

IRCM

Montreal Clinical
Research Institute

Driven by life.



Annual Report

23 24

A year of possibilities.

SUMMARY



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**Driven
by life.**

Recipient of budgetary support from the following ministries



THE IRCM AT A GLANCE

For over half a century, the IRCM has been committed to excellence, fostering scientific breakthroughs, training the next generation of scientists, and driving innovation in biomedical research.

The IRCM was the first research centre in Quebec to bring together, under one roof, scientists with experience in both fundamental and clinical research. A unique model at the time, the IRCM is now an internationally-renowned institute, among the most successful in Canada. Recognized for its scientific excellence, it stands out in many areas of the life sciences, including cutting-edge work in the field of precision therapies.

The IRCM, a centre of scientific knowledge located in the heart of Montréal's university community.

57

years of biomedical research

425

employees and students

35

research laboratories

4

research centers

6

6 specialized clinics and a long COVID research clinic



MESSAGE FROM THE CHAIRMAN OF THE BOARD

Members of the IRCM community,

It is with great pleasure and pride that I, once again, sign this message from the chairman to present our annual report.

Again this year, the management team, researchers, and teams from the various departments have joined forces to deliver results that live up to the IRCM's reputation. The scientific and administrative challenges we have

collectively taken on have demanded the very best of us.

For their part, the members of the Board of Directors have chosen to continue to focus on optimizing the Board's governance and developing our management team's leadership. Thus, we have strengthened the composition of our Board of Directors with judicious appointments, all



Richard Mayrand
Chair of the Board of Directors
Pharmacist, FOPQ, FCPA, F.Adm.A.,
ASC, C.Dir.

while achieving gender parity around the table. We have also adopted a scientific governance framework—a first in the field, to our knowledge.

As you will see, the achievements outlined in this annual report are a testament to the passion that drives our Institute. Our researchers are making a significant contribution to understanding the mechanisms of life and identifying innovative therapies, our clinicians are maintaining an exceptional quality of care for the many patients for whom our teams are the last resort, and our next generation of scientists continues to shine with aplomb beyond our walls.

Among the achievements that deserve to be highlighted, we should mention the adoption of our strategic plan. Board members underscored the quality of this essential tool, which is the fruit of an intense collaboration throughout the Institute.

The management team continues to deploy energy and creativity to advance the initiatives of the strategic plan, while respecting our budgetary framework. This is a matter we will continue to monitor closely.

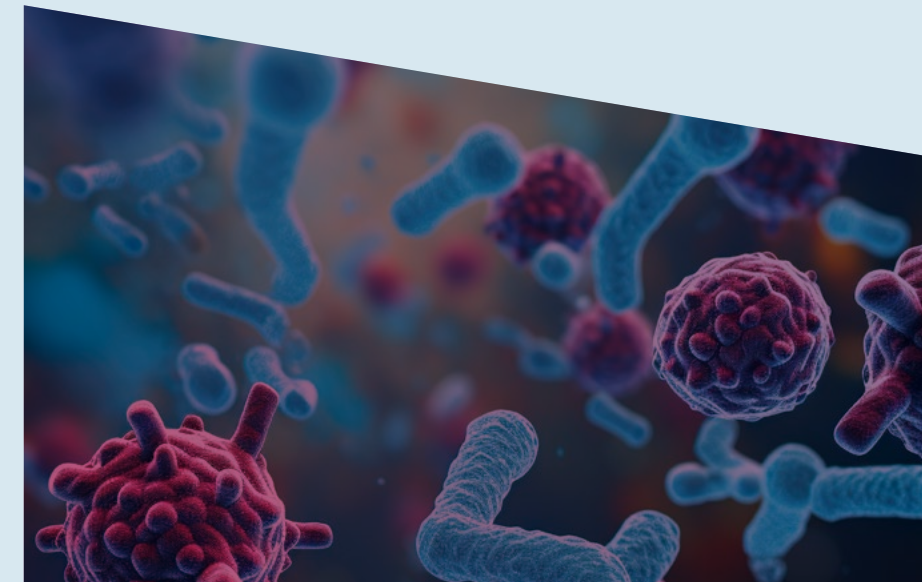
Finally, I cannot overlook the efforts and leadership of the IRCM's management in developing a proposal to create an innovation zone for precision medicine, a project with great economic potential and that is essential for Quebec.

The entire IRCM community can be proud of the results we present in this report and, above all, of everyone's commitment to achieving these successes.

Lastly, I would like to emphasize the pleasure I have had working with the members of the Board of Directors, as well as with our President and Scientific Director, Dr. Jean-François Côté, and his team. My warmest thanks to them.

In conclusion, I wish for us to continue along the path of hard work, excellence, collaboration, and humanism—values that are the DNA of our fine Institute.

THE ACHIEVEMENTS OUTLINED IN THIS ANNUAL REPORT ARE A TESTAMENT TO THE PASSION THAT DRIVES OUR INSTITUTE.



MESSAGE FROM THE PRESIDENT AND SCIENTIFIC DIRECTOR

Members of the IRCM community,
Collaborators,

I am very proud to present this 2023–2024 Annual Report, which reflects all the hard work and talent of our community.

Over the years, I never cease to be amazed at the diversity and depth of expertise within the Institute, whether in fundamental and clinical research, the care provided at our clinic, or all aspects of support for the Institute's activities:

Important scientific discoveries, awards and grants, innovation, exceptional emerging talent, efficient management of our resources, and so on. Excellence is part of our culture, and we can be proud of the work accomplished during **this year of possibilities**. Indeed, the past year has paved the way for new and ambitious avenues that I am committed to exploring with you, always in



Jean-François Côté
President and Scientific Director

the service of the well-being of our fellow citizens.

Not so long ago, we emerged stronger and more determined from a pandemic that forced us to reinvent ourselves, based on new paradigms. In 2023, we have also embarked, at the IRCM, on the development of a major five-year strategic plan aimed at positioning ourselves as a key player in the research and innovation ecosystem.

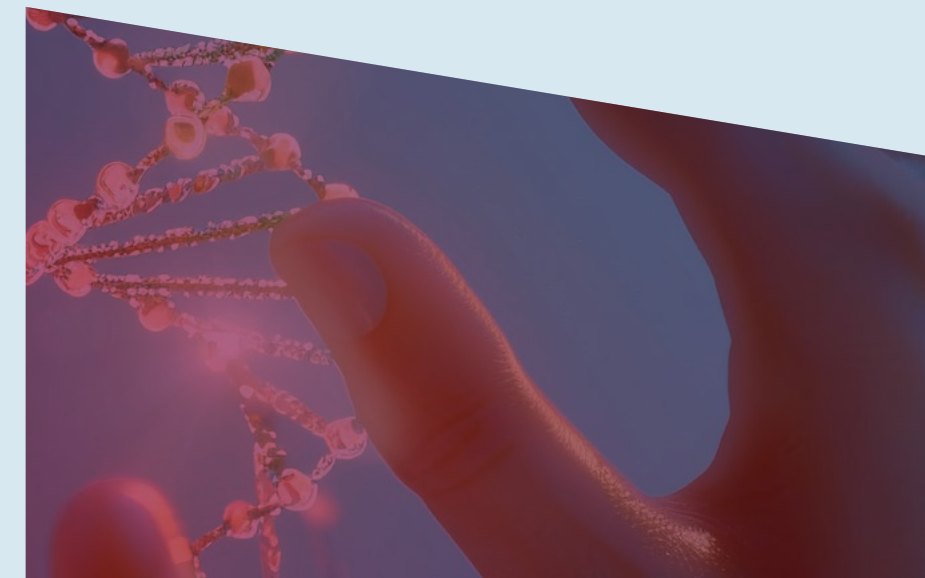
This exercise, which is the fruit of the joint efforts of the IRCM's driving forces, was shaped by workshops and both individual and collective discussions: researchers, clinicians, members of management and the Foundation, not to mention the invaluable contribution of our employees and professionals from the IRCM community.

This new strategic vision will be our guide as we continue to grow, while facing up to the very real challenges that lie ahead, paving the way for concrete actions to be taken in each of our areas of activity. This five-year plan is based, among other things, on the deployment of our ambitious Precision Therapies project, all built around shared values and an integrated, coherent, and modern vision. Already 2023 has seen the Sidney-Altman RNA Therapeutics Hub take off, and that is only the beginning.

Building on the successes of this **year of possibilities**, I invite all of you to continue working together to take the IRCM's excellence in research and care further and higher, while cultivating an inclusive, modern, and caring work environment.

Your PSD,

**EXCELLENCE IS IN OUR
CULTURE, AND WE CAN
BE PROUD OF THE WORK
ACCOMPLISHED DURING THIS
YEAR OF POSSIBILITIES**





PUSHING THE BOUNDARIES OF EXCELLENCE

STRATEGIC DIRECTIONS: AN AMBITIOUS AND VISIONARY PLAN

After several months of work, the IRCM has come up with a strategic plan to lay the foundations that will guide the deployment of its mission for years to come. This five-year plan was drawn up through workshops and discussions with the concrete collaboration of people representing the various groups in the internal community. The result is a clear roadmap based on shared values that will enable our Institute to spread its wings and realize its full potential in science and care, anchored in a foundation of excellence and innovation, in a humanist and modern context.

THE SIDNEY-ALTMAN HUB: UNLOCKING THE THERAPEUTIC POTENTIAL OF RNA



We wanted to pay tribute to Dr. Sidney Altman, a great Quebecer, recipient of the Nobel Prize in Chemistry, and a pioneer in RNA medicine research, who shortly before his death, had joined the IRCM as Professor in Residence, and the Université de Montréal's Faculty of Medicine as Visiting Professor. His work is an inspiration and we look forward to building on his legacy of excellence.

Jean-François Côté, President and Scientific Director of the IRCM



In 2023, the IRCM announced the creation of the Sidney-Altman RNA Therapeutics Hub, as Montréal increasingly asserts itself as a centre of excellence in the field of research and care in connection with RNA-based therapies and personalized medicine. This initiative, to be deployed in collaboration with the Université de Montréal network, will aim to develop, in this field, the tools needed by scientists and physicians to treat diseases.

At the heart of this cutting-edge research hub will be a number of major projects, including a therapeutic RNA platform offering specialized design services in bioinformatics and artificial intelligence, as well as small-scale synthesis, validation, and optimization of therapeutic RNA molecules. This centre of excellence will also include biodistribution and toxicity analysis capabilities to facilitate the transition from preclinical stages to experimental and clinical trials.

A Y E A R O F
P O S S I B I L I T I S :
O U R W I N S

DRIVEN BY LIFE, AND BY OUR PEOPLE



To meet the needs of its community and continue to develop an environment that is as caring as it is effective, the IRCM has unveiled a series of promising initiatives over the past year, in collaboration with representatives of the Institute's student community.

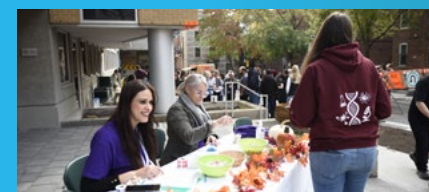
NEW FACES AT THE SERVICE OF RESEARCH



The IRCM has welcomed two new researchers who will enrich the diversity of its research. Renowned scientist **Nathalie Labrecque**, a Full Professor in the Department of Medicine and the Department of Microbiology, Infectious Diseases, and Immunology at the Faculty of Medicine of the Université de Montréal, and author of numerous cutting-edge scientific publications, heads the T-cell immunobiology laboratory at the IRCM. Researcher **Jane Yardley**, a Professor in the School of Kinesiology and Physical Health Sciences, has also joined the IRCM, where she heads her laboratory dedicated to understanding the effects of physical activity on type 1 diabetes, as well as the sex and gender differences associated with this disease.

ON THE ROAD TO GENDER PARITY

The Institute has begun working earnestly toward gender parity, an initiative that is beginning to bear fruit with, among other things, the recruitment of female laboratory directors and executives. In order to move forward in a coherent and harmonious way, the Institute has committed to certification with the organization Women in Governance, whose mission is to promote diversity and inclusion within companies and institutions of all kinds.



THE WELL-BEING COMMITTEE, NICKNAMED THE VITALITY COMMITTEE,

was created. Made up of members representing the Institute's various departments and services, this committee proposes several activities every month, focused on the physical and psychological well-being of the internal community..



THE IRCM'S REFLECTION ROOM was inaugurated as a space for relaxation, rest, and contemplation accessible to the entire internal community. In addition, a reserved area has been designated as a lactation room to facilitate the daily routine of new parents in the community.

FACES OF THE IRCM



Julie Lacombe, Ph.D., Research Associate and knowledge transmitter



It's one of the best research institutes in Montreal and in Canada, and I don't think I could be in a more interesting place for research.



Fatima Kassem, a passionate future scientist

After meeting with Dr. Cayouette and members of his laboratory, I felt that they valued scientific curiosity and professionalism.



Victor Sanchez, an efficient collaborator



It's an environment where people are very open and friendly. Really, since I arrived in Canada, for me, this has been the best!



Christine Matte, a pillar of academic life

When I read the job description, it was just like me on paper, in every way. It's such a lively, stimulating environment, and I have the latitude to carry out my projects according to my vision.



Sie Emile Hien, a trusted carpenter

What I like most here is the way we work together and encourage everyone. It didn't take me long to fit in, and that's probably because of how well I was welcomed.

Embracing
innovation
to give life to
the medicine of
tomorrow.

O U R R E S E A R C H
C E N T E R S A S O F
M A R C H 3 1 , 2 0 2 4

140

peer reviewed scientific publications

including

81

published in > 5 impact factor journals

423

Participations in peer committees or research evaluation committees

including

101

participations in funding agencies peer committees

RESEARCH *DRIVEN BY LIFE*

With its renewed vision, focused on the untapped potential of personalized medicine, research at the IRCM has been given a new lease of life. This impetus has made the past year a milestone for the Institute, as it positions itself as one of the leading institutions in personalized medicine in Quebec, while continuing to carry out its usual work. The Institute's research centers have embraced this revolutionary trend, drawing on their diverse expertise and collaborative potential.

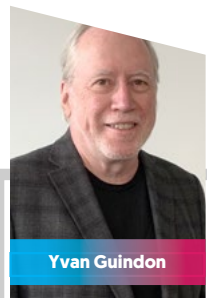


RESEARCH CENTER ON CANCER



Jean-François Côté

Cytoskeletal Organization and Cell Migration



Yvan Guindon

Bioorganic Chemistry



Eric Lécuyer

RNA Biology



François Robert

Chromatin and Genomic Expression



Martin Sauvageau

RNA and Noncoding Mechanisms



Marie Trudel

Molecular Genetics and Development



Jean Vacher

Cellular Interactions and Development

CO-RESPONSABLES
JEAN-FRANÇOIS CÔTÉ
FRÉDÉRIC CHARRON

RESEARCH CENTER FOR IMMUNITY, INFLAMMATION AND INFECTIOUS DISEASES



Hugo Chapdelaine

Primary Immunodeficiency Clinic



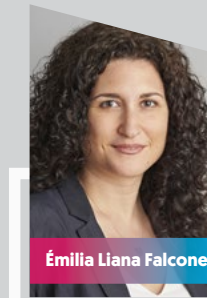
Éric Cohen

Human Retrovirology



Javier Di Noia

Molecular Biology of the B Cell



Émilie Liana Falcone

Microbiome and Mucosal Defence



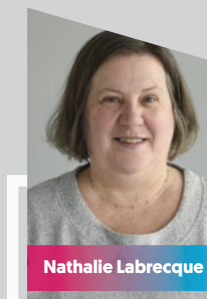
Hua Gu

Molecular Immunology



Paul Jolicoeur

Molecular Biology Research



Nathalie Labrecque

Immunobiology of T cells Research Unit



Tarik Möröy

Hematopoiesis and Cancer



Woong-Kyung Suh

Immune Regulation




André Vellette

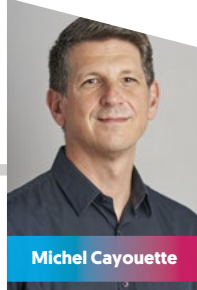
Molecular Oncology

CO-RESPONSABLES
JAVIER DI NOIA
WOONG-KYUNG SUH


RESEARCH CENTRE FOR GENETIC AND NEUROLOGICAL DISEASES




Guillaume Bollée
Rare Kidney Diseases Clinic




Michel Cayouette
Cellular Neurobiology




Frédéric Charron
Molecular Biology of Neural Development




Jacques Drouin
Molecular Genetics




Nicole J. Francis
Biochemistry of Epigenetic Inheritance




David R. Hipfner
Epithelial Cell Biology




Artur Kania
Neural Circuit Development




Marie Kmita
Genetic and Development



Mohan Malleshaiah
Stem Cells and Cell Reprogramming



Marlene Oeffinger
Ribonucleoprotein Biochemistry



Hideto Takahashi
Synapse Development and Plasticity

CO-RESPONSABLES
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JACQUES DROUIN

RESEARCH CENTRE FOR CARDIOMETABOLIC HEALTH



Yasaman Aghazadeh
Regenerative Medicine for Diabetes



Alexis Baas
Lipids Clinic and Genetic Dyslipidemias Clinic



Michel Chrétien
Functional Endoproteolysis



Benoit Coulombe
Translational Proteomics



Jennifer Estall
Cellular Interactions and Development



May Faraj
Nutrition, Lipoproteins and Cardiometabolic Diseases



Mathieu Ferron
Integrative and Molecular Physiology



Maxime Lamarre-Cliche
Hypertension Clinic



Rémi Rabasa-Lhoret
Metabolic Diseases Clinic



Eric Racine
Pragmatic Health Ethics



Peter W. Schiller
Chemical Biology and Peptide Research



Nabil G. Seidah
Biochemical Neuroendocrinology



Jane Yardley
Physical Activity and Diabetes

CO-RESPONSABLES
JENNIFER ESTALL
MAY FARAJ

INNOVATIVE AND PROMISING ADVANCES

For yet another year, IRCM's research teams have been advancing health knowledge by publishing their discoveries in prestigious scientific journals.



HEPATIC STEATOSIS: AN ARN-BASED THERAPEUTIC APPROACH

In groundbreaking work published in the journal *Metabolism Clinical and Experimental*, Dr. Nabil G. Seidah's team has discovered that PCSK7 gene produces a PCSK7 chaperone protein that regulates apoB, the major protein in LDL cholesterol particles. Dr. Seidah also found that the elimination of PCSK7 results in a 50% degradation of apoB and prevents hepatic steatosis. Moreover, it enables efficient liver recovery from diet-induced hepatic steatosis. For this research, Dr. Seidah teamed up with Dr. Martin Sauvageau to develop an RNA-based therapeutic approach to silencing PCSK7.

IDENTIFICATION OF SLAM RECEPTORS' PROTECTIVE ROLE

In *Cell Reports*, Dr. André Veillette's team unveiled a promising advance in our understanding of immune mechanisms in the face of certain viral infections and cancers.

The study shows that the production of memory NK cells is controlled by SLAM RECEPTORS. Using mouse models and an equivalent of cytomegalovirus, the team demonstrated that SLAM receptors prevent the destruction of memory NK cells and enhance the protection against viruses in preclinical models.

Furthermore, in the prestigious journal *Nature Immunology*, Dr. André Veillette and his

colleagues identified a pathway that impedes phagocytosis, a crucial process by which immune cells known as macrophages eat up cancer cells. This immune response can be impaired when cancer cells, using the CD47 molecule, block the action of the SIRP molecule which is essential for triggering phagocytosis. In addition, Veillette's team demonstrated that CD47 also blocks the action of the SLAMF7 molecule, which is important for fighting certain cancers such as multiple myeloma and lymphoma. Last but not least, this work sheds new light on Z10, an antibody which, when combined with other with other agents, is highly effective against cancer cells expressing SLAMF7.



LDL CHOLESTEROL INVOLVED IN TYPE 2 DIABETES

Recent work by Dr. May Faraj established for the first time a new mechanism and role for LDL cholesterol in the development of Type 2 diabetes, in addition to their traditional role in the development of cardiovascular disease in humans.

These findings suggest that in subjects with high LDL levels, an intervention that reduces inflammation may reduce the incidence of Type 2 diabetes, as well as cardiovascular diseases.

DIABETES AND FATTY LIVER ARE LINKED

Dr. Jennifer Estall's

team recently published a study that sheds new light on the links between diabetes and fatty liver. Published in the scientific journal *Diabetes*, this work revealed the abnormally high presence of proteins called sIL-6R and sgp130 in the blood of people with steatosis of the liver, a phenomenon that is even more pronounced in people living with diabetes. The team was able to establish that high levels of sugar and lipids, as found in diabetes, prompt different types of liver cells to produce these proteins. The team found that high levels of sugar and lipids, as in diabetes, prompt different types of liver cells to produce these proteins. Above all, the study revealed that sgp130's concentration of in the blood is a very

good indicator of liver damage, making this protein a possible early biomarker for this disease which has hitherto been difficult to detect in its early stages.

MYSTERIES OF VISION UNRAVELED

In a study published in the journal *Cell Reports*, **Dr. Michel Cayouette's** team identified a key mechanism involved in the growth of nerve cells that are essential for mediating binocular vision, which enables vision in the 3D world. The team identified a gene called Pou3f1, which acts as a major regulator of the expression of dozens of other genes. Together,

these genes generate the complete set of instructions that enable retinal ganglion cells to send projections from one brain hemisphere to the other. Moreover, the team showed that the Pou3f1 expression in retinal stem cells is sufficient to force them to become retinal ganglion cells, sending projections to the optic nerve.

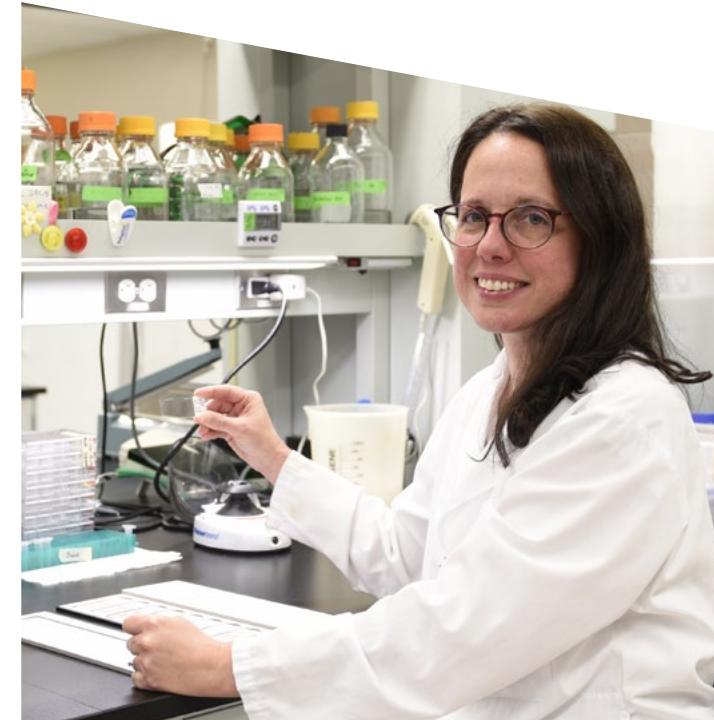
Also, another promising work by Dr Michel Cayouette's team was recently published in the *Proceedings of the National Academy of Sciences USA*. This work reveals a way of reactivating dormant cells in the retina and transforming them into neuron-like cells that could ultimately be used to replace cells that were lost to

retinal degeneration. This promising advance brings new hope of eventually restoring vision to people suffering from degenerative retinal disease.

A KEY ENZYME IN THE IMMUNE SYSTEM

Dr. Javier Di Noia's team has recently discovered a mechanism underlying the generation of effective immune responses, with strong potential for application in lymphoma therapy. The findings, published in the *Journal of Experimental Medicine*, show that an enzyme called PRMT1 plays a key role in the development of

Promising advances to improve understanding of serious and incapacitating diseases.



THE PROTECTIVE ROLE OF VITAMIN K AGAINST DIABETES

Research from **Dr. Mathieu Ferron's** laboratory, published in *Cell Reports*, has determined that enzymes involved in gamma-carboxylation, and therefore in vitamin K utilization, are present in large quantities in insulin-producing cells. Led by Dr. Julie Lacombe, the study identifies a novel gamma-carboxylated protein called ERGP and demonstrates that it plays an important role in maintaining physiological calcium levels in beta cells to prevent dysregulation of insulin secretion.

high-quality antibody responses. This phenomenon is crucial for the prevention of infectious diseases.

THE RELATIONSHIP BETWEEN 3D STRUCTURE AND THE BIOLOGICAL FUNCTION

Under the supervision of **Dr. Hideto Takahashi**, substantial work published in the *Journal of Biological Chemistry* sheds light on how structural changes in neuronal adhesion molecules are involved in regulating neural circuit development and synaptic connectivity.

REPROGRAMMING EMBRYONIC STEM CELLS

A new study led by **Dr. Mohan Malleshaiah's** team, and published in the journal *Cell Reports*, unveils a promising way to enhance the potential of pluripotent stem cells, such as embryonic stem cells, which

are commonly used for regenerative medicine applications. The research team discovered that these stem cells can be reprogrammed right back to the earliest stage of embryonic development, in order to enhance their developmental or differentiation potential.

NEW LIGHT ON THE MIRROR MOVEMENTS SYNDROME

Dr. Frédéric Charron's team has made a promising breakthrough in understanding the origins of the mirror movement syndrome, in a study published in the prestigious journal *Science Advances*. Based on the observation of the genetic background of a family carrying the mirror movement syndrome over more than four generations, followed by the use of a preclinical model, the study which was led by postdoctoral fellow Dr. Sabrina Schlienger and research associate Dr. Patricia Yam, shed light on a

new genetic mutation at the origin of the disease and its mechanism of action at the molecular level. The study demonstrated that in a newly activated gene in the Netrin pathway, this mutation results in abnormal movements similar to those observed in the mirror movement syndrome.

A BETTER UNDERSTANDING OF AUTOIMMUNE DISEASES

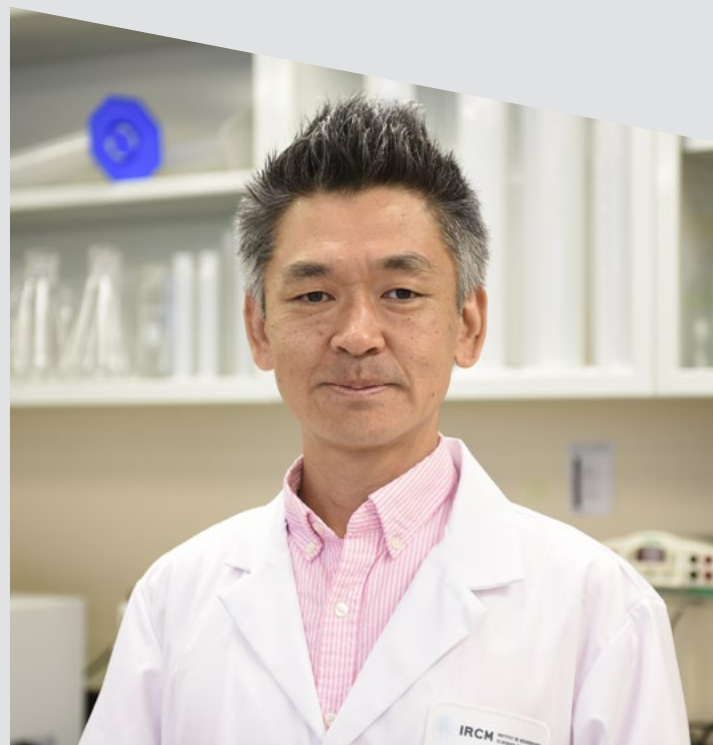
Led by **Dr. Woong-Kyung Suh** and published in *Life Science Alliance*, a study sheds new light on the critical role of the ICOS protein in the immune response, particularly in the development of certain autoimmune diseases. The team uncovered an underlying mechanism for the production of autoantibodies that attack the body's own cells, thereby increasing the risk of developing autoimmune diseases. The team's observations showed that ICOS is required for the maturation of



precursor T cells into fully functional Tfr cells. These Tfr cells then suppress the B cells that produce disease-related autoantibodies.

PARKINSON'S: A BRAIN PROTEIN IMPLICATED

New work by **Dr. Hideto Takahashi** and his team, published in the prestigious journal *Cells*, could help pave the way for new therapeutic options for Parkinson's disease and other associated disorders known as synucleinopathies. The latter result from pathological aggregation in the brain of the alpha-synuclein molecule, which becomes toxic when it penetrates neurons and spreads to others. The team discovered that neurexin, a protein naturally present on the surface of neurons, could be the gateway for alpha-synuclein to enter neurons.



UNITÉ DE RECHERCHE EN
ÉTHIQUE PRAGMATIQUE
DE LA SANTÉ



AN EVENTFUL YEAR IN HEALTH ETHICS

Dr. Eric Racine's team has had a busy year in terms of major projects and publications:

In rare diseases, a survey of 90 patients in Quebec highlighted the colossal challenges faced by these people.

In mental health, the team published a literature review, as part of a research project - involving people living with mental disorders, their loved ones, healthcare professionals and other stakeholders - in the co-construction of a support

guide on Medical Aid in Dying.

The team has also conducted research into the perception of cannabis legalization, as way to ingite healthy democratic reflection on important public health issues. Using a qualitative approach and guided interviews, this study explores the perceptions of the general public, people living with an addiction, and the clinicians who treat them, regarding the legalization of cannabis in Canada, wich is in effect since 2018.

A MILESTONE PUBLICATION IN LIVING ETHICS

Dr. Eric Racine's team has published an important scientific article laying the foundations of Living Ethics. Based on an innovative perspective that emphasizes dialogue, empowerment, co-learning and co-creation with a view to generating orientations for healthcare and social services, the practice of Living Ethics in healthcare requires the active involvement

of individuals and communities, as well as the integration of their perspectives, among others. This publication, the result of a major creative collaboration, is the very first to formalize the concept of living ethics.

154
External and industry users

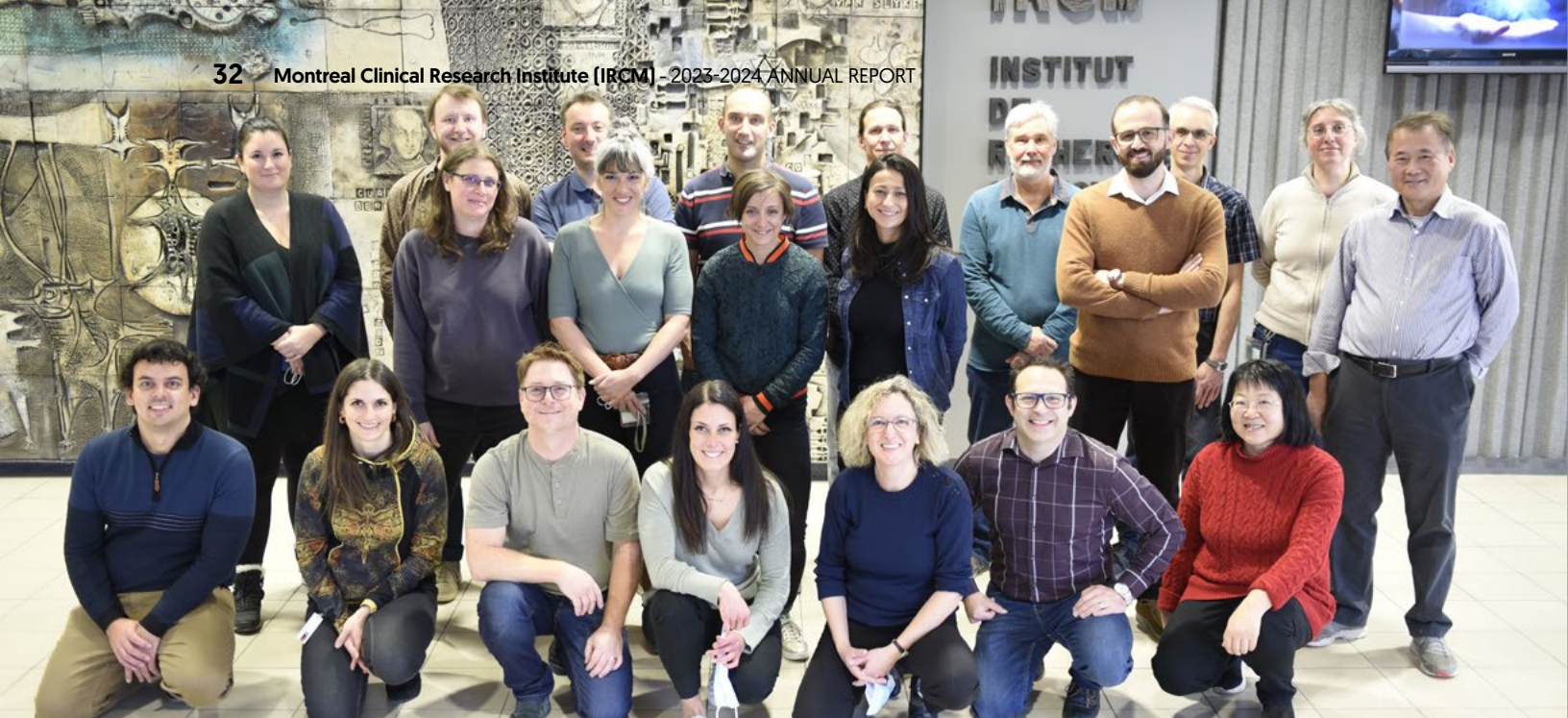
1 001
internal users

\$ 818,597
in external revenues

CORE AND ANIMAL FACILITIES

The core facilities and animal facilities provide important support to the entire scientific community. Enriched by the expertise of a team of managers, research assistants and top-level scientists, they support the in-house community as well as academic partners, in the conceptualization and development of high-performance research protocols.





CORE FACILITIES AND SPECIALIZED SERVICES:

- Bioinformatics
- Molecular biology and functional genomics
- Mass spectrometry and proteomics

- Flow cytometry
- Histology

- Microscopy and imagery
- Disease modeling and genome editing
- Nuclear magnetic resonance

- Specialized equipments
- Monoclonal antibodies
- Early Drug Discovery Unit (EDDU)

- RESEARCH PLATFORM:**
- Obesity, metabolism et diabetes

NEW STATE-OF-THE-ART EQUIPMENT

In addition to the renovations completed in the fall of 2023, the IRCM's Core Facilities have optimized their arsenal this year, with the acquisition of new state-of-the-art equipment, enabling the IRCM's research teams to position themselves at the forefront of science.

The equipment was obtained thanks to a grant from the Canada Foundation for Innovation (CFI) and the Quebec government, as part of the NeuroBasis project, led by researchers **Artur**

Kania, Frédéric Charron, Michel Cayouette and Hideto Takahashi.

The LSM980 2P confocal microscope, latest model of this type offered by Zeiss, features an AiryScan detector that doubles the resolution of standard confocal microscopy. The biphotonic capability of its pulsed laser enables in-depth 3D images.

The Stellaris STED super-resolution confocal microscope is equipped with a white laser whose excitation wavelength

can be modulated from 485 nm to 685 nm, and a STED laser enabling optical resolution of 50 nm. Its detectors can measure the arrival time of photons, enabling contrast to be obtained according to the temporal resolution of the fluorescent probes used.

The LightSheet Z.1 microscope enables the acquisition of whole 3D mouse brains marked with fluorescent probes and treated with tissue clearance techniques. With its *Mesoscale imaging System* chamber,

it can acquire this type of sample very quickly, and is equipped with six lasers and two cameras.



Ovidiu Jumanca, DVM, Cert LAM, CFM, Director of Animal Facilities and Technical Services

Without the Animal Health Service, research would not be possible. Our team of nearly 35 professionals devotes itself daily, and often behind the scenes, to applying the highest standards of care to ensure the well-being of these beings to whom we owe our lives.



TECHNOLOGY TRANSFER

For IRCM, one of the strengths of biomedical research lies in the ability to bring scientific advances to the patient's bedside. As the IRCM puts the spotlight on innovation and the medicine of tomorrow, the commercialization department is multiplying initiatives to develop the culture of technology transfer, promote the maturation of research advances and create synergistic links with players in the field.



To think in order to innovate

The technology transfer department played an important role in the development of IRCM's new strategic plan as part of the strategic planning working group. It helped define the objectives of the plan's second orientation, which aims to establish a culture that promotes the valorization of discoveries within the Institute. A number of actions were implemented to achieve the objectives defined for this direction, including :

DEVELOPING A CULTURE OF COMMERCIALIZATION

To develop a culture of commercialization, the department has set up a plan for its innovation broker to meet IRCM scientists on a regular basis. The objective is to mobilize researchers, identify projects with potential for commercialization and raise awareness of the legal issues surrounding intellectual property.

POSITIONING OURSELVES IN THE ECOSYSTEM

To encourage research collaborations with the private sector, the technology transfer office, in collaboration with the IRCM Foundation, met with the venture capital team at Sixty Degree Capital to present available technologies and explore investment, co-development and collaboration opportunities. This constructive exchange was an opportunity for seven IRCM researchers to present their promising work and learn about the market prospects for each technology.



Capitalize on
technology transfer
to create value
for all.



Working together to nurture maturation

Three major collaborative initiatives took place in 2024, aimed at maturing projects at IRCM:

A biotech called NumBio was created in 2023 based on a technology reported to the technology transfer office in 2017. Named NUMB, this technology which was conceived by Dr. Cayouette's laboratory, aims to develop therapeutic avenues for the tauopathies of Alzheimer's disease and glaucoma, using the long isoform of the Numb

protein. This new biotech will make it possible to establish collaborations with potential partners and access the funding needed to mature the technology.

The arrival of the company RNA Technologies & Therapeutics to the IRCM premises in 2024 has enabled the launch of three collaborative RNA therapeutics projects that are proving highly promising for population health.

The Valorisation Department met with Business France, the French government's economic agency, whose mandate is to foster collaborations between Canadian and French experts in the healthcare sector. The meeting provided an opportunity to link French biotech companies with IRCM scientists with projects in progress.

3,043
patients, including 713 new ones

32
medical residents in training

115
active clinical projects,
including :

5
biobanks

INNOVATIVE TREATMENTS, TO TACKLE RARE HEALTH ISSUES

The IRCM's Subspecialized Clinics provide medical and interdisciplinary care for both male and female patients. Continuously welcoming new patients for subspecialized evaluation and follow-ups, these clinics have become provincial, national and international reference centers, over the years. Thanks to their agility and multidisciplinary approach, as well as their preventive and innovative approach, they offer patient-centred third-line services that encourage feedback, self-care and knowledge transfer.

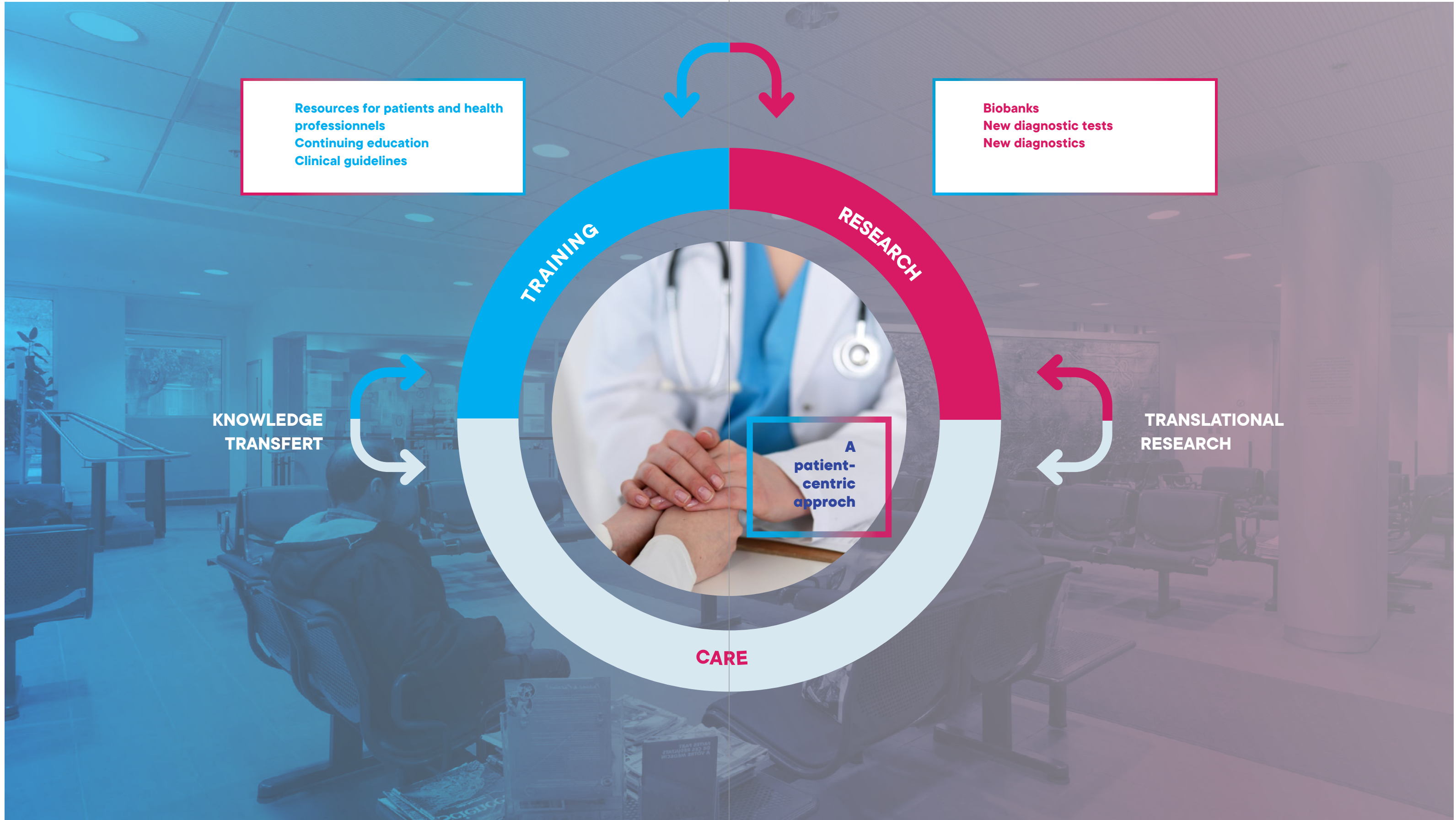


23

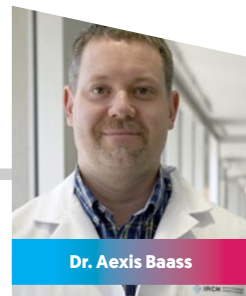
new projects

1

register

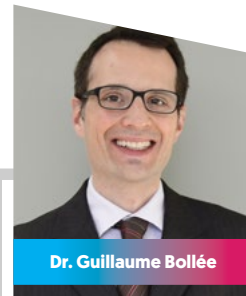


SURSPECIALIZED RESEARCH CLINICS



Dr. Alexis Baass

Lipids, Nutrition and Cardiovascular Prevention



Dr. Guillaume Bollée

Rare Kidney Diseases

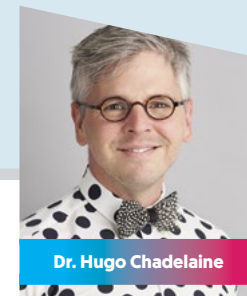


The **Genetic Dyslipidemia Clinic** was established within the Cardiovascular Prevention Clinic with the aim of improving the screening, diagnosis and treatment of genetic dyslipidemias, including familial hypercholesterolemia, familial chylomicronemia syndrome and dysbeta-lipoproteinemia. It is the only center in the Montreal region to carry this expertise. Cascade family screening and reproductive genetic counselling are offered, enabling personalized interdisciplinary management to reduce cardiovascular and pancreatic complications for both clinic patients and their children. Children can be screened at the Clinic and referred to pediatric clinics at the Montreal Children's Hospital or CHU Sainte-Justine via a service corridor.

The **Cardiovascular Prevention Clinic** is one of the largest lipid clinics in Canada. Hypertriglyceridemia (HTG) is an important specialty of this clinic. Patients have access to fourth-line care through ongoing clinical trials, or can choose a lifestyle-based intervention. In this context, the Clinic's interdisciplinary team has developed a structured program for patients with moderate to severe HTG, coupled with a metabolic syndrome, aimed at improving self-management of their disease and bettering the control of risk factors for their cardiometabolic health.

The **Rare Kidney Disease Clinic** is a center of excellence for the diagnosis and treatment of polycystic kidney disease and other genetic or rare kidney diseases. It receives referrals from CHU Sainte-Justine, ensuring continuity of care in the delicate context of the pediatric-adult transition in complex renal diseases. It is also one of the few nephrology clinics in Canada dedicated to hereditary kidney disease to offer interdisciplinary services and family screening. The clinic team is also working in collaboration with the Canadian PRM Foundation to host the annual forum for people with polycystic kidney disease and their families.

Our subspecialized clinics assess and treat patients living with complex and/or rare diseases, with a focus on personalized care that enhances quality of life. Alongside care, our healthcare teams collaborate closely and conduct cutting-edge teaching and research, to continually improve the state of knowledge.



Dr. Hugo Chadelaine

Primary Immunodeficiency

The **Primary Immunology Clinic** treats patients with primary immunodeficiency, which increases the risk of prolonged, frequent, severe or atypical infections and autoimmune manifestations. The Primary Immunology Clinic is the largest immunology clinic in Quebec, serving approximately 60% of Quebec patients, as well as patients from adjacent provinces. It is also the only clinic to receive transfers from CHU Sainte-Justine in primary immunology, with a transition program from pediatric to adult care that is among the best in North America, resulting in a significant proportion of 22% of young adults under the age of 30. The clinic also stands out in the province for its interdisciplinary approach, as well as its recent

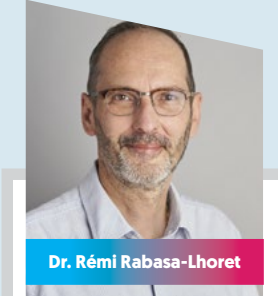


Dr. Maxime Lamarre-Cliche

Hypertension

offering of training to enhance the immuno-allergy specialty program for senior residents, a hands-on, clinical training program that exists nowhere else.

The **Hypertension Clinic** sees patients with rare problems regulating their blood pressure.



Dr. Rémi Rabasa-Lhoret

Diabetes

The **Diabetes Clinic** includes a type 1 diabetes sub-clinic that stands out for its expertise in new therapies and interdisciplinary management. The small team serves over 550 people living with diabetes and contributes to an innovative online self-care program. The type 2 diabetes sub-clinic associated with CHUM's cystic fibrosis clinic mainly follows people with multiple complications, including those with diabetes on insulin pumps.

IN ADDITION TO CARE, INNOVATIVE MULTIDISCIPLINARY PROJECTS

A NEW CARE PROGRAM BY THE INTERDISCIPLINARY TEAM

Developed by the IRCM Clinic's interdisciplinary team, the Lifestyle Habits program is an innovative initiative that aims to offer a range of care options to people with moderate to severe triglycerides accompanied by metabolic syndrome and who do not fit into any of the research protocols. This two-year program's objective is to help

patients better manage their disease themselves and better control their cardiovascular risk factors. The program includes tests to help personalize the intervention and monitoring of blood tests, as well as anthropometric and body composition measurements. It also includes assessment and monitoring of changes in lifestyle habits, and the joint establishment of a

personalized action plan focusing on adaptation and motivation. Seventeen people have enrolled in the program since January 2024.

A SERIES OF PODCASTS TO EQUIP PROFESSIONALS AND PATIENTS

Launched by a multidisciplinary team from the Lipid Clinic, the podcast series on severe hypertriglyceridemia features doctors, researchers, healthcare professionals, and emerging talent, as well as patient partners. Accessible via free platforms, this material aims to support healthcare professionals and those affected by the disease by helping them to understand and manage it.

Canada, providing a wealth of valuable data to the scientific community and policymakers. As part of this promising project, ten webinars have been offered to people living with type 1 diabetes, and more than 50 blog posts have been published. In addition, the SUPPORT platform has been adapted to provide young people ages 14 to 24 in transition to adult care with easy access to educational resources and practical tools to help them manage their day-to-day health.

Liana Falcone co-chaired the scientific committee for the First Canadian Symposium on Long COVID. She was also selected to co-chair the CAN-PCC committee responsible for establishing the first Canadian guidelines for the diagnosis of long COVID. The post-COVID research clinic has also been awarded a grant from the Long COVID Web, a network that supports research on the subject.

THE BETTER REGISTRY CONTINUES TO GROW

With nearly a thousand new members in 2023-2024, the JDRF-supported BETTER Registry now boasts over 4,200 members across

RESEARCH INTO LONG COVID CONTINUES

Research into long COVID research, led by **Dr. Emilia Liana Falcone**, has had a successful year. In the fall of 2023, in Montréal, Dr. Emilia



Synergistic interventions, at the crossroads of fundamental and clinical research

A FRUITFUL COLLABORATION BETWEEN DR. BAASS AND DR. SEIDAH

Dr. Alexis Baass, at the IRCM Clinic, and **Dr. Nabil G. Seidah**, fundamental researcher and laboratory director, have set up a collaborative research project aimed at measuring circulating ANGPTL8 levels in patients at the IRCM Lipids Clinic who are treated with a PCSK9 inhibitor, compared to a control group. Their hypothesis is that the use of a PCSK9 inhibitor reduces circulating ANGPTL8, which could be associated with a protective effect, not only on cardiovascular health, but also in the fields of oncology, diabetes, and obesity.

PRAGMATIC ETHICS: INNOVATIVE INTERVENTIONS FOR IMPROVED CARE

The Pragmatic Health Ethics Research Unit, headed by **Dr. Eric Racine**, has deployed new interventions at the IRCM Clinic with the aim of improving the management of psychological distress in patients. This living laboratory initiative was co-developed with patients and staff, thanks to funding from the ministère de l'Économie, de l'Innovation et de l'Énergie and the Fonds de recherche du Québec – Santé.

On the one hand, the team has set up a resource directory for patients and their families, which is intended to be an information-rich tool to better equip and guide patients with regard to the resources available for their physical and mental health. This directory, which includes a number of diverse references to medical, professional, and community resources available across

Quebec, will be accessible via the shared file, the Medesync platform, and the IRCM website.

In addition, in winter 2024, the team introduced a medical appointment preparation form, which has been deployed in the electronic medical record for patients in the long COVID, diabetes, immunology, genetic dyslipidemia, and rare kidney disease clinics. This form, sent to people in advance of their medical appointment, aims to facilitate communication and guide the consultation according to their priorities and needs.

Finally, a promotional campaign to raise awareness and encourage open discussions about mental health was conducted on the clinic's premises.

Coaching the next generation to ensure knowledge transfer

187

Students and trainees
(33 in Master level,
102 in PhD level and
52 postdoctoral fellows)

32

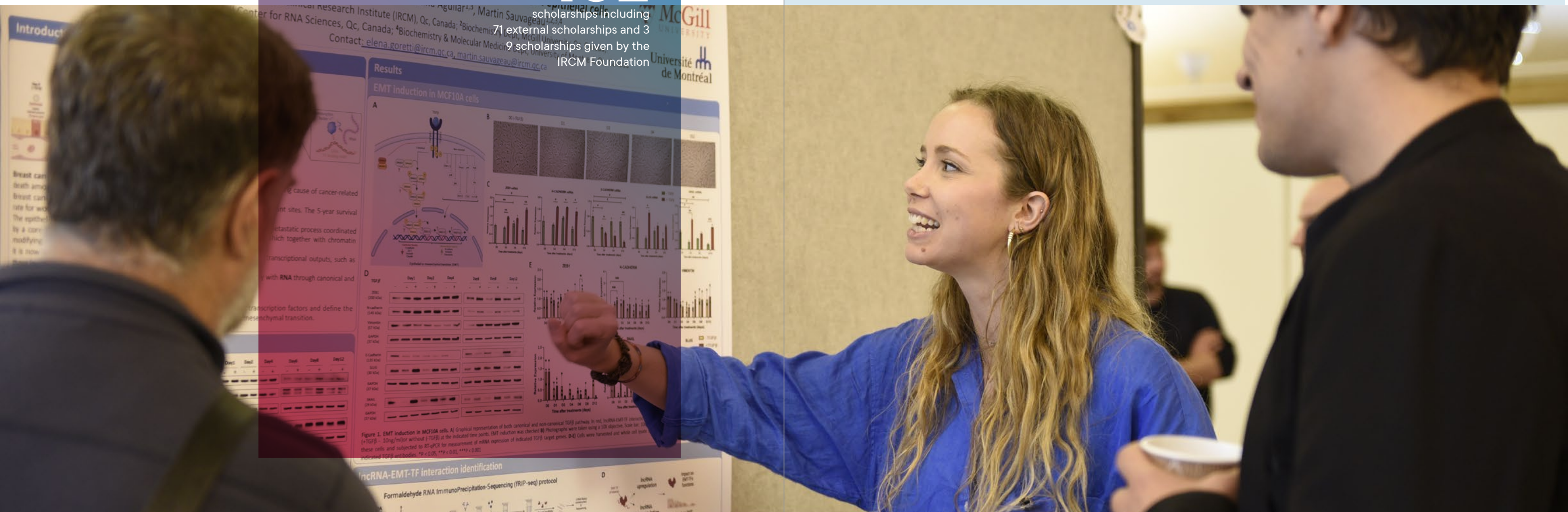
completed trainings, including
13 in Master level and
19 in PhD level

102

scholarships including
71 external scholarships and 31
scholarships given by the
IRCM Foundation

TRAINING THE NEXT GENERATION, A SURE THING

The transmission of scientific knowledge is the driving force behind the continuous improvement of science. At the IRCM, we are proud to train, year after year, the next generation of outstanding scientists. From undergraduate to graduate levels, our students play a key role in ensuring the continuation of cutting-edge work in the various fields of research currently being carried out within our walls. Within our walls, they find a stimulating, dynamic environment conducive to their development as future researchers of excellence



A NEW GENERATION OF SCIENTISTS THAT SHINES

SCHOLARSHIPS ON ARTIFICIAL INTELLIGENCE IN HEALTHCARE

Future scientists in training at the IRCM, Loïck Joumier, a PhD candidate, and Grégoire de Bisschop, a postdoctoral fellow, are the first two winners of the scholarship competition on artificial intelligence in healthcare, launched as part of the institutional grant awarded by the MEIE. With a fund of \$10,000 from the MEIE, plus additional support of \$11,000 per winner from the IRCM Foundation, this avant-garde competition aims to support the integration of artificial intelligence components and approaches into research work.



SCHOLARSHIPS FROM THE FONDS DE RECHERCHE DU QUÉBEC EN SANTÉ

The next generation of scientists in training at the IRCM won an impressive 18 FRQ-S grants. Coming from many of our laboratories, these students and postdoctoral fellows have distinguished themselves through the excellence of their research work.

The recipients are:

Apcher, Chloé - Dr. Jean-François Côté's laboratory

Benattallah, Naouel - Dr. Eric Lécuyer's laboratory

Bonhoure, Anne - Dr. Rémi Rabasa-Lhoret's laboratory

David, Luke - Dr. Michel Cayouette's laboratory

Desjardins, Aléhandra - Dr. Émilie Liana Falcone's laboratory

Gemeinhardt, Tim - Dr. Nicole Francis's laboratory

Grieco-St-Pierre, Lili - Dr. Mathieu Ferron's laboratory

Jimenez-Amilburu, Vanesa - Dr. Frédéric

Charron's laboratory

Lalonde, Andréane - Dr. Jean-François Côté's laboratory

Lambert, Élie - Dr. François Robert's laboratory

Lazaratos, Anna-Maria - Dr. Jean-François Côté's laboratory

Mockly, Sophie - Dr. Martin Sauvageau's laboratory

Ouimet, Benjamin - Dr. May Faraj's laboratory

Rodriguez, Marcelo Maximiliano - Dr. Javier Di Noia's laboratory

Russell, Samantha - Dr. Eric Lécuyer's laboratory

Talking science further

For another year, the **Scientists in Training seminar series** welcomed talented young researchers to present their work at IRCM. In 2023-2024, the seminar series welcomed Johannes Schlachetzki, Jumana AlHaj Abed and Benjamin Martin.

THE IRCM LECTURES SERIES

This year, the **IRCM Lecture Series** welcomed some twenty speakers on current research projects in Quebec and elsewhere in the world. These high-profile scientific gatherings are important opportunities for exchanging new ideas and enriching the research underway at the IRCM.

ETHICS CONFERENCES

Under the theme *Participatory, inclusive, ecosocial health: how to innovate and build bridges between democracy, the environment and our healthcare environments*, the **Pragmatic Health Ethics Lecture Series** welcomed a diverse line-up of speakers. From professional, academic, political and community circles, these high-calibre individuals brought their perspectives to bear on our healthcare practices.



A DYNAMIC STUDENT ASSO

2023-2024 EXECUTIVE COMMITTEE AND SUB-COMMITTEES

On October 6, 2023, students and future scientists at the IRCM elected the members of their new executive committee and representative sub-committees.

This year, more than thirty students from fourteen labs got involved in the life of their institute! As representatives of the student and post-doctoral community, the members of the new executive committee and

sub-committees have a mandate to contribute to maintaining a warm, welcoming environment that is conducive to learning. What's more, these budding scientists are the voice of the next generation of trainees

within the Institute's governing bodies, helping to ensure that conditions for learning and high-level training are constantly improved.

PRESIDENT
Élie Lambert

VICE-PRESIDENT
Djamouna Sihou

TREASURER
Sneha Sukumaran

RESPONSABLES OF COMMUNICATIONS
Samantha Boudreau
Maria Galipeau
Jean-François Laurendeau

REPRESENTATIVE MEMBERS OF THE IRCM EXECUTIVE COMMITTEE

STUDENTS REPRESENTATIVES
Clémence Schmitt

POSTDOCTORAL FELLOWS REPRESENTATIVE
Laure Monteillet

REPRESENTATIVE MEMBERS OF THE IRCM COMMITTEES

Graduate Studies Committee
MCGILLSTUDENTS REPRESENTATIVE
Luke Ajay David

UDEM STUDENTS REPRESENTATIVES
Matheus Naegele Aranguren

POSTDOCTORAL FELLOWS REPRESENTATIVE
Sara Luiza Banerjee

Scientific Life Committee

STUDENTS REPRESENTATIVE
Fatima Kassem

POSTDOCTORAL FELLOWS REPRESENTATIVE
Zekai Wu

Mental Health Committee
Sarah Hales

EDI Committee
Fatima Kassem

Liaison with the Foundation
Mathieu Joseph

Liaison with Science POP
Rebecca Cusseddu

Events Committees

INTERLAB COMMITTEE
Luke Ajay David
Dennis Drewnik
Camille Michaud
Bhadra Pattanayak

CAREER COMMITTEE
Luke Ajay David
Camille Michaud
Sophie Mockly
Nanu Pal

SOCIAL EVENTS COMMITTEE
Gilberto Duran Bishop
Dennis Drewnik
Elena Goretti

Noé Guilloay
Solène Huck

HEALTH AND WELL-BEING COMMITTEE
Alehandra Desjardins
Tim Gemeinhardt
Sarah Hales
Bhadra Pattanayak
Clémence Schmitt

SPORTS AND RECREATION COMMITTEE
Thais Souza Cunha
Tim Gemeinhardt
Nanu Pal



I'm very proud to see that the ASSO is becoming an increasingly important part of the IRCM. This year, our fantastic team included some thirty students and postdoctoral fellows. Despite their extremely busy research schedules, they have all been committed to providing their colleagues with resources and opportunities to make their time at the IRCM more stimulating,

collaborative and lively. I would like to underline the crucial contribution of the IRCM management team as well as the Academic Affairs Department, whose attentiveness and support have enabled the ASSO to take this important position. Several of our members were elected to sit on various decision-making and advisory committees, to ensure that the voices of the next generation of scientists are heard

at the Institute. Our initiatives and contributions will, I hope, ensure that the next generation of scientists continues to grow to its full potential within the IRCM community.

Élie Lambert, President of the Asso and PhD student at Dr. François Robert's laboratory

A LOOK AT ASSO'S MAIN ACTIVITIES IN 2023-2024

As part of the **Career Development Seminar Series**, the ASSO invited professionals from the world of research to come and meet future researchers, to present the range of career opportunities available to following graduate studies in research.

With the **Interlab meetings**, ASSO made it possible for students and postdoctoral fellows to discuss their research projects in a convivial atmosphere.

With a view to promoting the well-being and mental health of

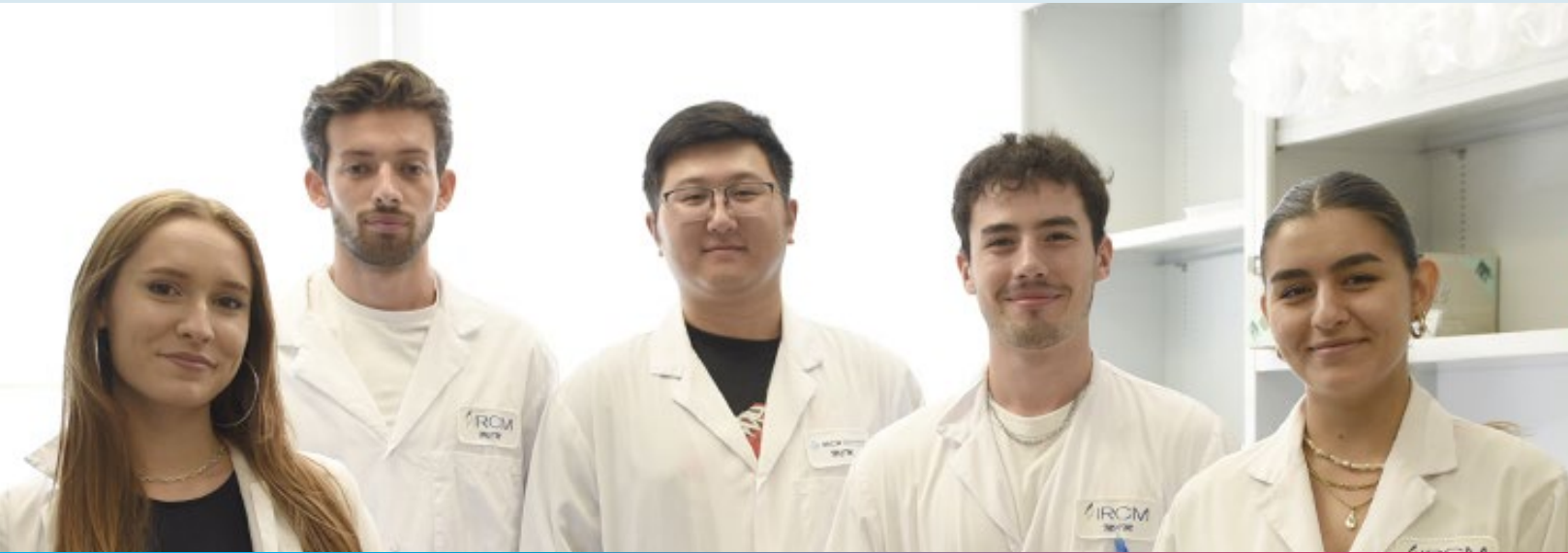
its members, ASSO has set up a **well-being committee** to organize activities such as monthly art therapy sessions and film evenings.

To support the development of strong bonds between its members, the Asso organized social and sporting events throughout the year, including **5@7 evenings and friendly volleyball tournaments**.

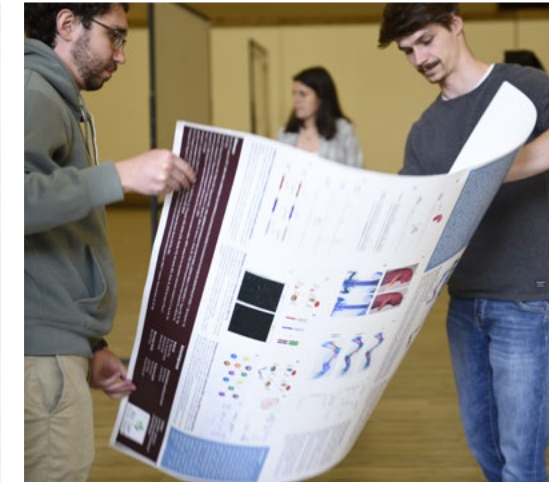
To support the integration of all, the Asso launched a friendly **French learning project** for all members of the community. This inspiring initiative, which includes

a tutoring program and a variety of teaching activities, has attracted the interest of both volunteers and people wishing to improve their language skills.

Academic Affairs, the key to a strong learning community



In the Fall of 2023, the IRCM welcomed a new cohort to its flagship Master of Cellular and Molecular Medicine (MCM) training program. The new recruits, Samuel De La Barrera, Andrew Issa, Maya Lynn Münzer, Ziqi Zhang and Idia Boncheva, who were selected following a rigorous process based on academic excellence, have joined the ranks of the Institute. They have embarked on this adventure to acquire a solid, multidisciplinary and in-depth training in biomedical research, which will facilitate their transition to doctoral studies.



M C M : A N E W
C O H O R T F U L L O F
P R O M I S E

SCIENTIFIC FORUM: COMING TOGETHER FOR BETTER COLLABORATION

The Scientific Forum, the traditional retreat of the IRCM's scientific community, was held on June 8 and 9, 2023 in the idyllic setting of the Hôtel Lac Carling, in Grenville-sur-la-Rouge.

Thanks to the IRCM Foundation, supported by a generous contribution from BMO Financial Group, this 5th edition welcomed nearly 150 members of the IRCM community in a warm atmosphere. Many students, postdoctoral fellows, research directors and IRCM professionals made the trip to this key event.

In front of a panel of experienced IRCM scientists, the Institute's up-and-coming scientists presented the excellent work they carry out as part of their research at the Institute. There were 27 oral presentations and 48 poster presentations, for which the best candidates were awarded the BMO Financial Group Emerging Scientist Awards.

A PROVINCIAL PREMIERE FOR SCIENCE POP



Finalists of the provincial event

The grand finale of the very first provincial edition of Science POP, the science popularization and communication competition, was held on 28 May 2023, under the aegis of the Fonds de recherches du Québec-santé (FRQ-S). In front of an enthusiastic audience at the IRCM, the finalists from 15 Quebec research institutions met in high-level contests. At the end of the event, nine winners were selected in total for the three challenges.

Mobilization Challenge

1ST - CHIEF SCIENTIST AWARD
Justine Fortin and Marjolaine Rivest-Beauregard of the Douglas research Center.

2ND - JACQUES-GENEST AWARD
Yiran Chen and Easin Uddin Syed of the Montreal Clinical Research Institute.

AUDIENCE AWARD
Justine Fortin and Marjolaine Rivest-Beauregard of the Douglas research Center.

Valorization Award

1ST- CHIEF SCIENTIST AWARD
Amélie Sanfaçon-Verret of the Centre for Interdisciplinary Research in Rehabilitation and Social Integration.

2ND - JACQUES-GENEST AWARD
Clara Ziane of the Université de Montréal
AUDIENCE AWARD
Clara Ziane of the Université de Montréal

Popularization Award :

1ST - CHIEF SCIENTIST AWARD
Kelly Godbout of the Centre de recherche du

CHU de Québec
2AND - JACQUES-GENEST AWARD
Madhura Lotlikar of the Centre for Interdisciplinary Research in Rehabilitation of Greater Montreal
AUDIENCE AWARD
Juliette Humeau of the Institut de recherche en immunologie et en oncologie



A pan-Quebec science communication initiative proposed by the IRCM and promoted by the FRQS, Science POP's aim is to work towards awakening scientific curiosity within Quebec society and to stimulate knowledge transfer skills, with the ultimate goal of promoting science-society dialogue.



I would like to congratulate all the students who, through their participation in the Science POP competition, have demonstrated a remarkable talent for popularising science. Their captivating passion for sharing their knowledge and advances in health research is a source of inspiration for the next generation. Initiatives such as these help to foster dialogue between science and society, to increase scientific literacy and thus combat misinformation.

Rémi Quirion, Quebec's Chief Scientist





To see all this talent being deployed to explain science in simple and accessible terms is extremely satisfying, and gives confidence in the ability of a whole new generation of researchers to build bridges with the public, thus creating fertile ground for the circulation of rigorous information on crucial issues such as health.

Dr. Jean-François Côté, President and Scientific Director at the IRCM

A DIVERSE JURY

- Adèle Salin-Cantegrel**, Co-Founder / CEO, Scikoop
- David Mendes**, Producer and host, Podcast “Papa PhD” Direction régionale de santé publique de Montréal, CIUSSS du Centre-Sud-de-l’Île-de-Montréal
- Emmanuelle Berthou**, Project Manager | Communications
- Gad Sabbatier**, Project Manager | Science and Technology, Axelys
- Gwendal Henry**, Communication Advisor Érudit
- Laila Benameur**, Director Entrepreneurship in Life Science, Montréal In Vivo
- Laurent Nicolas**, Linguiste, Collège André-Grasset
- Léa Berlinguet**, Chief of Project, Business Development | Strategy and Development, Hydro Québec
- Nicolas Pierre**, Senior Advisor, 9-1-1 sans fil, Bell Mobilité
- Olivier Séguin**, Head of Data Entry and Archives Teams, VSOP
- Pascal Henrard**, Writer, Scriptwriter, Author
- Patrick Kenny**, PhD, Retired Professor, Computer Research Institute of Montreal | CRIM

FINALISTS PARTICIPATING INSTITUTIONS

- Centre de recherche de l’Hôpital Maisonneuve-Rosemont
- The Douglas Research Center
- Centre de recherche du CHU de l’Université de Montréal
- Centre de recherche du CHU de Québec
- Centre de recherche du CHU Sainte-Justine
- McGill University Research Centre for Structural Biology
- Centre de recherche en immunologie et en cancérologie
- Centre de recherche interdisciplinaire en réadaptation du Montréal métropolitain
- Centre interdisciplinaire de recherche en réadaptation et en intégration sociale
- CIUSSS de l’Est-de-l’Île-de-Montréal
- Montreal Heart Institute
- Montreal Clinical Research Institute
- Institut national de recherche scientifique
- Regroupement intersectoriel de recherche en santé de l’Université du Québec
- Université de Montréal
- VITAM - Centre for Sustainable Health Research

Finalistes de l’édition IRCM.



22
Researchers recipients of
a scientific awards

164
invitations to give a lecture at a congress

76
invitations to give a seminary

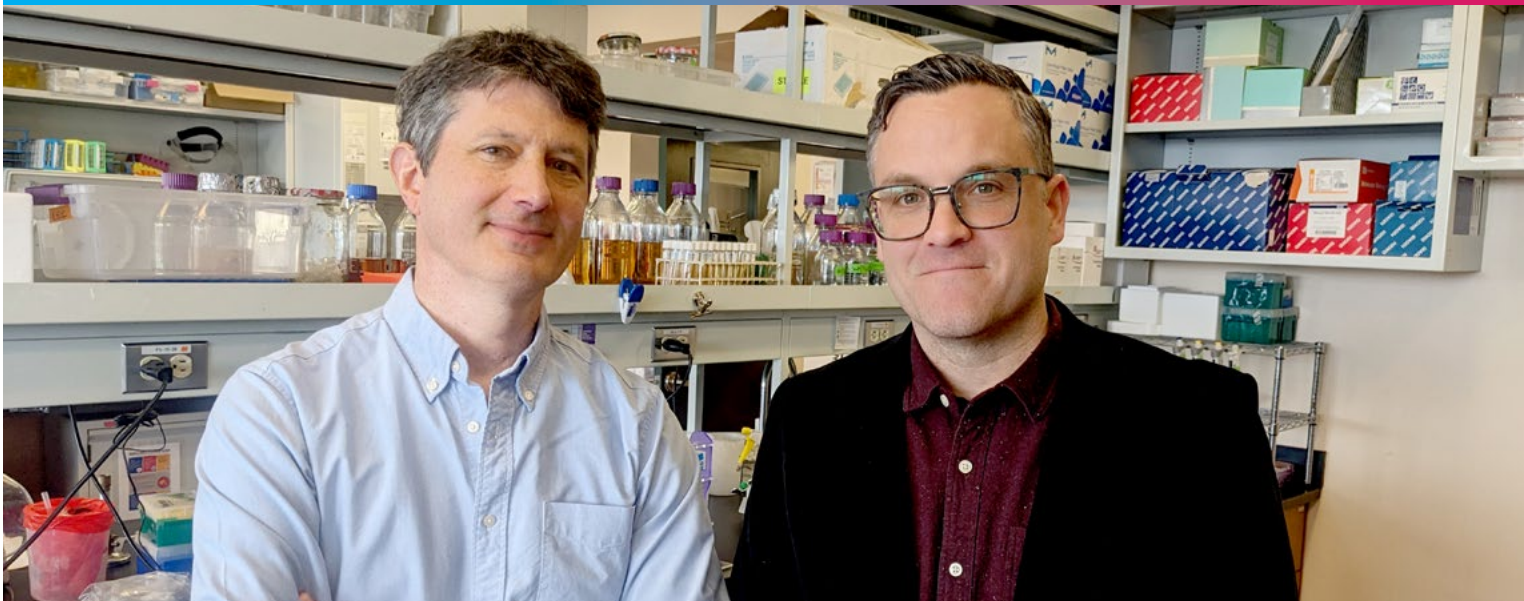
40
participations in the organization
of an extra-muros congress

TO SHINE BUILDING ON OUR STRENGTH

Thanks to the excellence of the advances published, the quality of the academic training provided, the innovative nature of the on-going work and the reputation of its scientists, the IRCM enjoyed national and international outreach in 2023-2024, in both the scientific and media spheres. This notoriety, the fruit of long-term collective work from all areas of the Institute, reflected in prestigious recognition, major success in scientific competitions and in an increased media coverage.



OUR SCIENTISTS STAND OUT



As part of the Innovative Therapies for Hereditary Ataxias competition, **Dr. Éric Lécuyer** was co-recipient of a grant from Genome Québec, Ataxia Canada and Muscular Dystrophy Canada. This support will enable innovative experimental approaches to be deployed to characterise the impact of mutations causing three different types of cerebellar ataxia involved in the production of abnormal RNA.

Known for his pioneering work on HIV, **Dr. Éric Cohen** was invited to sit on a Health Canada committee tasked with reviewing the federal approach to scientific advice and coordination of research in the event of a pandemic; an important work in the event of future large-scale health emergencies requiring coherent and structured action.

IRCM scientists stood out in the Canadian Institutes of Health Research (CIHR) Project Grants competitions, announced in the spring of 2024. **Drs. Yasaman Aghazadeh, Emilia Liana Falcone, Nabil G. Seidah, Hideto Takahashi, Woong-Kyung Suh, François Robert, Jacques Drouin and Mathieu Ferron.**

Dr. Emilia Liana Falcone also received the Bhagirath Singh Early Career Award in Infection and Immunity, which is awarded annually to the highest-ranking early career scientist in the spring and autumn Project competitions.

Dr. Michel Cayouette, one of Quebec's leading researchers in vision health, received the Prix Reconnaissance en recherche (fundamental/mid-career component) by the Faculty of Medicine of the Université de Montréal.

Dr. Nabil G. Seidah, a top scientist at the IRCM for several decades, received the J. Allyn Taylor International Prize in Medicine. Awarded for the first time to a Quebec scientist, this research recognition, among the most prestigious in Canada, is given to individuals who have significantly contributed to basic or clinical research in a specific field.

Drs. Javier Di Noia and Tarik Möröy were awarded major grants as part of the 2023 CIHR Spring awards. Dr. Di Noia received nearly \$850,000 over a five-year period for his work exploring immune mechanisms with a focus on a mutagenic enzyme called AID, while Dr. Möröy received a priority announcement of \$100,000 over one year for his work to clarify mechanisms of germ-center regulation.centres germinaux.

Dr. Jean-François Côté was named 2023 Great Scientist by the Quebec Breast Cancer Foundation, which annually honors exceptional individuals who have distinguished themselves in scientific, medical and community circles through their contribution to fighting this prevalent cancer.

Drs. Mathieu Ferron, Martin Sauvageau and Éric Lécuyer were each awarded "researcher-scholar" salary grants as part of the Fonds de recherche du Québec en Santé (FRQS) 2023-2024 competition. 18 students and postdoctoral fellows from the Institute's various laboratories also distinguished themselves by receiving fellowships as part of this competition for excellence.

Dr. Martin Sauvageau and Dr. Jennifer Estall each received a \$50,000 grant from the National Research Council's (NRC) New Beginnings program to support the establishment of proof-of-concept and the development of new RNA therapies. Dr. Sauvageau will investigate the function of long non-coding RNAs in the epithelial-mesenchymal transition of breast cancer using CRISPR screening, while Dr. Estall will investigate a novel RNA therapy approach targeting pancreatic beta cells for the treatment of diabetes.

Dr. Éric Racine is the co-recipient of a \$480,000 three-year-grant, with the possibility of additional funding up to \$800,000, as part of the prestigious 2023 Prix Lindsay competition. Announced by the Institut universitaire sur la réadaptation en déficience physique de Montréal (IURDPM) of the CIUSSS du Centre-Sud-de-l'Île-de-Montréal and the LRH Foundation, the grant will support three major projects, including one spearheaded by the IRCM team, entitled *Programme LEViER: Laboratoire d'éthique vivante en réadaptation, pour aller plus loin ensemble!*



UNE NOTORIÉTÉ EN PLEINE CROISSANCE



IN THE MEDIA



Under the banner of innovation, 2023-2024 was another year rich in outreach for IRCM, despite a very particular context, due to the banning of major media from Meta platforms, the implementation of Bill 25 on the protection of personal information, as well as the arrival of the new Google Analytics 4 platform.

As a result, our team had to rethink its strategies to continue promoting the Institute's successes and evaluate its communications initiatives. In the midst of these shifting sands, the communications team stayed the course to ensure its role as guardian of the image of the IRCM, its experts and its next generation of scientists, in the public arena. This significant outreach has travelled far beyond our borders, always in the spirit of raising IRCM's profile and cultivating an innovative, caring and inclusive research environment.

Between major announcements, most notably that of the Sidney-Altman RNA therapeutics cluster, our valued newsletter, our dynamic social platforms, and our diversified content, these twelve months, you will agree, were no shortage of action!

Florence Meney
Director of Communications and Public Affairs

951

media appearances

including

47%

in high reach media

51

press releases sent to media

19

laboratory directors mentioned

15

Research subjects covered

News of the IRCM in

+ 40

countries

and in

17

languages

DYNAMIC SOCIAL PLATFORMS

Number of followers
f 4,548 + 4,5%

in 11,656 + 25%

x 3,074 + 8%

ig 923 + 12%

A STRONG PRESENCE ONLINE

127,673

users

624,600

viewed pages

A PERFORMING NEW INTRANET

3,500

visits

+ 50,000

viewed pages

A NEWSLETTER THAT CATCHES THE EYE

11,735

subscribers

51%

opening rate



To promote our research by popularizing discoveries, promoting success stories and raising public awareness, is not only a way of encouraging our troops on a daily basis, but also a tangible way of helping to attract the best talent and allies in biomedical research. It's a long-term endeavour that we don't take lightly.


Valérie S. Morquette
Senior Advisor, Communications and Public Affairs

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Chairman of the IRCM Foundation
Corporate Director



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Cardiologist, President and CEO, Institut national d'excellence en santé et en services sociaux




Yvan Gendron
Health Network Manager and Consultant



Marie Giguère
Corporate Director




Brian Gelfand
Financial Market Professional




Didier Leconte
Consultant & Certified Corporate Director




Daniel Jutras
Rector, Université de Montréal




Ghislain Parent
Executive Vice President - International and member of the Office of the President, National Bank



Richard Payette
Corporate Director



Anna Paula Pingelli
Director of Legal Affairs, IRCM and General Secretary



Annie Pullen Sansfaçon
Professor at the Université de Montréal and Holder of the Canada Research Chair on transgender children and their families

BOARD OF DIRECTORS AND MANAGEMENT AS OF MARCH 31, 2024

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Director, Legal Affairs, IRCM and General Secretary

Céline Chéneau
Parajuriste, Assistant to the General Counsel

OBSERVER

Adriana Andrade
Ministère de l'Économie et de l'Innovation

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Marinella Ermacora (Vice Presidente)
André Couillard
Brian Gelfand

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Ghislain Parent (President)
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Marie Giguère (President)

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Véronique Boileau, Ghislain Parent

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Hélène Boisjoly (President)
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Rémi Rabasa-Lhoret
Vice President, Clinic and Clinical Research

Anna Paula Pingelli

Director, Legal Affairs and General secretary

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Director, Cytoskeletal Organization and Cell Migration Research Unit

Michel Cayouette
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Director, Cellular Neurobiology Research Unit

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Jennifer Estall
Director, Molecular Mechanisms of Diabetes Research Unit

Javier Di Noia
Associate Vice President, Students Affairs
Director, Molecular Biology of the B Cell Research Unit

Éric Lécuyer
Director, RNA Biology Research Unit

Mathieu Ferron

Director, Molecular Physiology Research Unit

Nicole Francis
Director, Biochemistry of Epigenetic Inheritance Research Unit

Rémi Rabasa-Lhoret
Vice President, Clinic and Clinical research
Director, Metabolic Diseases Research Unit | Director of the Diabetes Clinic

FINANCIAL STATEMENTS

SUMMARIZED STATEMENT OF OPERATIONS AS OF MARCH 31, 2024

Revenues:

Research grants from peer review organizations	
Grants – Research infrastructure	
Grants - Interest portion	
Other research grants	
Restricted donations	
MEIE grant - First agreement	
MEIE grant - Second agreement	
MEIE grant - Third agreement	
Federal grant from the Research Support Fund	
Grant from Ministère de la santé des services sociaux (MSSS)	
Supplementary project grant arising from Research Support Fund	
Grant from peer committee organizations for indirect costs	
Donation from the Fondation de l'IRCM	
Contribution from Université de Montréal	
Management fee revenues from the Fondation de l'IRCM	
Share in the profit of the subsidiary	
Investment income	
Change in unrealized fair value of investments	

Expenses:

Research Fund expenses for the year	
Operating Fund expenses for the year	
Amortization of capital assets	
Interest on notes payable	
Share in the loss of the subsidiary	

(Deficiency) excess of revenues over expenses

Operating Fund		Research Fund		Capital Asset Fund	
2024	2023	2024	2023	2024	2023
\$	\$	\$	\$	\$	\$
—	—	13 735 770	14 345 827	—	—
—	—	—	—	2 334 562	3 548 926
—	—	—	—	—	38 274
—	—	2 345 280	1 935 949	—	—
—	—	212 583	212 573	—	—
15 842 313	15 842 313	—	—	—	—
—	1 000 000	—	—	—	—
2 770 000	530 000	—	—	—	—
1 081 063	1 209 044	—	—	—	—
—	—	1 700 000	1 700 000	—	—
—	—	426 254	421 576	—	—
250 914	328 300	—	—	—	—
—	—	4 002 821	3 397 603	—	—
803 533	966 980	—	—	—	—
399 307	347 476	—	—	—	—
—	—	113 713	79 061	—	—
387 362	283 988	838 120	677 147	—	—
94 080	(68 097)	—	—	—	—
21 628 572	20 440 004	23 374 541	22 769 736	2 334 562	3 587 200
—	—	23 612 956	22 694 526	—	—
21 600 722	20 429 281	—	—	3 903 358	4 013 436
—	—	—	—	—	38 274
—	—	—	—	—	—
21 600 722	20 429 281	23 612 956	22 694 526	3 903 358	4 051 710
27 850	10 723	(238 415)	75 210	(1 568 796)	(464 510)

SUMMARIZED STATEMENT OF CHANGES IN FUNDS BALANCE

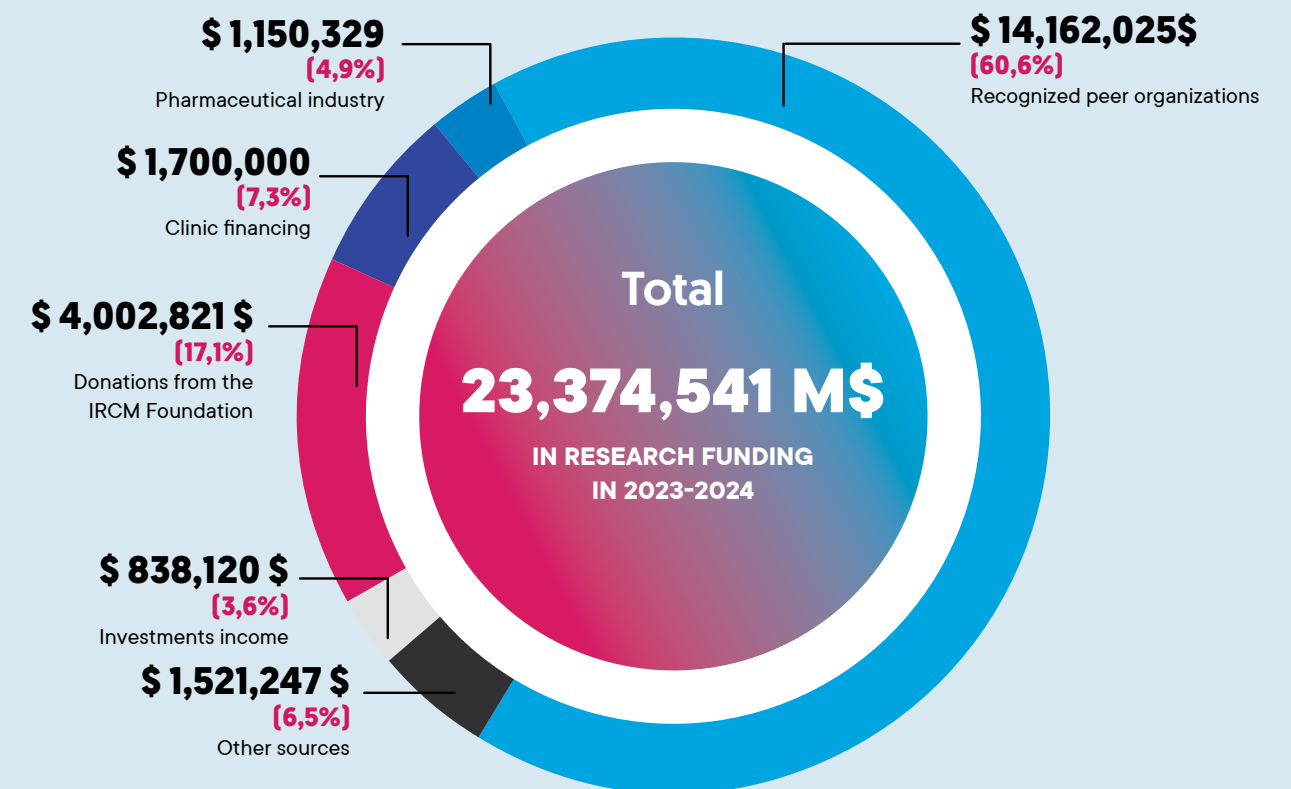
Fund balances, beginning of year	
(Deficiency) excess of revenues over expenses	
Change in remeasurments and other recognized items	
Interfund transfers	
Fund balances, end of year	

Operating Fund		Research Fund		Capital Asset Fund		Restricted Funds	
2024	2023	2024	2023	2024	2023	2024	2023
\$	\$	\$	\$	\$	\$	\$	\$
—	—	21 549 498	21 787 212	25 972 051	26 040 956	—	—
27 850	10 723	(238 415)	75 210	(1 568 796)	(464 510)	—	—
71 958	71 958	—	—	—	—	—	—
(99 808)	(82 681)	(706 220)	(312 924)	806 028	395 605	—	—
—	—	20 604 863	21 549 498	25 209 283	25 972 051	—	—

SUMMARIZED STATEMENT OF OPERATIONS AS OF MARCH 31, 2024

	2024	2023
	\$	\$
Assets		
Current assets		
Cash	20 252 064	12 822 226
Investments	—	13 207 471
Grants receivable and other receivables	5 007 767	4 844 714
Donation receivable from the Fondation de l'IRCM	1 111 758	984 265
Advances receivable from the Fondation de l'IRCM, non-interest-bearing	17 330	67 735
Prepaid expenses	279 717	276 260
	26 668 636	32 202 671
Investments	1 146 656	1 024 757
Interest in subsidiary	92 054	—
Capital assets	24 809 548	23 937 850
	52 716 894	57 165 278
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities	1 965 518	1 979 751
Salaries and wages payable	4 059 230	3 996 319
	6 024 748	5 976 070
Defined benefit obligation of the supplemental pension plan	882 000	876 000
Deferred grants	—	2 770 000
Negative interest in a subsidiary	—	21 659
	6 906 748	9 643 729
Fund balances		
Invested in capital assets	24 809 548	23 937 850
Externally imposed restrictions	21 745 313	24 535 375
Internally imposed restrictions (deficit)	(750 742)	(889 745)
Remeasurments and other recognized items related to the supplemental pension plan	6 027	(61 931)
	45 810 146	47 521 549
	52 716 894	57 165 278

RESEARCH FUNDING



PEER-REVIEWED GRANTING AGENCIES

- CANADA INSTITUTE OF HEALTH RESEARCH
- NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL OF CANADA
- SOCIAL SCIENCES AND HUMANITIES RESEARCH COUNCIL
- CANADA RESEARCH CHAIRS
- CANADA FOUNDATION FOR INNOVATION
- RESEARCH SUPPORT FUND
- FONDS DE SOUTIEN À LA RECHERCHE - VOLET SÉCURITÉ NATIONALE
- FONDS DE RECHERCHE BIOMÉDICALE
- FONDS DE RECHERCHE EN

- SANTÉ DU QUÉBEC
- MINISTÈRE DE L'ÉCONOMIE, DE L'INNOVATION ET DE L'ÉNERGIE
- MINISTÈRE DE LA SANTÉ ET DES SERVICES SOCIAUX
- MÉDICAMENTS QUÉBEC
- FONDS DE RECHERCHE DU QUÉBEC - NATURE ET TECHNOLOGIES
- FONDS DE RECHERCHE DU QUÉBEC - SOCIÉTÉ ET CULTURE
- UNIVERSITÉ DE MONTRÉAL
- ADMARE INNOVATION
- DIABETES CANADA
- FONDATION DES MALADIES DE L'ŒIL
- FONDATION DU CANCER DU SEIN DU QUÉBEC
- FONDATION FRANCOPHONE

- DU DIABÈTE
- FONDATION SUR LES LEUCODYSTROPHIES
- NOVATION (OEFFINGER)
- ALZHEIMER SOCIETY
- SLA CANADA
- CANCER RESEARCH SOCIETY
- TERRY FOX FOUNDATION
- OTTAWA UNIVERSITY
- UNIVERSITÉ LAVAL
- MCGILL UNIVERSITY

PHARMACEUTICAL COMPAGNIES

- ADMARE BIOINNOVATIONS
- KALVISTA PHARMACEUTICALS
- AMGEN CANADA
- BIOCLINIQUE MEDECINE
- BOEHRINGER
- CLINICAL FINANCIAL SERVICES
- GEORGE CLINICAL
- IQVIA CANADA
- JSS MEDICAL RESEARCH
- LAURENT PHARMACEUTICALS
- LIPHORUS
- MEDTRONIC
- NOVO NORDISK
- VERTEX PHARMACEUTICALS



IRCM Foundation

From left to right:
Dr. Hideto Takahashi, Researcher at the IRCM
Solange Fontaine, Donor
Deng Ying, Master student at the IRCM
Dr. May Faraj, Researcher at the IRCM and
Jean-Claude Arpin, Donor



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at a glance



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from the direction



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indispensables

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scholarships

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The Foundation
in numbers

\$4 M
donated
to the IRCM
to improve
life

\$ 419,000

for the training of the next generation of scientists

\$ 50,000

for the maintenance of suitable research premises

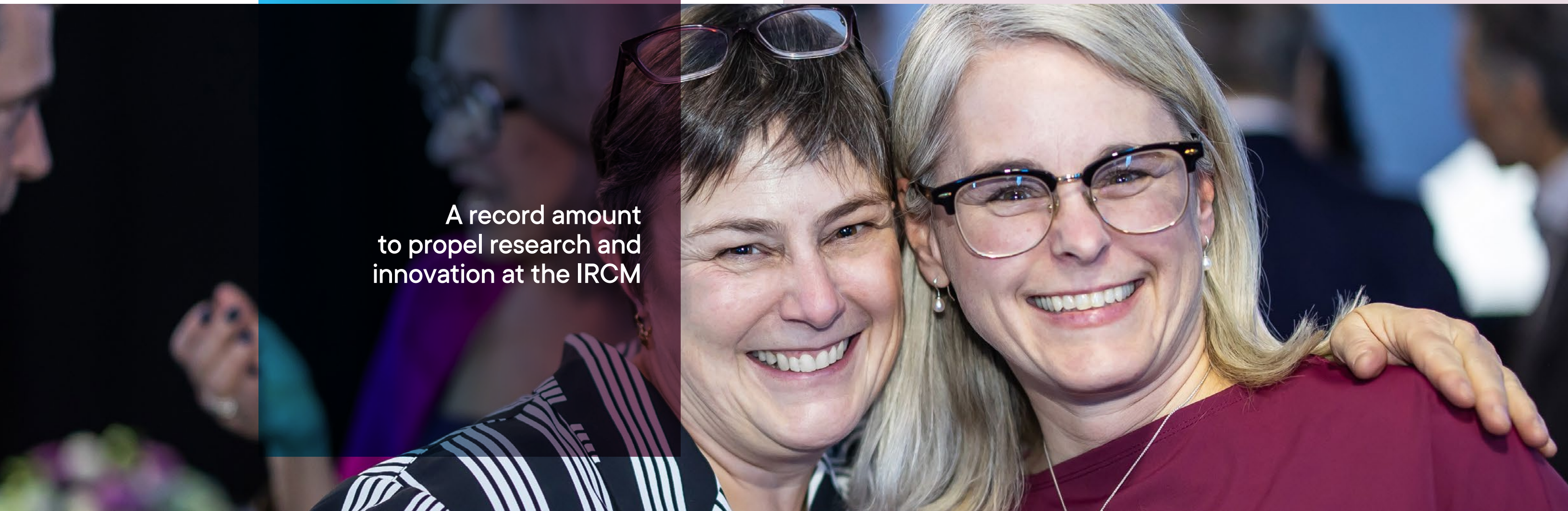
\$ 3,458,000

to fund cutting-edge research into some of the world's most debilitating diseases

\$ 73,000

for the acquisition of cutting-edge technological equipment

A record amount
to propel research and
innovation at the IRCM



MESSAGE FROM THE PRESIDENT AND THE EXECUTIVE DIRECTOR

Dear friends, allies, and partners,

What an exceptional year we have had!

Thanks to the commitment of its loyal allies, the IRCM Foundation has once again brilliantly fulfilled its mission: to support the cutting-edge work of the IRCM's excellent fundamental and clinical research teams, and ultimately, to contribute to improving knowledge in health.

This year, with our philanthropic events, our major ongoing campaign, and our various fundraising initiatives, the Foundation's impact has reached a new peak. Thus, it is with a deep sense of pride and gratitude that the IRCM Foundation has donated a record \$4 million to the IRCM in 2023-2024.

This amount has been invested to support cutting-edge research into a wide range of diseases, carried

out at the IRCM by its skilled and passionate teams. It has also contributed to the training of a brilliant new generation of scientists who come from all over the world to be trained by the IRCM's renowned scientists. Finally, the Foundation has contributed to the upgrading of the IRCM's facilities, which are essential for continuing to innovate and achieve breakthroughs.

For this major achievement in 2023-2024, we would like to thank each and every one of you, donors and partner organizations, philanthropists, members of the Board of Directors and its various committees, all the volunteers and, of course, the Foundation's team, who passionately go above and beyond to enable us to exceed expectations. Without you, our loyal collaborators, without your trust, your unwavering commitment, and

your immense generosity, none of this would be possible.

As with the IRCM's researchers, it is the promise of a tomorrow where disease has less of a hold on our lives that motivates the Foundation's team on a daily basis. The Foundation therefore became involved in the major strategic orientation exercise undertaken by the IRCM in 2023-2024 to contribute to this reflection on the future and continue to play its leading role in supporting innovation and excellence within the Institute.

This reflection resulted in a visionary and ambitious plan, focusing on the untapped potential of RNA-based precision medicine. This is a major project and a significant shift, which looks like it could be the next revolution in medicine, and the IRCM is poised for success,

with its diversified expertise, its technological platforms, its capacity for synergistic collaboration, and its influence in the community. This visionary plan will represent a significant financial challenge for the IRCM, which can continue to count on our unwavering commitment and support.

Building on our achievements and successes in recent years, and driven by the IRCM's strategic development vision, the 2024-2025 year will take us to new heights.

The best is yet to come!



**Marie-Bénédicte
Pretty**
Executive Director

**André
Couillard**
Président

IT IS WITH A DEEP SENSE OF PRIDE AND GRATITUDE THAT THE IRCM FOUNDATION HAS DONATED A RECORD \$4 MILLION TO THE IRCM IN 2023-2024.



Members

 <p>André Couillard Chairman of the Board Corporate Director</p>	 <p>Étienne Rivard Vice President of the Board - President and CEO, Infrastructel</p>		 <p>Antoine Bégin General Manager of Sales, TELUS Health Virtual Care</p>	 <p>Serge A. Boileau Corporate Director</p>
 <p>Martin Bourassa Partner, Talsom</p>	 <p>Jean-François Côté President and Scientific Director, IRCM</p>	 <p>Robert Dupont Partner, Fasken Martineau</p>	 <p>Sonia Hernandez ESG Partner, KPMG</p>	 <p>Renée Lefebvre Senior Director - Financial Planning & Analysis, Pratt & Whitney Canada Corp.</p>
 <p>Marie-Chantale Lortie Director of Partnerships Business Development, Bank of Canada</p>	 <p>Richard Mayrand Chairman of the Board, IRCM</p>	 <p>Louise Ann Maziak Corporate Director</p>	 <p>Ginette Paquin Marketing and Communications Consultant</p>	 <p>Josiane Parisien Wealth Advisor, RBC Dominion Securities</p>
 <p>Maya Raic Executive Director, Ordre des orthophonistes et audiologistes du Québec</p>	 <p>Luc Rodier President and CEO, Guillevin International</p>	 <p>Guy Saint-Jacques Consultant and Corporate Director</p>	 <p>Marie-Claude Soucy Vice President, Administrative Services Autorité des marchés financiers</p>	

BOARD AND COMMITTEES
AS OF MARCH 31, 2024

EXECUTIVE DIRECTOR

Marie-Bénédicte Pretty

SECRETARY

Ana-Paula Pinguelli
Director of Legal Affairs, IRCM and General Secretary

INTERIM TREASURER

Louise Ann Maziak

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Serge A. Boileau
Sonia Hernandez
Renée Lefebvre
Marie-Claude Soucy

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André Couillard
Louise Ann Maziak
Maya Raic

AD HOC MAJOR AND EXCEPTIONAL DONATIONS COMMITTEE

Maya Raic, President
André Couillard
Louise Ann Maziak
Guy Saint-Jacques

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Nathalie Parisel, Honorary President
Wilfredo Banegas
Steve Bastien
Bradley Boulton
Yves Carlos
Frédéric Kieffer
Kevin Lagacé
Katrine Lavigne
Benoit Marcil
Martin Piette
Étienne Rivard

Annual Gala 2023

Ginette Paquin, President
Luc Rodier, Honorary President
Brigitte Comeau
Robert Dupont
Marie Giguère
Sonia Hernandez
Frank Huang
Marie-Chantale Lortie
Évelyne Morrisseau
Pierre Séguin

Développement Événementiel

Martin Bourassa, President
Antoine Bégin
André Couillard
Marie-Chantale Lortie
Josiane Parisien
Étienne Rivard



I've had a fulfilling professional life. I now have a little more time to devote to the causes that are close to my heart and, in this way, to share my experience for the benefit of health research. In the '90s, I saw the excellence of research at the IRCM, but since joining the Foundation in 2018, I've been impressed by the diversity and quality of the research topics covered, and by the passion that drives its research teams.

Guy Saint-Jacques,

Administrator, on the Fondation's Board of Directors, and ambassador to the ongoing

OUR *DRIVEN BY LIFE* MAJOR CAMPAIGN IS ONGOING

2021-2026 OBJECTIVE:

\$25 M

AS OF MARCH 31, 2024:

\$20,4 M



BRIAN MULRONEY MAKES A PERSONAL GIFT FOR DIABETES CARE

The Right Honourable Brian Mulroney and Mrs. Mila Mulroney honoured the quality of care provided at the IRCM with a \$500,000 donation in support of the Diabetes Clinic, in December 2023.

This generous contribution was a part of a total gift of \$1.5 million, which was distributed equally to the IRCM Foundation

as well as those of the CHUM and the MHI, in gratitude for the quality care he received in the last years in diabetes, oncology and cardiology, respectively.

A loyal contributor to the IRCM Foundation, Mr. Mulroney was involved for three years as an ambassador for the 2021-2026 *Driven by Life* Major Campaign.



A COMMITTED COMPANY SUPPORTING THE BETTER REGISTER WHICH WAS SET UP BY THE IRCM CLINIC TEAM

The Better Registry aims to support and improve the quality of life of people affected by type 1 diabetes in Canada. In addition to being an online training platform supporting and promoting knowledge about this disease, the data collected through the BETTER Registry helps to shed light on multiple aspects of living with type 1 diabetes and to develop strategies aimed at alleviating this burden.

Dexcom donated \$600,000 to this project.

In so doing, it is contributing to the project's long-term viability, a crucial factor in both clinical and basic research. Philanthropic support on this scale keeps patients' hopes alive!

MAJOR ALLIES FOR IRCM'S RNA THERAPY INITIATIVES

In 2023, the prospect of an IRCM Sidney-Altman RNA Therapeutics Hub raises new hopes for personalized medicine and its high potential to generate effective solutions to a variety of serious diseases. Many important allies have joined forces to financially support and help develop this promising initiative for tomorrow's medicine.

From the very beginning of the initiative, the **Hewitt Foundation** stepped in with a \$1 million donation, giving the project a major boost.

In January 2024, in the wake of the launch of the Sidney-Altman Hub, the **Molson Foundation** donated \$750,000 to support highly promising research projects developed as part of the initiative. In keeping with its mission to support innovation, the Molson Foundation

is convinced of the potential impact of RNA therapeutics research on the health of future generations.

**MAJOR CAMPAIGN:
OUR COMMITTED AMBASSADORS**



Françoise Bertrand

Chair of the Board of Directors of Via Rail and Corporate Director



Martin Coiteux

Economist and Former Minister



Sylvain Corbeil

Associate Corporate and business development, Raymond Chabot Grant Thornton



Jean-François Côté

President and Scientific Director, IRCM



André Couillard

President of the IRCM Foundation



René Douville

Special Advisor, BMO Commercial Bank



Marinella Ermacora

Corporate Director



Paul C. Genest

Senior Vice-President Power Corporation of Canada



Nathalie Le Prohon

Présidente, IBM Québec Technologies



Alain Masse

President, UAP



Richard Mayrand

Chairman of the Board, IRCM



Brian Mulroney

Former Prime Minister of Canada
Cabinet member from 2021 to 2024



Anne No Delaide

Director, Eastern Canada, RBCx



Richard Payette

Businessman and Corporate Director, former President and Chief Executive Officer of Manulife Quebec



Maya Raic

Executive Director, Ordre des orthophonistes et audiologistes du Québec



Luc Rodier

President and CEO, Guillevin International



Guy Saint-Jacques

Consultant and Administrator



As an ambassador of the IRCM Foundation's major campaign, I am honored to support and promote the advances in healthcare made by the Institute's researchers. Their often little-known work is essential: without it, the hopes of many families, patients and doctors would be seriously compromised.

René Douville,

Conseiller spécial, BMO Entreprises et membre du cabinet des ambassadeurs de la campagne majeure

DONORS OF THE MAJOR CAMPAIGN

**PROPULSEURS CATEGORY
\$ 500,000 AND MORE**

Claude Garcia
Dexcom Canada
Doggone Foundation
Francine and Louis-Gilles Durand
Gosselin Family Foundation
Guillevin International
J.-Louis Lévesque Foundation
Molson Foundation
Richard and Edith Strauss Foundation
Mila and Brian Mulroney
Power Corporation of Canada

**ACCÉLÉRATEURS CATEGORY
\$ 100,000 AND MORE**

BMO Financial Group
Caisse de dépôt et placement du Québec
CIBC
Maryse and Jean-Claude Arpin

Rémi Rabasa-Lhoret
Yvan Morin Foundation
WinnerMax Capital

**DÉCLENCHERS CATEGORY
\$ 25,000 AND MORE**

Andrew J. Lutfy Foundation
A. Pizzagalli family Foundation
Ghislain Parent
Groupe Brivia
Groupe WSP Global
Infrastructel
Leucodystrophy's Foundation
Luc Rodier
Paul A. Fournier Foundation
Robert Rivard
Rolande Rompré-Leduc
Ruth and David Steinberg

**ALLIÉS CATEGORY
\$ 5,000 AND MORE**

André Couillard
Brian Gelfand and Elana Sckolnick family Foundation
Guy Saint-Jacques

Hélène Boisjoly
Italian Chamber of Commerce in Canada
Jean-François Côté
Marc Montminy
Marie-Claude Soucy
Marinella Ermacora
Maya Raic
Michel Décarly
Mireille and Murray Steinberg family Foundation
Pierre Duplessis
Pomerleau
Richard Mayrand
Richard Verreault Foundation
Richard Payette
Robert Dupont
Sibylla Hesse Foundation

INSPIRING PHILANTROPIC GATHERINGS

ANNUAL GALA : A RECORD AMOUNT COLLECTED



Thanks to the generosity of more than 500 guests from Montreal's business and research communities, gathered on November 28, 2023 at the Grand Quai du Port de Montréal, the IRCM Foundation Annual Gala raised \$815,000, an all-time record.

Held for the third year running under the honorary presidency of Luc Rodier, President and CEO of Guillevin International, this 24th edition was the occasion to announce in grand fanfare IRCM's Sidney-Altman RNA Therapeutics Hub, in the presence of Daniel Altman,

son of the late scientist. This success is due in no small part to the loyal commitment of the event's major donors:

ABB

Scotia Bank

Caisse de dépôt et placement du Québec

Westmount Square Surgical Center

Contact Delage

Cooper Industries

Dubo Électrique Ltée

Fasken

Financière des professionnels

Fondation Lise et Richard Fortin

Fonds de solidarité FTQ

Fondation Yvan Morin

Groupe Access

Groupe Boda

Groupe Desbiens Naoum Parisien

Gestion Rodier

Guillevin International

Ipex

Jadco

Jarislowsky Fraser

KPMG

KRB Avocats

Le très honorable Brian Mulroney

Nexans Canada

NCS International

Nesco

Ouellet Canada

PlanAxiom Solutions

Pratt & Whitney Canada

Raymond Chabot Grant Thornton

RBC Royal Bank

Schneider Electric

Services préhospitaliers Laurentides-Lanaudière

Siemens Canada

Stelpro

Sylvie Boileau

Tabiplast

Techno-Contact

UAP

A NEW RECORD FOR THE FOUNDATION'S GOLF TOURNAMENT

The 21st edition of the traditional IRCM Foundation *Parcours santé* - Golf Tournament took place on Tuesday, June 13, 2023 at Summerlea Golf Club, and achieved a new record of 230,000, which will enable the acquisition of new state-of-the-art research equipment for the IRCM.

Under the aegis of Honorary President Nathalie Parisel, General Director of Nedco Québec, over 250 people gathered for this important sporting event, which closed in the evening with an exceptional auction led by former Montreal Canadiens

star Yvon Lambert.

The success of the event is made possible thanks to the loyal commitment of its major donors:

National Bank of Canada

Bell Canada

Bibby-Ste-Croix

CMS Entrepreneurs Généraux

Construction J.P. Roy

G-TEK

Infrastructel experts-conseils

Ipex Électrique Inc.

Lécuyer Produit de Béton

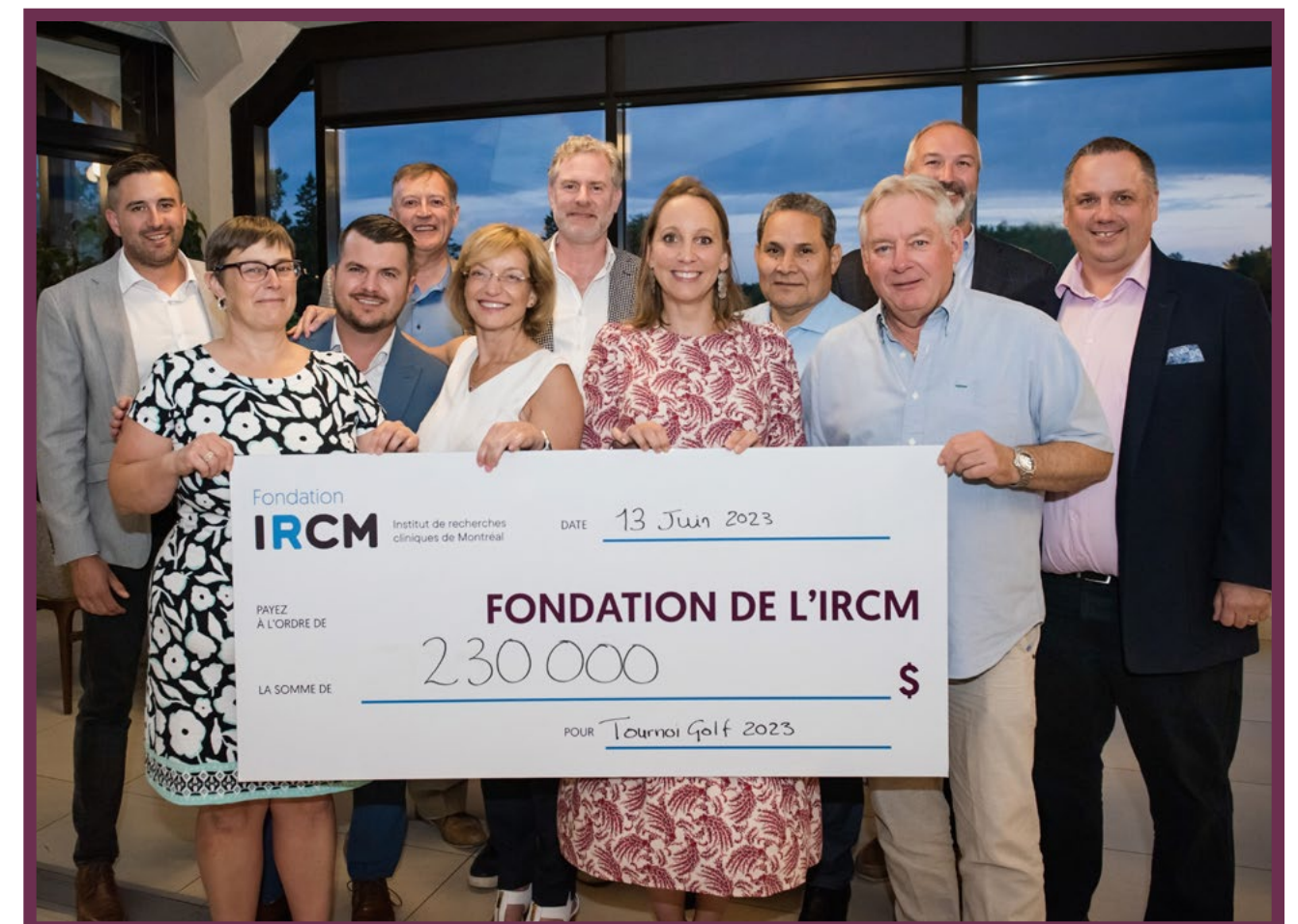
Nedco Québec

NRJ Environnement Routier

Schneider Electric

Signalisation Prosign Québec

Transec Common Inc



VOLUNTEERS AND PARTNERS INDISPENSABLE

2

committed Honorary Presidents for our events

18

members of our Board of Director who share their expertise.

30 and +

ambassadors who sit on our event committees and share their networks.

900

participants to our philanthropic activities and many donors.

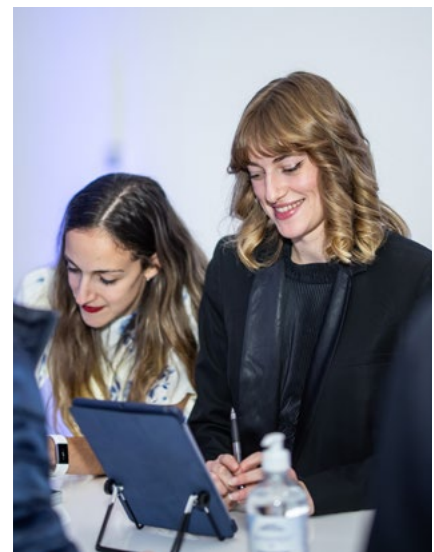
20 and +

volunteers (including IRCM students and employees) who are essential to a smooth running of our golf tournament and Annual Gala



The Foundation team says **thank you!**

VOLUNTEERS AND PARTNERS



IRCM FOUNDATION RESEARCH SCHOLARSHIPS

30
SCHOLARSHIPS

\$ 385,000
IN STUDENTS' SCHOLARSHIPS



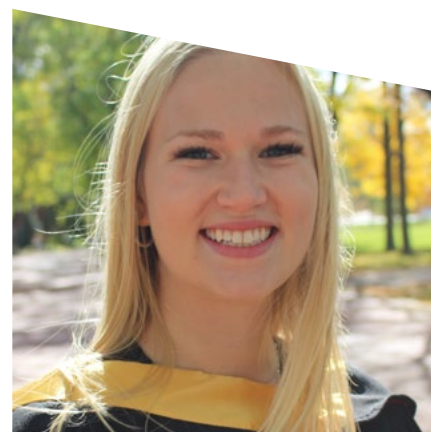
I am deeply grateful for the opportunity offered by this fellowship in artificial intelligence. This investment in my project strengthens my determination to make a significant contribution to the field.

Noé Guillo, PhD Student, Dr. Eric Lecuyer's laboratory



The IRCM Foundation research grant gave me the opportunity to explore an area of interest during a summer internship. Today, I'm honoured to be employed at IRCM, where I put my passion into practice on a daily basis.

Juliette Durocher, undergraduate summer intern and research assistant.



This scholarship has not only provided me with financial support, but also rewards my efforts and reinforces my commitment to continue striving for excellence in my work. It has also given me confidence in my ability to undertake a PhD.

Samantha Boudreau, PhD, Dr. Michel Cayouette's laboratory

The Foundation is proud to be able to contribute to the training of the next generation of researchers, whose work is an essential pillar of the scientific advances made in the Institute's laboratories.

This year, the Foundation awarded \$385,000 in research scholarships to students from the in-house community, as announced at the traditional Scholarship Evening in February 2024, in the presence of generous individual and corporate donors.



IRCM CHALLENGE SCHOLARSHIPS

Anti-diabetic Agents Team - Nicolas Chofflet

GGG team - Janaína da Silva

Infrastructel Team - Samantha Boudreau

RBC Gestion de patrimoine Team - Michael Slattery

SUMMER INTERNSHIP SCHOLARSHIPS

Kalista Lam, Juliette Durocher, Marianne Langlois, Jana Mahmoud, Jiayu Dou, Mohammed Kehili

RBC SCHOLARSHIPS - IA SANTÉ

Noé Guillo, Easin Uddin Syed

BANQUE NATIONALE SCHOLARSHIPS - MCM PROGRAM

Maya Lynn Munzer, Idia Boncheva, Ziqi Zhang, Andrew Issa, Samuel de la Barrera

JEAN-COUTU SCHOLARSHIPS

Kim Doyon-Laliberté, Ana Novačić

NOMINATIVE SCHOLARSHIPS - PARTNERS AND DONORS

Dubo électrique - Nikoletta Diamantopoulos

Biron Groupe Santé - Ying Deng

ABB - Dennis Drewnik

Schneider Electric - Elena Goretti

Desjardins Capital - Sarah Hales

Robert and Étienne Rivard - Fatima Kassem

Francine and Louis Gilles-Durand - Sneha Sukumaran

NOMINATIVES SCHOLARSHIPS - TRIBUTE

Jacques-Gauthier - Camille Michaud

Michel-Bélanger - Jana Ridani

Emmanuel-Triassi - Kavindu Puwakdandawa

Angelo-Pizzagalli - Noémie Vilallongue

THE IRCM FOUNDATION FUNDS AND CHAIRS

IRCM FOUNDATION'S ACTIVE RESEARCH FUNDS

- Internal Community Excellence Fund *
- Angelo-Pizzagalli Postdoctoral Scholarship Fund*
- Jean-Coutu Postdoctoral Scholarship Fund *
- Jacques-Genest Scholarship Fund
- Emmanuel-Triassi Fund for cancer research*
- Jean-Davignon and Pierre-Larochelle Fund *
- Jean-Guy-Desjardins Fund for priority research *
- Marcel and Béatrice Piché Fund *
- Marie and Willie Chrétien Fund for the IRCM Student Association *
- Michel-Saucier Fund for priority research
- Rosario and Annette Genest Fund *
- Sainte-Thérèse de l'Enfant-Jésus Fund in memory of Mable and Lucien Toupin *
- UAP-NAPA Fund
- Francine and Louis-Gilles Durand Fund
- Aisenstadt Fund
- Mirella et Lino Saputo Foundation Fund
- CIBC Fund
- CDPQ Fund
- Richard and Edith Strauss Foundation Fund
- Rabasa-Lhoret Fund

* Capitalized funds

IRCM FOUNDATION'S ACTIVE PHILANTHROPIC CHAIRS

Bell-Bombardier Chair in Cardiovascular disease

Éric Lécuyer

Gaëtane and Roland Pillenière Research Chair in Retina

Michel Cayouette

Michel F. Belanger Research Chair in Cancer

Tarik Moroy

J-Louis Lévesque Foundation Chair in Rare Diseases

Emilia Liana Falcone

J.A. DeSève Clinical Research Chair

Rémi Rabasa-Lhoret

Jacques-Genest – Royal Bank Chair

Jean-François Côté

John-Low-Beer Chair

Marie Kmita

Transat Chair in Breast Cancer Research

Jean-François Côté

Alain Fontaine Research Chair in Cancer

Jean-François Côté

Doggone Foundation Chair in Pain

Artur Kania

NEW DOGGONE FOUNDATION CHAIR IN PAIN



This major support from the Doggone Foundation comes at just the right time to enable us to explore the next stage of our research. This will involve defining the molecular composition of the neurons that transmit pain signals. Their characterization will enable us to identify the receptors that are expressed, so as to identify drugs capable of specifically targeting them, blocking their activity and altering the function of the link between the spinal cord and the brain. I am immensely grateful to the Doggone Foundation for this philanthropic initiative.



DR. ARTUR KANIA, Director of the Neural Circuit Development Research Unit

The Doggone Foundation donated \$500,000 to advance cutting-edge research through the creation of the Chair of Excellence in Pain. An incapacitating symptom present in most human diseases, pain remains poorly understood and little investigated in research,

despite the fact that, in its chronic form, it affects people of all ages and from all walks of life, impacting the physical and mental quality of life of over 7 million Canadians. The Doggone Foundation Chair of Excellence in Pain will support the highly promising work of Dr.

Artur Kania, Director of the Neural Circuit Development Research Unit at the IRCM, who will study the interruption of specific neural connections as a means of reducing the sensation of pain.

TESTIMONIALS

A PLANNED GIFT TO MARK COMMITMENT

LISE LAMOUREUX, donor and member of the IRCM Foundation Cercle des immortels



Thanks to the invaluable advice and unfailing support of the multidisciplinary team at the IRCM Clinic, I took care of my diabetic husband for over 30 years. For me, it's essential to give back to those who have been so devoted to us over the years. My planned gift to the IRCM Foundation represents one more step towards quality solutions and care for future generations. It's my way of helping to perpetuate this precious commitment.

THANK YOU FOR EXCEPTIONAL CARE!

REAL BRAIS, IRCM CLINIC's partner-patient IRCM Foundation's contributor



I would like to express my deep gratitude for the high-quality care I have received at the IRCM Clinic for over 12 years. It is truly a privilege to receive such compassionate attention. Your dedication and compassion make a real difference to our lives.



ON THE ROAD TO COMPOSTELA : A PILGRIMAGE FULL OF MEANING

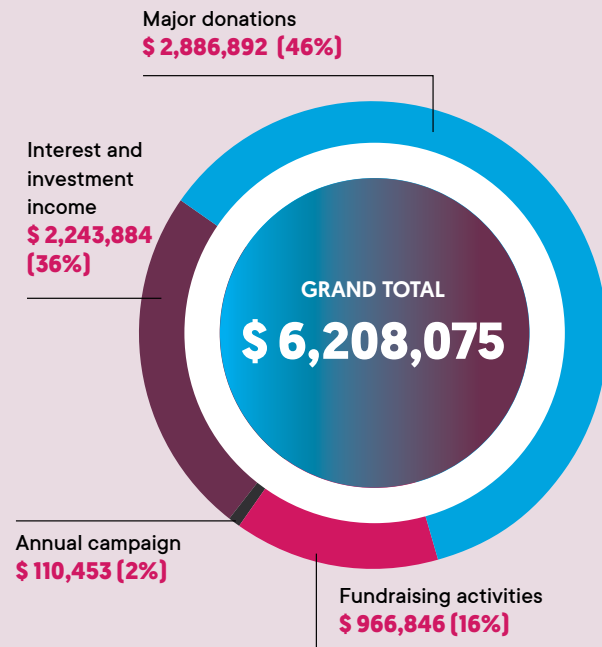
MARC PRÉNOVOST, hiker and philanthropist



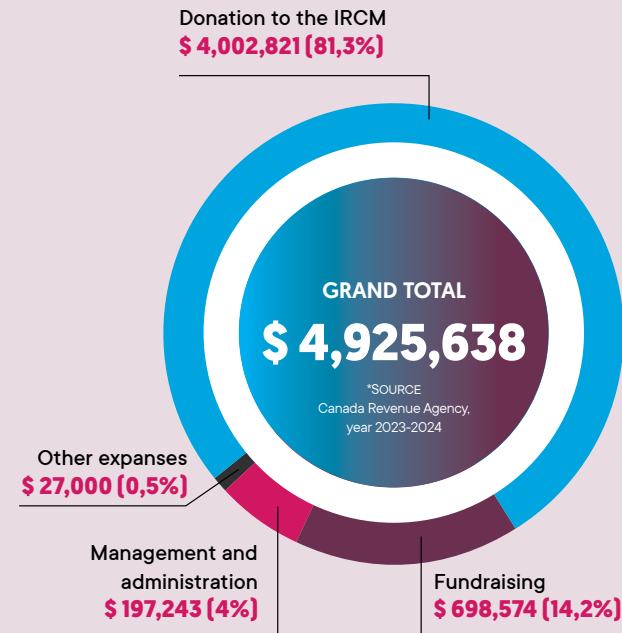
In September 2023, I walked 900 km on the Chemin de Compostelle in memory of my good friend Milène, who died of breast cancer at the age of 48. Since the onset of her illness, she was very involved with the IRCM Foundation. I wanted to pay tribute to her, and continue what she had started, to give hope to all those who are fighting this battle. Thanks to the people around me, I was able to raise \$10,800 to support breast cancer research at the IRCM. I'm really proud of this personal achievement!

THE IRCM FOUNDATION IN NUMBERS

REVENU ALLOCATIONS



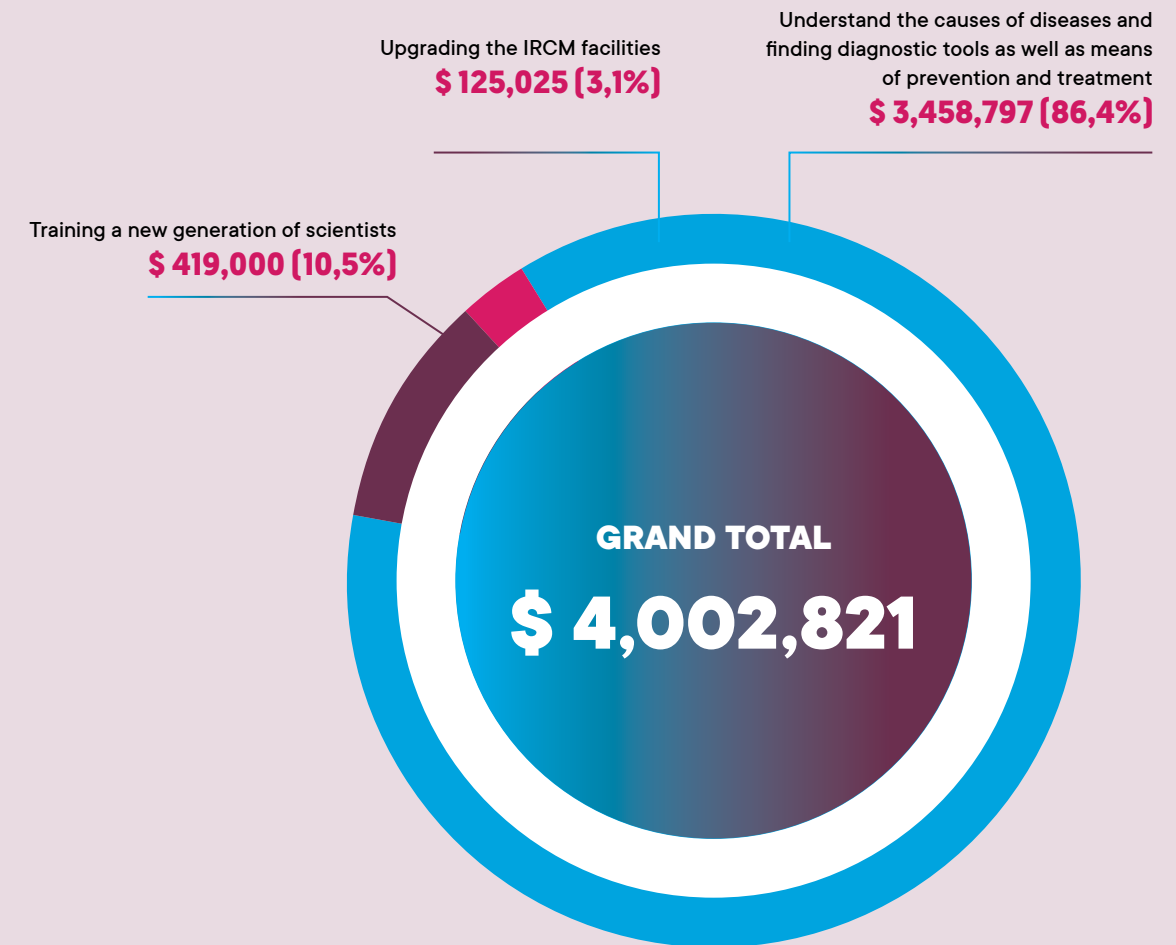
EXPANSES



ASSETS AS OF MARCH 31, 2024

\$ 22,893,669

FUNDS REMITTED TO IRCM





Montreal Clinical Research
Institute 2023-2024 Annual
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Communications Department

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The IRCM 2023-2024 annual
report summarizes the highlights
and financial data for the period
beginning on April 1, 2023, and
ending on March 31, 2024.



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