



The New Frontiers Research Campaign

Pioneering Research



Hôpital St-Boniface Hospital
FONDATION • FOUNDATION

Today's Discoveries, Tomorrow's Cures

Thanks to your generosity, researchers at St. Boniface Hospital can forge ahead towards discoveries that will be tomorrow's cures.

In 2012, celebrating the Albrechtsen Research Centre's 25th anniversary, the New Frontiers Research Campaign launched. Our goal was ambitious: a \$25 million investment in basic and applied medical research. Your support was remarkable, paving the way for courageous innovation that will continue to make a significant difference now and for years to come.

Thank you for being an important part of the campaign. **You helped provide \$25 million for medical research that will change and save lives.** We are pleased to share this report on your impact.

"I can't thank our Campaign donors enough. It is only through a strongly funded research infrastructure that we can create new approaches to address chronic health conditions and save lives. When you support science, you are supporting solutions."

—Dr. Grant Pierce,
Executive Director of Research



The Research Opportunity Fund

Your generous participation in the New Frontiers Research Campaign created the \$10 million Research Opportunity Fund, which gives St. Boniface Hospital Research the flexibility and ability to seize on research opportunities when they arise and to help its research teams reach their full potential.

The fund supports the work of our Principal Investigators in the fields of cardiac science, food science, neurodegenerative disorders and clinical research. Your investments positioned St. Boniface Hospital Research to remain the **#1 Research Intensive Hospital in Western Canada**, and in the Top 5 nationally, for eight years running¹.

When you invest in health research, it means Manitoba scientists, graduate students, research fellows, residents and post-docs have the financial support necessary to explore unexpected pathways, follow intriguing possibilities, and take risks. It gives our working laboratories adequate financial resources to recruit and hire talented new investigators to join our team of 250. It means that we can acquire important equipment for our 30 research labs, and it supports our 480 ongoing active clinical studies.



¹ According to data calculated by Research Infosource Inc. an independent group out of Toronto.

Healthy Hearts

The Institute of Cardiac Sciences (ICS) is a leading force in the fight against heart disease. By investing in the ICS, you helped build on the group's existing strengths through the recruitment and expansion of research programs in areas of women's health, disease prevention, novel treatment strategies for ischemic heart disease, hypertension, heart attacks, strokes and coronary heart disease.

Your generous support helped expand international partnerships with the ICS, fueling joint research programs with renowned institutions around the world, including:

- Mayo Clinic, USA;
- McMaster University, Hamilton, Canada;
- Montreal Heart Institute, Canada;
- University of Rome Tor Vergata, Italy;
- Scuola Superiore, Italy;
- Slovak Heart Institute, Slovak Republic;
- Ben Gurion University, Israel;
- Rajiv Gandhi Biotech Centre, India; and
- Cuban Cardiac Society, Cuba.

With your help, the ICS can initiate new research programs under established Principal Investigators, while also developing tomorrow's leading scientists. For example, you made it possible to pursue a new research focus on women's heart health led by Principal Investigator Dr. Ross Feldman. Dr. Feldman's important study of sex-specific preventative care and therapies may save the lives of countless women, who are historically underrepresented in medical research.

Meanwhile, the ICS graduate training program continues to thrive, thanks to you. Our graduate and postdoctoral students regularly benefit from distinguished international visiting scientists. Recent visitors included Dr. Eduardo Costa from Brazil, Dr. Sarita Gupta from India, Dr. Lindsay Brown from Australia, and Dr. Shahla Shoejaei from Iran.

Over the next three-to-five years, the ICS will continue to establish networks of cardiovascular excellence and fortify our graduate education programs and public outreach efforts.

Thank you for helping us build healthier hearts.

Dr. Sanjive Dhingra studies cardiac regeneration and tissue engineering. His work may help doctors repair broken hearts.



Preventive Medicine

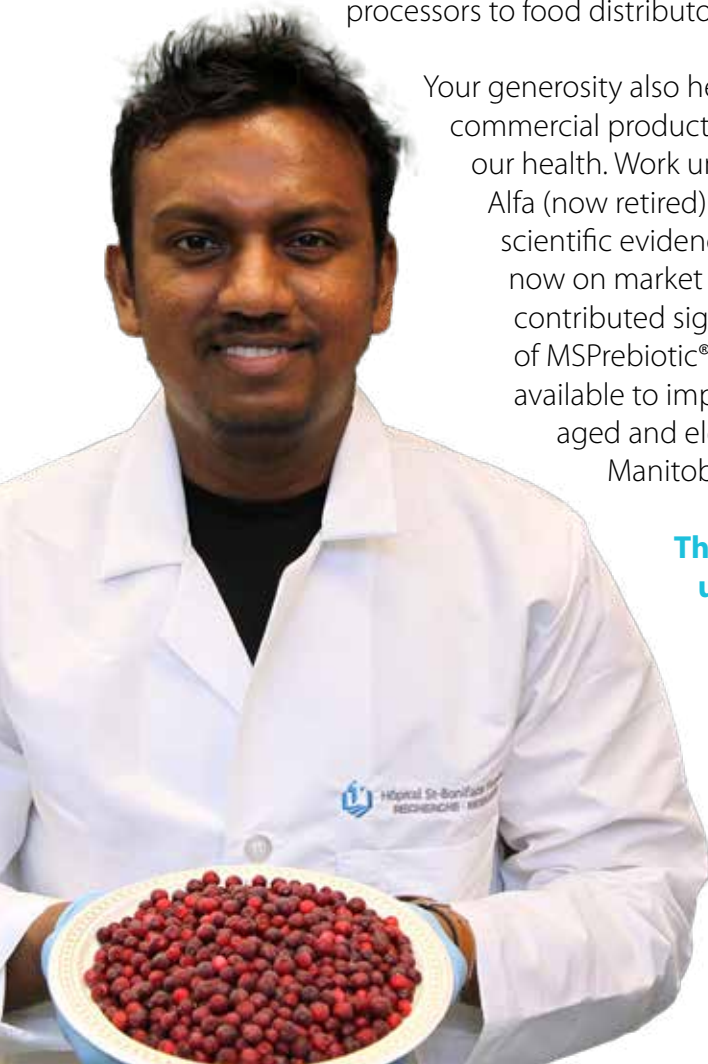
The Canadian Centre for Agri-Food Research in Health & Medicine (CCARM) is the only research group of its kind in the world, dedicated to investigating and understanding the potential health-related benefits found in functional foods, nutraceuticals and natural health products. With your support, CCARM's research programs will continue to translate positive results from basic laboratory science into new food products and safe dietary supplements that directly impact the health of Canadians.

Because of your support, CCARM has the funding to help attract outstanding scientists to its team. Dr. Luc Clair recently joined the CCARM group in its new Agriculture-Health Economist position. His research examines the economic benefits of functional foods and natural health products as they relate to both agriculture and health. This work will be of great value for determining the economic impact of food-based interventions on the health care system. Ultimately, it will help inform the commercial agri-food sector about the economic impact of our research along the entire production chain, from farmers to food processors to food distributors to consumers.

Your generosity also helped bring exciting new commercial products to the market to help improve our health. Work undertaken by Dr. Michelle Alfa (now retired) under CCARM, provided the scientific evidence for a commercial product now on market shelves across Canada. Her work contributed significantly to the development of MSPrebiotic®, a food supplement now available to improve gut health in both middle-aged and elderly adults, manufactured in Manitoba by MSPrebiotics Inc.

**Thank you for helping us
unlock the health benefits of
the foods that grow in our
backyard.**

**CCARM researchers
discovered the potential
of lingonberries to protect
against kidney failure.**



Brain and Nerve Disease

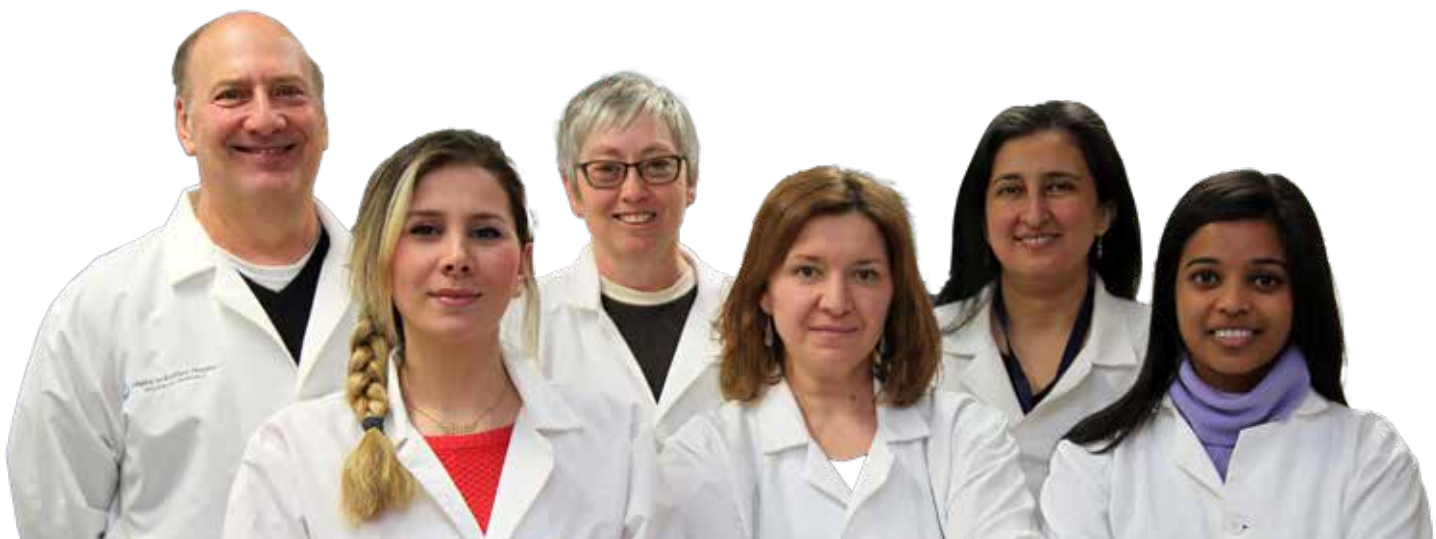
Neurodegenerative diseases of the peripheral and central nervous systems devastate individuals and their families. The increasing prevalence of these diseases in our aging population is demanding greater attention from government and other funding agencies.

Aided by your support, **the Division of Neurodegenerative Disorders (DND)** research team works to determine the underlying mechanisms of and identify potential treatments for diseases including Alzheimer's disease, ischemic stroke, traumatic brain injury and aging-related nerve degeneration.

DND is particularly interested in the impact of diabetes on these neurodegenerative disorders. In patients with Alzheimer's disease, there is an increased risk of developing diabetes and these patients exhibit more severe and accelerated memory loss. Our researchers aim to identify the key signalling pathways that are impaired and investigate how insulin is a factor.

One of the most remarkable developments to emerge from DND over the past few years is a treatment currently in clinical trials to help people who suffer from chronic numbness or pain and tingling in their extremities, caused by diabetes or other conditions. Led by DND Director Dr. Paul Fernyhough and Dr. Nigel Calcutt of the University of California at San Diego, the researchers found that antimuscarinic drugs such as atropine or pirenzepine can reverse the numbness and pain, and drive nerve fibre regeneration and repair in disease states where there is otherwise irreversible nerve damage. Calcutt, Fernyhough and Lakshmi Kotra of the University of Toronto are working together to bring these drugs to market to treat this devastating and painful condition.

Thank you for keeping St. Boniface Hospital at the forefront of neurodegenerative research.



Dr. Benedict Albeni and his team are working to improve a better understanding of dementia, aiming to improve therapies and even prevent the disease process.

Translating Discoveries to the Patient

The vision underpinning the New Frontiers Research Campaign included a deep appreciation for the importance of translating scientific discoveries into practice to improve human health. **The I.H. Asper Clinical Research Institute, next door to the Albrechtsen Research Centre, is uniquely positioned to leverage the strength of a bench-to-bedside approach for improving human health.**

Your investments further stimulated basic research, helping clinical researchers uncover questions while investigating new treatments, which ultimately strengthened and accelerated critical clinical research. The I.H. Asper Clinical Research Institute conducts approximately 480 ongoing, active clinical studies and is currently reviewing about 100 new trials per year to create new approaches to address cardiovascular and vascular conditions, cancer, and the benefits of nutritional interventions.

Through your support, we are helping to test and validate the efficacy and safety of new treatments for a great number of diseases currently affecting Manitobans and people all over the world.



Thank You!

Medical research is more critical than ever as all of us face the effects of the COVID-19 pandemic. Because of your support, our researchers have the resources they need to participate in finding solutions to the world's most pressing health problems, supporting the global effort to optimize our public health infrastructure on every front.

“Your investment means that we are able to acquire important laboratory equipment and support ongoing active clinical studies. Most important of all, you make the difference for critical, life-saving research findings to be successfully and safely advanced to the next stage of development; the stage where new treatments are available to physicians to help save more lives here at home, and around the world,” says Dr. Grant Pierce, Executive Director of Research.

Your generosity has made you a partner in life-saving research that will continue to make a difference as we look ahead to 2021 and the celebration of the Hospital's 150 years of excellence in patient care and research, and the Foundation's 50 years of philanthropy.

Thank you for being an important part of our history, and our future!



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