active and resilient brain.

A Group of Scientists Mobilized to Combat Antimicrobial Resistance

Canada's first centre of excellence dedicated to combating antimicrobial resistance and promoting responsible antibiotic stewardship is being established in Sherbrooke.

Developed through a partnership between the CIUSSS de l'Estrie – CHUS, Université de Sherbrooke, and bioMérieux, the centre will bring together approximately fifteen researchers, including Dr. Louis Valiquette. They will share expertise and develop innovative solutions to address this major global public health challenge.

The large-scale initiative, featured in [La Tribune](#), marks a significant milestone for infectious disease research in Quebec and across Canada.

A Promising Injectable Therapy for Multiple Cancers

A series of media reports, including an [interview](#) broadcast on Radio-Canada's Par ici l'info, have highlighted Dr. Étienne Rousseau's work in nuclear medicine.

Together with his team, he investigated an injectable radiotherapy treatment for certain advanced metastatic cancers, including those of the esophagus, stomach, biliary tract, and pancreas.

The results are encouraging: The therapy demonstrated a favourable side-effect profile and may offer new treatment options for patients. These findings pave the way for larger clinical studies and further exploration of this approach for other cancer types.

The Role of the Brain in Chronic Pain

Pascal Tétreault focuses on the brain's involvement in chronic pain.

Through his research, he aims to understand how pain alters brain structure and function and to identify the most appropriate treatment for each individual, based on the specific characteristics of their brain and the distinct effects of chronic pain. His work was recently featured in an article in [La Tribune](#).

Spotlight on Rare Diseases

Members of the Interdisciplinary Research Group on Neuromuscular Diseases Cynthia Gagnon, Elise Duchesne, and Simon Girard welcomed the team from Radio-Canada's [Découverte](#) into their laboratory in the Saguenay-Lac-Saint-Jean region.

They presented their research on rare diseases, namely myotonic dystrophy type 1 (DM1). Through the testimony of a patient, the program highlighted the vital collaboration between researchers, clinicians, and individuals affected by these conditions, an essential partnership driving advances in understanding and care.

Medicine, Research, and Optimism

Dr André Carpentier shared his professional journey and expertise on the [1001 voix du succès podcast](#), where he debunked common misconceptions about fats, diabetes, and cardiometabolic health.

He also appeared on [Des années lumières](#) to explain the difference between "good" and "bad" fats.

An Innovative Tool to Combat Aggressive Brain Cancers

Claire Dubois presented her latest research on [Panorama](#).

She and her team are developing a tool designed to help select the most effective treatment for each individual. By creating medical avatars derived from a patient's tumour, it is possible to test therapies virtually before administering them. This innovation could accelerate the development of new drugs and contribute to more personalized cancer care.

Is There a Link Between Gestational Diabetes and Childhood Obesity?

Luigi Bouchard studies how conditions in the womb during pregnancy can influence a child's future health, including the risk of diabetes and obesity.

Le [Journal de Montréal](#) highlighted his research, which aims to prevent these chronic diseases from the earliest stage of life.

Long COVID: Gaining a Better Understanding of a Persistent Condition

Well after the end of the COVID-19 pandemic, some individuals continue to suffer from long COVID, with symptoms persisting over time.

Simon Décary and Alain Piché have been featured in the media, explaining that this condition is often difficult to live with, that waiting lists to access care are long, and, most importantly, that there is hope thanks to ongoing research.

Recent media reports highlighted the scope of the issue:

- ["Approximately 2,000 patients are on waiting lists for long COVID clinics."](#) [In French]
- ["Living with long COVID, a patient requests medical assistance in dying"](#) [In French]
- ["Around one hundred new cases of long COVID are reported each month"](#) [In French]»

PATIENT PARTNERSHIP

Initiatives with an International Impact

Our patient-partnership practices are gaining attention as far afield as Europe! This fall, Patient Partnership Coordinator Catherine Wilhelmy was invited to present our initiatives at Healthcare Week Luxembourg 2024 and at the Doctoral Seminar of the French National Cancer Institute (INCa) in Paris.

These presentations highlighted our unique approach, especially the involvement of patient partners in fundamental research. The audience was both surprised and intrigued by this model.

Publication of a Position Statement on Patient Partnership

Patient partners from the Expériences community, including members from our own institution, have published a [position statement](#) presenting five key recommendations to better implement and standardize patient-partnership practices. The document provides an overview of the evolution of this approach, both in Quebec and internationally.

Tribute to an Inspiring Patient Partner

In July 2024, André Gaudreau, a pioneer in patient engagement in research, sadly passed away.

His involvement extended far beyond the CHUS Research Centre: He collaborated with Diabetes Action Canada, Réseau-1 Québec, and numerous research teams. He also contributed to the creation of the MaRoute program, designed to support the training of young scientists.

Through his passion, optimism, and generosity, André Gaudreau inspired many and paved the way for others wishing to become actively involved in research.



STUDENT SUCCESS STORIES

Alexis Perreault Shines at Science POP

A PhD student in immunology, Alexis Perreault stood out at the provincial final of the Science POP competition.

His presentation entitled “Casser des œufs : une recette gagnante contre le cancer?” (Cracking Eggs: A Winning Recipe Against Cancer?) earned him two awards:

- The Jacques-Genest Award (2nd place)
- The People’s Choice Award in the Outreach Challenge

This double recognition highlights his talent for making science both engaging and accessible.

An Exceptional Journey for Louis-Olivier Roy

A PhD student in health science research, Louis-Olivier Roy has achieved remarkable success!

In 2024–2025, he

- received scholarships from the Canadian Institutes of Health Research and the Fonds de recherche du Québec, as well as an honourable mention from the Dean of the Faculty of Medicine and Health Sciences at the Université de Sherbrooke;
- published three scientific articles as first author and four additional articles as co-author;
- has held leadership roles as President of the Student Committee for the Mother-Child Research Axis and as Student Representative on the Executive Committee since 2022.

He has also been actively involved in the Centre’s scientific and community life, serving on the Organizing Committee for the Mother-Child Research Axis retreat, volunteering at the Sherbrooke Wine Auction, and sitting on the Organizing Committee of the Science POP Competition.

And that’s not all! In 2024, he competed in the Triathlon World Championships in Spain, proving that it is possible to excel in both science and high-level sports.



STUDENT SUCCESS STORIES

Dr. Isabelle Hardy: A Promising Emerging Scientist

She recently received the following:

- A 2025–2026 Phase 2 Salary Award from the Fonds de recherche du Québec – Health Sector and the Ministère de la Santé et des Services sociaux, designed to support medical residents pursuing a career in research;
- A 2025–2026 Postdoctoral Training Award from Michael Smith Health Research BC for her project entitled [“Consequences of Preconception Bariatric Surgery for Fetal Size and Pathological Growth Restriction: A Linked Population Registry Study.”](#)

Gabrielle Pratte: A Rising Postdoctoral Researcher

For this postdoctoral fellow working under the supervision of Mélanie Couture, the past year has been marked by significant achievements:

- She was among the finalists for the University of Sherbrooke’s 2024 Best Doctoral Thesis Award;
- She received a 2024–2026 Canadian Institutes of Health Research Health System Impact Fellowship to support her postdoctoral training;
- She is the first author of an [article](#) published in Child: Care, Health and Development.

Nada Zoubdane: An Award-Winning Doctoral Researcher

A PhD candidate in physiology, she distinguished herself at the Université de Sherbrooke Three Minute Thesis competition, earning

- the First Prize at the francophone final;
- the People’s Choice Award at the 2024 national final in Ottawa.

Her presentation focused on preventing atherosclerosis through a polyphenol-rich diet and the consumption of extra virgin olive oil—described as a “divine ancestral remedy.” Thanks to her outstanding science communication skills, she made complex research both engaging and accessible.

Her excellence was further recognized with the award of a Université de Sherbrooke Excellence Scholarship for her doctoral studies.

Antoine Théberge: A Doctoral Student Making His Mark in Brain Imaging

A PhD student in computer science, he presented his research at the prestigious [Medical Image Computing and Computer Assisted Intervention 2024](#) conference.

His project focuses on tractography, the virtual reconstruction of white matter fibres in the brain using magnetic resonance imaging, without the need for surgical intervention.

Thanks to the advances he shared, scientists will be able to study white matter more accurately and efficiently. This work could help deepen understanding of neurodegenerative diseases and improve the planning of neurosurgical procedures.

Samantha Côté Recognized for Her Research in Neuroscience

At the end of her PhD in radiation sciences and medical imaging, she received the 2024 Excellence in Neuroscience Papers Award for her publication entitled [Association of Cumulative Lifetime Exposure to Female Hormones With Cerebral Small Vessel Disease in Postmenopausal Women in the UK Biobank](#).

This early-career researcher award highlights the significance of her work on brain function.

It is a historic achievement as Samantha is the first Quebecker to receive this distinction!

Anaëlle Morin Awarded a Major Doctoral Scholarship

A PhD candidate in health sciences, she received a \$141,794 doctoral scholarship from the Fonds de recherche du Québec as part of the 2024–2025 Doctoral Training Program for holders of a professional degree.

This four-year scholarship will support her project entitled Development and Validation of a Measurement Instrument for Nursing Practice in Family Medicine, conducted in collaboration with her supervisors Marie-Ève Poitras and Cynthia Gagnon.

The project aims to develop and evaluate a tool to better describe the work of nurses in family medicine and, ultimately, improve clinical practice.



CRCHUS IN NUMBERS

DEDICATED PEOPLE

320
RESEARCHERS

179
RESEARCH PROFESSIONALS

13
ADMINISTRATIVE PROFESSIONALS

759
STUDENTS

6
research axes



55,9 M \$
annual budget



16 CANADA RESEARCH CHAIRS

6 NEW RESEARCH CHAIRS

893
SCIENTIFIC PUBLICATIONS

1 434
ACTIVE RESEARCH PROJECTS

Funding Sources for 2024–2025

Fonds de recherche du Québec (FRQ) - secteur Santé Grant (Centre)	\$ 2 755 000
Grants from FRQ - secteur Santé recognized organization	\$ 17 107 932
Scholarships from FRQ - secteur Santé recognized organizations	\$ 8 289 962
Research contracts with the private sector	\$ 8 415 125
Sales and services	\$ 1 831 555
Contribution of the CIUSSS de l'Estrie – CHUS and the CHUS Foundation	\$ 1 713 351
Donations for teaching and research	\$ 1 000
CFI/John R. Evans Leaders Fund/IOF	\$ 2 815 213
Grants not recognized by the FRQ - secteur Santé	\$ 7 913 568
Scholarships not recognized by the FRQ - secteur Santé	\$ 3 166 675
Other*	\$ 1 984 435
Annual budget	\$55 993 816

*NPO, non-Canadian agencies, Quebec Agency, MSSS and healthcare organizations.

Note: The total amount of funding reported here may differ from that in the Centre Hospitalier Universitaire de Sherbrooke financial statements as some partner grants are managed by the Université de Sherbrooke.

AXIS	RESEARCHERS			STUDENTS			SCHOLARSHIPS AND GRANTS (RGAs*)	CONTRIBUTION TOPUBLICATIONS
	UNIVERSITY RESEARCHERS	UNIVERSITY CLINICAL RESEARCHER	ASSOCIATES	MSc	PhD	Postdoc		
Cancer: Biology, Prognosis and Diagnosis	37	15	13	75	71	13	\$ 7 432 396	149
Diabetes, Obesity and Cardiovascular Complications	16	12	14	24	38	11	\$ 2 720 823	134
Medical Imaging	26	4	3	58	87	10	\$ 3 581 910	101
Inflammation – Pain	36	17	8	66	77	13	\$ 5 161 183	145
Mother-Child	20	23	31	54	42	14	\$ 3 167 633	138
Health – Populations, Organizations and Practices	16	24	5	54	41	11	\$ 3 333 950	226
TOTAL:	320			759			\$ 25 397 894	893

*Recognized granting agencies.



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