

CENTRE DE
RECHERCHE



2020-2021
ANNUAL REPORT

Our
KNOWLEDGE
brings
HOPE

SINCE **1980**



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MISSION

FOR A NEW RESEARCH DYNAMIC

The Centre de recherche du Centre hospitalier universitaire de Sherbrooke (CRCHUS) plays a leadership role in the creation of knowledge and its translation towards improving health.

To this end, the CRCHUS fosters the excellence of its researchers by building on its strengths and setting while providing a collaborative environment conducive to creativity and partnerships. The research activities supported by the CRCHUS, contribute to the creation of innovative treatments and improved health care services.

VISION

EXCELLENCE - BOLDNESS - CREATIVITY

The CRCHUS is a world-class environment for research, innovation, and knowledge transfer that is dynamically integrated into its clinical and university setting. The collective achievements of the CRCHUS have a tangible impact on improving health.



In accordance with section 58.1 of the [Professional Code](#) (chapter C-26), only medical, dental and veterinary doctors may use the title of "Doctor" or an abbreviation of this title (Dr.) without restriction.

MESSAGE FROM THE DIRECTOR

Marked by the COVID-19 pandemic, 2020-2021 has been a year of unprecedented upheaval and adaptation for the Centre de recherche du CHUS (CRCHUS). This year was also marked by a transition in the leadership of the Centre. After eight years at the helm of the CRCHUS, Dr. William D. Fraser entrusted me with a vibrant organization that is in an excellent position.

Dr. Fraser's and the scientific community's achievements over the past eight years are impressive. Among these are a number of unique achievements: The implementation of the Clinical and Epidemiological Research Unit, the Patient Partner Strategic Committee, and the creation of new positions for emerging researchers, making the CRCHUS a key partner when it comes to researcher recruitment by the Université de Sherbrooke (UdeS) Faculty of Medicine and Health Sciences. In addition to these achievements, the Centre has restructured its research platforms and integrated the CRED informatics platform, endowing us with unique capabilities in digital healthcare. Finally, we have strengthened our partnership with the CHUS Foundation, creating new internal funding programs to significantly increase our research teams' competitive edge. Our funding programs have also become outstanding drivers for development, enabling our teams to see a return of more than twenty-three dollars per dollar invested.

As proof of our great capacity to adapt, with \$200,000 in financial support from the CHUS Foundation and in conjunction with other research bodies, the CRCHUS has set up a special COVID-19 funding program. This program contributed to the expansion of research on the pandemic.

Comprising 290 researchers, 793 students and 158 highly qualified employees, the CRCHUS has become the 4th largest research Centre in Quebec. Compared to 2014-2015, our publications and funding have increased by 36% and 41% respectively. In 2019, the CIUSSS de l'Estrie – CHUS, whose research is carried out mainly by the CRCHUS, rose from 27th to 17th position among the most active research institutions in Canada.

The CRCHUS Strategic Plan, rated as excellent by the Fonds de recherche du Québec – Santé in January 2020, places the person at the core of all research activities, it questions existing paradigms, and aims to integrate health-related information in order to improve our population's health and the care provided. With this visionary plan in hand and in collaboration with the CRCHUS community, I am committed to the ongoing integration of the patient partnership into all of our activities. Keeping the next generation's interests at heart, we will integrate students more into our governance, namely within the Scientific Advisory Board. In partnership with the UdeS, the

development of digital research, the enhancement of CIUSSS de l'Estrie – CHUS health data through research and the creation of learning health systems stem from our strategic plan and are at the heart of every action. In addition, we will emphasize the scientific productivity of our research teams and platforms by fostering a culture of continuous performance assessment. We will also improve our ability to implement major research and infrastructure development programs. In order to accelerate the expansion of research culture in healthcare settings, our teams will strengthen their collaborations with clinical departments. Finally, we will modernize our habits relating to the environment and sustainable development.

Armed with a clear vision of the CRCHUS, I want to spark and foster the teams' sense of belonging and pride in being part of such a dynamic organization. We have big ambitions and we are aiming for continuous improvement in the CRCHUS's performance over the next few years, despite the pandemic-related issues, the shortage of healthcare professionals, and the challenges that we may encounter along the way. Our greatest strength is our community because it demonstrates such expertise, professionalism, enthusiasm and passion in its work. Thanks to these collective attributes, the CRCHUS will continue to enjoy outstanding successes in the near future.

I wish to thank the CRCHUS management as well as all the members of the axes, of the teams and research platforms, and of the committees and departments for their dedication and for the trust they have bestowed upon me as Scientific Director. If there is one lesson to be learned from the past year, it is that health research is essential to our society's momentum and to the population's well-being. Our Centre's community is part of the cavalry of white coats riding to the population's rescue to meet major health challenges. This fills me with great pride!



Dr. André Carpentier,
MD, FRCPC
Scientific Director of the
Centre de recherche du CHUS

DISCOVERIES OF THE YEAR



CANCER: BIOLOGY, PROGNOSIS AND DIAGNOSIS

A Revolutionary Vaccine to Fight an Aggressive Form of Breast Cancer



Lee-Hwa Tai's team is conducting a [study](#) that aims to design a therapeutic vaccine to treat triple-negative breast cancer, one of the most difficult cancers to treat due to its rapid progression. In addition, the majority of patients do not respond to chemotherapy or surgery. Her technique consists in using breast cancer cells harvested from a woman at the time of her surgery, and infecting them with an oncolytic virus, a type of virus that destroys cancer cells and will be detected by the patient's immune system. The cancer cells are then injected back into the woman, which stimulates her immune system.



DIABETES, OBESITY AND CARDIOVASCULAR COMPLICATIONS

Using Adipose Tissue to Fight Type 2 Diabetes and Obesity



Denis Blondin and **Dr. André Carpentier**, in collaboration with Dr. Camilla Schéele from the University of Copenhagen, have developed an unprecedented method to activate the tissue responsible for burning excess sugar and fat in the human body. They have shed light on the cell receptor causing this activation. Their [study](#) demonstrates that when activated by exposure to cold, brown adipose tissue burns fat. This scientific breakthrough could eventually improve the treatment of type 2 diabetes and obesity as well as prevent related complications by stimulating brown fat with the help of a drug.

DISCOVERIES OF THE YEAR (CONT.)



MEDICAL IMAGING

Breaking the Blood-Brain Barrier in the Treatment of Neurological Diseases



Fernand Gobeil [is studying](#) the role of B1 and B2 receptors molecular structures that react to neurotransmitters in connection with the blood-brain barrier. This barrier represents the main obstacle to brain drug delivery. In collaboration with **Dr. David Fortin** and **Martin Lepage**, the researcher demonstrated innovativeness by combining both classic and innovative magnetic resonance imaging technologies. The latter involving a contrast agent targeting the B2R receptor. The team managed to determine when and where these receptors are present, enabling specialists to target them for brain drug delivery.



INFLAMMATION-PAIN

Towards Pain Relief Without Side Effects



Although they are effective in pain reduction, opioid treatments cause various side effects, such as addiction. **Louis Gendron** is focusing on the Delta receptor, a therapeutic target that causes fewer side effects and induces analgesic effects to alleviate inflammatory, neuropathic, cancer and migraine-related pain. He has [identified](#) several proteins that interact with the Delta receptor in the brain. The identification of these proteins represents a crucial step in the development of analgesics to treat chronic pain with little or no side effects.

DISCOVERIES OF THE YEAR (CONT.)



MOTHER-CHILD

GESTE: A Cohort Generating Interesting Leads



Analyses of the data collected by the GESTE birth cohort, created by **Larissa Takser**, have made it possible to establish a link between prenatal acetaminophen exposure and a child's brain development. The researcher has [identified](#) an association between the presence of acetaminophen, measured in the first feces of the newborn, and an indirect effect on increased hyperactivity in the child. This finding underlines the relevance of conducting more specific analyses, in order to conclude whether the drug should be contraindicated during pregnancy.



HEALTH: POPULATIONS, ORGANIZATION, PRACTICES

Loss of Taste and Smell Associated with COVID-19



Dr. Alex Carignan, **Dr. Jacques Pépin** and **Dr. Louis Valiquette** were the first to [study](#) anosmia and dysgeusia associated with the novel coronavirus SARS-CoV-2. Their objective: To confirm whether these symptoms were characteristics associated with people who tested positive for the virus. The researchers observed that nearly 70% of people with the disease presented with partial or complete loss of taste and smell. Their findings were published in the Canadian Medical Association Journal. In the article, the team specified that these symptoms should be used as an indication to carry out a diagnostic test for COVID-19, and that this test should be repeated in people presenting with these clinical manifestations and for whom the first test was negative.

HIGHLIGHTS

A New Scientific Director to Lead the CRCHUS



Dr. André Carpentier has succeeded **Dr. William D. Fraser** as Scientific Director of the CRCHUS. Recognized for his vast knowledge in the fields of diabetes and endocrinology, in recent years, Dr. Carpentier has contributed to several type 2 diabetes-related discoveries that offer hope for more effective treatments

for this disease. His wealth of experience will enable Dr. Carpentier to successfully lead the Centre into the future. Congratulations!

A New Pediatric Oncology Research Partnership



Thanks to **Dr. Josée Brossard**, the CRCHUS has joined the Children's Oncology Group, an international research consortium comprised of physicians and researchers. The partnership, which has led to the creation of ten clinical research projects to study pediatric cancers, was

made possible by a generous donation of \$1 million from the CHUS Foundation. These funds were raised by employees of Bombardier Recreational Products.

Using a Cohort to Guide the Treatment of Heart Disease



Dr. Frédéric Dallaire has created a cohort of more than 1,000 patients who have been followed since the 1980s because they live with tetralogy of Fallot, the most common cyanotic congenital heart disease. The cohort is the result of pairing clinical and administrative data, an approach that made it possible to include every Quebec

patient with this malformation. The cohort demonstrated that cardiac surgery, which aims to preserve the pulmonary valve, greatly improves survival and reduces the number of subsequent interventions in children and young adults.

Persons of the Year: Dedicated People

Dr. François Lamontagne, Karine Tremblay and **Andréa Dépelteau** share the same objective: The advancement of science to improve the care and services provided to the population. They achieve this goal thanks to their passion for research. Thank you and congratulations!



RESEARCHER OF THE YEAR

Dr. François Lamontagne

Health: Populations,
Organization, Practices Axis



RESEARCH PROFESSIONAL OF THE YEAR

Karine Tremblay

Cancer: Biology, Prognosis and
Diagnosis Axis
Inflammation-Pain Axis



STUDENT OF THE YEAR

Andréa Dépelteau

Health: Populations,
Organization, Practices Axis

Patient Partners Publish for the First Time

The Patient Partner Strategic Committee has published its [first scientific article](#). Highlighting the key factors for fruitful and lasting collaboration between patients and researchers, it recounts the Committee's achievements since its creation in 2017.

HIGHLIGHTS (CONT.)

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The CRCHUS, Offering HOPE for 40 Years!

The year 2020 marked the CRCHUS's 40th anniversary. For the occasion, the Centre showcased its researchers, their partnerships and the health-related discoveries that have emerged over the past four decades. A museum exhibit is in the works to explain in a simple and insightful way how the CRCHUS relies on collaboration and innovation to better understand and resolve health and social services issues. A series of capsules, featuring spokesperson Jean-Luc Mongrain, were also produced to highlight the importance of research in people's lives. The capsules were broadcast on the RDI channel.

A source of hope for patients, researchers' knowledge has contributed to the evolution of health-related research across Quebec and around the world since 1980.

An Effective Practice Centred on Cognition and Behaviour



Pasquale Roberge has evaluated and implemented transdiagnostic group cognitive-behaviour therapy, a new approach to treat anxiety and depressive disorders. It is a structured, short-term, present-oriented psychotherapy that aims to correct behaviours by analyzing the way thoughts, emotions and experiences

interact. The findings of the study were published in the Psychological Medicine scientific journal. They demonstrate the effectiveness of this treatment when offered in a primary care setting, which may contribute to its large-scale implementation.

Spotlight on Vulvar Pain



Many women suffer from vulvar pain, especially following a vaginal delivery.

Mélanie Morin wishes to break the taboos surrounding this type of pain by raising awareness about the topic, which is all too often trivialized. In order to do this, she has created a partnership with the Exogénia and Cigonia clinics, which specialize in

perineal rehabilitation through physiotherapy. The objective: To study the effectiveness of laser treatments for this type of pain.

HIGHLIGHTS (CONT.)

New Titles for Dr. Lamontagne



Dr. François Lamontagne's efforts during the COVID-19 pandemic have earned him two new titles, further broadening the CRCHUS's outreach. The researcher has been appointed Co-Director of the new Quebec COVID - Pandemic Network (QCPN). The objective of the network is

to promote collaboration between researchers in order to accelerate discoveries and their applications to fight the coronavirus. Adding to this new role is that of Co-Director of Sepsis Canada, which aims to improve the treatment and recovery of patients with sepsis. Sepsis is a possible complication when suffering from a severe form of COVID-19.

COVID-19: Dr. Carignan Informing the Public



During the COVID-19 pandemic, **Dr. Alex Carignan** demonstrated his dynamic nature while informing the public in the regional and national media. Through his reassuring approach, he endeavoured to provide clear and concise explanations so that listeners and viewers could fully understand the nature of the

SARS-CoV-2 virus. He helped people to be more vigilant and to take care of themselves in addition to recognizing the signs and symptoms of the disease.

A Globally Recognized Vaccination Model



In 2018, **Dr. Arnaud Gagneur** saw his vaccination strategy become a provincial program: The Motivational Interviewing in the Maternity Ward for the Immunization of Children (EMMIE) Program. Vaccination counsellors meet with the parents of newborns to discuss vaccine-related benefits and issues. Two years later,

the results speak for themselves: Vaccine hesitancy has dropped by 40%. This remarkable statistic convinced the Quebec government to roll out the EMMIE program in all its maternity units, which inspired other provinces and countries to replicate the model in their own institutions.

A New COVID-19 Treatment Under Development



The goal of **Richard Leduc's** study is to prevent the virus from entering human cells and then enabling the immune system to destroy it. In collaboration with international researchers, he wishes to develop a treatment to be delivered through inhalation, such as with asthma pumps, to prevent the spread of COVID-19

in the human body. This promising research arose from harnessing small molecules used in the past to fight influenza.

Ensuring Patients Are Not Neglected Thanks to a Post-COVID Clinic



Located at the Hôtel-Dieu de Sherbrooke, the Post-COVID Ambulatory Care Clinic is the first to be set up in the province. The result of an initiative by **Dr. Alain Piché**, the clinic supports people who experienced a benign form of the disease, but still have symptoms several weeks after the infection.

A Biobank to Better Understand the Coronavirus

Dr. Alain Piché was commissioned by the Fonds de recherche du Québec and Génome Québec to set up the very first COVID-19 biobank in Sherbrooke. This biobank provides the scientific community with the samples and data required to study the virus as part of the Québec BQC19 biobank. A platform such as this also provides researchers with an outstanding outreach opportunity.

NEW RESEARCH CHAIRS



Centre de Recherche Médicale de l'Université de Sherbrooke (CRMUS) Chair

Lee-Hwa Tai was awarded the new Chaire CRMUS de recherche translationnelle en immunothérapie. Highlighting Ms. Tai's exemplary work, the chair enables her to continue her research on the role of immune cells in the spread of cancers and to treat aggressive breast and bladder cancers.



Chaire André-Lussier – Université de Sherbrooke

Dr. Hugues Allard-Chamard was awarded the Chaire André-Lussier de rhumatologie, enabling him to contribute further to the definition of the molecular and pharmacological mechanisms regulating the function of the prostaglandin receptors and of the enzymes that form prostaglandins.



Canada Research Chair (Tier 2) –Natural Sciences and Engineering Research Council

Isabelle Laforest-Lapointe was awarded the Canada Research Chair in Applied Microbial Ecology. Highlighting the researcher's recent advances, this chair enables her to further her studies on the importance of leaf microbes in terrestrial ecosystems.



New Canada Research Chair –John R. Evans Leaders Fund

Ayman Oweida was awarded the new Canada Research Chair in Anti-Tumor Immunity by Radiotherapy. This chair underlines the quality of his research which aims to develop new strategies to improve radiotherapy treatment of lung, head and neck cancers.

PATIENT PARTNERSHIP



PATIENTS DEDICATED TO RESEARCH!

At the CRCHUS, patient partners are actively involved in research, in collaboration with researchers and their teams. Several of them sit on the Patient Partner Strategic Committee, which oversees the implementation and coherent supervision of the patient partnership. Others work with research teams in order to share and make the most of their experience with a physical, psychological or psychosocial health condition. They are true experts of what it is like to live with a disease.

Patient Partner Recognition

A patient partnership-related evaluation criterion has been added to the Centre de recherche du CHUS structuring project funding program in translational research. Patient partners now help evaluate the files by rating the funding requests.

PATIENT PARTNERSHIP (CONT.)

THE EVOLUTION OF THE PATIENT PARTNERSHIP



+ 3 000 hr
of volunteer commitment
= 85 weeks
of full-time work



Three research projects initiated
by patients, including one by a
group of children aged
9 to 11 years old.



**3 patient partner
committees:** Strategic,
Children and Breast Cancer.
The committees include
7 clinical investigators,
3 institutional staff members
and **20 patient partners,**
aged 9 to 94 years old.

Researchers worked with
80 patient partners as part
of their studies, including the following:



- Functional MRI assessment of food intake regulation in preadolescents (**Luigi Bouchard, Dr. Marie-France Hivert and Dr. Patrice Perron**).
- Management of small renal masses: a prospective study of patient values and preferences (**Dr. Patrick Richard**).



The first guide
produced by patients for researchers
who are interested in patient
partnerships.

Patient Partners Are Supporting the Next Generation

Several patient partners participated in the evaluation of student oral presentations as part of various scientific days organized by CRCHUS research axes.

The Jaime-Borja Patient Partner Choice Award was given to students who stood out for their talent in conveying information in layman's terms and for the relevance of their project to patients. This award also pays tribute to Jaime Borja, a patient partner with a longstanding history of involvement in research.

For the Advancement of Knowledge

Firmly believing in the value of research and in the resulting social responsibility, patient partners want to ensure that users' needs are heard. Together, they wish to demystify research in the population's mind, transforming it into a widespread and accessible culture. To fulfill this mission:

- They help define research priorities by taking part in the conceptualization of the research question, the methods used, the measuring instruments and the recruitment strategies.
- They take part in discussions with the research teams to ensure that research efforts result in concrete applications based on fundamental knowledge.
- They discuss the keys to success that will increase the studies' feasibility.
- They contribute to the public outreach of research.

STUDENT SUCCESSES

SCHOLARSHIPS

Vanier Canada Graduate Scholarship Program

– Government of Canada

- **Caroline Leblanc** (Karine Bertrand from the Université de Sherbrooke and **Christine Loignon**, co-directors) – \$150,000

Fonds de recherche du Québec – Santé

– Graduate Scholarship Program

- **Andréa Dépelteau** (Dr. Catherine Hudon, Director) – \$133,451
- **Marika Groleau** (Pierre-Étienne Jacques, Director) – \$84,000
- **Christian Vincelette** (Christian Rochefort, Director) – \$122,735

Fonds de recherche du Québec – Santé

– Tremplin Award

- **Julie Douchin** (Dr. Patrick Richard, Director) – Up to \$6,000

Prix Acfas IRSST – Institut de recherche Robert-Sauvé en santé et en sécurité du travail

- **Justine Benoit-Piau** (Nathaly Gaudreault and **Mélanie Morin**, co-directors) – \$19,500

Prix Engagement

– Quebec Rehabilitation Research Network

- **Marylise Martel** (Nathaly Gaudreault and Guillaume Léonard, Research Centre on Aging, co-directors) – \$250

University Scholarships – Université de Sherbrooke

Master's – Faculty of Medicine and Health Sciences Program

- **William Beauchesne** (Louis Gendron and Karine Tremblay, Université de Sherbrooke, co-directors)
– Domenico-Regoli Scholarship – \$35,000
- **Anthony Gagnon** (Christian Bocti, Research Centre on Aging, **Maxime Descoteaux** and **Larissa Takser**, co-directors)
– J.A. De Sève Excellence Scholarship – \$35,000
- **Victor Létourneau** (Jean-Bernard Denault, Director)
– Abdenour-Nabid Scholarship – \$35,000

Doctorate – Université de Sherbrooke Program

- **Andréa Dépelteau** (Dr. Catherine Hudon and **Émilie Lagueux**, co-directors) – Institut Universitaire de Première Ligne en Santé et Services Sociaux Excellence Scholarship – \$45,000
- **Dhyana Kpegba** (Mannix Auger-Messier and **Philippe Sarret**, co-directors) – Faculty of Medicine and Health Sciences Excellence Scholarship – \$30,000
- **David Martin** (Florian Bentzinger, Director)
– VoiceAge Excellence Scholarship – \$35,000
- **Camille Simard** (Philippe Sarret and **Lee-Hwa Tai**, co-directors) – Abdenour-Nabid Scholarship – \$57,000



Committees that Are Making Things Happen!

The Health: Populations, Organization, Practices research axis saw the emergence of its first student committee. A great initiative by the next generation, the committee's mandate is to represent the students of the axis and to encourage their participation and involvement in the scientific community.

Nothing can stop the Diabetes, Obesity and Cardiovascular Complications research axis student committee. In spite of the COVID-19 pandemic, committee members organized several networking, learning and training activities.

When Art Meets Science

The new *Exprime-toi pour la santé!* (Express yourself for health!) event, set up by the Health: Populations, Organization, Practices axis, combined art and science in a show intended for the general public. The show featured the stories of people living or having lived with a physical or psychological health disorder, using various means of artistic and scientific expression, such as visual arts, poetry and dance. Congratulations to **Alexandra Chapdelaine** who orchestrated the whole thing!

OUTREACH

IN THE MEDIA

Impact of the Coronavirus on the Population Rate



Alan Cohen put data from research on COVID-19 into perspective in order to estimate the expected mortality rate in Quebec and Canada in 2020. He achieved this by developing an ingenious calculation model that gave him a glimpse into the future.

Studying the Versatility of Probiotics

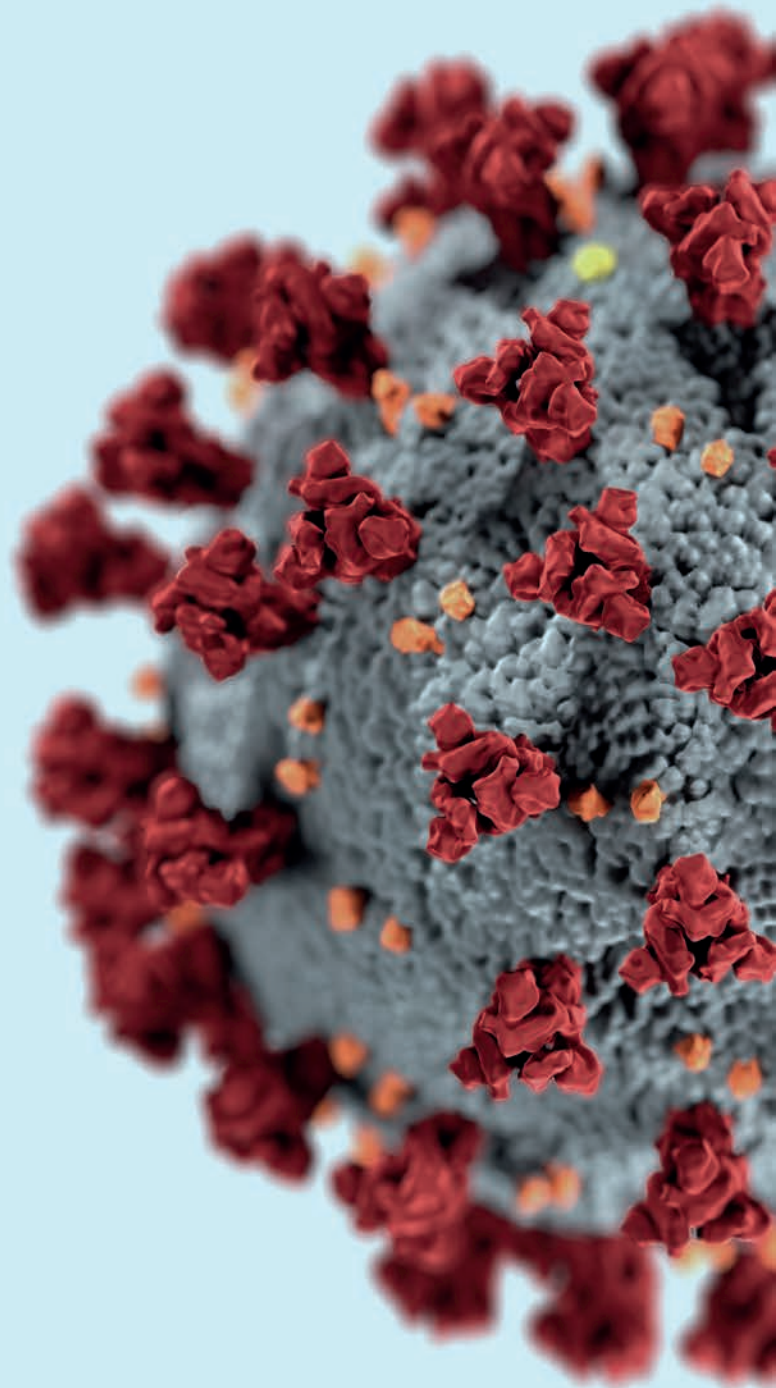


Recognized for their health benefits, probiotics cause few side effects as well as playing an antiviral role. **Dr. Jean-Charles Pasquier** has established a link between lower quality microbiome and the development of severe forms of COVID-19. This is where probiotics could be a game changer. To assess his hypothesis, the researcher set up a study to determine the impact of probiotics on reducing the duration and symptoms of the disease.

Using Corticosteroids to Treat COVID-19



The World Health Organization has called on **Dr. François Lamontagne** to lead a team of researchers who are analyzing the results of studies that have measured the effects of corticosteroids to treat patients with COVID-19. These inexpensive drugs would have a beneficial effect on the potentially fatal inflammation present at the severe stage of the disease.



OUTREACH (CONT.)

ON TELEVISION



***Au cœur de la vie:* Featuring Research on COVID-19**

Simon Décary, **Isabelle Gaboury**, **Dr. Alex Carignan**, **Dr. Olivier Lesur** and **Dr. Louis Valiquette** appeared on the show *Au cœur de la vie* to present their studies on SARS-CoV-2. Organized annually by the Société Radio-Canada, the show raised \$4,192,634 to improve the healthcare and services provided to the Estrie community.

A Material with Antibacterial Powers



Many pathogenic viruses and bacteria are transmitted largely through contaminated surfaces. **Louis-Charles Fortier** has demonstrated the antibacterial properties of anodized aluminum, which would make it possible to stem epidemics, including COVID-19. His study was featured on the show [*Découverte*](#).

Our Experts on [*Les aventures du Pharmachien*](#)



The Pharmachien (show's host) returned to the CRCHUS to take stock of popular beliefs in health. This time, he discussed statins and the effects of the cold on our health

with **Dr. André Carpentier**, as well as hormone therapy with **Dr. Sophie Desindes**.

IN PRINT AND IN SCIENTIFIC JOURNALS



A New Book on Long-Term Care Organizations

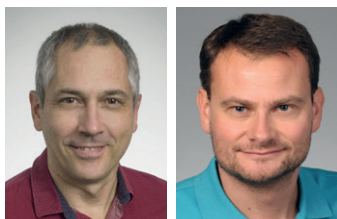
Yves Couturier has published a book on the diversity of perspectives surrounding long-term care organizations. Entitled *Les organisations de soins de longue durée – Points de vue scientifiques et critiques sur les CHSLD et les EHPAD*, it was written in collaboration with François Aubry from the Université du Québec en Outaouais and Flavie Lemay from the Université de Montréal.



Recognition for His Scientific Writing

Timothy Dubé was one of the best authors of the Canadian Medical Education Journal. Entitled [*It takes a community to train a future physician: social support experienced by medical students during a community-engaged longitudinal integrated clerkship*](#), his article describes the importance of the relationships that medical students develop by living, learning and working in rural communities.

AWARDS AND DISTINCTIONS



Paying Tribute to Dedication in Research

Réjean Fontaine and **Dr. Arnaud Gagneur** caught the attention of *La Tribune* newspaper, which underlined their passion for research as well as the resulting achievements as part of its Mérite estrien event.



International Honour in Pharmacology

Pedro D'Orléans-Juste was inducted as a Fellow of the British Pharmacological Society, becoming the first Quebecer to receive this prestigious designation. This distinction was awarded to him for his contribution to research, resulting in numerous publications and for his participation in the Society's scientific meetings.

Dr. Pasquier Honoured by the Fonds de Recherche du Québec – Santé (FRQS)



The FRQS has awarded **Dr. Jean-Charles Pasquier** with the *Statut d'excellence scientifique de chercheur-clinicien chevronné*. This honour highlights his commitment to maintaining high quality research activities.

An Honourable Mention for Mathieu Bélanger



In recognition of his expertise, **Mathieu Bélanger** received the Mitacs Honourable Mention as part of his nomination in the Top 25 Star Mentors from New Brunswick's universities, colleges and research institutions who have shown an exemplary job of training the next generation of researchers.

First Woman to Head the Canadian Association of Gastroenterology (CAG)



Nathalie Perreault has been appointed President of the CAG, making her the first woman to hold this title since its creation in 1962. Her new role means she will be developing research in Gastroenterology across the country as well as organizing the Association's annual scientific conference.

Recognition for Dr. Dallaire's Leadership



Dr. Frédéric Dallaire received the Emerging Academic Leaders award from Pediatric Chairs of Canada. This award was given to him for demonstrating initiative and leadership at the start of his career.

A New Role for Mélanie Couture at the Canadian Academy of Health Sciences (CAHS)



The CAHS has selected **Mélanie Couture** as Vice Chair of the Oversight Panel ensuring autism assessment. Its mandate: To guide the Public Health Agency of Canada in its initiative to develop a national autism strategy.

Isabelle Laforest-Lapointe Rewarded for her Contribution to Knowledge Advancement



The Canadian Society for Ecology and Evolution has recognized **Isabelle Laforest-Lapointe's** contribution to research in microbial community ecology by awarding her the *CSEE Early Career Award*.

EXTERNAL FUNDING PROGRAMS

Programme de soutien aux organismes de recherche et d'innovation
– Ministère de l'Économie et de l'Innovation

- **Dr. Alex Carignan** and **Dr. Louis Valiquette** – \$203,200

New Frontiers in Research Fund
– Social Sciences and Humanities Research Council

- **Vincent Burrus** and **Sébastien Rodrigue** – \$250,000

Lotte & John Hecht Memorial Foundation

- **Dr. François Lamontagne** – \$1,870,000

Innovation Fund

- Canada Foundation for Innovation
- **Réjean Fontaine** – \$7,034,763
- **Dimitri Ryczko** – \$320,502

John R. Evans Leaders Fund

- Canada Foundation for Innovation
- **Audrey Corbeil-Therrien** – \$80,107

Cannabis Research in Priority Areas
– Canadian Institutes of Health Research

- **Louis Gendron** – \$1,500,000

Synergy Grant

- European Research Council
- Auke Ijspeert, École Polytechnique de Lausanne, **Dimitri Ryczko** and **András Simon**, Karolinska Institute – €9.6 million

Programme Prompt-IA - Volet propulsion des universités – Ministère de l'Économie et de l'Innovation

- Vincent Aimez, Université de Sherbrooke, **Pierre-Marc Jodoin**, **Martin Lepage**, **Dr. Louis Valiquette** and **Martin Vallières** – \$500,000

Innovation to Impact Grants

– Canadian Cancer Society Research Institute

- **Brigitte Guérin**, **Dr. Michel Pavic**, **Dr. Etienne Rousseau**, **Dr. Éric Turcotte** and **Dr. Guy-Anne Turgeon** – \$450,000

Canadian Institutes of Health Research (CIHR) Grants

Several researchers received CIHR funding to support their health-related work: **Dr. Hugues Allard-Chamard**, **Martin Audet**, **Mannix Auger-Messier**, **François Bachand**, **Jean-François Beaulieu**, **Marie-Claude Beaulieu**, **Denis Blondin**, **Dr. Gilles Boire**, **François-Michel Boisvert**, **François Boudreau**, **Chantal Camden**, **Félix Camirand Lemyre**, **Dr. André Carpentier**, **Dr. Julie Carrier**, **Nils Chaillet**, **Dr. Anne-Marie Côté**, **Yves Couturier**, **Robert Day**, **Isabelle Gaboury**, **Dr. Arnaud Gagneur**, **Dr. Andrew Grant**, **Dr. Catherine Hudon**, **Subburaj Ilangumaran**, **Emmanuelle Jasmin**, **Steve Jean**, **Dr. François Lamontagne**, **Richard Leduc**, **Christine Loignon**, **Catherine Malboeuf-Hurtubise**, **Alexandre Maréchal**, **Éric Marsault**, **Patrick McDonald**, **François Michaud**, **Ayman Oweida**, **Dr. Alain Piché**, **Thomas Poder**, **Sheela Ramanathan**, **Pasquale Roberge**, **Christian Rochefort**, **Dr. Sophie Roux**, **Michelle Scott**, **Martine Shareck**, **Yannick Tousignant-Laflamme** and **Elijah Van Houten**.

Natural Sciences and Engineering Research Council of Canada (NSERCC) Grants

The following researchers received NSERCC grants: **Sherif Abou Elela**, **Pascale B. Beauregard**, **Florian Bentzinger**, **Martin Bisailon**, **Vincent Burrus**, **Jean-Philippe Côté**, **Maxime Descoteaux**, **Nancy Dumais**, **Jean-Pierre Dussault**, **Nathalie Fauchaux**, **Réjean Fontaine**, **Louis-Charles Fortier**, **Michel Grandbois**, **Subburaj Ilangumaran**, **Pierre-Étienne Jacques**, **Klaus Klarskov**, **Simon Labbé**, **Daniel Lafontaine**, **Isabelle Laforest-Lapointe**, **Christine Lavoie**, **Martin Lepage**, **Alexandre Maréchal**, **Éric Marsault**, **Éric Massé**, **Patrice Masson**, **Philippe Micheau**, **Ayman Oweida**, **Jean-Luc Parent**, **Éric Plourde**, **Jean-François Pratte**, **Sébastien Rodrigue**, **Philippe Sarret**, **Michelle Scott** and **Marc-André Tétrault**.

Fonds de Recherche du Québec (FRQ) Grants

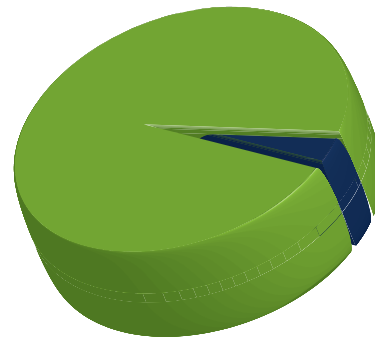
A number of researchers obtained new scholarships and grants from the FRQ, namely: **Mannix Auger-Messier**, **François Bachand**, **Denis Blondin**, **Patrick Boissy**, **François-Michel Boisvert**, **Luigi Bouchard**, **Jean-Philippe Brosseau**, **Dr. Artuela Çaku**, **Chantal Camden**, **Félix Camirand Lemyre**, **Dr. André Carpentier**, **Nils Chaillet**, **Alan Cohen**, **Jean-Philippe Côté**, **Yves Couturier**, **Dr. Frédéric Dallaire**, **Maxime Descoteaux**, **Timothy Dubé**, **Isabelle Gaboury**, **Dr. Arnaud Gagneur**, **Nathaly Gaudreault**, **Diane Guay**, **Brigitte Guérin**, **Dr. Catherine Hudon**, **Steve Jean**, **Simon Labbé**, **Isabelle Laforest-Lapointe**, **Émilie Lagueux**, **Dr. François Lamontagne**, **Jean-François Lepage**, **Dr. Olivier Lesur**, **Éric Massé**, **Patrice Masson**, **Philippe Micheau**, **Mélanie Morin**, **Ayman Oweida**, **Dr. Jean-Charles Pasquier**, **Dr. Alain Piché**, **Nicolas Quaegebeur**, **Dr. Maxime Richer**, **Sébastien Rodrigue**, **Dr. Etienne Rousseau**, **Philippe Sarret**, **Martine Shareck**, **Pascal Tétrault**, **Yannick Tousignant-Laflamme** and **Dr. Alain Vanasse**.

INTERNAL FUNDING PROGRAMS

Thanks to its generous donors, every year, the CHUS Foundation contributes to several internal funding programs for students and researchers who are members of the CRCHUS.

Among these programs, the Internal Funding Assistance Program, the structuring projects and the funding match programs are true drivers for research.

For every dollar invested, \$23.22 in grants was received, contributing greatly to research funding.



\$3,586,667
AMOUNT
INVESTED

\$83,285,844
GRANTS
RECEIVED

Internal Funding Assistance Program (PAFI)

The PAFI offers researchers six grants of \$25,000 each to launch research programs. The aim of the Program is to stimulate the development of original projects that are relevant to health issues and that could subsequently be supported by external sources of funding.

- **Dr. Magaly Brodeur** and her collaborators: Marie-Claude Battista, Denis Boutin and Catherine Wilhelmy from the Patient Partner Strategic Committee, **Dr. André Carpentier**, **Christine Loignon** and Marie-Ève Poitras from the Université de Sherbrooke.
- **Chantal Camden** and her collaborators: **Audrée Jeanne Beaudoin**, **Mélanie Couture**, **Isabelle Gaboury**, **Dr. Catherine Hudon**, Karen Hurtubise from the Université de Sherbrooke and **Pasquale Roberge**.
- **Dr. François Corbin** and his collaborators: Benoît Laurent from the Université de Sherbrooke and **Jean-François Lepage**.
- **Dr. Anne-Marie Côté** and her collaborators: Marie-Claude Battista from the Patient Partner Strategic Committee, **Félix Camirand Lemyre**, **Dr. Annabelle Cumyn**, **Dr. William D. Fraser** and **Dr. Marie-Ève Roy-Lacroix**.
- **Mélanie Morin** and her collaborators: Cynthia Gagnon from the Université de Sherbrooke, Dr. Hanns Lochmüller from the Children's Hospital of Eastern Ontario and **Dr. Le Mai Tu**.
- **Dr. Éric Turcotte** and his collaborators: **Brigitte Guérin**, **Ayman Oweida** and **Dr. Etienne Rousseau**.

Structuring Project in Translational Research Funding Program

The program helps teams of researchers who are members of the CRCHUS to develop a structure in order to respond to strategic funding initiatives supported by external organizations, outside of the Canadian Institutes of Health Research open competitions. Selected projects received \$50,000, to which research axes are frequently asked to contribute required matched funds in the amount of \$25,000. The chosen teams are:

- **Félix Camirand Lemyre** and his collaborators: **Dr. François Lamontagne** and **Jean-Baptiste Michaud**.
- **Dr. William D. Fraser** and his collaborators: **Dr. Jean-Patrice Baillargeon**, **Félix Camirand Lemyre**, John Draper from Aberystwyth University, **Isabelle Hardy** and Anne-Sophie Morisset from the Centre de recherche du CHU de Québec.
- **Lee-Hwa Tai** and her collaborators: **Dr. David Fortin** and **Dr. David Mathieu**, **Dr. Maxime Richer** and **Philippe Sarret**.

Funding Match Program

Granting agencies require that the research community also participate financially. To this end, the CRCHUS sets aside an annual funding match budget to support research teams who submit funding proposals, thus ensuring their competitive edge. Matching funds were awarded to:

- **Florian Bentzinger** and his collaborators: **Mannix Auger-Messier**, Penney Gilvert from the University of Toronto, **Éric Marsault** and Dr. Ubaka Ogbogu from the University of Alberta – \$70,000.
- **Dr. Étienne Fortin-Pellerin** and his collaborators: Andy Adler from Carleton University, **Benoit Chabot**, Marie-Josée Fortier, patient partner, Dr. Pascal M. Lavoie from the University of British Columbia, **Philippe Micheau**, **Dr. Jean-Paul Praud** and Michaël Sage from the Université de Sherbrooke – \$35,000.
- **Louis Gendron** and **Yannick Tousignant-Laflamme** – \$15,000.

INTERNAL FUNDING PROGRAMS (CONT.)

Special Funding Program – COVID-19

In order to meet coronavirus research needs, the CHUS Foundation donated funds to research institutions to fight the pandemic. This was a one time, non-renewable program. Four projects received funding, for a total of \$200,000, broken down as follows:

- **Dr. Alex Carignan** and his collaborators:
Dr. Annie-Claude Labbé from the Université de Montréal,
Dr. Jacques Pépin, Dr. Louis Valiquette and
Dr. Philippe De Wals from the Centre de recherche du CHU
de Québec, as well as Dr. Marie-Élise Parent and
Dr. Marie-Claude Rousseau from the Institut national de la
recherche scientifique – \$75,000.
- **Isabelle Gaboury** and **Michel Tousignant** as well as their
collaborator: Simon Décary, Université de Sherbrooke
– \$75,000.
- **Dr. Olivier Lesur** and his collaborators:
Dr. François Lamontagne and **Éric Marsault** – \$25,000.
- **Dr. Louis Valiquette** and his collaborators:
Félix Camirand Lemyre, Dr. Alex Carignan and **Alan Cohen**
– \$25,000.

Small Research Equipment Funding Program (PÉRC)

The PÉRC provides support to clinical or non-clinical university researchers, who are members of the CRCHUS, for the purchase of research equipment costing between \$5,000 and \$20,000. The funds were awarded to:

- **Antonio Conconi** and his collaborators: **Brendan Bell, Louis-Charles Fortier, Alfredo Menendez** and Raymund Wellinger from the Research Centre on Aging, for the purchase of a 96-well qPCR machine – \$20,000.
- **Philippe Sarret** and his collaborators: **Louis Gendron, Richard Leduc** and **Éric Marsault**, for the purchase of a high performance liquid chromatograph (HPLC) – \$20,000.

Postdoctoral Fellowship Program

The program encourages young, dynamic and high-performing researchers to become postdoctoral fellows. The creation of a special fund has made it possible to offer a maximum of three scholarships per competition. The scholarship is for 2 years at \$22,500 per year. The recipients are:

Spring 2020 Edition

- **Marine Daures (Nicolas Gévry, Director).**
- **Cinar Eda (Chantal Camden, Director).**
- **Yuguo Liu (Florian Bentzinger, Director).**

Fall 2020 Edition

- **Svenja Schüeler (Florian Bentzinger, Director).**
- **Stephanie Sersli (Martine Shareck, Director).**
- **Melanie Stamp (Réjean Fontaine and Dr. Jean-Paul Praud, co-directors).**

Graduate Scholarship Program – non FMSS

This program supports the most successful students wishing to pursue studies in health-related research in faculties other than the Université de Sherbrooke Faculty of Medicine and Health Sciences (FMSS). Three scholarships of \$11,250 per year for a period of two years were awarded to master's students, and three scholarships of \$14,250 per year for a period of three years were awarded to doctoral students. The recipients are:

Master's

- **Élisa De La Fontaine (Pierre-Michel Bernier and Jean-François Lepage, co-directors).**
- **Amélie Fillion (Alexandre Maréchal, Director).**
- **Puregmaa Khongorzul (Abdelaziz Amrani and Denis Gris, co-directors).**

Doctorate

- **Michael Desgagné (Éric Marsault and Philippe Sarret, co-directors).**
- **Esmaeil Ranjbar Kolehian (Réjean Fontaine, Director).**
- **Alex Valcourt Caron (Maxime Descoteaux, Director).**

CONGRATULATIONS
TO ALL RECIPIENTS!

OUR RESEARCH AXES

Each year, new members join and others leave the ranks of the CRCHUS. Welcome to our new members and thank you to all of those who bring, have brought or will bring their expertise to the Centre!

CANCER: BIOLOGY, PROGNOSIS AND DIAGNOSIS

Director: Lee-Hwa Tai, PhD
Coordinator: Karine Tremblay, PhD

A New Director at the Helm of the Axis

Lee-Hwa Tai has succeeded Benoit Chabot as Director of the Cancer: Biology, Prognosis and Diagnosis axis. In addition to devoting her career to cancer, the scientist is involved in fundraising events for the cause, such as the Cyclo-Sherbrooke cycling marathon. There is no doubt that she will invest 110% as leader of the axis. Congratulations!

During his years as Director of the axis, Benoit Chabot demonstrated passion and hard work, fostering remarkable successes in research. Thank you for all you've done!

New Researcher

Marie Brunet, PhD – Expertise in proteogenomics (trans-omics data) and in data science (bioinformatics, biostatistics and artificial intelligence).

Researcher Departures

Daniel Houde, PhD
 Michael Huels, PhD



Members Sherif Abou Elela, PhD François Bachand, PhD Annie Beaudoin, MD Brendan Bell, PhD Mathieu Belzile, MD Paul Bessette, MD Martin Bisaillon, PhD François-Michel Boisvert, PhD Nicole Bouchard, MD Marie-Josée Boucher, PhD François Boudreau, PhD Josée Brossard, MD Jean-Philippe Brosseau, PhD Marie Brunet, PhD Julie Carrier, MD Benoit Chabot, PhD Yves Collin, MD Antonio Conconi, PhD Jean-Bernard Denault, PhD	Perrine Garde-Granger, MD Sameh Geha, MD Fernand-Pierre Gendron, PhD Nicolas Gévry, PhD Véronique Giroux, PhD Darel Hunting, PhD Subburaj Ilangumaran, PhD Jean-Paul Jay-Gerin, PhD Steve Jean, PhD Claudio Jeldres, MD, MSc Thomas Joly-Mischlich, PharmD Hans Knecht, MD Pierre Lavigne, PhD Frédéric Lemay, MD Alexandre Maréchal, PhD Éric Massé, PhD Laurence Masson-Côté, MD, FRCPC David Mathieu, MD, FRCS (C) Nathalie McFadden, MD Charles Ménard, B.Pharm, MD, CRMCC	Jean Alfred Morisset, PhD Ayman Oweida, PhD Benoit Paquette, PhD Michel Pavic, MD Jean-Pierre Perreault, PhD Nathalie Perreault, PhD Alain Piché, MD, MSc, FRCPC Patrick Richard, MD, MSc, FRCPC Nathalie Rivard, PhD Xavier Roucou, PhD Robert Sabbagh, MD, FRCSC Léon Sanche, PhD Caroline Saucier, PhD Michelle Scott, PhD Marco Sirois, MD, FRCS (C) Lee-Hwa Tai, PhD Guy-Anne Turgeon, MD Chang Shu Wang, MD, PhD
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OUR RESEARCH AXES [CONT.]

DIABETES, OBESITY AND CARDIOVASCULAR COMPLICATIONS

Director: Pedro Geraldes, PhD

Coordinator: Ouhida Benrezzak, PhD

A New Director at the Helm of the Axis

Pedro Geraldes was named Director of the axis. He has also been the Director of the Université de Sherbrooke Centre of Excellence in Diabetes, Obesity and Cardiovascular Complications for several years, his advanced expertise will enable him to meet this challenge brilliantly. Congratulations!

Researcher Departures

Emanuel Escher, PhD

Denise St-Cyr, PhD



Members

Jean-Luc Ardilouze, MD, PhD

Mannix Auger-Messier, PhD

Jean-Patrice Baillargeon, MD, MSc

Mathieu Bélanger, PhD

Diego Bellabarba, MD

Frédéric Bernier, MD, MHA

Ghassan Bkaily, PhD

Denis Blondin, PhD

Luigi Bouchard, PhD, MBA

Guylain Boulay, PhD

André Carpentier, MD, FRCPC

Ahmed Chraïbi, PhD

Marc-Antoine Despatis, MD, MSc

Pedro D'Orléans-Juste, PhD

Jean Dubé, MD, PhD

Robert Dumaine, PhD

Paul Farand, MD

Guy Fink, PhD

Nicole Gallo-Payet, PhD

Pedro Geraldes, PhD

Michel Grandbois, PhD

Marie-France Hivert, MD, MSc

Ghislaine Houde, MD

Kerry Hull, PhD

Ananda Kalevar, MD

Fabienne Langlois, MD

Marie-France Langlois, MD

Christine Lavoie, PhD

Richard Leduc, PhD

Serge Lepage, MD

François-Charles Malo, MD

Anne Méziat-Burdin, MD

Michel Nguyen, MD

Paul Pape, PhD

Patrice Perron, MD

Marie-Hélène Pesant, MD

Nicole Van Rossum, MD

OUR RESEARCH AXES (CONT.)

MEDICAL IMAGING

Director: Brigitte Guérin, PhD

Coordinator: Réjean Lebel, PhD

New Researchers

Audrey Corbeil-Therrien, PhD – Expertise in metabolic and functional imaging as well as in artificial intelligence.

Claude Legault, PhD – Expertise in the development of new synthetic methodologies and their application in the creation of new high added value organic compounds.

Researcher departure

It is with deep sorrow that we learned of the death of our colleague and friend Éric Marsault. He passed away suddenly on January 13, 2021, as he was about to go cross-country skiing. A keen outdoorsman, he loved winter sports. He left his mark on the scientific community through his remarkable achievements in medicinal chemistry. He played several different roles: Director of the Institut de pharmacologie de Sherbrooke, professor at the Université de Sherbrooke and researcher at the CRCHUS, to name a few.



Members

M'Hamed Bentourika, PhD
Pierre-Michel Bernier, PhD
Yves Bérubé-Lauzière, PhD
Audrey Corbeil-Therrien, PhD
Robert Day, PhD
Maxime Descoteaux, PhD
Jean-Pierre Dussault, PhD
Réjean Fontaine, PhD
David Fortin, MD, FRCS(C)
Gérald Gahide, MD, PhD
Fernand Junior Gobeil, PhD
Brigitte Guérin, PhD
Pierre-Marc Jodoin, PhD
Roger Lecomte, PhD
Claude Legault, PhD
Martin Lepage, PhD

Olivier Lesur, MD, PhD
Jeffrey Leyton, PhD
Patrice Masson, PhD
Jean-Baptiste Michaud, PhD
François Moreau, MD
Moulay Ali Nassiri, PhD, MSc
Éric Plourde, PhD
Jean-François Pratte, Jr. Eng., PhD
Nicolas Quaegebeur, PhD
Etienne Rousseau, MD, B.Eng.
Marc-André Tétrault, PhD
Pascal Tétreault, PhD
Éric Turcotte, MD
Elijah Van Houtten, PhD
Johannes E. Van Lier, PhD
Kevin Whittingstall, PhD
Yue Zaho, PhD

OUR RESEARCH AXES (CONT.)

INFLAMMATION-PAIN

Director: Louis Gendron, PhD

Coordinator: Karine Tremblay, PhD

New Researchers

Pascale B. Beauregard, PhD – Specializes in the biofilms produced by bacteria and their involvement in certain pathologies.

Philippe Dauphin Ducharme, PhD – Expertise in the development of an electrochemical platform of DNA-based and protein-based biosensors for molecular monitoring of medications and drugs.

Researcher Departure

François Cabana, MD



Members

Hugues Allard-Chamard, MD, PhD

Abdelaziz Amrani, PhD

Claude Legault, PhD

Martin Audet, PhD

Corentin Babakissa, MD

Frédéric Balg, MD

Nicolas Beaudet, PhD

Pascale B. Beauregard, PhD

Florian Bentzinger, PhD

Gilles Boire, MD, MSc

Patricia Bourgault, PhD

Simon Brisebois, MD

Vincent Burrus, PhD

André Cantin, MD

Jean-Philippe Côté, PhD

Philippe Dauphin Ducharme, PhD

Artur José De Brum-Fernandes, MD, PhD

Yves Dory, PhD

Claire Dubois, PhD

Nancy Dumais, PhD

Nathalie Fauchaux, PhD

Louis-Charles Fortier, PhD

Alain Frigon, PhD, MSc

Éric Frost, PhD

Nathaly Gaudreault, pht, PhD

Louis Gendron, PhD

Philippe Goffaux, PhD

Sylvain Grignon, MD, PhD

Klaus Klarskov, PhD

Simon Labbé, PhD

Philippe Lachapelle, MD

Daniel Lafontaine, PhD

Sylvie Lafrenaye, MD, PhD

Émilie Lagueux, PhD

Ève Langelier, PhD

Pierre Larivée, MD

Patrick Liang, MD

Marc-André Magalhaes-Grave, MD, FRCSC

Serge Marchand, PhD

Patrick McDonald, PhD

Adrianna Mendreck, PhD

Alfredo Menendez, PhD

Mélanie Morin, pht, PhD

Jean-Luc Parent, PhD

Sophie Plamondon, MD

Sheela Ramanathan, PhD

Martin Richter, PhD

Sébastien Rodrigue, PhD

Marek Rola-Pleszcynski, MD

Diane Rottembourg, MD, MSc

Éric Rousseau, PhD

Sophie Roux, MD, PhD

Dimitri Ryczko, PhD

Djea Saravane, PhD

Philippe Sarret, PhD

Jana Stankova, PhD

Yannick Tousignant-Laflamme, pht, PhD

Le Mai Tu, MD, MSc, FRCSC

OUR RESEARCH AXES (CONT.)

MOTHER-CHILD

Director: Dr. Frédéric Dallaire, MD, PhD

Coordinator: Jennifer St-Laurent, MSc

A New Director at the Helm of the Axis

Dr. Frédéric Dallaire is the new director of the Mother-Child axis, occupying the role held by Dr. Jean-Paul Praud for many years. Dr. Dallaire's expertise in children's health will underpin his leadership of the research axis. Congratulations!

During his tenure, Dr. Jean-Paul Praud was deeply involved in the Centre, contributing to the expansion of research, namely with students. Indeed, many of them speak of an enriching experience for their academic and professional careers. Thank you for all you've done!

New Researchers

Willow Burns, PhD – Expertise on the dynamics of couple relationships when dealing with serious illnesses involving children.

Catherine Malboeuf-Hurtubise, PhD – Expertise in developmental psychology, clinical psychology and child and adolescent mental health.

Jean-Sébastien Plante, PhD – Expertise in mechanical engineering, including the design of medical equipment, and in respiratory health.

Researcher Departure

Hervé Walti, MD



Members

Christiane Auray-Blais, PhD
Audrée Jeanne Beaudoin, PhD
Jean-François Beaulieu, PhD
Marc Bellavance, MD
Valérie Bertelle, MD
Catherine Bertholet, MD
Guylain Boissonneault, PhD
Chantal Bouffard, PhD
Michel Grandbois, PhD
Willow Burns, PhD
Hubert Cabana, PhD
Artuela Çaku, MD, MSc, FRCPC
Chantal Camden, PhD
Belina Carranza-Mamane, MD
Céline Catelin, MD
François Corbin, MD, PhD
Anne-Marie Côté, MD
Francois-Pierre Council, MD, PhD
Mélanie Couture, PhD

Claude Cyr, MD
Frédéric Dallaire, MD, PhD
Sophie Desindes, MD
Dominique Dorion, MD
Marc Dumas, PhD
Mario Dumas, MD
Étienne Fortin-Pellerin, MD, FRCPC, MSc
William D. Fraser, MD, MSc
Nancy Gagné, MD
Arnaud Gagneur, MD, PhD
Serge Gravel, PhD
Denis Gris, PhD
Emmanuelle Jasmin, O.T., PhD
Isabelle Laforest-Lapointe, PhD
Alexandra Langlois, MD
Jean-François Lepage, PhD
Sébastien Lévesque, MD, PhD
Catherine Malboeuf-Hurtubise, PhD
Bruno Maranda, MD, MSc
Édith Massé, MD

François Michaud, PhD
Philippe Micheau, PhD, Eng.
Brigitte Moreau, MD
Annie Ouellet, MD
Jean-Charles Pasquier, MD, PhD
Jean-Sébastien Plante, PhD
Jean-Paul Praud, MD, PhD
Catherine Raby-Nahas, MD
Maxime Richer, MD, PhD
Sébastien Roulier, MD
Marie-Ève Roy-Lacroix, MD
Miriam Santschi, MD
Nadine Sauvé, MD
Larissa Takser, PhD
Isabelle Thibault, PhD
Jean-Sébastien Tremblay-Roy, MD
Helen Vlachos, MD, FRCPC
Guy Waddell, MD
Paula Waters, PhD

OUR RESEARCH AXES (CONT.)

HEALTH: POPULATIONS, ORGANIZATION, PRACTICES

Director: Pasquale Roberge, PhD

Coordinator: Charaf Eddine Ahnadi, PhD

New Researchers

Magaly Brodeur, MD, PhD – Expertise in the analysis and management of policies aimed at improving the healthcare system and the front-line patient experience.

Martin Charrette, PhD – Expertise in the development, implementation and evaluation of the effectiveness of a nursing residency program.

Timothy Dubé, PhD – Expertise in the use of innovative qualitative methods, including guided walking.

Émilie Gosselin, PhD – Expertise in critical care, nursing intervention, acceptability and feasibility studies, as well as in the development, validation and translation of measuring instruments.

Michaël Mayette, MD – Expertise in adult critical care medicine, mechanical ventilation, resuscitation, transport and cardiopulmonary bypass.

Charles St-Arnaud, MD – Expertise in general internal medicine and intensive care, particularly in cardiopulmonary bypass.

Researcher Departure

Marianne Xhignesse, MD, MSc



Members

Marie-France Beauchesne, PharmD
Marie-Claude Beaulieu, MD
Lucie Blais, PhD
Patrick Boissy, PhD
Magaly Brodeur, MD, PhD
Félix Camirand Lemyre, PhD
Alex Carignan, MD
Nils Chaillet, PhD
Martin Charette, PhD
Alan Cohen, PhD
Yves Couturier, PhD
Pierre Dagenais, MD, PhD, FRCPC
Frédéric D'Aragon, MD, PhD, FRCPC

Timothy Dubé, PhD
Damien Échevin, PhD
Nicolas Elazhary, MD
Isabelle Gaboury, PhD
Fabien Gagnon, MD, MSc, FRCPC
Frances Gallagher, PhD
Émilie Gosselin, PhD
Andrew Grant, MD, DPhil, FACMI
Diane Guay, PhD
Catherine Hudon, MD, PhD
Pierre-Étienne Jacques, PhD
François Lamontagne, MD, MSc
Marjolaine Landry, PhD
Élisabeth Leblanc, MD

Christine Loignon, PhD
Michaël Mayette, MD
Johane Patenaude, PhD
Jacques Pépin, MD, MSc, FRCPC
Thomas Poder, PhD
Pasquale Roberge, PhD
Christian Rochefort, PhD
Mathieu Roy, PhD
Martine Shareck, PhD
Charles St-Arnaud, MD
Louis Valiquette, MD, MSc, FRCPC
Alain Vanasse, MD, PhD

RESEARCH IN NUMBERS

FUNDING SOURCES FOR THE 2020-2021 PERIOD

Fonds de recherche du Québec – Santé (FRQS) grant (Centre)	\$2,459,963
Grants from FRQS-recognized organizations	\$17,911,124
Scholarships from FRQS-recognized organizations	\$4,984,284
Research contracts with the private sector	\$5,862,467
Sales and services	\$771,061
Contribution of the CIUSSS de l'Estrie – CHUS and the CHUS Foundation	\$1,219,375
Donations for teaching and research	\$199,356
Scholarships and grants not recognized by the FRQS and other income	\$11,538,682
Total:	\$44,946,312

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.

RESEARCH AXES	UNIVERSITY RESEARCHERS	UNIVERSITY CLINICAL RESEARCHERS	ASSOCIATE RESEARCHERS	STUDENTS			SCHOLARSHIPS AND GRANTS (RGAs*)	CONTRIBUTION TO PUBLICATIONS
				MSc	PhD	Postdoc		
Cancer: Biology, Prognosis and Diagnosis	36	14	10	57	62	16	\$5,947,938	136
Diabetes, Obesity and Cardiovascular Complications	19	9	11	33	31	13	\$4,174,991	98
Medical Imaging	28	5	1	84	63	18	\$3,027,661	118
Inflammation – Pain	38	15	6	91	69	10	\$5,280,545	158
Mother-Child	20	19	19	69	57	14	\$2,221,325	157
Health: Populations, Organization, Practices	17	19	4	61	31	14	\$2,242,948	186
TOTAL:	158	81	51	395	313	85	\$22,895,408	853

*Recognized granting agencies, regular researchers only

CLINICAL AND ADMINISTRATIVE STAFF: 158

CLINICAL RESEARCH AS OF MARCH 31, 2020

1 114
ACTIVE
RESEARCH
PROJECTS

212
CLINICAL
RESEARCH
PROJECTS
SUBMITTED TO THE
CIUSSS de l'Estrie
– CHUS RESEARCH
ETHICS COMMITTEE

Which include:

28 INDUSTRY PROJECTS

53 FUNDED PROJECTS

131 IN-HOUSE PROJECTS

CENTRE DE RECHERCHE DU CHUS

3001 12th Avenue North, Wing 9, Door 6
Sherbrooke (Quebec) J1H 5N4

crchus.ca



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et de services sociaux
de l'Estrie – Centre
hospitalier universitaire
de Sherbrooke*



Our partners:

*Fonds de recherche
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