WITH THANKS

Celebrating the Impact of Your Generosity – 2019

The Ottawa Hospital

6,166 babies delivered

Ranked **#1** in Ontario for Patient Satisfaction

1.19 million patient care visits

52,799 surgical cases

On MoneySense's "Charity100" ratings, which rates charity and fundraising efficiencies, we get the highest awarded grade in its class.

Because of You

It is a privilege to share with you the impact of your generous support this past year. It is the power of the collective generosity of donors like you that is the difference between basic health care with standard equipment and being at the forefront of cutting-edge treatments, with state-of-the-art technologies, offering revolutionary patient care that is saving lives.

When it comes to our health, and the health of our loved ones, we won't settle for mediocrity. Our researchers are pushing the boundaries of scientific discovery, every day. From groundbreaking research to clinical trials that offer a better quality of life for patients, the fingerprints of our donors are on all of it. Your support allows us to solve some of the most complex health-care challenges facing our region today.

This report highlights the standard of excellence that we hold ourselves to at The Ottawa Hospital. The research, treatments, discoveries, and exceptional care mentioned in the following pages are a reflection of the compassion and dedication of our donors, and in some cases, were funded solely by the generosity of donors like you.

Thank you for your ongoing support. We are grateful to have you by our side as we make tomorrow's health care possible today.

With thanks,

Tim Kluke
President and CEO, The Ottawa Hospital Foundation

Groundbreaking research right here at home

Our focus on research and learning helps us develop innovative ways to treat patients and improve care. As a multi-campus hospital, we provide specialized care to patients in Ottawa and eastern Ontario, but **our techniques and research discoveries are adopted around the world.**

We are determined to remain at the forefront of research and discovery that will directly translate into improved treatment and outcomes for patients. **It is your support that allows us to trailblaze toward new discoveries** and uphold the level of excellence for which we are internationally recognized.

2,257	Researchers
825	Active clinical trials
1,740	Scientific papers published in 2018
12,371	Patients enrolled in clinical trials

"Every gift has an impact. Donor support means our researchers have access to the very best tools, from world-class equipment to the latest expertise in clinical trials. State-of-the-art research resources can make all the difference, leading to breakthroughs that save lives and improve care for people not only in Ottawa but also across Canada and, indeed, the world."

– Dr. Duncan Stewart, Executive VP Research, The Ottawa Hospital

A world leader in stem cell research

Dr. Bernard Thébaud examines a premature baby in the Neonatal Intensive Care Unit.

The Ottawa Hospital's Regenerative Medicine Program is **a world leader and well equipped for the rapid growth of stem cell research**. Donor support is having a significant impact on the development of new stem cell treatments, allowing our physicians and researchers to make major advances in patient care and research and to transform lives.

"If you are in the computer business, you go to the Silicon Valley; if you are in oil and gas, you have to be in Alberta; if you are in stem cells, you need to be in Ontario, particularly Ottawa, because that is where the greatest advances are being made."

– Dr. Bernard Thébaud, neonatologist at The Ottawa Hospital is developing a stem cell treatment to heal the lungs of premature babies.

Hope for our smallest patients

From the day she was born, Olivia Eberts has been a fighter. Born 115 days before her due date, at 23 weeks and 4 days, she has persevered through heart surgery and multiple health problems. Miraculously, she survived, but some of the breathing equipment that helped keep her alive damaged her developing lungs, causing a chronic condition called bronchopulmonary dysplasia (BPD). This condition harms the brain, stunts growth, and its complications can lead to blindness or cerebral palsy. There is no cure.

Dr. Bernard Thébaud wants to change that. The neonatologist and senior scientist at The Ottawa Hospital is working on a therapy for BPD based on umbilical cord stem cells. He and his team discovered that stem cells act like mini pharmacies, diagnosing the problem and dispensing the appropriate healing factors. Now, **his goal is to launch a clinical trial to bring this discovery to the sick babies he sees every day in the NICU.**

Jamie Eberts holds her tiny baby, Olivia, who has a lung condition called BPD.

"What we see in the lab is very promising. We think stem cells are going to be a game changer for these babies. I am confident that we have the talent and the tools here to find a treatment for BPD. Step by step, with the help of donor support, our findings are helping us get there."

– Dr. Bernard Thébaud

Made-in-Canada CAR-T Therapy

Dr. Natasha Kekre

CAR-T therapy, which uses a patient's own genetically modified immune cells, is **one of the most exciting advances in cancer treatment**. After seeing striking results in young patients with end-stage acute lymphoblastic leukemia (ALL), CAR-T researchers are now expanding into other kinds of cancer and optimizing their techniques.

Drs. Manoj Lalu and Dean Fergusson led a team that analyzed data from nearly 1,000 patients who participated in 60 different CAR-T trials and found that one particular **CAR-T therapy eliminated all signs of cancer in almost 80 percent of patients with ALL**. This study is part of a made-in-Canada CAR-T research program that will include a unique clinical trial, opening this year, led by Dr. Natasha Kekre.

Thanks to donor support, we are able to equip our researchers with the resources needed to pioneer advances in treatment and to tackle some of the most complex health-care challenges we face today.

"We haven't seen anything this promising to battle blood cancer in decades."
– Dr. Natasha Kekre, Principal Investigator and Hematologist, The Ottawa Hospital

Facing cancer head-on

Over the next 15 years, Canadians will see a 40 percent increase in cancer diagnoses with almost one in two developing cancer in their lifetime. Our ability to translate research into patient therapies, coupled with one of the best-equipped cancer centres in the country, means we are well positioned to face this challenge head-on.

Oncologist Dr. Mark Clemons and Senior Scientist Dr. Dean Fergusson designed the REaCT Program.

The Ottawa Hospital's Drs. Mark Clemons and Dean Fergusson launched the world-leading REaCT (Rethinking Clinical Trials) Program to help answer important questions that patients have regarding their treatment. By adopting new ways of performing practice-changing research, the REaCT Program **has streamlined clinical trial enrollment in order to quickly identify what is the best treatment for patients**. REaCT studies are now open at multiple sites across Canada. With fewer than three percent of Canadian cancer patients enrolled in clinical trials before REaCT, enrollment across all REaCT sites now exceeds 90 percent, with **over 2000 patients enrolled in Ottawa alone**. Simply put, REaCT trials are changing care for patients and donor support for cancer research is critical to this program.

A REaCT clinical trial recently discovered that patients who would traditionally receive drugs for their bone metastases every four weeks could be effectively treated once every three months. This new treatment schedule also meant a significant reduction in hospital visits, blood tests, and drug side effects, all while saving millions of dollars in drug costs. **This world-first discovery is changing the way patients are treated around the world.**

Helping the Immune System recognize and destroy cancer

For more than 70 years, doctors continue to turn to radiation, chemotherapy, and surgery as the primary therapies for cancer patients. But today, **our researchers and clinicians are exploring ways to make our own immune systems recognize and reject cancer cells with unprecedented results.**

Nancy Vinet celebrates with Dan Collins who has no trace of melanoma after immunotherapy treatment.

Immunotherapy, under the care of Dr. Michael Ong, is what saved Dan Collins' life. Two weeks after undergoing surgery to remove a golf ball sized melanoma mass on the back of his head, the mass grew back, along with another in his right lung. He had an aggressive, stage 4 cancer and it had metastasized. Dan was placed on immunotherapy, designed to cause his own immune system to attack the cancer in his head and on his lung. On the first type of immune therapy, the tumour in his head responded but the one in his lung did not. On a second type of immunotherapy, the lung tumours completely disappeared and today (years later) **there are no signs of cancer anywhere in his body.**

"After battling an aggressive stage 4 melanoma that had already metastasized, there are no longer any signs of cancer in my body. When I think back to the day of my diagnosis, I remember wondering if I could survive. But thanks to research, thanks to people like you who support research, I'm alive. I never could have imagined it."

– Dan Collins, cancer survivor

A new era in breast health

September 2019 marked the one-year anniversary of the official opening of the Rose Ages Breast Health Centre. **The Centre, which was built through the generosity of our donors,** houses an impressive suite of technologies that are the latest and most comprehensive in Canada.

In addition to providing the very best technology for patients, the Centre is an inviting space and focuses on overall wellness and compassionate care.

"I have three daughters and six granddaughters. Anything that helps them and other women in the future is of interest to me. I know my support will be well used to improve patient care."

– Suzanne Halpenny, donor

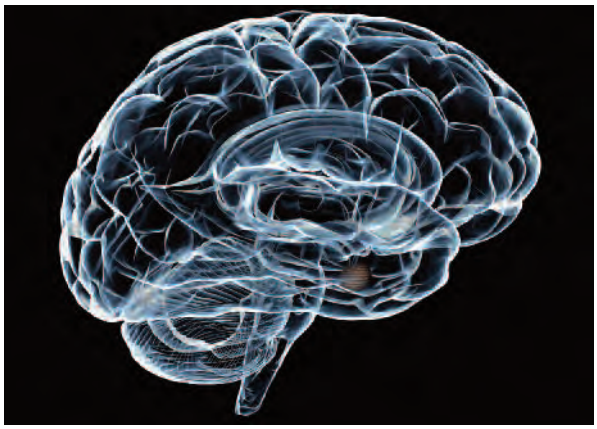
New research chair to lead cutting-edge work in liver and pancreatic cancer

In August 2019, Dr. Guillaume Martel was announced as the first Arnie Vered Family Chair in Hepato-Pancreato-Biliary Research. Dr. Martel is a gifted surgeon at The Ottawa Hospital who has saved and prolonged the lives of countless patients, particularly those with cancer. **An international search conducted for this Research Chair found the best candidate right here in Ottawa.** This Research Chair provides the opportunity for innovative clinical trials and cutting-edge surgical techniques that will benefit our **patients for years to come. This was made possible through the generous support of the Vered Family, alongside other donors.**

"When Arnie got sick, he needed to travel to Montreal for treatment. It was so hard for him to be away from home and our six children. We wanted to help make it possible for people to receive treatment right here in Ottawa. This Chair is an important part of his legacy."

– Liz Vered, donor

Excellence in Neuroscience



The Ottawa Hospital is internationally recognized for excellence in neuroscience research and care. We have more than 150 scientists, clinician investigators, trainees and staff, who, thanks to the support of donors, are conducting groundbreaking research to understand how the brain works and to develop better ways to treat diseases like stroke, Parkinson's, multiple sclerosis, and neurodevelopmental disorders.

"Our work and all behind-the-scenes efforts to make research happen on the clinical front and research front can't happen without the incredible philanthropists and patients who give us a chance to try new things. We owe a lot of gratitude to the community of patients and family members who, over the years, have helped us. I really mean it, from the bottom of my heart."

– Dr. Michael Schlossmacher, Director of Neuroscience and neurologist, The Ottawa Hospital

How one gene mutation may affect Parkinson's Disease

Researchers have struggled for years to understand how mutations in one gene, called LRRK2, can increase the risk of three very different diseases: Parkinson's (a brain disease), Crohn's (a gut disease), and leprosy (a peripheral nervous system disease). The Canadian LRRK2 in INflammation Team (CLINT), comprised of seven research teams at five Canadian institutions, is investigating the possibility that inflammation may be the culprit. The Ottawa Hospital's Dr. Michael Schlossmacher is one of the Principal Investigators of CLINT. For years, researchers have thought that LRRK2's primary role was in the brain, but CLINT is shifting their focus to the immune system and inflammation. If they are correct, **it could open the door for the monitoring of infections as a key risk element for prediction, early detection, and prevention** of the diseases LRRK2 affects, as well as for new treatment approaches.

A new home for world-class health care

The Ottawa Hospital will soon embark on one of the most ambitious projects the Ottawa region has ever experienced: the creation of **a new, state-of-the-art health and research centre to replace the aging Civic Campus.** When it opens, the new Carling site will be home to the most progressive digital technology, one of the largest neuroscience research programs, and the most advanced trauma centre in the country.

The new Carling site will maximize trees and greenspace, to help speed healing and to create a focal point in our city for patients, families, and the community to enjoy. (Image: Concord Medical Services, Shanghai - HDR)

"This will be unlike anything we've done before. We are creating a facility—right here in our community—that will be the envy of the world for its ability to foster innovation in every aspect of health care."

—Cameron Love, Chief Operating Officer, The Ottawa Hospital

Transforming trauma care

The new Carling site will revolutionize trauma care in our region. Ambulances will have exclusive and private access to the emergency department. Patients arriving by helicopter will have elevator access from the roof directly into one of multiple trauma bays. Every minute matters for our most injured patients and this direct and expedited access to emergency trauma care will mean more lives saved and a reduction in long-term side effects and injury.

One year of regenerative orthopaedic surgery at The Ottawa Hospital

It has been a successful first year for Dr. Daniel Coutu, the inaugural Research Chair in Regenerative Orthopaedic Surgery, with the recruitment of a team of highly skilled scientists and the purchase of a state-of-the-art confocal microscope to look at skeletal tissue regeneration in 3D.

Dr. Coutu also initiated international collaborations in the field of skeletal regeneration and tissue engineering with Johns Hopkins University (United States) and Lund University (Sweden). He developed new models to study stem cells in the skeletal system and presented at various national and international conferences dedicated to orthopaedic surgery and stem cell research. **The creation of this chair was made possible by the generous support of our community of donors.**

Establishing a Research Chair in Gay Men's Health

Due to stigma and inaccurate stereotypes, many gay men often do not disclose their sexual orientation to their health-care providers. As a result, only common health conditions are addressed, while mental health, sexual health, HIV infection, and other health issues relevant to gay men are overlooked. Gay men have higher rates of depression, anxiety disorders, and suicide than their heterosexual counterparts. At The Ottawa Hospital, we are committed to establishing a **Research Chair in Gay Men's Health who will focus on** a wholistic approach to delivering health care to gay men, will bring attention to the broad scope of gay men's health issues, and will facilitate collaboration among academics, health-care professionals, and the community.

2,300 patients treated thanks to donor-funded robotic technology

In 2011, the da Vinci Surgical System was acquired **exclusively with funds donated by our community of supporters.** Since then, this leading-edge robotic technology has been used to treat 2,300 cancer patients suffering with prostate, head and neck, and gynecological cancers. We are grateful for the generous donor support that allows us to provide state-of-the-art technology, like the da Vinci Surgical System, to our patients. **The Ottawa Hospital has developed one of the largest robotic cancer surgery programs in the country.** We have published results showing excellent safety and improved results for our patients.

Revolutionary technique makes brain cancer glow

Dr. John Sinclair removes a tumour using the new fluorescence-guided microscope.

We know that when we equip our health-care providers and researchers with world-class tools, techniques, and facilities, we see groundbreaking discoveries that transition from lab to bedside, and ultimately improve patient outcomes. Our new Carling site will be outfitted with the latest technologies, tools and equipment – equipment like the fluorescence-guided microscope used to remove malignant brain tumours, including glioblastoma multiforme, an extremely aggressive form of brain cancer.

These tumours have ill-defined borders with cells reaching like tentacles into parts of the brain that neurosurgeons can't see and, therefore, can't fully remove them. Until now.

Neurosurgeon Dr. John Sinclair has introduced a technique to The Ottawa Hospital called fluorescence-guided brain surgery. Before surgery, patients drink a liquid containing 5-aminolevulinic acid (5-ALA) which is then absorbed by the cancerous tissue causing it to glow a fluorescent pink under a special wavelength of blue light from the microscope. Being able to see the tumour intertwined with normal brain tissue gives surgeons a much higher chance of removing the entire tumour. Recent studies demonstrate that this can now be achieved in 70 percent of surgeries as opposed to the previous 30 percent average. Survival and quality of life are both dramatically affected by this technology.

We are grateful to the donors who have already given generously to bring this groundbreaking, first-in-Canada technique to The Ottawa Hospital.

"I have the unique privilege of seeing the impact that a caring and giving community has on our hospital. The result of this generosity is not only benefiting the residents of the Ottawa region – but is changing lives across the country and around the world. This is something we can all be proud of and is the legacy we, as a community, will leave behind."

– Dr. Jack Kitts,
President and CEO,
The Ottawa Hospital

PRESIDENT'S BREAKFAST

Public Service 2019

60
table hosts

517
guests inspired

60
minute breakfast - $315K raised

3
remarkable patient stories

PRESIDENT'S BREAKFAST

2019

63
table hosts

461
guests inspired

60
minute breakfast - $525K raised

3
remarkable patient stories

THE RIDE

POWERED BY mattamy HOMES

2019 Results

"Each of us individually, and together as a community, have the power to define what health care will look like in Ottawa in the coming decades."

- Dr. Jack Kitts, President and CEO, The Ottawa Hospital

710
riders

85
teams

$1,071,255
total dollars raised for patient care and research

Mother and son, Rita and Robert Cloutier. Rita is undergoing cancer treatment at The Ottawa Hospital's Irving Greenberg Family Cancer Centre.

The Ottawa Hospital Foundation

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