

A child in a space suit stands on a small platform, holding a large yellow balloon decorated with stars. The background is a deep blue space filled with stars, planets, and nebulae. The text 'ANNUAL REPORT 2021-2022' is centered in white.

ANNUAL REPORT

2021-2022



**foundation
of stars**
the magic of research

**Since 1977, the Foundation of Stars
has given the greatest gift to children
and teens: the promise of a better,
healthier future through research!**



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Message from the Chair of the Board of Directors and the President and CEO

The year 2022 marks the 45th anniversary of the Foundation of Stars. This remarkable journey has been marked by promising discoveries, inspiring breakthroughs and mobilizing projects, and driven by an incredible, generous and visionary community, of which you are a part.

These achievements would not have been possible without the expertise and passion of our researchers, who have been motivated by a common vision from day one: transforming the lives of sick children for the better. This vision remains alive and well thanks to our generous donors, board and committee members, volunteers, and partners who have stood by them for all these years.

In 2022 alone, 16 projects were approved by the scientific committee, which carefully selected innovative projects from the four major pediatric research centres, as well as peripheral centres and universities in Quebec. All of them stand out because of their interregional, interdisciplinary and multicentre collaboration, and because they are guaranteed to have measurable results and outcomes, criteria that are the strength of our mission.

The pandemic has taken a heavy toll on the mental health of children and adolescents already weakened by the collateral effects of COVID-19. Launched early this year, the ***Child and Youth Mental Health Research Campaign*** was designed to address the urgent needs of research teams working on five critical research projects focusing on depression, anxiety, eating disorders, and attention deficit disorder with or without hyperactivity.



" All of these events were a success, and the generosity of the participants made it possible to reach our objectives! "

In addition to the mental health projects, eleven projects have been funded in 2021–2022 in the following areas: infectious diseases and immunity in global health, neurodevelopment, reproduction and maternal and child health, autoimmune diseases, hematology-oncology, and cardiology. In addition, on November 7, 2021, the next generation of scientists and researchers met in a hybrid format at the 5th Provincial Mother-Child Research Conference, organized by the Centre de recherche mère-enfant du CHU de Sherbrooke, to discuss the latest advances during conferences and presentations given by students.

Moreover, all our fundraising activities took place in person, in secure environments. This was the case for the 4th Tough Mountie Challenge, which was held simultaneously in Montreal, Québec City and Sherbrooke, and the 9th Encan des vins de Sherbrooke Wine Auction. A new sporting challenge was also added during the year: The Alpine Challenge was held at Ski La Réserve, in Lanaudière, and at Owl's Head, in the Eastern Townships. In this activity, participants had to get to the summit on climbing skis—commonly known as “sealskins”—before coming back down on a ski slope at night, equipped with a headlamp. All of these events were a success, and the generosity of the participants made it possible to reach our objectives!

I would also like to highlight the unfailing support of the Major donors committee, which enabled us to create the Builders' Match Fund, with the objective of accelerating pediatric research and doubling the donations received. To achieve this goal, we are very proud to have quickly obtained the support of three major builders: Power Corporation of Canada, Industrial Alliance and Scotiabank. These companies have pledged to match donations received to support our mental health research projects. Their generosity will multiply the value of other donors' contributions and will allow us to achieve even more results by accelerating research.

I would also like to add that once again this year, we have been buoyed by the commitment and participation of our valued board and committee members. We welcome the new members of the Major donors committee and the creation of the first Young Leaders committee. Welcome to the Foundation's family!

Finally, we would like to acknowledge the retirement of one of our most valuable volunteers, Mr. Roy Bourque, a man of heart who has been committed to the cause of pediatric research for 30 years. Thank you, Roy! Thank you also to Mr. Sam Younès, who is stepping down as a board member. Thank you, Sam, for your commitment and expertise over the years, as well as to Dr. Jean-Paul Praud, who is leaving the board of directors, but remains on the scientific committee. The Foundation of Stars thanks them all.

Thank you for believing with us for all these years. More than ever, we are convinced that it is through research that we will be able to offer a healthy future to more and more children, today and tomorrow.



" I am very grateful to all our volunteers, our committee members, our board members and the Foundation team who have worked tirelessly, and to our donors, people who are committed to supporting

pediatric research. Thanks to your trust and support, several teams of researchers have been funded at more important times than ever. "

M. ALAIN AUCLAIR

PRESIDENT OF THE BOARD OF DIRECTORS



" We are all part of the same team: Everyone puts their shoulder to the wheel to offer solutions and hope to sick children. The young people are our stars and touch us with their stories

and their determination in their daily struggle. For them, it is essential to continue to support research to make new advances possible. "

JOSÉE SAINT-PIERRE

PRESIDENT AND CEO

Mission, vision and values

AN ESSENTIAL ROLE

The Foundation of Stars' core reason for being is to support pediatric research. The Foundation of Stars is **there for children at every stage of their life**, from conception to adulthood. **Every day, the Foundation does everything in its power** to ensure that all children and adolescents have access to the latest research findings so that they can thrive, now and throughout their life. The Foundation strives to impact major fields of excellence in pediatric health by supporting relevant scientific research in areas where the needs are most pressing.

To date, over \$72 million have been awarded to experienced and emerging researchers in support of innovative and promising research projects. Medical breakthroughs in childhood diseases motivate us and nurture our hope that one day, all children will grow up healthy!



Our mission

The Foundation of Stars is dedicated exclusively to funding pediatric research to protect, promote and enhance the health and well-being of children and youths.



Our vision

The Foundation of Stars aims to be the driving force behind the advancement of pediatric research, thereby increasing the chances of recovery and improving the health of children.





Our values

INTEGRITY

We act in an open and honest manner.

LEADERSHIP

We are motivated to provide hope in health and education.

COMMITMENT

We work passionately for children, researchers and society.

RESPECT

We work with respect for people and the environment.



Did you know?

Since its inception, the Foundation has paved the way for a tremendous amount of research progress

HERE ARE JUST A FEW EXAMPLES OF THE ADVANCES THAT HAVE BEEN MADE THANKS TO YOUR SUPPORT:

Over the years, the Foundation of Stars, supported by a large number of donors, has been able to contribute to the growth and progress of excellent pediatric research in Quebec. Here is an overview of the results obtained from the projects funded this year:

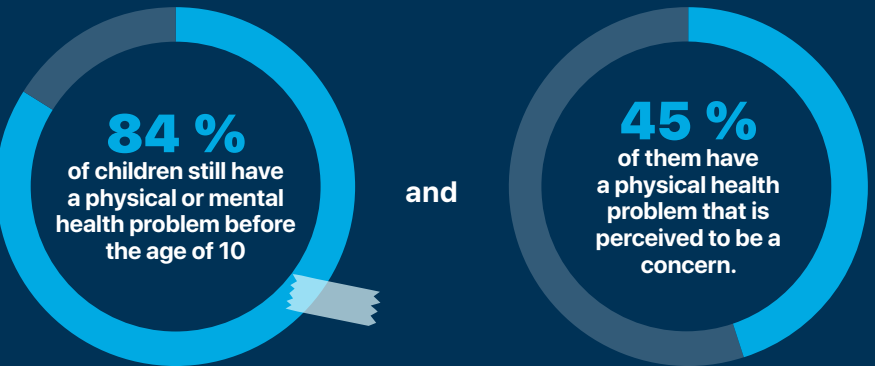
- ★ Initial results of a study on the mental health of families in periods of confinement conducted by **Dr. Lily Hechtman**, a child psychiatrist at the MUHC, show that 78.5% of the families observed (254 participating Canadian and Quebec families) had symptoms above the threshold of anxiety, depression and poor family functioning, with a high proportion of parents reporting symptoms of anxiety (62.9%) and depression (73.4%) above the threshold. This study is a first step in establishing the characteristics of at-risk families and targeting interventions to mitigate the adverse effects of confinement.
- ★ Nearly 100 children and their parents participated in the study on the problematic eating behaviours and attitudes of children (PEBAs) by **Professor Isabelle Thibault** of the CHU de Sherbrooke. Her preliminary analyses show that 16% of children in grades 5 and 6 have PEBAs


of a worrying intensity. Among the risk factors associated with PEBAs, **preliminary analyses show that children with PEBAs have much more difficulty with several risk factors, namely depressive and anxious feelings, self-esteem, personal and interpersonal alienation, lack of introspection, lack of emotional regulation, perfectionism, asceticism, and relational difficulties with the mother (lack of trust and anger towards her).**

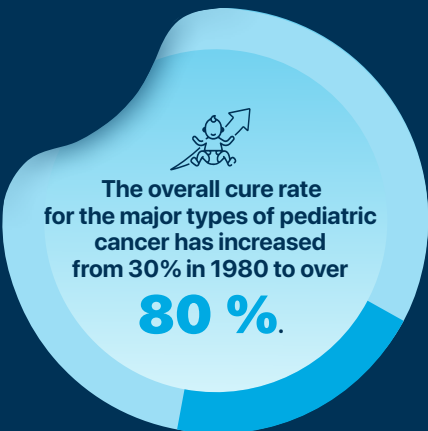
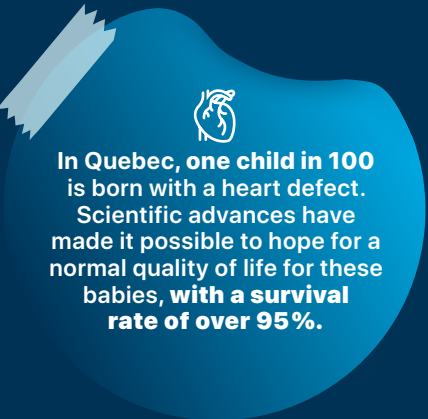
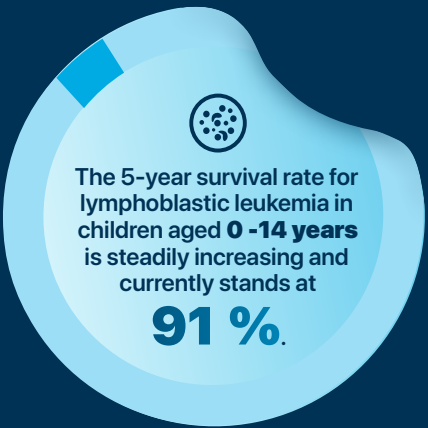
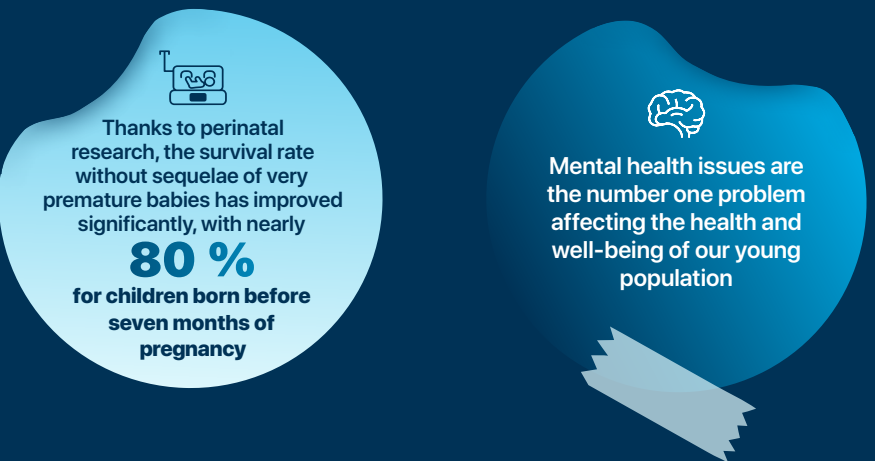
- ★ During the pandemic, **Professor Catherine Malboeuf-Hurtubise** at CHUS and Bishop's University conducted two studies on the impact of two art therapy interventions in a school setting on the mental health of elementary school children. Since March 2020, both projects have been conducted: **The first pilot study** compared a mandala colouring intervention (art therapy based on mindfulness) and a guided drawing intervention focused on emotions. The project was conducted in a classroom of elementary school students (n=22) at the onset of the pandemic (spring 2020). **Results from this pilot project revealed potential decreases in children's hyperactivity in both groups and decreased levels of inattention in the emotion-focused guided drawing group.** In the second study, conducted during the 2020–2021 school year, the effects of the same two interventions were compared with 165 children from two different schools (eight classes in all). **The results of our research indicate that both interventions significantly decreased the children's anxiety levels.**

Some numbers

Despite all the advances of the last 45 years...



 Prematurity in Quebec has changed significantly over the past decade. 10 years ago, a baby born at 24 weeks gestation had a 40% to 50% chance of survival. Today, this rate is between 70% and 75%.

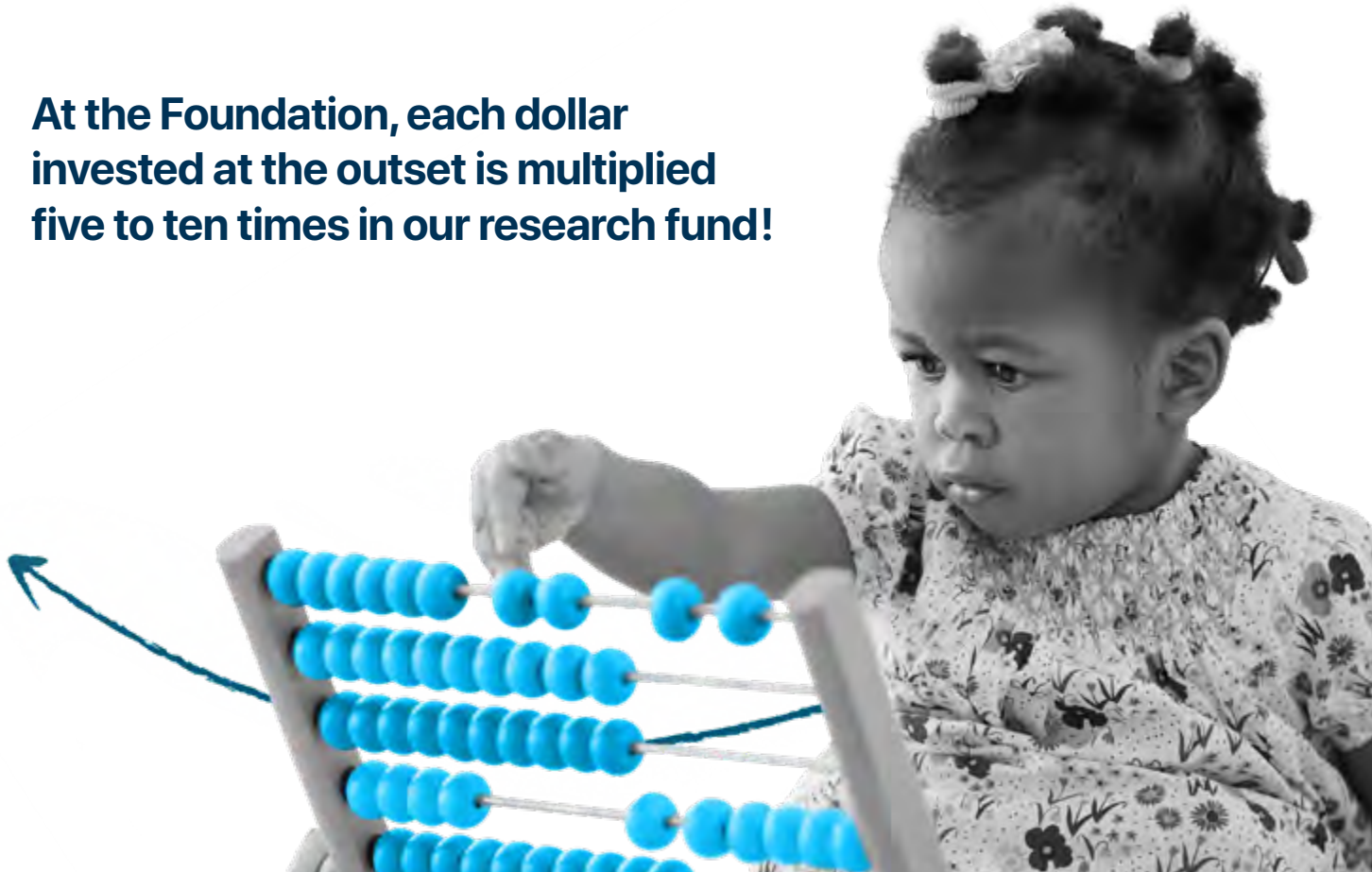


The Foundation's leverage effect

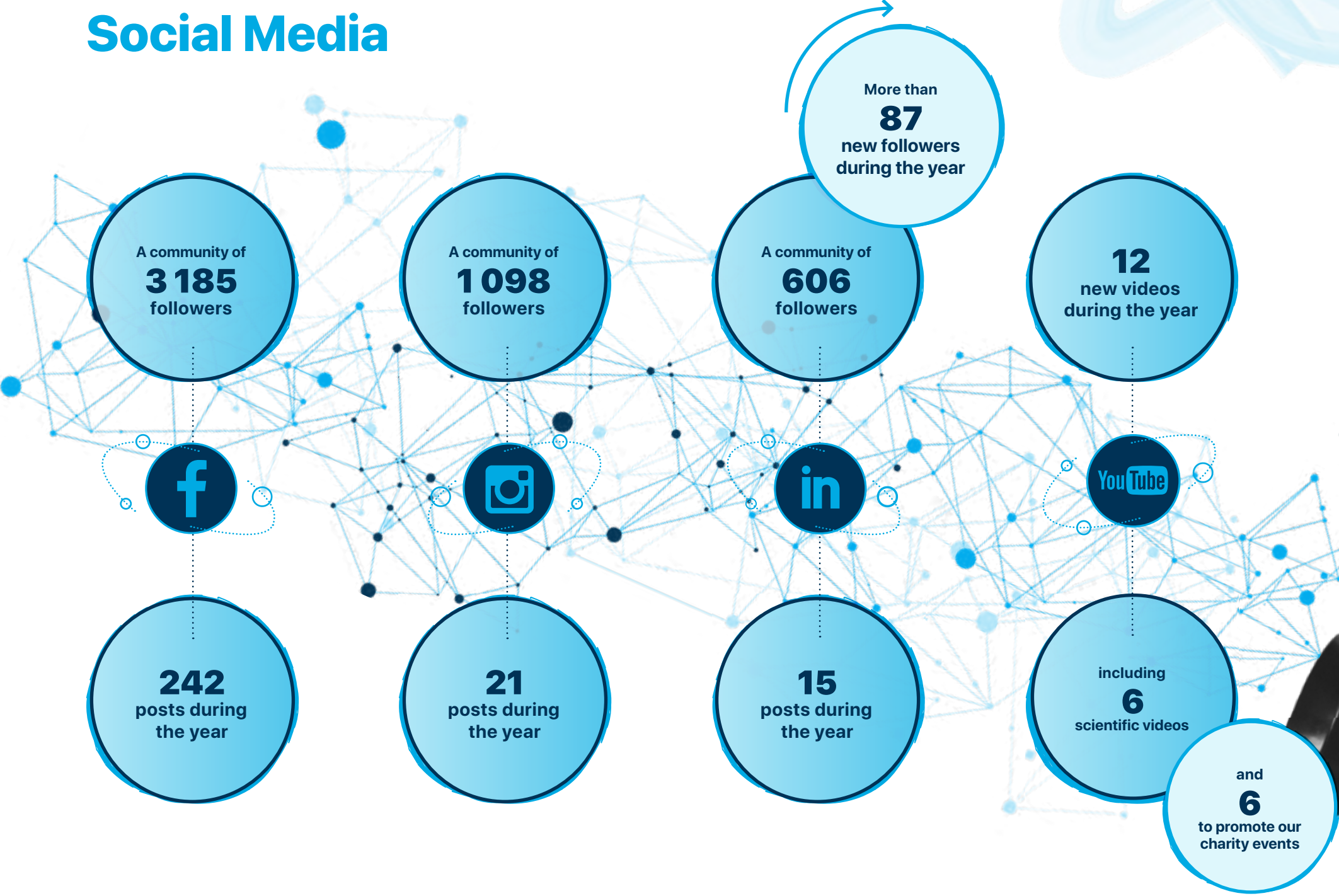
Your financial support of the Foundation, the researchers and their innovative research projects demonstrates your confidence in them and has a leveraging effect, leading to the investment of other funders. This means that every dollar invested up front can add up to five to ten times more in research funding.

In other words, when a promising research project is funded by the Foundation of Stars, other government institutions also show their confidence and add a significant investment to the Foundation of Stars' seed funding.

At the Foundation, each dollar invested at the outset is multiplied five to ten times in our research fund!



Social Media



Tough Mountie Challenge, 4th edition

A community of
1 100
" Likes "

54
posts during
the year



Alpine Challenge, 1st edition

A community of
177
" Likes "

32
posts during
the year

Two Facebook events:

Ski La Reserve
Alpine Challenge
311
positive responses

Owl's Head
Alpine Challenge
242
positive responses



Testimonials

Star Laurent



Mélanie Grégoire, mother of little Laurent, tells us the story of this courageous little boy.

“ Thirty weeks, that’s where science is at. It is to this sentence, uttered by Dr. Étienne Fortin-Pellerin and confirming that there was hope, that I clung during the 60 days that my son remained hospitalized in intensive care.

My son Laurent was born prematurely. It was a painful experience. First there was the shock of having to give birth under general anesthesia, then the terribly agonizing questions: ‘Will my child live? If so, in what condition?’ An uncontrollable feeling of guilt settled over me.

I had to wait a whole day to see my darling baby! He was intubated all over, and I couldn’t hold him. I was overwhelmed.

That’s when Dr. Fortin-Pellerin told me that thanks to advances in research, he would be able to ‘repair’ my son’s lungs, which were too small and too rigid. If you only knew the relief and gratitude I felt!

It’s clear to me now: It’s because people like you donate to research that my Laurent was able to make it. Today, he is a beautiful, energetic baby!

I am grateful to all the donors of the Foundation. ”

—Mélanie Grégoire

“ Thank you from the bottom of my heart for supporting families who have to deal with the unknown of a premature birth and who strive to keep hope in their child’s future. ”



Star family Mathis



Star Joël

Dr. François Corbin and Prof. Jean-François Lepage are conducting research on fragile X syndrome—a rare genetic defect that causes intellectual disability. This syndrome significantly reduces the learning abilities and social integration of affected children. Here is a testimonial from the parents of two patients being followed by the researchers.

“ When the doctors told us about Mathis’s diagnosis, they told us that there was a high risk that we would have to place him in a care facility adapted to his condition, because of the aggressive behaviours that the disease can trigger. That day, I wasn’t able to go home right away. I pulled over to the side of the road in shock. But we got back on our feet afterwards. We looked at things in a positive light and exposed Mathis to as many family experiences as possible (we have four children).

As he grew up, Mathis became Sir Smile, a true little joy on two legs! We know that many families would like to see Dr. Corbin’s clinical trial result in a miracle. For us, the miracle is our son. He has given us unusual experiences and our children know what it means to be different. We also want to help others, and that is why we participate in the research work of Dr. Corbin and Prof. Lepage. ”

—Dominic Lapointe, Mathis’s father

“ My biggest concern is our son’s future. What will he do when my wife and I are no longer here, given that he needs support for everything?

My hope in participating in the clinical trials is that he will be as independent and happy as possible, in every way possible. I have the greatest respect for the team of scientists who are involved in this process and I have total confidence and loyalty in them.

And to the people who donate, I say: ‘Thank you for your generosity; it will be returned to you!’ ”

—Gilles Provencher, Joel’s father



Star Florence



Florence's little heart kept beating even when she was only 22 weeks old, says her father, Antoine Halwagi.

"There are events in life that mark us forever. In our case, everything changed completely on May 12, 2021. How could our daughter come into the world so early? My wife's water broke after just 22 weeks of pregnancy. We were in shock, you can imagine. In the ambulance that took us to the hospital, our first, terrible reaction was to tell ourselves that everything was over.

But we didn't know Florence and her strength yet. And we didn't know everything about medical advances. When we arrived at the Montreal Children's Hospital Neonatology Centre and I asked what the chances were for an extremely premature baby to not only survive, but to grow up well, I was told that there were happy stories. My wife and I decided to believe it. Especially since Florence was moving. Her little heart was beating on the ultrasound.

The doctors managed to keep her in the womb for a few days. Then she was born by Caesarean section. She was delivered by Dr. Gabriel Altit, a research physician whose important work in pediatric cardiology the Foundation of Stars supports.

With babies like Florence, everything is subject to complications and concerns: brain development, lungs, cardiovascular system... Florence was intubated because she could not have breathed on her own for very long. The tube bothered her a lot, poor thing, so much so that she took it out three times! Such vigour surprised us, and gave us hope.

Then, our little one had a heart complication after being given a medication. That's when Dr. Altit suggested that we participate in a research protocol to better characterize the condition of premature babies with the help of ultrasounds.

That Florence was able to survive is quite an achievement. Her presence fills us with emotion. We know that she will have challenges. No one can predict what they will be. Fortunately, research has advanced so much that yesterday's premature babies, who are adults today, can no longer be used as models. Thanks to the Foundation of Stars and the essential support of its donors, Florence will not have the same life as children like her who were born prematurely a few years ago."

—Antoine Halwagi, Florence's father

Our Fundraising Campaigns

The Foundation's fundraising campaigns are essential sources of funding. They ensure the smooth running of the Foundation and support excellent research projects. Many of you have given generously. Regardless of the amount, each donation is a precious gesture that helps improve the lives of sick children.

The second year of the pandemic that has just ended did not slow down the generosity of our donors. Many of them have supported us, both through our relationship marketing campaigns and our fundraising campaign for the mental health of children and adolescents who have suffered psychologically from the confinement and the pandemic.

This exemplary generosity is also that of our major donors. Great builders have joined the Foundation to support it with the 2022 Builders' Match Fund for Mental Health.

On behalf of all the researchers whose projects are funded by your donations, thank you for your support and for the hope you give to the families of sick children. Thanks to you, everything will be done to make their greatest dream come true: to be cured!



Child and Youth Mental Health Research



The pandemic has taken a heavy toll on the mental health of children and youth who are more vulnerable than ever to the collateral effects of COVID-19. Launched early this year, the **Child and Youth Mental Health Research** campaign was designed to address the urgent needs of the teams of five key prevention research projects being conducted at four major pediatric research centres in Quebec. The mental health of children, adolescents and families was the cornerstone of this campaign.

In addition, as part of the mental health campaign, three generous donors, **Power Corporation of Canada**, **Industrial Alliance** and **Scotiabank**, have committed to match one-time contributions to support these projects led by our multidisciplinary research teams working in various centres across the province.

The goal of the **Builders' Match Fund** is to accelerate research by doubling the donations raised through the Fund. This fund was made possible thanks to these generous donors who have pledged their support for the next four years.

We thank our builders from the bottom of our hearts for their generous support and commitment.

By contributing to this fund, they are helping to expand the reach of donations in several ways:

- ★ Increasing the value of the investment by doubling the donations received;
- ★ Ensuring that each donation will have a greater impact and allow for more rapid progress in child and youth mental health research projects;
- ★ Participating in the collective effort for knowledge transfer and greater collaboration among researchers;
- ★ Ensuring a greater success of pediatric research in action;
- ★ Providing secure funding for early project start-up.



The following are the projects of the *Child and Youth Mental Health Research* campaign.

PROJECT

Positive and negative factors affecting the adjustment of children and their families to confinement during the COVID-19 pandemic



DIRECTOR

Dr. Lily Hechtman

(McGill University, MUHC)

COLLABORATORS

Dr. Lila Amirali (CHU Sainte-Justine), Dr. Philippe Hwang, Dr. Lara Ipekian and Dr. Nikhil Jaiswal (MUHC)

SUMMARY

A March 2020 review in The Lancet synthesized previous literature examining the psychological impacts of confinement, including elevated levels of stress, anxiety, mood, and posttraumatic stress symptoms. Despite these findings in individuals, to our knowledge, no study has examined the psychological effects of confinement on children, families, and family functioning, as well as the positive and negative factors that affect adaptation to confinement or its treatment.

The purpose of this project is to identify the positive and negative determinants of children's, parents', and families' adjustment to confinement. It aims to identify vulnerable families to target interventions and follow-up for those most in need of support. It studies the effects of the pandemic on the mental health of Canadian families (on parents, children, but especially on the family itself) by assessing mental health along several axes (anxiety, depression, stress, family function).

The project has three objectives:

- ★ Identify the positive and negative determinants of children's, parents', and families' adaptation to confinement.
- ★ Demonstrate that a brief, targeted family therapeutic intervention will be effective in addressing the exacerbating and psychological factors of confinement on at-risk families.
- ★ Educate and train community mental health workers to recognize at-risk families and intervene to improve their family functioning.



PROJECT

Impact of the Pandemic on the Mental Health of Youth Living with Attention Deficit Hyperactivity Disorder (ADHD) —COMPASS QUEBEC

PROJECT CO-DIRECTORS

[Dr. Richard Bélanger](#) and [Dr. Slim Haddad](#)
(Université Laval, CHU de Québec)

COLLABORATORS

Marie-Pierre Sylvestre (Université de Montréal), Prof. Scott Leatherdale and Prof. Karen Patte (University of Waterloo); professionals from regional public health departments, schools and school service centres in the Capitale-Nationale, Saguenay-Lac-Saint-Jean and Chaudière-Appalaches regions



SUMMARY

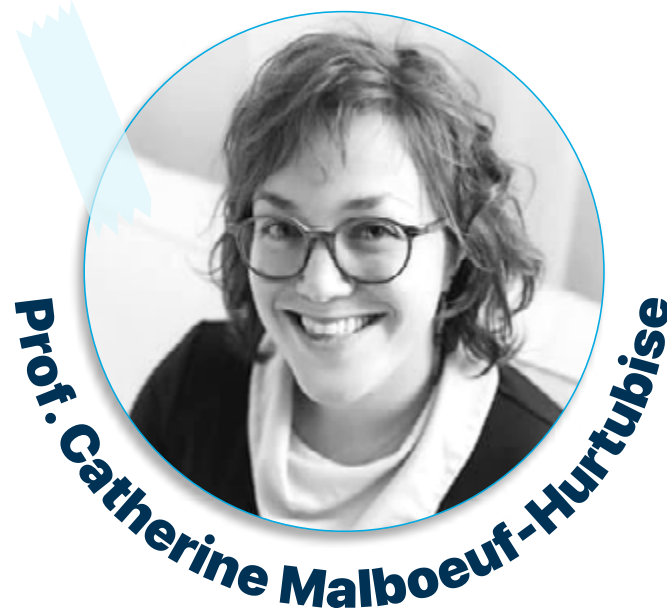
The mental health of young people and its evolution during the COVID-19 pandemic are the source of many concerns. Unfortunately, the data currently available do not allow us to conclude that the emotional changes described are directly caused by the pandemic. More importantly, the inability of some projects to identify groups for whom the pandemic may have been even more adverse limits our ability to provide them with the help they deserve.

The COMPASS project aims to generate ongoing scientific information to better understand adolescent realities and support actions to promote the health and well-being of youths. COMPASS has been operating in four provinces and three territories in Canada since 2012.

PROJECT

1. Evaluation and comparison of interventions based on art therapy and mindfulness and then on philosophy

2. Attentive presence on the mental health of elementary school children at the time of COVID-19



DIRECTOR

Prof. Catherine Malboeuf-Hurtubise
(CHUS, Bishop's University)

COLLABORATORS

Prof. Chantal Camden (CHU de Sherbrooke), Dr. Nicholas Chadi (CHU Sainte-Justine), Prof. Catherine Herba and Prof. Geneviève Taylor (Université du Québec à Montréal), Prof. Geneviève Mageau, Prof. Mireille Joussemet and Prof. Marc-André Éthier (Université de Montréal), Prof. Mathieu Gagnon (Université de Sherbrooke) and Prof. David Lefrançois (Université du Québec en Outaouais)

SUMMARY

In a non-pandemic setting, mental health disorders are present in 25% of elementary school children. However, the most recent reports show that the COVID-19 pandemic increased signs of anxiety and depression in young people. The impacts of these disorders are numerous: increased behavioural problems, decreased motivation for school, and increased school dropout rates.

Studies have shown promising results in counteracting psychological distress and promoting well-being in children by proposing mindfulness and philosophy interventions. **This project therefore aims to offer interventions that can help many children to be less affected by the pandemic they are currently experiencing.**

The combination of two complementary projects, one on mindfulness and art therapy, and the other on mindfulness and philosophy for children, highlights the multidisciplinary nature of this research proposal. The varied expertise of the collaborators (psychology, philosophy, education, arts) will allow for the design of interventions to alleviate the suffering of elementary school children who have been dealing with the vagaries of the COVID-19 pandemic.

PROJECT

Study of a virtual therapeutic approach to treating eating disorders in and beyond a pandemic context



DIRECTOR

Dr. Nicholas Chadi (CHU Sainte-Justine)

COLLABORATORS

Dr. Danielle Taddeo, Dr. Pierre-Olivier Nadeau, Dr. Louis Picard, Dr. Linda Booji, Parie-Paule Goudreau (Centre intégré des troubles de la conduite alimentaire)

SUMMARY

In October 2020, the Association des pédiatres du Québec (APQ) sounded the alarm on the observed and future impacts of the COVID-19 pandemic on the mental health of children and adolescents. At CHU Sainte-Justine, the number of cases taken in charge has doubled over the past year. For many, confinement was the tipping point leading to the development of an eating disorder. **This research project will be used to evaluate the efficiency of virtual telemedicine care. Telemedicine and telepractice interventions represent a promising new treatment approach to help youths with an eating disorder during a pandemic.**

- ★ This project will synthesize knowledge about the effectiveness of online support programs for adolescents with eating disorders and their families, and the use of these programs worldwide.
- ★ It will also evaluate the effectiveness of personalized online treatments and self-care measures on the physical and psychological health and psychosocial adjustment of youths with eating disorders.
- ★ Finally, the project will aim to describe the experience of young people with eating disorders and their families participating in the virtual intensive ambulatory care of CHU Sainte-Justine.

PROJECT

Problematic food behaviours and attitudes (PFBAS) in children: How and Why do they develop?



DIRECTOR

Prof. Isabelle Thibault

(Université de Sherbrooke and CHUS)

COLLABORATORS

Dr. Caroline Pesant and Dr. Marie-Claude Roy (CHU de Sherbrooke), Prof. Dominique Meilleur (Université de Montréal), Anne-Marie Tougas and Catherine Laurier (Université de Sherbrooke), Catherine Bégin (Université Laval), Marie-Pierre Gagnon-Girouard (Université du Québec à Trois-Rivières), a group of Quebec researchers interested in eating disorders, and other stakeholders from various regions of Quebec

SUMMARY

Although eating disorders can begin in childhood and have very negative consequences throughout life, there has not yet been a large-scale study with enough participants to follow children over a long period of time to establish and understand the psychosocial factors associated with the development of eating disorders.

Therefore, this research project aims to follow a large sample of children to understand what distinguishes those with and without PFBAs in terms of psychosocial factors.

This project is taking place in elementary and high schools in various regions of Quebec (Eastern Townships, Montreal, Québec City, Outaouais, Centre-du-Québec, Saguenay, Gaspésie). It is aimed at children in grades 5 and 6 and secondary 1, as well as their parents. The study consists of completing a questionnaire or series of questionnaires or participating in interviews, depending on the group of children. All participants will complete the same protocol in the second year of the project.



Our Relationship Marketing Campaigns

They are important pillars of our annual campaigns. Every year, whether by letter, email, or telephone conversations during telemarketing campaigns, you show your sensitivity, interest, curiosity, and commitment to this cause that is close to your heart.

Each and every one of your donations, regardless of the amount, is a precious gesture aimed at improving the lives of sick children. Children who only dream of one thing: being cured.

OUR CAMPAIGNS REPRESENT

**more than 2,523 donors
who contribute \$34,084
every month**

Nearly \$357,795 in donations raised through various promotional tools and actions, including:



our **printed newsletter**, published in June 2021, which informs you about the progress of our researchers and the latest news on the Foundation's activities;



the **2022 agenda** which, year after year, is always appreciated by our donors;



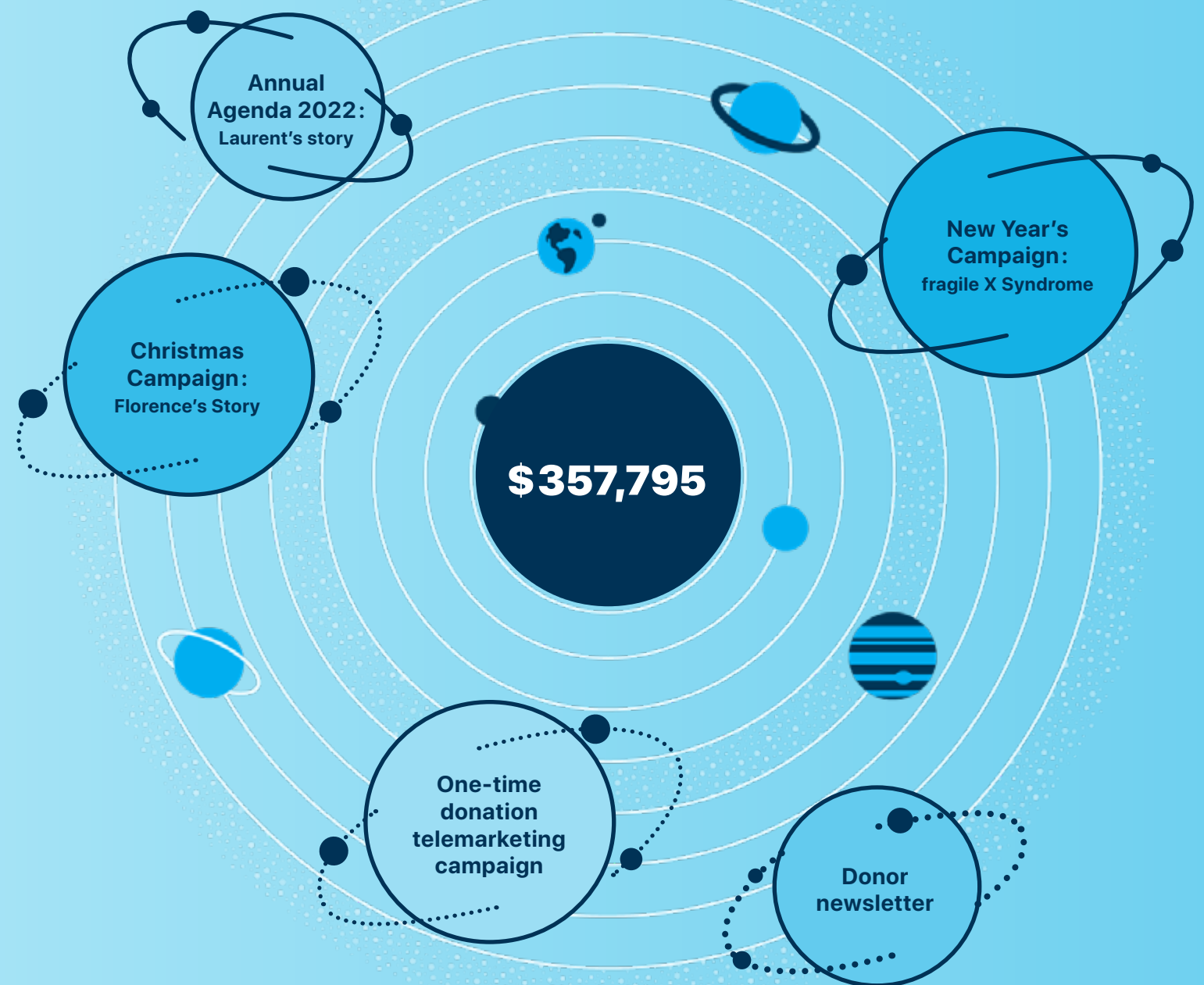
our **Christmas mailing** in December 2021, in which we told the touching story of little Florence, born at 23 weeks, and mentioned the extraordinary work of Dr. Gabriel Altit in neonatology; we also announced the commitment of Kiehl's skincare and beauty products for matching donations;



the **New Year's Campaign**, launched in February 2022, informing you about Dr. François Corbin and Prof. Jean-François Lepage's research project on a rare disease, fragile X syndrome, and featuring testimonials from the parents of Mathis and Joël;



our first **telemarketing campaign for one-time donations**, which exceeded its objectives; thank you for listening!



Our Events

9th Encan des vins de Sherbrooke Wine Auction

The 9th Encan des vins de Sherbrooke Wine Auction took place on Monday, December 6, 2021, in front of a live audience at the Granada Theatre. Thanks to the generous participation of the campaign cabinet and all those present, the Foundation of Stars brilliantly raised over \$105,000. All profits will be donated to the mother-child axis of the CHUS!

Special thanks to Kevin Houle for hosting the evening, to Élodie Caron and Dr. Judith Simoneau for their valuable testimonials, to Nolwenn Bénard from réZin, who introduced the featured winery—Domaine Quinta de la Rosa—and to Laurent Berniard, auctioneer from IEGOR, who hosted the auction during the evening and who has hosted our wine auctions for the past 15 years.

We would like to thank our partners for their support: [Sherbrooke Toyota](#), [BMW Sherbrooke](#), [Audi Sherbrooke](#), [Bell Media](#), [Construction Longer](#), [Raymond Chabot](#), [RBC Wealth Management](#), [Immex Société immobilière](#), [Bérubé Team](#), [Sherbrooke Honda](#) and [N.V. Cloutier Sherbrooke](#). Thank you also to the [Air Canada Foundation](#) for its faithful participation.

2021-2022
\$105,000

Since the beginning
\$957,002



9th Encan des vins de Sherbrooke Wine Auction

THE FUNDS RAISED SUPPORTED THE FOLLOWING PROJECTS AND RESEARCHERS FOR THE YEAR 2021:

Dr. Frédéric Dallaire's project

QUALITY study—longitudinal evaluation of the quality of life of children and young adults with heart defects.

Project of Prof. Christiane Auray-Blais

Simultaneous screening of eight sphingolipidoses by analysis of lysosphingolipids in urine collected on filter paper in children.

Dr. Étienne Fortin Pellerin's project

Evaluation of pulmonary artery pressure by electrical impedance tomography in newborns.

A BIG THANK YOU TO OUR CAMPAIGN CABINET AND OUR THREE HONORARY CO-CHAIRS

- ★ **Patrick Audet**, real estate agent part of the Bérubé Team
- ★ **Prof. Christiane Auray-Blais**, biochemist at the Genetics Department of the Université de Sherbrooke, honorary chair of the event
- ★ **Sébastien Beaudoin**, vice-president and general manager of BMW Sherbrooke, co-chair of the event
- ★ **Dr. Frédéric Dallaire**, pediatric cardiologist, director of research, Department of Pediatrics, Université de Sherbrooke
- ★ **Janick Dallaire**, owner of Audi Sherbrooke and Volkswagen de l'Estrie
- ★ **Dominic Duhamel**, general manager of Sherbrooke Honda
- ★ **Renaud Fortier**, owner and president of Hyundai Sherbrooke
- ★ **Alain Laplante**, real estate agent part of the Bérubé Team
- ★ **Louis Martineau**, co-owner of N.V. Cloutier Sherbrooke
- ★ **Dr. Jean-Paul Praud**, professor, physician and researcher, Department of Pediatrics, Université de Sherbrooke
- ★ **Danielle Rousseau**, president of Sherbrooke Toyota, co-chair of the event
- ★ **Louis Roy**, financial security advisor at Roy, Lévesque et associés inc.
- ★ **Jennifer Saint-Laurent**, coordinator of the mother-child research axis at CRCHUS
- ★ **Ronald Thibault**, president of Thibault GM

Tough Mountie Challenge, 4th edition—2021

The 4th Tough Mountie Challenge, organized by the Foundation of Stars in collaboration with the **Royal Canadian Mounted Police** (RCMP) and presented by the **Caisse Desjardins des policiers et policières**, took place on Saturday, October 2, 2021.

2021-2022
\$196,618

Since the beginning
\$436,618



The generous participation of the athletes, their fundraising efforts and various financial partners helped raise \$196,618 for pediatric research. Some highlights of the event:

- ★ For the first time since its inception, the Tough Mountie Challenge was held simultaneously in three participating cities: Montreal (Rutherford Park), Sherbrooke (Jacques-Cartier Park) and Québec City (Leclerc Stadium).
- ★ Nine teams of police technology students participated in the Challenge thanks to the financial support of our valued presenting partner, Desjardins Caisse des policiers et policières.
- ★ In all, on the three sites of the event, we welcomed 50 teams of 6 people (300 participants) and 75 volunteers, while respecting the restrictions imposed by the COVID-19 (cleaning of obstacles, mandatory vaccination passport, wearing of masks).
- ★ At each site, participants had to complete the same course. Three prizes were awarded:
 - ★ Best provincial fundraiser;
 - ★ Fastest team, S.W.A.T. level (cumulative individual times);
 - ★ Best Tough Mountie, S.W.A.T. level (individual time).
- ★ We could count on a MAJOR partner, **Deloitte**, on COMMANDING partner, in Montreal and Sherbrooke (**GardaWorld**), on CAPTAIN partners in Québec City (**Trudel Immeubles**) and Montreal (**Lion Electric, Dialogue** and **Les Accessoires Hudson Inc.**), whom we thank. We also thank our ESCOUADE partners and sponsors in the three cities, **Subaru Montréal, Industries Lassonde** and **SAIL**.
- ★ Merci pour la précieuse collaboration des services de police des villes de Montréal, de Sherbrooke et de Québec.
- ★ Merci aussi à nos commanditaires, St-Viateur Bagel, Larose, Audio Visuel Olympique, Ma Zone Fit de Josée Laviguer, Prefair Imrico Ltée, Leclerc, Trudel Sécurité, l'Université McGill, le Campus Notre-Dame-de-Foy (CNDF), le Lait au chocolat, Pixel Nord, Pommes Qualité Québec, Martin Gervais et David Moura, photographe.



FINALLY, A BIG THANK YOU TO THE ORGANIZING COMMITTEE, COMPOSED OF:

- ★ **Éric Boucher**, Corporal, Royal Canadian Mounted Police
- ★ **Isabelle Bois**, Superintendent, Royal Canadian Mounted Police
- ★ **Gaétan Courchesne**, Director of Security, Power Corporation
- ★ **Alexandre Degrasse**, Constable, Royal Canadian Mounted Police
- ★ **Roberto Dérap**s, Level Director, Secondary 4, Collège Laval
- ★ **Julie Lachance**, Inspector, Royal Canadian Mounted Police
- ★ **Olivier Lapointe**, Senior Manager, Business Development, Desjardins Caisse des policiers et policières
- ★ **Marie-Ève Lavallée**, Inspector, Royal Canadian Mounted Police
- ★ **Dr. Luc Lavigueur**, Chiropractor, Clinique Chiropratique St-Lambert
- ★ **Maryline Lévesque**, Sergeant, Special Forces, Service de police de la Ville de Sherbrooke
- ★ **Yan Therrien**, Staff Sergeant, Royal Canadian Mounted Police

1st Alpine Challenge 2022 an alpine hiking challenge on two beautiful Quebec mountains

The first Alpine Challenge took place in the winter of 2022. Organized by the Foundation of Stars in collaboration with La Réserve ski resort in Lanaudière and Owl's Head in the Eastern Townships, it is the only charitable alpine hiking challenge in Quebec created to support pediatric research. Held in the evening, it allowed alpine hikers to live an unforgettable night experience, with good food, drinks and music by DJ PASDEROCHE from the summit to the foot of the mountain. Participants, equipped with headlamps, had to complete as many climbs as possible in four hours, either solo or in teams of two to four people. Each participant had to raise a minimum of \$200 for the Foundation.



ALPINE Challenge—SKI LA RÉSERVE

On February 19, 2022, participants in the ALPINE Challenge—SKI LA RÉSERVE pushed their limits and braved the cold to help exceed our fundraising goal, with \$102,000 raised for mental health projects at the MUHC and CHU Sainte-Justine.

Some highlights of the event:

- ★ Solo or in teams of 2 to 4 people, 201 participants took part in the Challenge.
- ★ Some 26 volunteers aged 15 to 65, including the remarkable Diane Pigeon, who was responsible for the course, contributed to the success of the event.
- ★ We were able to count on a SUMMIT partner, **National Bank**, and on a DECADE partner, **Clinique Dr Éric Lajoie, dentist**.
- ★ Generous sponsors also put their shoulder to the wheel: CTR, IGA St-Donat, Quincaillerie Patrick Morin and Boulangerie St-Donat.



A BIG THANK YOU TO THE ORGANIZING COMMITTEE, COMPOSED OF:

- ★ **Anne-Marie Guertin**, Chief Financial Officer, Imagia Canexia Health and chair of the organizing committee
- ★ **Marie-Claude Halde**, General Manager, Ski La Réserve
- ★ **Dr. Éric Lajoie**, Dentist, Clinique Dr Eric Lajoie
- ★ **Julien Michaud-Beaudry**, President and Founder, Les Rassembleurs
- ★ **Diane Pigeon**, Director of Patrol, Operations and Security, Ski La Réserve

ALPINE Challenge—OWL'S HEAD

The ALPINE Challenge—OWL'S HEAD, presented by **Infiniti Sherbrooke**, allowed nearly 230 alpine enthusiasts to surpass themselves. On March 12, 2021, braving a snowstorm, these valiant cold-weather enthusiasts helped us surpass our goal by raising \$147,000 for the mental health projects of the Centre de recherche mère-enfant du CHU de Sherbrooke.

Some highlights of the event:

- ★ A total of 229 participants registered either solo or in teams of 2 to 4 participants.
- ★ Jean-Sébastien Poulin, co-owner of Nissan and Infiniti Sherbrooke, acted as honorary president and Katy Saint-Laurent, president and founder of KSL, as spokesperson.
- ★ We salute the commitment of 19 volunteers from 35 to 69 years old, including our course director, Mike Cyr.
- ★ Our ASCENSION partner **Infiniti Sherbrooke**, SOMMET partners **Sanimax** and **Crevier** and DÉNIVELÉ partners **Mike Cyr Agence Immobilière**, **Broken Binding Ski Club**, **Équipe Abinader Notaire**, **NSI Solution** and **Desjardins Entreprises** also greatly contributed to the success of the Challenge.
- ★ Finally, we salute the participation of our sponsors, Rona Giroux & Giroux and Boutique de ski Wax, of Mansonville, and Printeez, of Granby.



A BIG THANK YOU TO THE ORGANIZING COMMITTEE AND PARTNERS, COMPOSED OF:

- ★ **Andy Broda**, Representative of CST Arwin
- ★ **Mike Cyr**, President of Mike Cyr real estate agency and president of the partners' committee
- ★ **Émilie Larue**, in charge of Owl's Head security patrol
- ★ **Claudie Leclerc**, in charge of Owl's Head events
- ★ **Julien Michaud-Beaudry**, President and Founder, Les Rassembleurs
- ★ **Jean-Sébastien Poulin**, Co-owner of Nissan and Infiniti Sherbrooke, and honorary president of the Challenge
- ★ **Katrine Scott**, Marketing Director, Owl's Head

Public events and activities

Every year, many businesses, entrepreneurs and individuals take up the cause of children's health and well-being by organizing fundraising events, donating a percentage of their sales or otherwise.

Without these generous hearts, research into children's diseases, which is at the heart of the Foundation of Stars' mission, could not progress.

From fundraising dinners to customer collections or a fixed amount for each product sold, all means are good—and effective—to contribute to the cause.

A big thank you to the companies listed below, to their employees and to all those who, in one way or another, have generously contributed to help the Foundation and advance excellent pediatric research. You are the stars!





2021-2022 | \$20,000

Since the beginning | \$434,900

Somodif Textile Recycling Canada inc.

A partner of the Foundation of Stars for 21 years, Textile Recycling Canada Somodif Inc. raises funds each year through its clothing recycling program, for which people are invited to drop off their used clothing in the boxes provided. It is an initiative that never goes out of fashion, and which allows the population of Greater Montreal to unite their efforts to contribute to the advancement of pediatric research.



2021-2022 | \$15,000, plus a donation of \$27,550

Since the beginning | \$67,550

Kiehl's

For a third year, the Kiehl's brand of skincare and beauty products has faithfully reiterated its support for the Foundation with a fundraising campaign in support of the Canadian Pediatric Congenital Heart Network. Throughout December 2021 and January 2022, for every Kiehl's Body Cream sold, \$10 was donated to the Foundation for the advancement of pediatric cardiology research in Canada. In addition, a substantial donation was made from the proceeds of the brand's vintage motorcycle auction.



2021-2022 | \$12,500

Since the beginning | \$528,559

37th Royal Canadian Mounted Police Spaghetti Dinner

The 37th Royal Canadian Mounted Police Spaghetti Dinner was held virtually on November 17 and 18, 2021, in collaboration with the Omni Mont-Royal Hotel. The pandemic did not dampen the generosity of the people of the RCMP: thanks to the dedicated officers of the Royal Canadian Mounted Police who delivered the sauce and pasta, donors were able to prepare and enjoy the traditional spaghetti associated with this event in the comfort of their homes. Over \$12,500 was raised for pediatric research! Thank you to the RCMP and all the volunteers and sponsors for supporting us for all these years.



2021-2022 | \$10,000

Hydro Solution

The Quebec company has distinguished itself again this year with a great initiative: From December 2021 to January 2022, for every new installation of a water heater, either purchased or rented, Hydro Solution donated 2 dollars for pediatric research. Thank you to this local company for its unwavering support!



2021-2022 | **\$4,500**

Since the beginning | **\$349,202**

St-Viateur Bagel

St-Viateur Bagel has been a star partner of the Foundation of Stars for 37 years and this year donated \$4,500 to the Foundation. Thank you to the Morena family for getting involved and helping us protect, promote and improve the health and well-being of children and youth. Over the past four decades, the commitment of this Montreal family has raised close to \$350,000 and funded several pediatric research projects.

Other Generous Donors

Ghislain Leblanc's tour

John-Caboto High School

The Napperon de la recherche, a restaurant placemat identified with the Foundation

L'Enfantillon enfants et maternité store, in Laval





Funded Research Projects

Major research projects and distinguished researchers receive funding from the Foundation of Stars for the advancement of research on childhood diseases. This year, the funds awarded to the major pediatric and peripheral research centres in Quebec for structuring research projects focus on the following areas: immune diseases, perinatality, cardiovascular health, neurodevelopment of newborns, cancer, childhood obesity, infectious diseases, and immunity in global health.

ALLOCATION OF FUNDS





Dr. Anne-Marie Côté

PROJECT

Systematic screening of primary hyperaldosteronism following hypertensive pregnancy disorders

DIRECTOR

Dr. Anne-Marie Côté

COLLABORATORS

Marie-Ève Roy-Lacroix, Matthieu St-Jean, Michèle Mahone (CHUM)



SUMMARY

À Worldwide, 5 to 10% of pregnancies are complicated by hypertensive disorders of pregnancy (HDP), which lead to serious maternal, fetal and neonatal complications. Many of these women are found to have preexisting (<20 weeks of pregnancy) or postpartum hypertension (PH) that persists for more than 3 months. It has also been shown that women with self-limiting postpartum HDP are at high risk for developing chronic hypertension and cardiovascular complications later on.

Excessive production of aldosterone, a hormone secreted by the adrenal gland, leads to sodium retention and excessive urinary potassium loss in the kidneys. The prevalence of primary hyperaldosteronism (PA) in hypertensive patients is close to 10% (St-Jean M., 2019) and may even be as high as 20% (Štrauch B., 2003) in severe hypertensives. Its main causes include unilateral adrenal adenomas secreting aldosterone autonomously or bilateral adrenal hyperplasia. Over 88% of adenomas are now associated with genetic mutations (Namba K., 2018).

Treatment is primarily surgical for adenomas or medical for hyperplasia. Primary hyperaldosteronism is even more important to diagnose early because it is associated with an increased prevalence of cardiovascular complications compared with essential hypertension. Early detection and treatment that limits long-term cardiovascular health consequences would therefore be essential for young mothers with chronic hypertension. In addition, pregnancy outcomes appear to be better when PA is diagnosed and treated before a pregnancy.

We estimate that the prevalence of primary hyperaldosteronism in women with hypertensive disorders of pregnancy, particularly if they have chronic hypertension, is probably close to 20%. Thus, systematic screening at 3 months postpartum will allow early diagnosis and treatment, limiting the long-term cardiovascular health consequences for these young women.

The primary objective is to determine whether the prevalence of PA is sufficient (>5%) to recommend its systematic screening in all women who have had HDP, or only in selected women. Secondary objectives are to determine the maternal and fetal complications between women with PA and those without.



PROJECT

Transforming the management of Berger's disease with you

DIRECTOR

Dr^e Alexandra Cambier

COLLABORATORS

Centre hospitalier de l'Université Laval and Centre hospitalier universitaire de Sherbrooke

SUMMARY

Berger's disease, also known as IgA nephropathy, is an autoimmune disease that endangers the kidneys of its sufferer. It affects between 2 and 10 people out of 100,000 each year and often manifests itself in young adults, but can appear as early as childhood. In this case, the disease not only affects the kidneys, but also hinders the child's entire development.

The support of the Foundation of Stars will allow us to take a giant step towards a better understanding of Berger's disease and, consequently, towards an unparalleled quality of life for the children who suffer from it. This research aims to better predict the trajectory of the disease and, depending on its level of aggressiveness, to adjust the strength of the treatment; to design new treatments that are more effective and have fewer side effects, thus improving the health and overall development of children; with new therapeutic avenues and new biomarkers, to prevent as many patients as possible from having to go on dialysis or undergo transplants; and to develop new screening strategies so that the disease can be detected and managed even before the onset of symptoms.



Dr. Anne Monique Nuyt



Prof. Sylvana Côté

PROJECT

Research Network in Perinatal Determinants of Children Health

DIRECTORS

Dr. Anne Monique Nuyt
and Prof. Sylvana Côté

COLLABORATORS

Dr. Daniel Dufort and Prof. Isabel Fortier (Montreal Children's Hospital, McGill University Health Centre); Prof. Gina Muckle and Dr. Emmanuel Bujold (Centre mère-enfant du CHU de Sherbrooke); Dr. Jean-Paul Praud and Dr. Frédéric Dallaire (Centre universitaire du CHU de Québec)

SUMMARY

The World Health Organization has included global child health in its priorities for action aimed at achieving a marked and sustained improvement in the health of the world's population by 2030. In addition, in the global context of declining child mortality from infectious diseases, the child health goals were recently revised (in 2016) to include sequelae related to neonatal neurological injury, prematurity, and congenital malformations.

This project is both unique and unprecedented in the pediatric research landscape in Quebec and Canada. The Perinatal Determinants of Child Health Research Network is the first to propose a resolutely multidisciplinary approach to research on the perinatal determinants of child health. It is the first to make logistical, scientific and financial resources available to researchers from several medical and social disciplines to enable a more global and less compartmentalized approach to child health, as is often the case today.

PROJECT

Effects of maternal supplementation in docosahexaenoic acid on brain development and neurodemetric outcomes of breastfed premature infants: A preschool follow-up of a randomized clinical trial (MOBYDlckPS)



DIRECTOR

Dr. Mireille Guillot

COLLABORATORS

Dr. Isabelle Marc, Dr. Georges Caouette and Dr. Célia Matte-Gagné (CHU de Québec), Dr. François Olivier (Montreal Children's Hospital), Dr. Julie Bartholomew (Jewish General Hospital), Dr. Alyssa Morin (CHU de Sherbrooke), Dr. Ibrahim Mohamed (CHU Sainte-Justine)

SUMMARY

When a child is born very prematurely, the brain is not fully mature. Several crucial stages of brain development occur in the weeks following birth. Better nutrition, adapted to the needs of the premature baby, especially with docosahexaenoic acid (or DHA, an omega-3 present in large quantities in the brain), could favourably contribute to the brain development and neurodevelopment of the child born very prematurely.

The MOBYDlckPS project proposes a long-term follow-up of premature children recruited in the MOBYDlck study. In the MOBYDlck study, a Canadian multicenter study, mothers of very premature infants who wished to breastfeed took either a DHA supplement or a placebo during the neonatal period. Thus, in the mothers randomized to the DHA group, breast milk was enriched with DHA at a dose similar to that transmitted by the placenta at the end of pregnancy (thus making it possible to meet the needs of the very preterm child). We now have a unique opportunity to determine whether supplementation with a high dose of DHA is a strategy to improve the development of the very preterm infant.

As part of our research program, the MOBYDlckPS project will help establish the neurodevelopmental trajectory of the cohort as well as serve as the basis for the development of the next phase of the study, which will involve MRI brain imaging and neuropsychological assessment at age 8.

PROJECT

Natural history of asymptomatic central venous catheter-related thrombosis in children with cancer



DIRECTOR

Dr. Marie-Claude Pelland-Marcotte

COLLABORATORS

Prof. Nils Chaillet (CHU de Québec Research Centre), Dr. André Lamarre, Julie Bouchard (CHU de Québec), Dr. Thai Hoa Tran (CHU Sainte-Justine), Dr. Leonardo Brandao (SickKids Hospital, Toronto), Dr. Paul Monagle (Royal Children's Hospital, Melbourne, Australia)

SUMMARY

This project has several innovative elements. First, the concept of incidentally discovered asymptomatic VTE, or VTE, is largely unstudied in pediatrics, unlike its adult counterpart. Given the major differences between pediatric and adult oncology in terms of the types of cancers encountered, the anticancer treatments administered, and the use of VNRs, the management of asymptomatic VTE in pediatrics cannot simply be extrapolated from adult data and deserves to be studied in its own right. The methodology previously used in adults will therefore be adapted to a new population and a very different clinical setting.

Second, this study will be large enough to assess the impact of asymptomatic thrombosis in children with cancers other than acute lymphoblastic leukemia, as these diagnoses are underrepresented in the current literature.

Finally, research on the post-thrombotic syndrome in pediatrics is limited by the lack of accepted standards for its diagnosis and grading. In this project, investigators will use and compare several tools to advance the scientific knowledge in this field regarding the diagnosis of post-thrombotic syndrome for research and clinical use.

PROJECT

Program in Infectious Diseases and Immunity in Global Health (IDIGH)



DIRECTOR

Dr. Laurence Chapuy

COLLABORATORS

Dr. Hussein Wissanji and Dr. Van Hung Nguyen (Montreal Children's Hospital), Dr. Colette Deslandres, Dr. Dorothée Dal-Soglio and Dr. Marianne Beaudin (CHU Sainte-Justine)

SUMMARY

This project involves an innovative approach using state-of-the-art techniques, including the use of high-dimensional immunophenotyping combined with single-cell transcriptomics (SC-seq), which allows for the simultaneous study of RNA and proteins from a single cell. Applying this state-of-the-art technology to pediatric fibrotic CD tissue on cells from different diseased regions in the same patient will provide insight into cell flow and function in different areas of the gut. Our study focuses on monocytes and macrophages. Although they play a crucial role in inflammation and fibrosis, no study has described their distribution and role in the GLMs of pediatric IDI patients. Yet, understanding the interactions and functions between the cells is a prerequisite for the development of new therapeutic approaches to prevent fibrosis.

PROJECT

Establishing a proof of concept that long-term myelination abnormalities can be objectively quantified in school-aged children with NE-TH



DIRECTOR

Prof. Marie Brossard-Racine

COLLABORATORS

Dr. Pia Wintermark (Montreal Children's Hospital), Dr. Anne Gallagher, Dr. Thuy Mai Luu, Dr. Elena Pinchefsky, Prof. Marie-Noëlle Simard (CHU Sainte-Justine)

SUMMARY

Birth asphyxia and resulting neonatal encephalopathy (NE) in full-term babies is a major cause of mortality and severe neurodevelopmental disorders, including cerebral palsy and intellectual disability. Therapeutic hypothermia (TH) has proven effective in reducing death rates and severe neurodevelopmental disabilities and became the standard of care in Canada in the early 2010s. Nonetheless, many children with NE will develop brain damage and neurodevelopmental deficits. Because these cohorts of children are only now entering elementary school, we have limited data on their outcomes at this age. Furthermore, it is unknown how deficits at school age might be related to suboptimal brain development and neonatal brain damage. This study is a first step in characterizing brain structures in 9-year-old children with NE who were treated with hypothermia at an early age. By establishing that we can actually objectively measure brain maturation in this clinical group, this study will pave the way for a larger multi-centre study that will aim to better anticipate the health and educational needs of these high-risk children during the elementary years and beyond.



PROJECT

Longitudinal study of plasma ribo-hormones (microRNAs) and their roles in the development of childhood obesity

DIRECTOR

Dr. Luigi Bouchard (CIUSSS SLSJ Research Centre and Université de Sherbrooke)

COLLABORATORS

Prof. Marie Brunet, Prof. Pierre-Étienne Jacques, Dr. Patrice Perron (CHUS Research Centre and Université de Sherbrooke), Isabelle Marc (CHUQ Research Centre) Department of Pediatrics, Université Laval, Dr. Marie France Hivert (Harvard University) and Katrine Thibeault (FRQS Fellow)

SUMMARY

Overweight and obesity are defined as an excessive accumulation of body fat. In Canada, 29% of children suffer from this condition and the majority (~70%) will maintain their excess weight in adulthood. The recent rapid increase in the prevalence of childhood obesity cannot be explained by genetic evolution, which supports the involvement of epigenetics, at the interface of gene-environment interactions. **MicroRNAs (miRNAs) are short non-coding RNA molecules that repress protein synthesis by binding to their target messenger RNAs.** These epigenetic regulators, also called "ribo-hormones," are secreted and stable in the blood where their functions are similar to steroid hormones. Only six studies on miRNAs and childhood obesity (<8 years) have been conducted, all on small samples (n<20) and none prospectively as our Gen3G birth cohort allows.

HYPOTHESIS

miRNAs contribute to the regulation of energy metabolism, fat mass accumulation, and the development of obesity in childhood.

OBJECTIVES

- ★ Identify plasma miRNAs in cord blood associated with BMI and fat mass at 5 years of age.
- ★ Establish the causal role of microRNAs in childhood fat accumulation through miR-eQTL identification and Mendelian randomization.

BENEFITS

In addition to helping to understand the mechanisms involved in the development of childhood obesity, the study has the potential to identify cord blood miRNAs that predict obesity risk at 5 years of age. The researchers will use machine learning-based analytical strategies to identify the predictor miRNAs. Sensitivity, specificity, negative and positive predictive values will be calculated using receiver operating characteristic (ROC) curves. This study opens the door to a 5-year microtranscriptome analysis and longitudinal analysis.



5th Provincial Mother-Child Research Conference

The 5th Provincial Mother-Child Research Conference was held on November 5, 2021. This event, in which the Foundation of Stars was the main partner, was organized by the Centre de recherche mère-enfant de l'Université de Sherbrooke, in collaboration with the three other major pediatric research centres in Quebec. It showcased the latest advances in cutting-edge research to improve diagnosis, prognosis, therapeutic approaches and care outcomes for mothers, children and adolescents. Over 235 researchers and students participated in the hybrid lectures. In the morning, young researchers gave 120 oral and poster presentations on the Zoom platform.

The Foundation of Stars was proud to present six awards to young presenters at the conference. Congratulations to these up-and-coming presenters!

Best oral presentations

- ★ Ann Fauteux – Université de Montréal
- ★ Andréa Azar – Université de Montréal
- ★ Marianne Gagnon – Université Laval

Best Poster Presentations

- ★ Philippe Moisan – Université de Montréal
- ★ Alyson Deprez – Université de Montréal
- ★ Elias Jabbour – McGill University

Thanks to Dr. Jean-François Lepage and Jennifer St-Laurent, organizers of this year's conference.





Financial highlights

The year 2021–2022 has once again demonstrated the agility and creativity of the Foundation of Stars.

This annual report paints an excellent picture of the work accomplished during this exceptional year in many ways.

Throughout its pages, you have been able to discover various charitable activities, the fundraising initiatives of the Friends of the Foundation and the wide range of fundraising campaigns that took place during the year.

Finally, this report has allowed you to learn a little more about the dedicated people who have contributed to the advancement of research and to get to know some of the child stars who have benefited from this progress.

We have a lot to be proud of: research funding projects have combined to contribute \$502,689 to research!

We hope that this new year will allow us to gather more funds to continue supporting the fight against children's diseases.

Distribution of funds for pediatric research

PARTNERS	2021-2022	CUMULATIVE TO MARS 31, 2021
CUSUM Pediatric Research Centre – Montreal Children’s Hospital	\$135,730.50	\$29,953,667
CHU Sainte-Justine Pediatric Research Centre	\$158,354.50	\$29,988,667
Centre hospitalier universitaire du CHU de Québec – Department of Pediatric Research ⁽¹⁾	\$19,607.50	\$7,037,401
Centre hospitalier universitaire de Sherbrooke (CHUS) – Department of Pediatric Research ⁽²⁾	\$99,500.50	\$3,692,312
	\$64,004 ⁽³⁾	
CIUSSS de la Capitale-Nationale	\$23,492	\$23,492
Scholarships from the Fondation pour la relève (FRQS)	-	\$1,088,164
Dr. Nada Jabado – Special Project (Brain Cancer)		\$200,000
Child and Youth		\$100,000
Provincial Conference Award – Mother-Child Research	\$2,000	\$16,500
Centre of Excellence in Childhood Obesity		\$370,000
Prof. Isabelle Thibault (CHUS) – Eating Disorders	-	\$50,000
TOTAL	\$502,689.00	\$72,496,711

(1) Since 1985

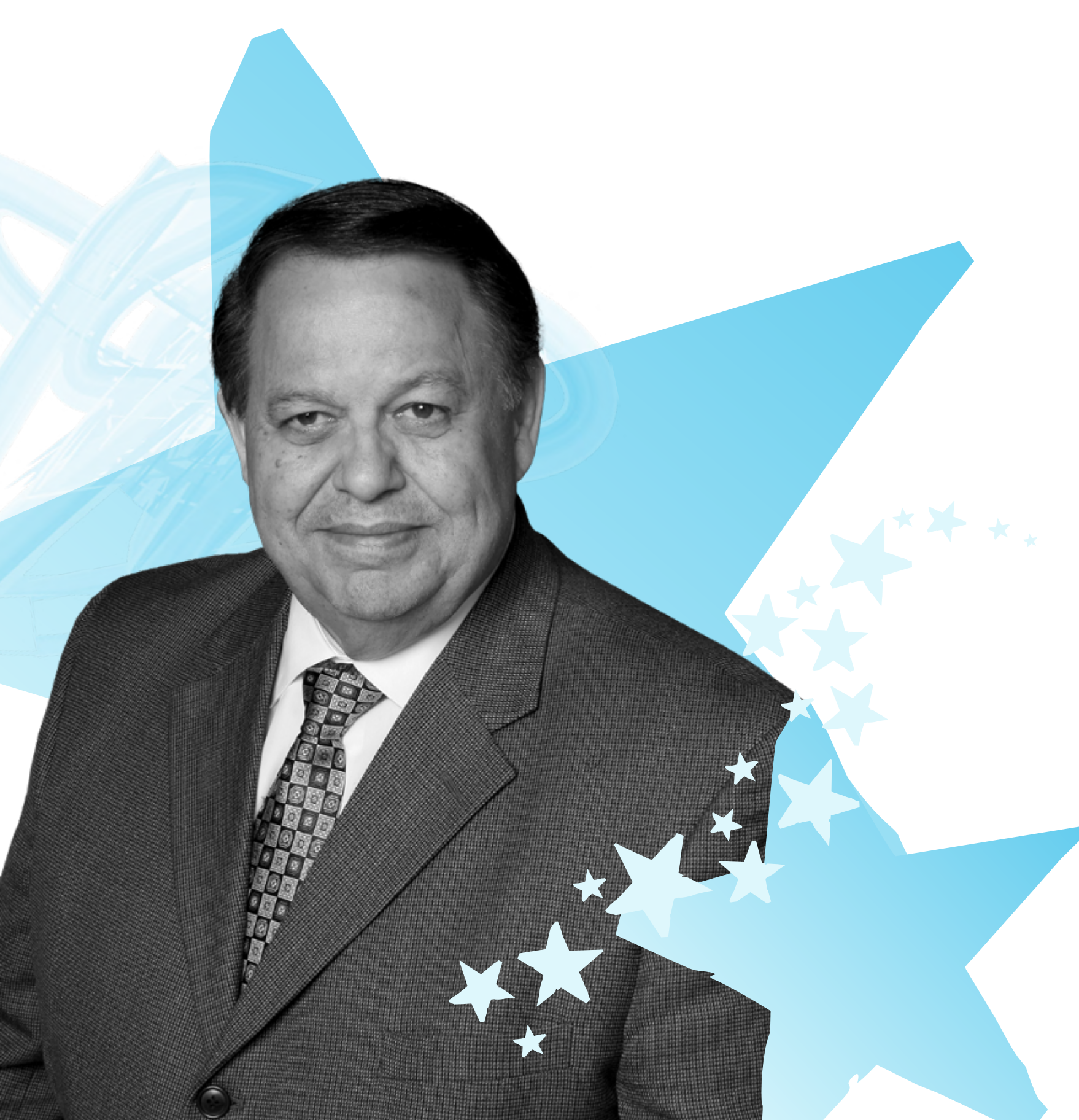
(2) Since 1999

(3) Funds donated at the 9th Encan des vins de Sherbrooke Wine Auction

The fiscal year end is March 31, 2022.

The audit of the financial statements of the Foundation of Stars was conducted by the firm Gosselin et associés.





Tribute to a man of heart

Roy Bourque: our star volunteer for three decades

The Foundation can count on a large number of kind-hearted people who devote themselves to the cause of sick children. Among this constellation of people who believe in the importance of research, some stand out for their constant and unfailing commitment. Roy Bourque is one of them.

In addition to a career as an executive and consultant, Roy began his volunteer work with us in the 1990s and for many years presided over the Telethon of Stars. Now a Lifetime Governor, he has served on the Foundation's board of directors, as President and, over three decades, has recruited and motivated hundreds of volunteers across Quebec.

On behalf of all the children, researchers and institutions that the Foundation has been able to help since the beginning, we pay tribute to him and sincerely say: Thank you from the bottom of our hearts!

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Research Axis
CHU de Québec—Université Laval

Dr. Jean-Paul Praud, M.D., Ph. D., Board Member
Pediatrics and Physiology Department
CIUSSS de l'Estrie-CHUS

Scientific strategic advisor:

Dr. Guillaume Sébire, Child Neurologist, Clinical
Researcher, Director of the Division of Child Neurology
Professor, Department of Pediatrics,
Faculty of Medicine, McGill University



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