

# 44th Parliament Welcome Kit



**Research Canada: An Alliance for Health Discovery**

401-17 York St., Ottawa, ON K1N 5S7

[www.rc-rc.ca](http://www.rc-rc.ca) | [info@rc-rc.ca](mailto:info@rc-rc.ca) | 613-234-5129 | @ResearchCda

# A Message from the Parliamentary Health Research Caucus

It is with great pleasure that we welcome each of our colleagues in the House and Senate—both new and returning—to this 44th Parliamentary Session and join **Research Canada: An Alliance for Health Discovery** to officially launch the **44th Parliament Welcome Kit**. Research Canada's **44th Parliament Welcome Kit** will help you to familiarize yourself with the health research and health innovation taking place in Canada and to keep us all informed about the researchers and innovators in our communities who continue to advance health research and develop diagnostics, treatments and therapeutics to better serve the health needs of our constituents across the country.

Since 2009, the **Parliamentary Health Research Caucus** has been fortunate to have Canada's best and brightest health researchers and health innovators present their research discoveries and new technologies to Parliamentarians at events, both in person and virtually. Together with Research Canada, we have planned a series of Virtual Parliamentary Health Research Caucus Events this year to continue to meet and learn from **Game Changers in Health Research and Health Innovation**. All of our events in 2022, starting with the **Parliamentary Health Research Caucus Welcome Reception and Game Changers in Health Research and Health Innovation Panel** on March 1, will focus on game-changing health research in many different areas—the kind of research that is visionary and holds the promise of revolutionary change in human health and healthcare.

Enjoy the Welcome Kit!

Sincerely,

***The Parliamentary Health Research Caucus***



**Brendan Hanley**

MP (Yukon)  
Chair



**Stephen Ellis**

MP (Cumberland—Colchester)  
Vice-Chair



**Carol Hughes**

MP (Algoma—Manitoulin—Kapusksing)  
Vice-Chair



**Hon. Mohamed-Iqbal Ravalia**

Senator (Newfoundland and Labrador)  
Senate Representative

# A Message from Research Canada's Leadership

## **Research Canada: An Alliance for Health Discovery**

welcomes Parliamentarians for the first time, or welcomes you back to Parliament for this 44th Parliamentary Session.

Research Canada is a national, broad-based alliance dedicated to advancing Canadian health research and health innovation through collaborative advocacy and education. Our Alliance includes research institutes and hospitals, universities and colleges, health charities and professional organizations, national research networks and health and biosciences companies.

Since 2009, Research Canada has worked closely with the **Parliamentary Health Research Caucus**, a non-partisan, "owned by Parliamentarians" forum that engages all Parliamentarians in educational events that showcase Canadian health research and health innovation.

Over the past 13 years, more than 350 talented and dedicated health researchers and innovators have shared their stories and scientific achievements with Parliamentarians at over 40 in-person and virtual events on the opioid crisis, Indigenous health, mental health, cancer research and the COVID-19 pandemic, just to name a few.

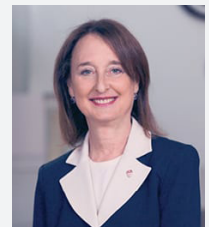
For the past two years, our country has faced a very difficult and unprecedented challenge, and we thank you and your colleagues in Parliament for continuing to do everything you can to support Canadians across the country. The health research and health innovation communities across Canada have stepped up to the challenge as well, working non-stop to advance solutions to this public health crisis and continuing to develop evidence-based solutions to a myriad of health and medical concerns facing everyday Canadians, pandemic or not.

We look forward to working with you in our collective efforts to build a healthy and prosperous nation through a robust health research and health innovation ecosystem.

Sincerely,  
***Research Canada's Leadership***



**Deborah Gordon-El-Bihbety**  
President and CEO



**Rose Goldstein, MD**  
Chair



**Tarik Möröy, PhD**  
Vice-Chair

## **About Research Canada**

Research Canada is a national, broad-based alliance dedicated to advancing health research through collaborative advocacy. Its goals are to ensure that health research is a high priority of the federal government and to increase investments in health research from all sources. Visit [rc-rc.ca](http://rc-rc.ca).

# The Parliamentary Health Research Caucus

## Did you know that human knowledge is doubling every ten years?

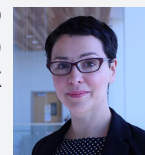
Every day, researchers across Canada are making game-changing advancements in health and medical research that are paving the way for new innovations that will change—and save—lives across Canada and the globe. Join Research Canada and the Parliamentary Health Research Caucus for a series of events throughout 2022 that will introduce you to some of Canada's Game Changers in Health Research and Health Innovation!



Visit [rc-rc.ca/health-research-caucus/](https://rc-rc.ca/health-research-caucus/) to learn more, and stay tuned for more information about upcoming Parliamentary Health Research Caucus events!

*"BioCanRx is pleased to sponsor this important event. Canada is home to incredible game-changing health discoveries. But many of these leading-edge inventions don't make it to clinical trial or they become targets of foreign takeovers. By addressing the challenges that hamper research translation from the lab to patients, we'll be better situated to advance made-in-Canada innovations such as vaccines and immunotherapies and reap the rewards of our investments in fundamental science."*

**DR STÉPHANIE MICHAUD**  
PRESIDENT AND CEO  
BIOCANRX





# Funding for Health Research and Innovation in Canada

## ► WHO ARE THE STAKEHOLDERS?

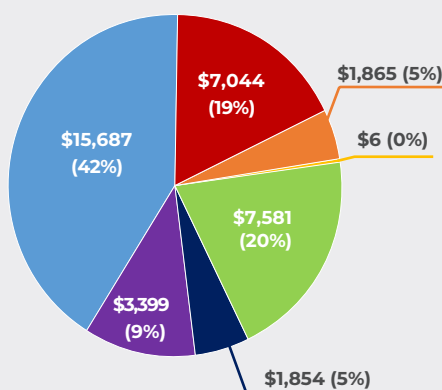
Canada's health research and health innovation ecosystem involves numerous organizations and agencies that act as either funders or performers (or both) of research and development (R&D).<sup>1</sup>

**The Funders:** Canada's business enterprises—which include health and bioscience companies—are the single largest source of funding for R&D in Canada, accounting for over 42% of R&D spending. Institutions—which include universities, colleges and academic health science centres—are the next largest source of funding for R&D (20%), followed by the federal government (19%). Other key sources of R&D funding in Canada include foreign investors (such as the U.S. National Institutes of Health), provincial governments, provincial research organizations, and private non-profits (which include health charities, foundations, and other non-profit organizations).

Total R&D Spending  
**\$37.4 B in 2020**

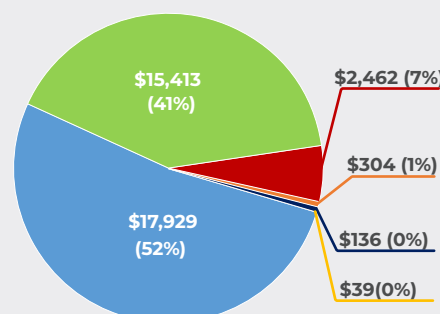
Total *Health* R&D Spending<sup>2</sup>  
**\$4.0 B in 2020**

**Sources of R&D Funding in Canada**  
(in millions of dollars)

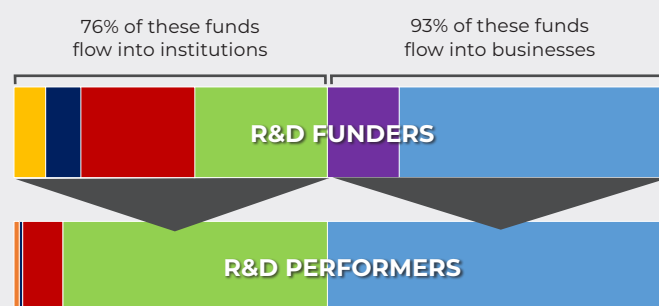


**The Performers:** Over 90% of R&D in Canada is performed by business enterprises and institutions. Generally, most government and private non-profit funding is used to support R&D performed by institutions, while most foreign and business enterprise investment goes to businesses.

**Performers of R&D in Canada**  
(in millions of dollars)



**Flow of R&D Funding**



### For your information:

Statistics Canada has not published any data on health R&D spending specifically since 2007. As a result, we can only estimate the total health R&D spending in Canada from all funding sectors combined. Except where indicated, the data reported here include R&D across all scientific disciplines.

**Legend:** Federal Government (Red), Provincial Government (Orange), Provincial Research Organizations (Yellow), Institutions (Green), Business Enterprises (Blue), Private non-profits (Dark Blue), Foreign Investors (Purple)

## ► WHAT DO WE FUND?

### 1. People

As the two largest performers of R&D in Canada, institutions and businesses employ (and pay the salaries of) the vast majority of health researchers in Canada. Within universities and colleges, these costs are in part covered by tuition fees and other investments. Within academic health science centres, researcher salaries are typically covered by administrative fees and funds raised by their affiliated hospital foundations. The federal government's *Canada Research Chairs Program* and *Canada Excellence Research Chairs Program* also provide financial support to universities across Canada to help them attract and retain world-class researchers.

1. Statistics Canada. Table 27-10-0273-01 Gross domestic expenditures on research and development, by science type and by funder and performer sector (x 1,000,000). DOI: <https://doi.org/10.25318/2710027301-eng>
2. Statista (2021) *Total health research expenditure in Canada from 1975 to 2021*. Retrieved from: <https://www.statista.com/statistics/436571/total-health-research-spending-canada/>

### For Your Information:

*Scholarships and fellowships are not a replacement for researcher salaries. A 2018 survey by Science & Policy Exchange found that 66% of students and postdocs who received tri-council awards required additional funding to support themselves.<sup>3</sup>*

Scholarships and fellowships provide important additional support to the next generation of health researchers—graduate students and postdoctoral researchers. The federal government, through the three granting councils, offers a number of scholarship and fellowship programs for doctoral students and postdoctoral researchers, including the *Vanier Canada Graduate Scholarships* and *Banting Postdoctoral Fellowships*. Other sources of scholarships and fellowships include organizations like Mitacs and some businesses and private non-profit organizations.

## 2. Research

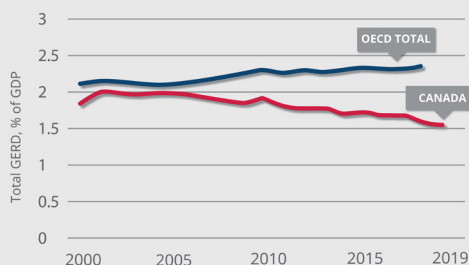
Each of the seven sectors involved in Canada's research ecosystem provide direct funding for research projects and initiatives—this includes funding for both investigator-initiated projects and targeted funding for research to address specific priority issues.

### CANADA AT THE INTERNATIONAL TABLE

Worldwide, Canada is no longer in the top 30 nations in terms of total research intensity.

Canada's gross domestic spending on R&D (GERD) has been declining slowly over the last 15 years.

While Canada has the highest higher education expenditures on R&D (HERD) among the G7, the federal share is much lower than other countries at 23%.



Source: Organization for Economic Co-operation and Development. *Gross domestic spending on R&D*

### SUPPORTING CDN HEALTH RESEARCHERS & INNOVATORS



Source: Canadian Institutes of Health Research

The primary source of federal R&D funding is the granting councils: the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council (NSERC) and the Social Sciences and Humanities Research Council (SSHRC). The granting councils directly fund investigator-led R&D through each of their project grant competitions and other initiatives, and additionally support targeted R&D for priority issues such as Indigenous health and Canada's emergency response to the COVID-19 pandemic. Other government agencies, such as the National Research Council (NRC), also directly fund—and in the case of the NRC, perform—R&D.

### For Your Information:

*In 2019-20, CIHR invested almost \$620 million in investigator-initiated research projects and over \$250 million towards priority-driven health research.<sup>4</sup> NSERC invested \$245.8 million in life sciences and related technologies.<sup>5</sup>*

From the private non-profit sector, health charities and foundations directly support priority-driven research with funds raised in part from fundraising and donations. Other non-profits, such as the Stem Cell Network and the Canadian Institute for Military and Veteran Health Research (CIMVHR), which receive partial funding for their operations from the federal government, directly fund R&D projects relevant to their unique mandates. In addition to funding research performed within their own labs, businesses also provide vital financial support for research projects conducted within institutions, often in partnership with funds provided internally by the institutions and affiliated hospital foundations.

### For Your Information:

*Researchers in Canada are struggling to find federal funding for research projects that can lead to innovative health solutions. Success rates of the Canadian Institutes of Health Research (CIHR)'s project grant competition have steadily been declining over the past two decades.<sup>4</sup>*

## 3. Infrastructure

Infrastructure costs are a necessary component of a fully-funded research ecosystem and include things like buildings, equipment, laboratories, and access to electronic databases. While these costs are covered internally by the research performers, academic institutions, in particular, generally need to look to external sources of funding to cover the full costs of infrastructure. The Canada Foundation for Innovation's (CFI) Infrastructure Operating Fund is the primary source of infrastructure funding from the federal government, but businesses and non-profit organizations also provide necessary infrastructure support.

## 4. Indirect Costs

There are a number of additional costs that are indirectly incurred in the conduct of research but that nonetheless are a crucial component of the full costs of research. These indirect costs, which include maintenance of spaces and equipment, meeting regulatory and technical standards, and providing central technical and administrative supports (i.e. staff), are typically borne by the hosting institution. The federal government supports these costs through the Research Support Fund (RSF).

### For Your Information:

*The RSF currently reimburses institutions for the indirect costs of research at approximately 20% of the direct costs, but estimates suggest that the actual indirect costs incurred are between 40% and 60%.<sup>6</sup>*

3. Science & Policy Exchange (2018). *Survey on Graduate Student & Postdoc Funding*. Retrieved from <http://www.sp-exchange.ca/events/survey/>

4. Canadian Institutes of Health Research

5. Natural Sciences and Engineering Research Council of Canada

6. Fundamental Science Review Panel (2017). *Investing in Canada's Future: Strengthening the Foundations of Canadian Research*.

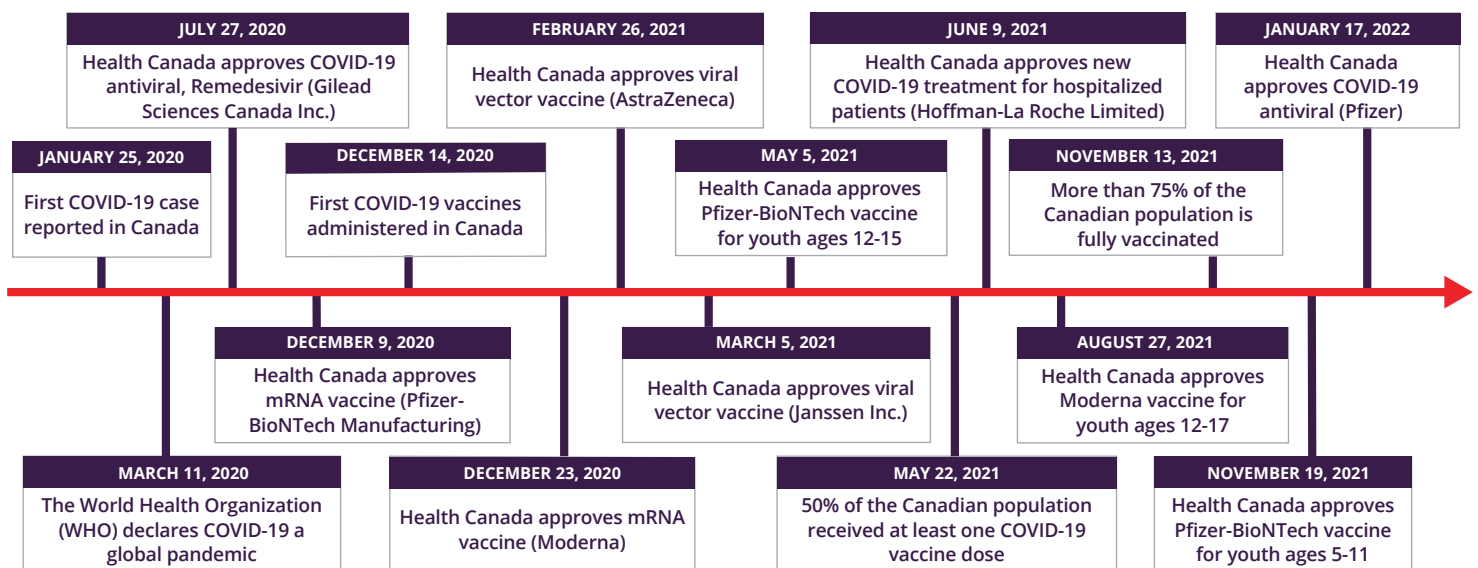
# Addressing the COVID-19 Pandemic Through Health Research and Innovation

When the COVID-19 pandemic emerged in early 2020, Canada's health research and innovation communities rose to the challenge and immediately began investigating ways to fight the virus, including using diagnostics, therapeutics, vaccines and public health measures to help slow the spread and mitigate the social, health and economic impacts of the virus that causes COVID-19—SARS-CoV-2.

As a result, in just two years, we now have five new therapeutic drugs and five COVID-19 vaccines approved by Health Canada<sup>1</sup> that have been delivered to almost 85% of Canada's population.<sup>2</sup> Many other vaccine and therapeutic candidates have been authorized for clinical study, over 40 of which are being led and/or supported by Research Canada Members.

## THE HEALTH RESEARCH AND INNOVATION ECOSYSTEM IS:

Canada's network of postsecondary institutions, research hospitals, governments, incubators, start-ups, innovative companies, investors, health charities and patient groups, each working in collaboration to advance science and develop innovative solutions to improve the health and wellbeing of all people living in Canada.

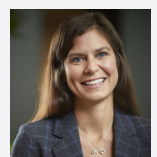


Source: Government of Canada

- 1 Government of Canada. Drug and vaccine authorizations for COVID-19. February 18, 2022. <https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/drugs-vaccines-treatments/authorization/list-drugs.html>
- 2 Government of Canada. COVID-19 vaccination in Canada. February 18, 2022. <https://health-infobase.canada.ca/covid-19/vaccination-coverage/>

*"This is an exciting time in science and biopharmaceutical innovation – where unparalleled medical advances are revolutionizing how many diseases are diagnosed and treated. As a global, science-led company, AstraZeneca is pushing the boundaries of science to discover and develop new life-changing treatments – helping to transform health care, change the lives of billions of people for the better and address some of the biggest healthcare challenges facing humankind."*

**KIERSTEN COMBS**  
PRESIDENT  
ASTRAZENECA CANADA



## HOW DID WE DO IT?

1. **FUNDING:** The Government of Canada acted quickly to fund COVID-19 health research, investing over \$2 billion since the start of the pandemic to support Canada's research ecosystem in the fight against COVID-19.
2. **FUNDAMENTAL SCIENCE:** SARS-CoV-2 is a new infectious agent, but coronaviruses are not. Years of basic biomedical research gave scientists a foundational understanding of coronaviruses that allowed them to quickly move beyond understanding SARS-CoV-2 to developing solutions to prevent and tackle the virus.
3. **UNPRECEDENTED COLLABORATION:** Canada—and the world—saw unprecedented levels of collaboration among and between sectors and knowledge sharing across jurisdictions.
4. **PUBLIC AND PATIENT ENGAGEMENT:** Recruitment of sufficient numbers of participants is often a challenge for clinical trials, but widespread public interest in solutions to COVID-19 helped to quickly attract large numbers of enthusiastic trial participants.

## RIISING TO THE CHALLENGE

The COVID-19 pandemic undoubtedly had an enormous impact on Canada, from the disruption to people's daily lives, to the halting of ongoing health and clinical research, to exacerbating the challenges facing research personnel, chronically ill patients and vulnerable populations across the country.

- Many ongoing research projects and funding opportunities were put on hold in order to focus efforts on the COVID-19 pandemic, many of which have yet to resume. Researchers across the country—from graduate students and trainees to postdoctoral fellows and early- and mid-career investigators—continue to face uncertain futures in research.
- Other health concerns and diseases did not stop for COVID-19. Indeed, many ongoing health concerns—like mental health, addictions and chronic conditions—have been exacerbated by the pandemic and require continued research to address them.
- In addition to the impact COVID-19 has had on chronically ill populations, it has also disproportionately impacted already vulnerable and diverse communities, especially among Indigenous and racialized communities.







The pandemic also created unique challenges for the different sectors that comprise the health research and innovation ecosystem:

- Academic health science centres—our research institutes and teaching hospitals—lost critical research funding due to the halting of ongoing clinical research and subsequent pullout of private industry partners as they focused their own efforts on responding to the pandemic.
- Health charities are critical service providers to some of Canada's most vulnerable populations and represent a vital source of funding for health and clinical research. Reduced philanthropic donations as a result of the economic challenges presented by COVID-19 severely reduced health charities' capacity to carry out these fundamental activities and continue to threaten the long-term health of this sector.
- The pandemic has created unique barriers for post-secondary institutions—in particular, their ability to attract and retain international students and talent.
- In response to the COVID-19 pandemic, health and biosciences companies largely focused their efforts and resources towards vaccine, treatment and diagnostic research and development, as well as supplying front line workers with critical medical and personal protective equipment. With resources dedicated elsewhere, their ability to continue to invest in clinical research throughout much of the pandemic was severely limited. At the same time, health and biosciences companies were faced with continued uncertainty regarding the upcoming changes to the Patented Medicine Prices Review Board (PMPRB) regulations.

Despite these challenges, Canada's health research and innovation ecosystem rose to the challenge of COVID-19, focusing efforts on advancing innovative health research to combat the virus and continuing to support our most vulnerable populations.

## INTO THE FUTURE

The response of Canada's health research and innovation ecosystem to the COVID-19 pandemic is a shining example of what we can accomplish when we work collaboratively and are supported both financially and with policies that enable and foster trans-sector partnerships between and among stakeholders. With the growing spread of COVID-19 variants, health research and innovation will continue to be critical in helping us to understand these variants and assess the effectiveness of vaccines and other interventions to achieve herd immunity and enable us to return to—and maintain—a sense of normalcy in our daily lives.

**We need to continue to support this ecosystem approach to research and innovation to ensure that Canada is prepared for the health challenges yet to come.**

*"University Health Network is excited to support Research Canada and the new Parliamentary Health Research Caucus. At Canada's largest research hospital, a commitment to the full spectrum of fundamental, translational, and clinical research is part of our vision to create a healthier world. From basic discoveries in cancer, cardiovascular disease, transplantation, immunology and neurology, to cutting-edge experimental therapies using nano technology, advanced genomics and regenerative medicine, our researchers are transforming the future of care and driving innovation, commercialization and growth of the life sciences ecosystem in Canada. We are honoured to be here and to share our progress with you."*

**DR. BRAD WOUTERS**  
EXECUTIVE VICE-PRESIDENT,  
SCIENCE AND RESEARCH  
UNIVERSITY HEALTH NETWORK



# Helping Canadians through Health Research and Innovation



**Aidan Deschamps**  
PATIENT, CHEO RESEARCH INSTITUTE

Aidan Deschamps is hitting all the developmental milestones expected of any 10-month-old baby, but things could have turned out very different had he not been born in the right place at the right time.

The Ottawa baby is a pioneer in medicine, the first in Canada to be diagnosed with spinal muscular atrophy (SMA) using Ontario's newborn screening test, and the first in the country, outside of clinical trials, to be subsequently treated for the rare and often fatal neuromuscular disease using gene replacement therapy.

*Read Aidan's story in the Ottawa Citizen: Ottawa baby a pioneer of gene therapy for rare disease*

**Gabrielle Fontaine**  
GRADUATE STUDENT, UNIVERSITY OF MANITOBA

The earlier breast cancer is detected, the more treatable it is. But for remote communities, that early detection is out of reach. Gabrielle Fontaine, an Anishinaabe student from Sagkeeng First Nation is working on an easy-to-use portable device to help people in remote communities detect breast cancer before it becomes a death sentence.

*"This device could be placed in rural community centres so that anyone on the reservation can have access to it. That way, we can reduce and prevent unnecessary death."*

*Read Gabrielle's story from CBC News: Anishinaabe U of M student building portable device to detect breast cancer earlier*



**Andrea Redway**  
PATIENT, INNOVATIVE MEDICINES CANADA

In 2015, at the age of 47 and with no risk factors, Andrea Redway's world was turned upside down by a stage 4 lung cancer diagnosis. Andrea endured a difficult two months full of chemotherapy and radiation treatments following her diagnosis. Then she heard of an innovative new immunotherapy treatment. That treatment ultimately saved her life.

*"Having access to innovative medicines and treatments meant everything to my family."*

*Read Andrea's story on Innovative Medicines Canada's website: Meet the Patients*

*"The healthcare sector faces immense challenges in the coming years – keeping pace with developments in population change, and the evolution of new technologies to diagnose and treat patients. Forging partnerships across all parties involved in the delivery of health solutions is key to ensuring that innovation is embraced, and real change occurs. Working together with governments of all levels, and other partners in the continuum of care for Canadians, is fundamental in ensuring the development of strategies, solutions and hardware to meet both new and old challenges, and to ensure a healthy healthcare system for Canada."*

**SEVKET ON**  
MANAGING DIRECTOR, CANADA  
SIEMENS HEALTHINEERS



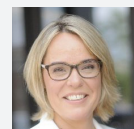
# Research Canada Members

Research Canada is proud to have over 100 member organizations that represent the diverse Canadian health research and health innovation ecosystem.

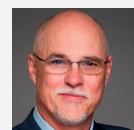
- AbbVie Canada
- Alberta Health Services
- ALS Society of Canada
- Arthritis Society
- Association of Faculties of Pharmacy of Canada
- Banting Research Foundation
- Baycrest Health Sciences
- BD Canada
- BioCanRx
- BIOTECCanada
- Bruyère Research Institute
- Canada Fetal Alcohol Spectrum Disorder Research Network (CanFASD)
- Canadian Association for Neuroscience
- Canadian Association of Occupational Therapists
- Canadian Cancer Society
- Canadian Foundation for Animal-Assisted Support Services (CFAS)
- Canadian Frailty Network
- Canadian Institute for Military and Veteran Health Research (CIMVHR)
- Canadian Medical Hall of Fame
- Canadian Nuclear Laboratories
- Canadian Nurses Foundation (CNF)
- Canadian Organization for Rare Disorders
- Canadian Society for Immunology
- Canadian Society for Medical Laboratory Science
- Canadian Society for Molecular Biosciences (CSMB)
- Cancer Research Society
- Carleton University
- Centre for Addiction and Mental Health (CAMH)
- Children's Hospital of Eastern Ontario (CHEO) Research Institute
- Crohn's and Colitis Canada
- Diabetes Canada
- Douglas Mental Health University Institute
- Eastern Health
- École de technologie supérieure
- Friends of CIHR
- GE Healthcare Canada
- Genzyme Canada
- Gilead Sciences Canada
- Canadian Glycomics Network (GlycoNet)
- Hamilton Health Sciences
- HealthCareCAN
- Health Sciences North Research Institute (HSNRI)
- HSF Canadian Partnership for Stroke Recovery (CPSR)
- Huntington Society of Canada
- Innovative Medicines Canada
- Institut de recherches cliniques de Montreal (IRCM)
- Institute for Advancements in Mental Health
- IWK Health Centre
- JDRF
- Johnson & Johnson
- Kids Brain Health Network
- Kingston General Health Research Institute
- Lady Davis Institute
- Lawson Health Research Institute
- Lunenfeld-Tanenbaum Research Institute
- March of Dimes Canada
- McMaster University
- Micellae Delivery Systems Inc.
- MedicAlert Foundation Canada
- Memorial University Faculty of Medicine
- Montréal Neurological Institute
- Mood Disorders Society of Canada
- Myeloma Canada
- Neighbourhood Pharmacy Association of Canada
- New Brunswick Health Research Foundation
- Nova Scotia Health Authority
- Osteoporosis Canada
- Ottawa Hospital Research Institute
- Ovarian Cancer Canada
- Pancreatic Cancer Canada
- Pfizer Canada
- Providence Health Care Research Institute
- Provincial Health Services Authority, BC
- Queen's University
- Research Institute of the McGill University Health Centre (RI-MUHC)
- Ryerson University
- Saint Paul University
- SickKids Research Institute
- Simon Fraser University
- Stem Cell Network
- Sunnybrook Health Sciences Centre
- The Graham Boeckh Foundation
- The Michener Institute of Education at UHN
- The Royal College of Physicians and Surgeons of Canada
- The Royal's Institute of Mental Health Research, affiliated with the University of Ottawa
- Thunder Bay Regional Health Sciences Centre and Thunder Bay Regional Health Research Institute
- University Health Network
- University of Calgary
- University of Manitoba, Faculty of Medicine
- University of Montréal Faculty of Medicine
- University of New Brunswick
- University of Ottawa Heart Institute
- University of Regina
- University of Saskatchewan
- University of Waterloo
- University of Western Ontario
- Vaccine and Infectious Disease Organization – International Vaccine Centre (VIDO-InterVac)
- Vancouver Coastal Health Research Institute
- VoxCell BioInnovation
- Waypoint Centre for Mental Health Care
- Women's College Research Institute and Women's College Hospital
- York University

*"Thanks to continued support from the federal government, Canada's Stem Cell Network has been leading the way in building national capacity in stem cell and regenerative medicine research. Advancements have been made in areas such as type 1 diabetes, retinal degeneration, and diseases such as Parkinson's, muscular dystrophy and blood cancers. The field of regenerative medicine holds great promise not just for improved health, but also for contributing to our economy. Experts anticipate that Canada is well placed to capture 5% of the global market for regenerative medicine. This represents approximately \$5 billion and 6,000 new jobs in the coming years."*

**CATE MURRAY**  
EXECUTIVE DIRECTOR & COO  
STEM CELL NETWORK



**DR. MICHAEL RUDNICKI**  
CEO & SCIENTIFIC DIRECTOR  
STEM CELL NETWORK





# Thank You to Our Sponsors



**Innovative Medicines Canada** is the national voice of Canada's innovative pharmaceutical industry. We advocate for policies that enable the discovery, development and commercialization of innovative medicines and vaccines that improve the lives of all Canadians. We support our members' commitment to being valued partners in the Canadian healthcare system.



**Gilead Sciences Canada, Inc.** (Gilead Canada) is the Canadian affiliate of Gilead Sciences, Inc. and was established in Ontario, in 2006. With 21 marketed products, we work in the therapeutic areas of HIV, liver disease, oncology, inflammatory diseases and respiratory diseases supporting full-scale commercial, medical, regulatory, finance and legal operations for both Gilead Sciences and Kite, a Gilead Company, in Canada.



**BioCanRx**, Canada's Immunotherapy Network, is a network of scientists, clinicians, cancer stakeholders, academic institutions, NGOs and industry partners working together to accelerate the development of leading edge immune oncology therapies for the benefit of patients. BioCanRx is becoming a world-leader in the translation, manufacture and adoption of cancer immunotherapies.



**AstraZeneca** is a global, science-led biopharmaceutical business and our innovative medicines are used by millions of patients worldwide. Our core focus is in the areas of Cardiovascular, Renal and Metabolism; Oncology; Respiratory & Immunology; Rare Diseases; Infection and Vaccines. The company employs more than 1,100 people across Canada, including roughly 700 employees at our head office and clinical research hub in Mississauga, Ontario. Globally, AstraZeneca has established itself as a leader in sustainability – playing an important part tackling the biggest challenges of our generation, from climate change to the COVID-19 pandemic, access to healthcare to issues of equality.



**Siemens Healthineers** pioneers breakthroughs in healthcare. For everyone. Everywhere. As a leading medical technology company, Siemens Healthineers is continuously developing its product and service portfolio, with AI-supported applications and digital offerings. These new applications enhance the company's foundation in in-vitro diagnostics, image-guided therapy, in-vivo diagnostics, and innovative cancer care.

An average of 85,000 Canadians every day receive treatment or tests from a Siemens Healthineers device, and 70% of critical clinical decisions are influenced by the technology we provide. Our 1,000 employees in Canada include sales, service, and training specialists, which includes some 300 team members at our Point of Care manufacturing facility in Ottawa where handheld blood analysis devices are developed and made.



**The Stem Cell Network (SCN)** is a national not-for-profit organization that supports three main objectives: stem cell and regenerative medicine research; training the next generation of highly qualified personnel; and supporting the knowledge mobilization and transfer of stem cell and regenerative medicine research. From the lab to the clinic, our goal is to power science that will benefit Canadians. With support from the Government of Canada, the Network has grown from a few dozen labs to more than 199 world-class research groups, supporting 200+ research projects and 24 clinical trials. Since its inception, 21 biotech companies have been catalyzed and more than 4,000 highly qualified personnel have been trained.



**University Health Network (UHN)** is Canada's largest research hospital and home to the Princess Margaret Cancer Centre, the Toronto General Hospital, the Toronto Western Hospital and the Toronto Rehab Institute, as well as seven research institutes and Michener, our applied health education school. With an annual budget approaching \$500 million dollars, we invest in innovative fundamental science, translational research, clinical research and commercialization to positively impact the lives of patients and families that we serve. This work is led by over 5000 scientists, clinicians, technical staff, students and fellows, and is strongly supported by our two foundations—The Princess Margaret Cancer Foundation and the UHN Foundation. Together with academic, philanthropic, government, private and patient partners, we are making progress every day towards creating A Healthier World.





**The Arthritis Society** is Canada's national charity dedicated to extinguishing arthritis. We represent the six million Canadians living with arthritis today and the millions more at risk. We're investing in high-risk, high-reward research and social impact projects and accelerating the success of innovators to get solutions to those that need them most.



**Igniting the bio-economy's brainpower**  
**Catalyseur de l'intelligence en bioéconomie**

**BioTalent Canada** supports the people behind life-changing science. Trusted as the go-to source for labour market intelligence, BioTalent Canada is focused on igniting the industry's brainpower, bridging the gap between job-ready talent and employers, and ensuring the long-term agility, resiliency, and sustainability of one of Canada's most vital sectors.



**Canadian Nuclear Laboratories**  
**Laboratoires Nucléaires Canadiens**

**CNL** is Canada's premier nuclear science and technology organization, and a world leader in developing nuclear technology for peaceful and innovative applications. Using our unique expertise, we are restoring and protecting the environment, we are advancing clean energy technology, and our medical breakthroughs continue to improve the health of people around the world.



**GlycoNet** is a federally funded pan-Canadian network focusing on glycomics—the study of carbohydrates—to deliver made-in-Canada solutions to global health and sustainability issues. GlycoNet amplifies Canada's competitive edge in world-class glycomics training, research, and commercialization to develop therapies and vaccines for human and animal health. Website: glyconet.ca



**Nexim Healthcare Consultants** has provided qualified registered nurses, homecare staff, personal support workers, developmental service workers, and housekeeping staff to our partner organizations across Ontario for 10 years. We supply healthcare staffing support on a 24/7 basis to hospitals, long-term care, retirement residences, community living, home care, shelters, and prisons.



A leading postsecondary institution in Ontario, **Sheridan** educates approximately 43,000 full- and part-time students annually from campuses in Brampton, Mississauga and Oakville. A trailblazer in unique arts, technology, health care, research and innovation, Sheridan ensures students learn job-ready, practical skills and develop the confidence and problem-solving savvy to push boundaries in an ever-changing world.



The Ottawa Hospital's Biotherapeutics Manufacturing Centre (BMC) is the most experienced facility of its kind in Canada, having manufactured more than a dozen biological therapies and vaccines for clinical trials on three continents. With eight GMP suites and 40 staff, BMC offers comprehensive services to academic and corporate partners.



**The Canadian Medical Hall of Fame** (CMHF) celebrates Canadian leaders whose work advances health in Canada and the world, inspiring the pursuit of careers in the health sciences. We foster future generations of health professionals through youth education programs and awards. This enduring tribute to our country's rich medical history is showcased virtually at [www.cdnmedhall.ca](http://www.cdnmedhall.ca).



**BD Biosciences** is an industry pioneer with a rich and continued legacy of innovation and transformation in research discoveries. We offer Canadian researchers a one-of-a-kind combination of instruments, reagents, and software for an end-to-end customer solution and service.



**The Canadian Society for Medical Laboratory Science** (CSMLS) represents over 14,000 medical laboratory professionals, many who have been providing accurate testing and results informing public health decisions during the pandemic. Often unseen, these health care heroes are key to patient care and rely on system-wide support to continue their essential work.



**CENTRE FOR AGING + BRAIN HEALTH INNOVATION**  
**Powered by Baycrest**

Canada's leading accelerator in the aging and brain health sector, **CABHI** provides networking, funding, and support to seniors care organizations, front-line care workers, researchers, and innovators for the development, testing, and dissemination of new ideas, programs, and technologies. CABHI is a collaboration of health care, science, industry, not-for-profit and government partners whose shared aim is improved quality of life for the world's aging population.



**GSK** is a science-led global healthcare company with a special purpose: to help people do more, feel better, live longer. Our goal is to be one of the world's most innovative, best performing and trusted healthcare companies. We are deeply committed to using our science to bring differentiated, high-quality, and affordable products to Canadian patients in a timely manner.



**The Institute for Advancements in Mental Health (IAM)** develops and creates solutions working with and for people living with mental health needs. At IAM, collaboration is key to creating a better society for all. To learn more: [iamentalhealth.ca](http://iamentalhealth.ca)



The **IRCM** is an independent, dynamic and multidisciplinary biomedical institution that conducts basic and clinical research and trains high-level future scientists. Driven by life, it seeks to improve scientific knowledge through excellence, collaboration and innovation to pave the way for a new generation of health solutions and treatments.



**Lakehead University** is a comprehensive, research-intensive university with campuses in Thunder Bay and Orillia. As the only university in Northwestern Ontario, we serve a geographical catchment area the size of France, including almost 80% of Ontario's First Nations communities. For five years in a row, Research InfoSource ranked Lakehead University Canada's #1 Research University in our peer category and in 2020, we ranked first in not-for-profit research income.



**Mood Disorders Society of Canada**  
La Société Pour Les Troubles de L'Humeur du Canada

**Mood Disorders Society of Canada** provides a strong, cohesive national voice for people with mood disorders & their families. MDSC aims to improve access to treatment, inform research, shape program development & government policy to improve the quality of life for people affected by mood disorders.



**The Neuro (Montreal Neurological Institute-Hospital)** is a bilingual, world-leading destination for neuroscience research and advanced patient care. As the first institute in the world to fully embrace Open Science, The Neuro is committed to openly sharing data, resources, and expertise in order to advance science and discover new treatments. [www.theneuro.ca](http://www.theneuro.ca)



**Nova Scotia Health Innovation Hub: Discovering high-impact health care solutions.** The first of its kind in Atlantic Canada, Nova Scotia Health's Innovation Hub is a centre of excellence for health research, innovation and discovery. Through strategic partnerships, the Innovation Hub is transforming health care through leading-edge research and is delivering high-impact solutions for patients and providers.



**Ryerson University** is one of Canada's largest comprehensive universities and a leader in innovative, career-oriented education. Here, learning and experience go hand-in-hand. What our students study in the classroom is enhanced by real-world knowledge and informed by our mission to serve societal needs. Located in the heart of Toronto, the university's focus on experiential learning and entrepreneurship place it in a unique position to make an impact locally and across the globe.



**THE TERRY FOX RESEARCH INSTITUTE**  
L'INSTITUT DE RECHERCHE TERRY FOX

**The Terry Fox Research Institute** invests in groundbreaking cancer research. With support from the Canadian government, the Terry Fox Foundation and partners, it leads two precision medicine initiatives, The Marathon of Hope Cancer Centres and The Digital Health and Discovery Platform (co-led with Imagia), to improve outcomes for cancer patients.



**The University of Alberta** in Edmonton is one of the top teaching and research universities in Canada, with an international reputation for excellence across the humanities, sciences, creative arts, business, engineering and health sciences. The U of A is also home to the Li Ka Shing Applied Virology Institute, led by Nobel Prize laureate Michael Houghton and renowned virologist Lorne Tyrrell.



**The Women and Children's Health Research Institute (WCHRI)** supports research excellence dedicated to improving the health and lives of women and children. WCHRI is a partnership between the University of Alberta and Alberta Health Services, with core funding from the Stollery Children's Hospital Foundation and the Alberta Women's Health Foundation.