

Canadian Liver Foundation Fondation canadienne du foie Bringing liver research to life Donner vie à la recherche sur le foie

# Annual Report 2018

# In 2018, we stood tall with our partners in change.

Born in 1969 from a concerned group of doctors and researchers who witnessed the growing cases of liver disease; the Canadian Liver Foundation became the only non-profit in Canada dedicated to bringing liver research to life by funding all forms of liver research. We come from humble beginnings, but we recognized early on that our cause is bigger than any one individual, group or organization.

Our work in 2018 was proof that becoming a *partner* in change takes the recruitment of many voices, helping hands and skillsets. It is about joining together to overcome challenges for the livelihood of those today and the future of those tomorrow.

# **CLF ACHIEVEMENTS IN 2018**

\$2,400,000 committed to liver research in Canada

Provided funding to 37 researchers

across 15 research projects

Collaborated with

from healthcare professionals to the general public were educated on liver health and liver disease topics



# 707 investigators and educators

through our research and education partnerships

# 18.1M Canadians

• Edmonton

Vancouver

• Calgary

Winnipeg

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## A MESSAGE FROM THE CHAIRPERSON AND PRESIDENT



Bringing liver research to life Donner vie à la recherche sur le foie

There is strength in numbers. There is no "I" in "team." These sayings have become popular phrases for a good reason; they illustrate what it means to be a part of a meaningful collective dedicated to sparking a transformation or improvement. Aptly, that is what being a "*partner in change*" means to the Canadian Liver Foundation (CLF).

In 2018, our *partners in change* saw the value of what investing in all forms of liver research can have on our future healthcare system. Whether it concerns research projects being conducted by Canada's leading liver experts or by medical students eager to make life-changing discoveries, liver research funded by partners and donors has enhanced the methods by which our healthcare professionals can better prevent, diagnose, manage or cure liver diseases across the country.

*Our partners in change* are also comprised of Canada's top National liver health research networks, committed to improving the lives of the *1 in 4 Canadians who may be affected by liver disease*. Partnerships with networks like the Canadian Donation and Transplant Research Program (CDTRP), the Canadian Network on Hepatitis C (CanHepC), the Canadian Network of Autoimmune Liver Diseases (CaNAL) and the Canadian Association for the Study of the Liver (CASL) are making meaningful advancements across the country so that everyday Canadians like your family, friends, neighbours, co-workers or any members of your community have a fighting chance against liver disease.

One of the most innovative programs in CLF history was brought to life this year thanks to the support of devoted *partners in change* including Mr. and Mrs. Sonny and Florence Leong and the Vancouver Bullion & Currency Exchange. The HepBeware research project led by Dr. Peter Kwan and Dr. Francis Ho provided free hepatitis B blood tests to over 2,000 people in

Vancouver's Asian Community. Because of it, members of the community who tested positive for hepatitis B were able to be guided towards their family doctors and seek the treatment they needed before life-threatening complications like cirrhosis or liver cancer could develop or advance.

Our volunteers who selflessly gave their precious time, skills and efforts to our events and programs embody what it means to be a *partner in change*. These volunteers who champion liver disease can be driven by a personal experience, or motivated by the philanthropic charge that runs through their body. What is certain is that without them—our National signature events like our STROLL for LIVER, LIVERight Galas and LIVERight Health Forums, as well as our patient support services like our Peer Support Network and many more, would cease to exist.

The list of our *partners in change* goes on. On behalf of the CLF, we feel fortunate to be able to highlight some of the many partners that make us whole in the pages ahead. Many of these individuals and groups have stood beside the CLF, doing whatever it takes to reduce the number of Canadians affected by liver disease and improve the quality of life for those suffering with it.

We are undoubtedly in good company, and we hope to continue each day by seeking out new champions of liver health for years to come. Together, we will continue to grow stronger. Together, we are *bringing liver research to life* with our *partners in change*.

Sincerely,





Morris Sherman M.D., FRCPC Chairperson

Together, we are bringing liver research to life with our partners in change.



Gary A. Fagan

President & CEO

# Non-alcoholic Fatty Liver Disease

Non-alcoholic fatty liver disease (NAFLD) is a condition where too much fat is stored in the liver.

It tends to develop in people who are overweight or obese, particularly if they have a lot of fat around the middle of their body. It can also develop in a person whose body weight is in the healthy weight range, but who typically eats a lot of sugary and fatty foods and lives a sedentary lifestyle. Because of this, NAFLD has become the most common liver disease in Canada, affecting more than 7 million people. This is why the Canadian Liver Foundation (CLF) has recently estimated that 1 in 4 Canadians may be affected by liver disease. This progressive illness is predicted to soon surpass hepatitis C as the leading cause of liver transplants in the western world. Non-alcoholic steatohepatitis (NASH) is NAFLD's most severe form, causing liver inflammation and may even lead to cirrhosis, liver cancer or the need for a liver transplant. The CLF continues to support researchers, liver specialists, dietitians and other professionals to reduce the incidence of NAFLD and understand how it may be diagnosed and treated more effectively.

# FACTS ABOUT NON-ALCOHOLIC FATTY LIVER DISEASE



7,000,000+

Affecting over 7 million Canadians, the most common liver disease in Canada



1/5

I in 5 people with NASH can develop cirrhosis





Up to 20% of obese individuals are at risk of developing the more severe form of NAFLD, called nonalcoholic steatohepatitis (NASH)



2 years

Children as young as 2 years old can be affected by NAFLD

## INVESTIGATING NEW TREATMENTS FOR NAFLD

One of the liver's over 500 functions in the human body is to convert the food we eat like fat, sugar, and protein into energy that keeps us active and alert.

In the bodies of the 6 million Canadians who are classified as clinically obese (a BMI of 30 or higher) however, this "energy metabolism" system malfunctions and often leads to the development of several diseases like heart disease, type 2 diabetes and of course, nonalcoholic fatty liver disease (NAFLD), the most common liver disease in Canada. **Dr. John Usshe**r, a researcher at the University of Alberta, has recently discovered that a drug used to level the energy metabolism system in patients with heart disease, called ranolazine, may also reduce the severity of NAFLD. Ranolazine has shown promise in increasing how well your liver converts food into energy and thus could reduce the impact of NAFLD.

This exciting new investigation conducted by Dr. Ussher and his team will attempt to confirm whether ranolazine directly reduces fatty liver by increasing liver sugar metabolism. If the findings are successful, this study could help establish whether ranolazine is a suitable treatment for NAFLD.



Funding from the CLF and its donors is helping my lab to elucidate novel mechanisms by which energy metabolism is regulated in the liver, and whether modifying liver energy metabolism may represent an exciting strategy to improve and reverse the consequences of fatty liver disease.

– Dr. John Ussher

# HITTING THE GROUND 'STROLLING'

Hundreds of Canadians across the country stretched their muscles and exercised their passion for liver health at the 2018 STROLL for LIVER fundraising walks.

In 12 cities from Vancouver to Moncton, these dynamic events got families, friends, neighbours and community members out and about, strolling to raise money for lifesaving liver research and education. From babies and toddlers to grandmas and grandpas, there was no stopping these dedicated strollers from fundraising to help support the 1 in 4 Canadians who may be affected by liver disease.

Our top fundraising teams around the country included "**Dylan's Rockstars!**" (\$9,525), "**Larry's Girls**" (\$9,100) and the **Nagpal family** (\$7,954). These great leaders hit the ground running and carried us to an outstanding total of \$152,000 raised!

Some highlights of the Strolls include CLF sponsor, **Nutrafarms Inc**. handing out free healthy lunches in Toronto & Ottawa, visits and participation from **Mayor Naheed Nenshi** (Calgary) and **Mayor Jim Watson** (Ottawa), and the debut of our first spectacular nightstroll in Montreal surrounded by stunning light art installations seen under the stars.

The participation of these phenomenal strollers, volunteers and sponsors who came together to make a meaningful difference has touched the lives of families, friends and loved ones affected by liver disease. Thank you for helping us get one step closer towards the finish line, where the answers to preventing, diagnosing, treating and curing liver disease await us.







# Viral Hepatitis

Viral hepatitis is a form of liver disease caused by viruses that attack the liver.

From short-term illnesses to chronic infections, viral hepatitis strikes thousands of Canadians with potentially life-threatening consequences. In Canada, two of the most common forms of viral hepatitis are hepatitis B and C. Most often, newly-infected adults with hepatitis B or hepatitis C have no symptoms. Others get a brief, acute illness with symptoms ranging from fatigue, to loss of appetite, to jaundice (yellowing of the skin and eyes). Both hepatitis B and C can cause chronic (long-lasting) illness leading to liver damage and liver cancer.

Early detection is the key to fighting viral hepatitis. Both viruses are blood-borne diseases and can be spread through tattoos, piercings, intravenous drug use, and unprotected sex. People who have lived in Asia, parts of Europe and Africa are also at a higher risk of carrying hepatitis B or C without even knowing.

# 600,000

Up to 600,000 Canadians may be living with chronic hepatitis B or C

Hepatitis B & C cause 78% of liver cancer cases worldwide

78%

#1

DAIDA

Chronic hepatitis C is the leading cause of liver transplantation in Canada

It is estimated that 44% of Canadians who have chronic hepatitis C don`t know they have it

## CAROL'S STORY

Born in 1956, Carol spent much of her adult life in Montreal where she lived a selfdescribed 'regular' life. She never engaged in any behaviour she thought would put her at a higher risk of health problems, and lived each day thinking that her regular checkups with her family doctor would be enough to keep her clean bill of health.

Unfortunately, in 2008 after donating blood at a clinic, her outlook would change forever. Carol received a letter in the mail informing her that she had hepatitis C. To this day, Carol is still unsure of how she came into contact with the virus. In fact, an estimated 80 percent of Canadians born between 1945 and 1975, like Carol, are unaware that they are at higher risk of living undiagnosed with hepatitis C. Carol began treatment six months after being diagnosed with hepatitis C. Today, she can happily say that she has been cured, but this hepatitis C survivor understands the challenges presented when trying to cope with liver disease.



The harsh misconception that remains attached to hepatitis C describes a false narrative where the disease exclusively affects those who have engaged in unhealthy habits like intravenous drug use or unprotected sex. Carol has battled this stigma since day one by volunteering with the Canadian Liver Foundation on countless occasions to provide compassionate support for those living with liver disease in Montreal. She has also facilitated numerous educational presentations to help counteract the misconceptions of hepatitis C.

Carol believes that the key to changing a liver disease patient or caregiver's experience for the better requires patience, guidance and most importantly, 'listening from the heart.' By living each day with this outlook, Carol's philosophy gives hope to each and every Canadian who is affected by liver disease.

#### HEPBEWARE

Recent data has indicated that approximately 40% of Asian immigrants living in some major US cities are living undiagnosed with hepatitis B. This sent a serious worry through the Vancouver's medical community, where approximately one million Asian-Canadian immigrants live.

Armed with this knowledge, the CLF partnered with philanthropists **Mr. and Mrs. Sonny and Florence Leong and the Vancouver Bullion & Currency Exchange** in 2018 to launch the **HepB**eware screening project in Vancouver—a city where approximately one million Asian immigrants live.

HepBeware is a free program conducting hepatitis B blood tests in Asian communities. In 2018, this research project led and facilitated by Dr. Peter Kwan and Dr. Francis Ho provided over 2,000 tests to willing participants in 29 public locations such as community centres, churches, malls and schools. Once tested, those found to be hepatitis B positive were encouraged to see their family doctors for a follow up in order to streamline the treatment process and keep patients feeling informed and comfortable.

The **HepB**eware program will continue into 2019 thanks to another significant donation of \$100,000 by Mr. and Mrs. Leong, who continue to show exemplary leadership as philanthropists in the liver health community. The year ahead will see this trailblazing initiative include more community awareness on the importance of hepatitis B testing, education for family physicians on steps after diagnosis, and advocacy efforts to break the stigma that surrounds hepatitis B in the Asian communities. The HepBeware project has also been selected to be presented at the Digestive Disease Week conference in 2019, the largest gastroenterology conference in the world.

We are thankful to the Leong family and the Vancouver Bullion & Currency Exchange for proving how being a *partner in change* is impacting local communities and those across the country.





# **#THISISYOURWARNING**

Like many other liver diseases, hepatitis C is notoriously known in the health community as a 'silent' disease; showing no symptoms until it has done significant damage to the liver. In 2018, we continued our work to 'sound the alarm' on hepatitis C with the #ThislsYourWarning awareness campaign.

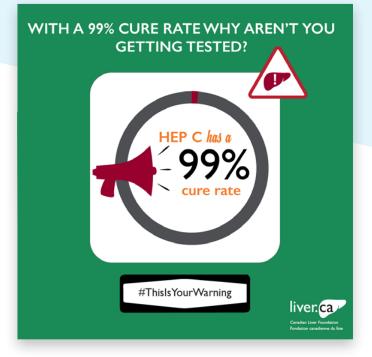
Coinciding with World Hepatitis Day on July 28th, our campaign was launched with a Public Service Announcement (PSA) that mirrored the audio and visuals of common alert signals (sirens, train whistles, etc.), thereby illustrating that hepatitis C does not always come with an obvious warning.

#ThisIsYourWarning targeted Canadians of little-known hepatitis C risk factors including age and country of origin. Canadians born between 1945—1975 were targeted as research shows this age group is more likely to be living undiagnosed with hepatitis C. These Canadians were encouraged to determine their hepatitis C status by taking an online risk assessment. Available in English, French and Chinese, this online tool allowed over 14,500 individuals to learn if they should speak to their doctor about getting tested for hepatitis C.

#ThisIsYourWarning also aimed to reach people through news media, digital advertisements, and social media to educate audiences of the impact hepatitis C can have on your liver.

With over 10 million Canadians reached, this milestone campaign ensured that hepatitis C stayed silent no longer in the minds of many across the country.





# Liver Transplantation

A liver transplant can be a significant lifesaving operation that replaces a diseased or poorly functioning liver with a healthy donated liver.

A liver transplant recipient can receive either an entire liver from a deceased donor or a portion of a healthy liver from a living donor. Liver transplants are widely regarded as a treatment option for people with liver failure; meaning it is often the last resort for patients with progressive liver disease.

While we are grateful for the skillful work of liver transplant specialists, we hope to continue to improve liver disease prevention and treatment, so that one day, we will no longer require liver transplantation.

From humble beginnings, Canada saw its first living liver transplant take place in 1993. Today, the average success rate in Canada for both adult and pediatric liver transplantation is over 80%.







5,626 Canadians are living with a transplanted liver



Over 300 people were waiting for a liver transplant in Canada

## FACTS ABOUT LIVER TRANSPLANTATION





Over 450 liver transplants were conducted in Canada



64 people including children died waiting for a liver transplant

### ALLEXIS' STORY

Allexis was born in 2003 with biliary atresia, a rare liver disease that is the leading cause of liver failure in infants and children. In biliary atresia, the bile ducts leading from a child's liver to their intestines are either absent or damaged, preventing bile from leaving the liver and injuring it. Allexis' parents received this awful diagnosis on Christmas Eve of 2003, just two months after she was born.

A month later, Allexis needed to undergo the Kasai procedure; a surgery in which the damaged bile duct outside the liver is replaced. Her surgery was a success, but the next year was spent with many hospital visits and regular checkups. At two-yearsold, Allexis' family was told she would need a liver transplant in the next decade.

Allexis' childhood was no walk in the park. She underwent frequent blood testing, regularly took medications and followed a special high-nutrition diet due to vitamin deficiencies. She also underwent blood and platelet transfusions due to bleeding in her gastrointestinal tract. All of this affected her ability to participate in activities with family and friends due to her exhaustion and shortness of breath.

Fast forward to 2014, the Liver Transplant team in Toronto determined it was time for Allexis to be on the liver transplant list and she was listed on her 11th birthday. By this time, she was suffering from low oxygen levels due to complications of her liver disease (known as hepatopulmonary syndrome). As the frequency of doctors' visits grew to almost every week, the urgency of Allexis' transplant became more apparent. Her family spent this difficult time in their lives connecting with other families who were coping with liver disease through volunteer opportunities with the CLF.

Finally, the family's waiting was rewarded. Allexis received her gift of life in June of 2015. Thanks to the knowledge and practices transplant surgeons have obtained from liver research, Allexis has now spent the last three years embracing all the freedoms life has to offer when you have a healthy, functioning liver.



# REVITALIZING DONOR LIVERS TO REIMAGINE LIFE

We are in the golden age of liver transplantation. From the first liver transplant conducted in Canada nearly 50 years ago, to today where over 5,000 Canadians are currently living with a transplanted liver — the success of liver transplant researchers and surgeons can be felt all around us.

Unfortunately, hundreds of Canadians remain on the transplant list every year. Some will even die waiting for a donor organ that never arrives.

Our initiative to *partner in change* with the Canadian Donation and Transplantation Research Program (CDTRP) is finding new ways to increase the number of lives saved through liver transplants every year, as well as improving the quality of life for those who are living with a donated liver.

World-renowned surgeons **Dr. James Shapiro** (Edmonton) and **Dr. Markus Selzner** (Toronto) are using a machine called the OrganOx metra<sup>®</sup>, one of only two in Canada, to ensure donor livers with unavoidable damages (like being deprived of oxygen, sitting too long on ice, or being too fatty) are restored to a usable condition. This is done in the OrganOx metra<sup>®</sup> by heating the liver to body temperature and pumping it with blood and other nutrients; mimicking the environment of the human body.

In 2018, Dr. Shapiro conducted additional research to see if other chemicals found within the human body could stop cell damage and keep



a liver healthy before transplantation. By following the methods uncovered in this research, we may be able to save an estimated 20 percent of donor-livers from being turned away due to their poor condition. The effect of these studies' success could reduce donor waiting times and save more lives.

Another 2018 CDTRP project led by **Dr. Andrew Mason** (Edmonton) is tracing the relationship between viruses and autoimmune liver diseases after a liver transplant occurs. For patients with primary biliary cholangitis (PBC), primary sclerosing cholangitis (PSC) and autoimmune hepatitis (AIH), a liver transplant may be their only choice to avoid total liver failure; but it is not a cure for the disease. Dr. Mason's research plans to better understand whether viruses within the body are causing these diseases to continue damaging the liver after a liver transplant.

As liver disease continues to grow with limited treatment options available, liver transplants will surely be on the rise in the next decade. Research supported in part by the CLF and conducted by the CDTRP is finding meaningful solutions today so that we can continue giving second chances at life tomorrow.

# Liver Cancer

Liver cancer may be the end result of many liver diseases.

Its most common form called hepatocellular carcinoma (HCC) may develop into multiple tumours, a notable pattern in people with liver cirrhosis (scarring of the liver). Another common liver cancer is called cholangiocarcinoma, which originates in the bile ducts of the liver.

To make matters worse, many cancer cells from around the body can travel through the blood and lodge themselves into the liver. These secondary cancers that spread from other parts of the body to the liver are 30 times more common than primary cancers (cancer that starts in the liver).

In Canada, the overall survival rate for liver cancer patients five years after receiving their diagnosis is a mere 20%. The current belief is that nearly half of liver cancers today could have been prevented if people reduced their fatty food, alcohol, and sugar intake and were tested for liver diseases like hepatitis earlier.

Since 1970, liver cancer cases have tripled in men and doubled in women



x3

Liver cancer is the third leading cause of cancer death worldwide

#3

0%

Only 20% of liver cancer patients survive within five years after receiving a diagnosis



More than 50% of liver cancer patients cannot be treated with current therapies

# CUTTING THE SIGNAL

One of the most astounding aspects of the human body is its ability to send white blood cells to help heal areas of trauma. These white blood cells produce proteins that communicate with the immune system at the site of damage. But what happens when a protein produced by white blood cells surrounding an inflamed liver is also a well-known enhancer of liver cancer?

Dr. Naglaa Shoukry of the University of Montreal is studying an inflammationcausing protein called IL-17. Together with her team, Dr. Shoukry is investigating which cells produce IL-17, when it is



signalling cancer cells to enter the liver, and what kind of treatments can block those cells from entering.

Dr. Shoukry believes that CLF donors have personally made it possible for her team to determine how patients with advanced liver disease develop liver cancer.

Currently, there are very few treatments for liver cancer. Our research will help us identify novel targets for limiting liver disease progression and preventing liver cancer.

– Dr. Naglaa Shoukry

## THE IMMUNE SYSTEM AND LIVER CANCER

The current therapies able to treat liver cancer are often ineffective when it is diagnosed in advanced stages. Not even liver transplants, where cancer can return in up to 20% of cases, are a completely effective treatment of liver cancer.

**Dr. Mamatha Bhat**, a researcher at the University of Toronto, knows that we cannot move forward without finding new ways to diagnose and treat liver cancer earlier.

Dr. Bhat's research team is analyzing the genetic makeup of two types of tumours recurring cancers that evolve in an environment where the immune system is overwhelmed by tumours, and recurring cancers that appear after a cancer-removing surgery (called resection) where the immune system is not overwhelmed by tumours. Her goal is to understand what role the immune system plays in the development of hepatocellular carcinoma (HCC), the most common form of cancer that starts in the liver. Research studies such as this can help more clearly define the relationship between the immune system and cancer cells, paving the way to identifying better treatments and ultimately cure liver cancer.



# WHEN CANCER CELLS ARE MASTERS OF DISGUISE

Liver cancer is a sly and devious disease. Primary liver cancers (cancers that begin in the liver) like hepatocellular carcinoma (HCC) can sneakily create shields around tumour cells, effectively hiding the tumour from the body's immune system.

These 'shields,' called tumour associated macrophages (TAM), are the main focus of our largest research grant to date—a \$1.2M grant funded in partnership with the Toronto General & Western Hospital Foundation (TGWHF).

In 2016, **Dr. Ian McGilvray** and his team at the University Health Network in Toronto vowed to explore how we can break down TAMs and expose tumour cells to the immune system, where they can be destroyed with or without the assistance of chemotherapy or other liver cancer treatments.

This three-year study harnesses the power of nanoparticles (microscopic particles made of metal) that are engineered to target individual cells. In 2018, Dr. McGilvray and his team gathered in-depth information on how HCC cells grow, and how TAMs are formed around these cells. With the knowledge gathered in 2018, Dr. McGilvray and his team plan to use nanoparticles containing medication to attack TAMs, exposing the tumour to the immune system or to chemotherapy that can destroy it.



Photo credit: Tim Fraser

Time is of the essence to combat growing liver cancer rates in Canada. The progress made in part by CLF funders in 2018 set the stage for this study to eventually move their findings into clinical trials, where an effective anti-cancer treatment may be developed and applied.

Thanks to donor-funded research projects such as this, TAMs may only be able to hide behind their disguises for a little while longer!

# Liver Disease in Children and Youth

Liver disease in children and youth is an umbrella term incorporating many diseases that may affect all kids from infancy to adolescence. The cause of most liver diseases affecting children still remains unknown with no cure.

These conditions (some of which occur in children and adults) include Alagille syndrome, alpha-I antitrypsin deficiency, biliary atresia, hepatitis, liver cancer, non-alcoholic fatty liver disease, and Wilson disease. For children with liver disease, life consists of frequent hospital trips and uncomfortable symptoms like nausea, pain, itchiness and extreme fatigue.

The Canadian Liver Foundation funds much-needed research to uncover the answers to how these diseases can be prevented, diagnosed earlier, treated and cured. Without these critical steps, children remain at risk of developing cirrhosis, liver cancer and the need for a liver transplant.

# FACTS ABOUT LIVER DISEASE



Biliary atresia is the main cause of death by liver failure in children



90%

90% of infants and children with hepatitis B usually remain infected for life



Up to 50% of obese children in Canada are at a higher risk of developing non-alcoholic fatty liver disease

1/2



# 30-50%

30% to 50% of children with Alagille syndrome may develop scarring leading to cirrhosis

## THE RIGHT TREATMENT FOR THE RIGHT PATIENTS

Imagine how effective treating a disease would be if it was developed based on the unique properties of a patient's body. Research funded by the CLF in 2018 aims to do just that.

**Dr. Binita Kamath** and her team at the Hospital for Sick Children in Toronto are using specialized technology to create bile duct cells from stem cells found in a patient's blood. These cells will then be studied to understand how a defective gene is causing liver inflammation and scarring in a severe childhood liver disease called biliary atresia. Biliary atresia occurs when the bile duct that leads from the liver to the intestine becomes damaged or is not developed, leaving excess bile sitting in and damaging the liver. Children affected by biliary atresia live a life far from the normal, happy childhood they deserve. Their early years are spent in and out of the hospital undergoing a multitude of tests and taking countless medications to try to manage their symptoms.

By determining how defective cells are created in a patient's body and matching that with the right treatments for a specific patient, Dr. Kamath can help ensure a cure for biliary atresia in children is within our reach, thus brightening the future for Canadian children.



The study uses both basic science and clinical approaches to paint a clearer picture of biliary atresia. The funding the CLF provides will allow us to develop new therapies and design the right clinical trials to test these treatments for the right patients.

– Dr. Binita Kamath

# HONOURING CHILDREN & YOUTH ACROSS THE COUNTRY





Every year, the CLF strives to bring our LIVERight Gala to new heights with high-calibre performances, great food and wonderful participants.

This signature fundraising event caps off a fantastic year spent with participants, donors and volunteers by honouring children & youth affected by liver disease and their caregivers. Just like every year, 2018 did not disappoint!

Thanks to a team of devoted volunteers, donors and sponsors who were truly 'on their game', the 2018 LIVERight Galas took place in six cities across the country and touched the heart of thousands in the community.

Our attendees came out dressed in their best suits and gowns and reached deep into their hearts to help us raise close to \$1 million in support of liver disease research and education.

Across the country, we honoured children, families and others who shared how they fought back against liver disease, their struggles and their passion to be a champion for liver health. Gala guests also sat in while



being motivated by liver specialists to spread the awareness of liver disease and give back to those suffering in the community.

In Toronto, Ottawa and Halifax, guests were entertained by the vibrant sounds of jazz singer Tia Brazda and the lively energy of Layne, The Auctionista. Other incredibly entertaining acts included the Jory Kinjo band in Calgary and marionette performers, Les Bois Dormants in Montreal.

A milestone in 2018 was our first-ever LIVERight Gala in Halifax. This extraordinary night was led by volunteer organizer Samantha Warshick in honour of her late father Brian who passed away from liver disease. Samantha and her volunteer Gala team not only helped reconnect Halifax attendees to the cause of liver disease, but sent a buzz of excitement and hope you could feel throughout Canada's liver health community.

Thank you to all who attended, contributed and *partnered in change* to make the 2018 LIVERight Galas ones for the record books!

# Partners in Change

To partner in change is to join a collaborative movement devoted to transforming the world around us. For the CLF, partnering in change has led to funding new and innovative lifesaving liver research, and supplying educational tools to medical professionals as well as the general public that will help prevent liver disease. Certainly, our partners in change provide the emotional support sought by those coping with a liver disease diagnosis or loss, and grant a voice to those affected by liver disease so that liver health can become a top priority in Canada.

In this section, we have chosen to celebrate some of our *partners in change* by highlighting what they allow us to do; keep our passion for liver health burning brightly and fuel our quest of *bringing liver research to life for all Canadians*.

#### PAUL'S STORY



Almost five years after a complex liver transplant operation saved his life; Paul's day to day still consists of celebrating his rejuvenated strength and overall good health.

In the past, Paul grew submissive to his bouts of fatigue or fever, listening to his body whenever he needed rest. Having dealt with an evolving skin condition for many years without an inkling of its cause, he felt that this may just be another hurdle to overcome.

His wakeup call, however, began when his fatigue began ramping up and he started experiencing deterioration in his sense of balance. A quick blood test showed that his liver enzymes were out of the desired range, leading his doctor to refer him to a specialist who confirmed his liver was failing.

After his diagnosis, Paul began experiencing severe mental and physical symptoms that made it difficult for him to function through everyday tasks for the first time in his life. Losing these abilities affected Paul profoundly, and to make sense of it all, he began attending the 'living with liver disease' support group meetings held by the Canadian Liver Foundation. The educational presentations and stories of other attendees aided Paul's ability to navigate medical resources and find the information he was desperately seeking at that time.

One of the life-changing lessons Paul took from the CLF's support groups was how to use his 'team' of health professionals, family and friends to help him function through his condition.

Soon after attending his first meeting, Paul's daughter volunteered to become his living liver donor — an incredible gift of love which saved his life.

To this day, Paul still admires the countless people he met at the CLF's support groups who were successfully dealing with their own liver diseases. He credits these individuals as some of the many sources of inspirations that kept him on course, even as his complications grew more severe.

Paul proudly continues to attend 'living with liver disease' meetings and is now in a position where he can use his personal story to answer the questions of group members trying to understand their own issues.

The power of this full-circle experience exemplifies how supporters of the CLF, like Paul, are making meaningful change in the world around them.

## **INSPIRING CANADA'S NEXT** GENERATION OF RESEARCHERS

Future liver disease researchers and clinicians need to be encouraged during their formative schooling years. With the CLF's 2018 Summer Studentship grant, we partnered in change with the University of Alberta to provide one of their students with research funding relating to the radiology of liver disease.

Through this initiative, Kyle Hennig, a computer engineering student at the University of Alberta, created a smartphone app capable of reading MRI imaging of the brains of patients living with metabolic liver diseases. This app was specifically designed for radiologists, pediatricians, surgeons and others as a 'one-stop-shop' where they can review MRI imaging and medical literature regarding possible diagnoses together in one place.

A distinct advantage of this app that separates it from others is its ability to house information on related diseases and diagnoses that could be previously found in many different medical textbooks or on paper, in one centralized location. This would save copious amounts of time spent by medical professionals trying to search for documents and materials.

The free app was released on mobile app stores in 2018 and allows medical professionals across Canada to operate it wherever they take their phonewhether in a hospital or at home.



Presented jointly by the CLF and the Canadian Association for the Study of the Liver (CASL), the Gold Medal Award is given to doctors and scientists who have made outstanding achievements in liver research, thus advancing liver health and liver disease.

In 2018, the Award was given to Dr. Gregory J. Gores, M.D., Reuben Professor of Medicine and Physiology, and the Kinney Executive Dean for Research at the Mayo Clinic. Dr. Gores has been called a "quadruple threat" due to his work in liver research, clinical practice, education and leadership.

In 2000, he was part of a team who pioneered liver transplantation in liver cancer patients. This innovation allowed for a shift in the







**W** The Canadian Liver Foundation supports research projects like mine to create a better diagnosis process into these diseases as well as preventing and developing cures that can benefit Canada as a whole. There is so much to uncover in liver disease and an incredible amount of potential for innovative technology to aid in that discovery.

– Kyle Hennig

## HONOURING LEADERS IN LIVER HEALTH

narrative regarding how liver transplantation could be considered an effective method for treating liver cancer patients.

Dr. Gores received the award at the 2018 Canadian Liver Meeting in Toronto, where he delivered a lecture on the risk factors and emerging treatments for hepatocellular carcinoma (HCC).

The CLF is proud to continue honouring the world's top liver researchers. Dr. Gores and all other Gold Medal recipients have provided Canadian healthcare professionals with the information they need to improve the lives of Canadians living with, or at risk of liver disease.

Receiving this award is one of the highest honours of my professional career. It reflects not only an appreciation for my contributions to hepatology as a medical specialty but also to the profession through leadership and mentorship.

# FINDING INFORMATION FROM THE SOURCE



The most current medical information on how we can treat, prevent and learn to cope with liver disease was offered faceto-face to over a thousand attendees at the 2018 LIVERight Health Forums.

In five cities across the country (Calgary, Edmonton, Toronto, Vancouver and Winnipeg), participants ranging from patients to caregivers to the general public filed into auditoriums and halls to hear free presentations surrounding relevant topics in liver health.

Some of Canada's leading liver specialists, nutritionists and pharmacists were on hand to provide practical tips like nutritional guidelines for patients living with liver disease, and how to make sure you are covered for the drugs you may need.

To ensure that information was clearly understood by attendees from the Asian-Canadian communities in Toronto and Vancouver, the LIVERight Health Forum presentations were provided in English, Mandarin and Cantonese.



Without fail, we continue to receive praises year after year about the Forum's built-in Q&A sessions with specialists, as well as the patient support meetings offered to those living with liver disease. The opportunity to have a question answered in-person and instantaneously is so rare for many attendees, whether that be from a healthcare professional or from someone with firsthand experience of liver disease. Many took the opportunity to merely thank these professionals and survivors for the impact they make on the lives of others.

Thanks to donor and sponsor contributions, the CLF is able to offer all attendees free admission to receive potentially lifesaving liver health information at these sessions. For all these reasons and more, it is unmistakable that the LIVERight Health Forums continue to be an essential asset to liver health education in Canada.

# HAND IN HAND, WE RISE

Every year from coast to coast volunteers take it upon themselves to start their own runs, their own concerts and their own tournaments to raise funds for the Canadian Liver Foundation.



#### MANITOBA

10th Birthday Party (O'Halloran family) Lac Du Bonnet Ice Fishing Derby (Tim Horton's) Khaw Family Supporting T-shirts Meat Draw & 50/50 (Casey's/Lakeview Inn) Pengelly Family Garage Sale The WKND Hair Salon Grand Re-Opening The Canadian Hemophilia Society's Golf Tournament Casey's Inn Comedy Show They too have felt or experienced the burden of liver disease weighing heavily on millions of Canadians. Still, they organize, prepare and give, not for a title, but because they have goodness in their own hearts.

Thanks to our volunteer fundraisers across the country, we are able to invest millions into research, education, support and advocacy programs. It takes a special group to be as resourceful, as driven and as inspired as they are—but the payoff of their efforts can be seen in everything we do. Thank you for *partnering in change* with the CLF in any way you choose. We are fortunate to have you on board, and together there is no doubt we are empowering the lives of the 1 in 4 *Canadians who may be affected by liver disease.* 

#### **ONTARIO**

The Tremblay Family Golf Tournament

Yoga for Liver Health

Grande Cheese Annual Golf Tournament

Kyle's Run

#### **BRITISH COLUMBIA**

LIVERight Little Heroes Birthday Parties (Catherine, Jaquelyne, Karsten, Kalysha, Julian, Venissa, Bella & Anson)

Golden Maple Film Festival

**VISM Arts Concert** 

# Financial Summary



The fight against liver disease is not one that any one person or organization can handle alone. With approximately 2% of funding coming from the government, the CLF relies heavily on the generous support of individuals, foundations and corporations who choose to support our mission of bringing liver research to life for all Canadians.

Our successes over the last year are thanks to the team of supporters lifting us up to new and on-going levels of achievement.

Our supporters are humanitarians determined to leave the world a better place than they found it. They are exceptional Canadians making transformative change in their communities. The CLF is and will continue to be forever grateful to our supporters who choose to make liver health a priority in all of their initiatives, giving hope to all Canadians affected by liver disease.

From Canadian public sector employees who are part of HealthPartners, to the family of companies that make up KENROC, to you, someone with your own unique narrative that has drawn you to our cause-advancements in liver research find their way back to the generous support attributed by each of these incredible partners in change.

However, the need to do more still weighs heavily upon us.

We are eager to create an environment where liver research projects from leading Canadian researchers, to enthusiastic graduate students multiply and flourish. With funding from new and returning donors, we can ensure more researchers have the resources they need to push ahead with their work. We can create opportunities for more people living with liver disease to access the free support services they need in times of despair and confusion. Finally, we can help ensure that more Canadians understand the difficulties that await them if they do not take immediate control of their liver health.

We thank you for being a part of our journey in bringing liver research to life, and we hope that you feel as strongly as we do the need to reduce the impact that liver disease has on our families, fellow Canadians, and across the globe.

#### TREASURER'S REPORT

We are pleased to present the Canadian Liver Foundation's financial highlights for the year ended December 31, 2018.

Through the continued support and generosity of individual donors, corporations who donate to us and the many partnerships formed, we continue to bring liver research to life for all Canadians.

The Canadian Liver Foundation's Donations and Chapter Revenue was \$6.9 million for both 2018 and 2017. This reflects consistent, ongoing support from our key stakeholders and reflects our ongoing efforts to retain our committed support.

Research Trust Funds revenue was approximately \$2.2 million compared to \$2.7 million in 2017. These funds have paid out \$2.0 million in research programs for both 2018 and 2017. In 2018, we have paid out \$711,000 in research grant disbursements to fund projects in our areas of research focus.

In total, we have paid out over \$2.7 million in 2018 in research programs and research grants compared to approximately \$2.9 million in 2017. This 6% decrease over 2017 reflects the ongoing strict allocation discipline applied to competition funded research applications and partnership agreements by our Medical Advisory Committee.

Our support for current research and education and our commitments for future research continues. At the end of 2018, we have committed over \$956,000 for future research projects. As is our policy, we only commit to research from resources available at the time of the commitment.

Expenditures on Programs in 2018 were approximately \$3.5 million compared to \$3.6 million in 2017. This 3% decrease over 2017 reflects the rigour with which we screen these expenditures.

We have maintained operating efficiency with expenses at \$3.0 million for both 2018 and 2017. This includes fundraising and administration costs. These are both lower as a portion of donations than 2017, and we are within guidelines established by tax authorities.

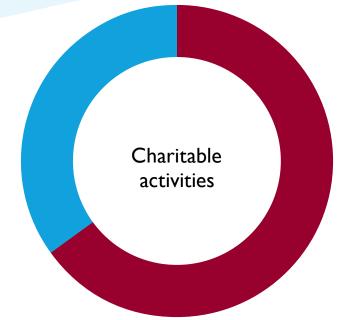
Our financial position remains sound. At the end of 2018, we had current assets of \$1.9 million and investments \$4.7 million. Our cash position had increased by in excess of \$500,000 reflecting the unusual late December receipts of some corporate partner funding and the delays caused by the postal slow down at that time.

Our total fund balances have decreased in 2018 by \$249,000 (-3.8%). The General Fund has increased by \$166,000 (13%), reflecting the net results of our day-to-day operations and will, in the longer-term provide a basis for funding research. Research Trust Funds have increased by \$31,000 (0.8%). The Medical Research Fund has decreased by \$446,000 (-31.8%). This decrease is a result of our continuing to be able to fund research grants out of previously earned funds as we maintain our policy (mentioned above) of restricting funding for research only to the extent that we have realized and retained earnings to do so. While our investment portfolio is lower than at the end of 2017, this is due to a general capital markets decline in December and the larger than usual cash position at that time mentioned above. This cash was invested during January 2019. I am also pleased to report that as of March 31, 2019, the capital markets decline has been completely reversed and we have seen capital appreciation through March 31, 2019. Nonetheless, we realized approximately \$308,000 in interest, dividends and realized gains during 2018. This provided substantial support to our activities and represented a liquidity yield in excess of 6% on our investments.

On behalf of the Foundation's Finance Committee, I want to express our sincere appreciation for the efforts and ongoing dedication of our volunteers, donors, program partners, professional advisors and staff.

Respectfully submitted

Elliott M. Jacobson, FCPA, FCA Treasurer



Research = 65% Education, Public Information and Community Support = 35%

Where our revenue comes from

Individual donors = 46% Partnerships = 32% Corporate Gifts = 10% Other = 4% Gaming = 3% Government = 2% Foundations = 2% Estates = 1%

# FINANCIAL POSITION SUMMARY

as at December 31, 2018 and 2017

	General Fund		Research Trust Funds		Medical Research Fund		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
ASSETS								
Current	\$828,804	\$391,041	\$906,336	\$876,624	\$129,999	\$639,200	\$1,865,139	\$1,906,865
Investments	\$783,877	\$1,097,116	\$3,043,172	\$3,042,181	\$826,465	\$763,766	\$4,653,514	\$4,903,063
Capital Assets	\$64,073	\$79,019					\$64,073	\$79,019
	\$1,676,754	\$1,567,176	\$3,949,508	\$3,918,805	\$956,464	\$1,402,966	\$6,582,726	\$6,888,947
LIABILITIES	\$230,700	\$287,404					\$230,700	\$287,404
FUND BALANCE	\$1,446,054	\$1,279,772	\$3,949,508	\$3,918,805	\$956,464	\$1,402,966	\$6,352,026	\$6,601,543
	\$1,676,754	\$1,567,176	\$3,949,508	\$3,918,805	\$956,464	\$1,402,966	\$6,582,726	\$6,888,947

#### **OPERATIONS SUMMARY** and 2017

for the	year	ended	December	31,	2018	2
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	General Fund Research Trust Funds Medical Research Fund		earch Fund	Total				
	2018	2017	2018	2017	2018	2017	2018	2017
REVENUE								
Donations and Chapter Revenue	\$4,746,081	\$4,482,114	\$2,180,065	\$2,455,911			\$6,926,146	\$6,938,025
Interest and Other Income	\$28,414	\$138,325	(\$1,188)	\$285,629	(\$33,112)	\$28,765	(\$5,886)	\$452,719
	\$4,774,495	\$4,620,439	\$2,178,877	\$2,741,540	(\$33,112)	\$28,765	\$6,920,260	\$7,390,744
EXPENDITURE								
Programs	\$1,456,972	\$1,537,642	\$2,030,674	\$2,068,028	\$1,569	\$2,919	\$3,489,215	\$3,608,589
Operating	\$2,969,896	\$3,012,010					\$2,969,896	\$3,012,010
	\$4,426,868	\$4,549,652	\$2,030,674	\$2,068,028	\$1,569	\$2,919	\$6,459,111	\$6,620,599
Excess of revenue over expenditure for the General Fund	\$347,627	\$70,787					\$347,627	\$70,78
Excess of revenue over expenditure for the Research Trust Funds			\$148,203	\$673,512			\$148,203	\$673,51
Excess of revenue over expenditure for the Medical Research Fund					(\$34,681)	\$25,846	(\$34,681)	\$25,840
Research Grant Disbursements					(\$710,666)	(\$843,999)	(\$710,666)	(\$843,999
Interfund transfers to support activities of the Medical Research Fund	(\$181,345)	(\$456,153)	(\$117,500)	(\$112,000)	\$298,845	\$568,153	\$0	\$(
Fund Balance — Beginning of Year	\$1,279,772	\$1,665,138	\$3,918,805	\$3,357,293	\$1,402,966	\$1,652,966	\$6,601,543	\$6,675,39
Fund Balance — End of Year	\$1,446,054	\$1,279,772	\$3,949,508	\$3,918,805	\$956,464	\$1,402,966	\$6,352,026	\$6,601,543

Complete financial statements including explanatory notes as audited by Grant Thornton LLP are available from the Canadian Liver Foundation National office.

We want to thank everyone who invested in our research, education, patient support and advocacy programs for the benefit of all Canadians living with or at risk for liver disease. The Canadian Liver Foundation's work would not be possible without the support of generous individuals, groups and organizations.

Donors listed are for the period January 1 – December 31, 2018. Every effort has been made to ensure the accuracy of our donor listing.

Should you find any errors or omissions, please contact Judy Thompson at 1-800-563-5483 ext. 4945 or clfdonation@liver.ca.

#### \$25,000+

Abbvie Corporation	John C Harper & April LaPointe
Astellas Pharma	
Canada Inc.	Health Partners/
	Partenaire Sante
Becton, Dickinson	Quebec
and Company	
	Intercept
Bristol Myers-Squibb	Pharmaceuticals Inc.
г 1 1 т 1 1	1
Federated Health	Ipsen Canada
Federated Health Charities	
Charities	Ipsen Canada John Johnson
Charities Gilead Sciences	John Johnson
Charities	John Johnson Kenroc Building
Charities Gilead Sciences Canada Inc	John Johnson
Charities Gilead Sciences Canada Inc Grande Cheese	John Johnson Kenroc Building
Charities Gilead Sciences Canada Inc	John Johnson Kenroc Building
Charities Gilead Sciences Canada Inc Grande Cheese	John Johnson Kenroc Building Materials Co Ltd

Mallinckrodt Pharmaceuticals Merck Canada Inc. QIAGEN Sang Yuan Mall Sanpoutei Ramen Seva International Charitable

Lupin Pharma

Canada Ltd

Foundation

Sexton Investments Ltd

SpecialtyRx Solutions

University of British Columbia

Vancouver Bullion & Currency Exchange Ltd

Jennifer Yap

Anthony Yen

#### \$10,000-\$24,999

Air Canada	Scotiabank Ottawa CBC &
American Collegiate Educational Services	Main Branch
Bayer Inc	Ratana & Arran Stephens
Franklin Bialystok	Kenneth Tong
BTG International Canada Inc	Transworld Management Ltd
Caisse Populaire Timmins	United Way of Toronto
D-Tech	Winnipeg

Consulting Inc

Winnipeg Foundation

Eisai Canada

Patsy Hui

Joseph Segal Family Foundation

Kathryn Kennedy

Kyo Korean BBQ & Sushi House

Sophia Law

London Drugs Limited

**Ox** Investments

Scotiabank

#### \$5,000-\$9,999

AGW Distributors

Airland

Airline Enterprise Co

Alberta Blue Cross

Atco Gas

Canadian OnLine **Giving Foundation** 

CIBC

Cinderella Beauty Clinic

City of Markham

Averil Cook

DCNOY

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F K Morrow Foundation

IMKT Direct Solutions Corp

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KNS Canada Inc

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Nutrafarms Inc

**Odgers** Interim Canada Inc

Synlogic Inc

Dr Edward Tam

The Victor & Anna Kern Foundation

Twenty Twenty Advertising

Alex Chi Kin Watt

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Audrey Zettl

#### \$2,500-\$4,999

All Charities Hospital for Sick Children Campaign Bank of Nova Scotia, Jewish Foundation Philanthropy of Manitoba **Bold Properties Inc** Agnus & Hanson Lau Café Gloucester Sarah Li **Canadian** Institutes of Health Research -Manyee Lui Institute of Nutrition, William Marchant Metabolism & Diabetes Anthony & Mary Martin Sarah Chang McCarthy Sylvia Chen Tetault LLP Sarah Chiang Melissa Ng & Peter Tai **Rebekah Assembly** City of Winnipeg of Alberta IOOF Charitable Fund **Regal Riverside Hotel** Ava Kaye Arana Clogg Richmond Chinatown Lions Jonathan Clogg Club Society **GI** Research Institute Rifle Shot Oil Corp Golden Star Resources Ltd **Rx** Infinity SafetyLine Grand Lodge of Alberta IOOF SAS Restaurants Ltd Lower Deck Hill Street Beverage Bar & Grill Company Inc

Shawn Savoy Shane Homes Ltd Twisted Media United Way Calgary & Area Vancouver Chinatown Lions Club Wingtat Game Bird Packers Donald Wishart Allen Wong Daifang Wu Agnes Yau

Dr Morris Sherman Shield Industries Ltd Collette & Lyle Sopel

Ian & Eve Wanless

\$1,000-\$2,499

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Albert Abrum Lager Foundation	Tom Burns
Almag Aluminun	Norma Butt
Apotex	Caisse de Bienfaisance
Atlantic Hepatology Services Inc	des employés et retraités du CN
Axia FibreNet	Calgary Health Trust
Axia NetMedia	L Douglas Campbell
Gordon Baker	Bruce Cappel
William Barnett	Francis K Chan
Peter Barnicke	Leeward Chear Alfred Chien
Baskin Financial Services Inc	Chinook Hot
Jennifer Bazylinski	Tubs & Saunas Winnie Chow
Bellatrix Exploration Ltd	D James Christie
Kevin Benner	Dr Stephen Chung
J Richard Bird	City of Winnipeg Employees' –
Boissevain/Morton Donor's Choice	Retirees' Charitable Giving
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Trevor Thomas Bruno	Commission scolaire des Draveurs
Barbara Bruser	Dr Stephen Congly

Melba Copithorne

Cossette Communication Inc

CTC Communication Corporation

Philip del Buey

Digipom rust

Wes Dorman

Dorset Realty Group

LilianDu

Nancy Eaton-Doke

Rosemary Edwards

EECOL Electric Corp

EFW Radiology

Azza Elfiky

**Enterpise Holdings** Foundation

**EXP** Services

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G Stone Jewelry

Cynthya Garbe

Lilli Gillman

Martha L Hadden

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HP Woodwork

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**IBM** Employees' Charitable Fund

Industrial Alliance Insurance and Financial Services Inc

Irix Design

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La fondation Pierrot LeBrun

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Lenergy **Resources Inc** 

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Edward Luke	Novartis Pharmaceuticals
Chieu Ngo & Ngoc Ly	Nudestix Inc
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Lynn MacSween	David Pauli
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McLean & Armstrong LLP	Quintex Services
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Ashley Stueck
Perry & Cindy Tetrault
The WKND Hair Salon
Tim Horton's Community Truck
Ronald E Townsend
TransCanada Energy
Ivan Trush
Bob Twardzik
United Way of Alberta Capital Region
United Way of Cape Breton
Upper Crust
Valard Construction
Elaine Vieth
Wellington Laboratories Inc
Deborah Wheeler- Gilchrist
Karen Wiebe

Solumet

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Nanda Bhimraj

Danielle Blouin

Cynthia & David Blumenthal

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Vicki Bobbie

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**Emilien Bolduc** 

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Brain Canada Foundation

Ruth Brayer

**British Pacific Properties Limited** 

**Diane Brookes** 

**Terry Brookes** 

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Canadian Hemophilia Society

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David Carey

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Frankie Chan

Rita Cheng

Chevalier De Colomb 9922

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Elsie Choban

Sylvester Chuang

Monica Chui

Monique Clemence

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Chris Collingwood

Comedy Show

Confidence Management Ltd.

Contentanel Seafood Restaurant

Margaret Cove

Craig Dunn Motor City

Maurice Cugliari

Kathleen Curtis

Linda Dalziel

Ross Davidson

Scott Deugo

Tasmin Dodd

Laura Duncan

Bronwen Dunlop

Cathy Dureault

Duval Annual **Combined** Appeal

Penny Dyte

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Endura	William Goulin
Manufacturing	Suzanne Goyer
Willmar Federau	Granite Mountain Stone Design
Gord & Donna Feeney	Yvette Grossi
Jordan Feld	Scott Hanert
Robert J Fenn	Don Hanson
Debralee Fernets	Irena Hapanowicz
M Fiorino	Health Society Killarney Branch
Pamela Fish	·
John Fisher	Amanda Heerschop
Joanne Furino	Joanne Hetherington
G B Catering Ltd	Hitchcock Family Foundation at
Marc-André Gagné	the Windsor- Essex Community Foundation
Maria Galego	
Gallant Custom Laboratories Inc	Robert Hoang Gerald Hoffman
J Robert Gaynor	Don Hohman
George & Karen	Rachel Holden
Erb Foundation	Roy Holenski
GMD Pharma Solutions	Krystina Holota

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Karen Lyon Andria MacDonald Daniel MacDonald Peggy MacDonald Ionathan MacKinnon Liane Malette Joe Manget Louisa Marcotte Anne Marie Marcoux Marsan Family Trust Nicholas Martens Nicola Martis Sarah McAulev George McCowan Dan & Marv McDougall J A McMillan Kevin Merrigan Mid-City Construction Managment Willie Miller Neelam Mohindra

Karli Moncrief Darlene Mothe Kenneth Moyle John Mueller Ghazy Mujahid Ed Muscat Nora Najjar **Joseph Natywary** Thomas Nelson Newtown Bakery Ernest Ng Susanna Ng Northstar Trading Ltd Heather O'Brien Klas Ohman Lesley Oligmueller Osler, Hoskin & Harcourt LLP Leslie Park Dr Nilufar Partovi

Horace Moncauskas

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Myrna Pearson

Vincent Peca

Dr Kevork Peltekian

Margaret D Peterson

Brook Pimm

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Mahboob Quazi

Mike Quinn

Ariel Qute

Charles Rawas

**Rosslyn Reed** 

Dawn & Axel Rehkatsch

Reitmans (Canada) Ltd River Road Colony

Morad Rizkalla

Carol Rowe

Gerald Rov

Roval Canadian Legion (Branch 582)

**Terrance Rummery** 

Mark Ruttan

John Sanford

Andrew Seto

Darren Shannon

Colin Shapiro

Shirley Shum

**Clayton Sissons** 

Sisters of Saint Martha

Andrew Smele

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Margaret Southern

Jeff Sparrow

Jeanne Spittlehouse

Bruce Staal

Barrie Steed

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Alejandro Sucre	Garry
Marion Susel	Liz W
Robert Sutherland	Sau K
Marie Laure Swiderski	Sonia
Kaing Szeto	Melin
Thomas & Ida Tait	Mary
Judy Thompson	Penny
	Ronal
Kenneth Thompson Dennis Tokaryk	Wawa Insura
Moses Paul Tooktoo	Dave
Michael Tran	James
Transportation Communications Union/I A M	Georg Patric
Vivian Trethewey	Gilbe Mase
Veronica Truax	Alan
Dean Trudeau	
Kathy Tschirhart	John `
Andy Tso	
Jennifer Tung	
B Vaz	
Ellen Veldhoen	

oria Deck Ltd v Walker Valter Xay Wan Wang da Warren Watson v Watson ald K Watts anesa Mutual ance Willey Williamson ge Wilson k Windle ert & Wong Yeung Yuan

#### \$250—\$499

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Ken Arnold Marija Artico J M Astill Nigel Ayers B Jolly Accounting Ltd Matthew Babineau Henry Baggs Karen Baird Balbi & Co Legal Centre Stephen Baldick Brian Banks P A Barbeau Mike Barber Norma Barber Terry Barron Debra Lou Bartels Sean Basarke Jean Batty Eugene Bauman Eleanor Bear Joan Beaton

Luc Beaudoin Leslie Belanger Ed & Irene Benedet John Berman Roland & Marie Bertin Bert's Auto and Tires Deosaran Bhimraj Billings Bridge Dental Centre Marc Bilodeau Yvette Bilodeau Angela Binns-Smith Andre Biron Sue Ann Bissoondatt Margaret Blanchard Peter Bobko Dale & Debbie Bochek Dorothy Boewe **Ghislaine Bolduc** Janet Bonekamp Charles J O Boone Gillian Booth

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n	Georgia Brumell	Central Agencies Inc.	
	Dr Kelly Burak	Amy Chan	
	Alain Burelle	Andy Chan	
	Aubrey Burrowes	Eliza Chan	
	Wayne Burwash	Kenneth Chan	
	Brian Busby	Denis Chartier	
	Maureen Cameron	Saima Chaudhry	
	Robert Cameron	Chef D	
	Caroline Campbell	Linda Chester	
	Cam-Ron Insurance	Nancy Cheung	
	Brokers Ltd	Tracy Cheung	
	Canada Donates	Stanley Chin	
	Canada Pipe Company	Paul Yu Pang Chiu	
	CAPO Industries	Alvin Chu	
	John Carey	Pauline Chuang	
	George Carless	CHUM – RUIS	
	Ada Carpenter	de luniversity de Montreal	
	Robert Carrothers	CKB Construction 2004 Ltd	
	Jim Carty	Elizabeth Clark	
	David Carvalho	Sharon Clarke	
	Cassidy Hea		
	Injury Law	Clean Sea Fishing Co Ltd	
	Terry Caunter		

#### \$250—\$499

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Gary Closson

CN Employees' and Pensioners' Community Fund

Melvin Cohen

Wayne Cole

Competition Oil Tools

Norman Cooke

Curtis Cooper

Betty Anne Copley

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Audrey Cowan

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Credit Union Central of Manitoba Crown Distributors

David Crump

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