

Research for a HEALTHIER CANADA



CIHR IRSC
Canadian Institutes of Health Research / Instituts de recherche en santé du Canada

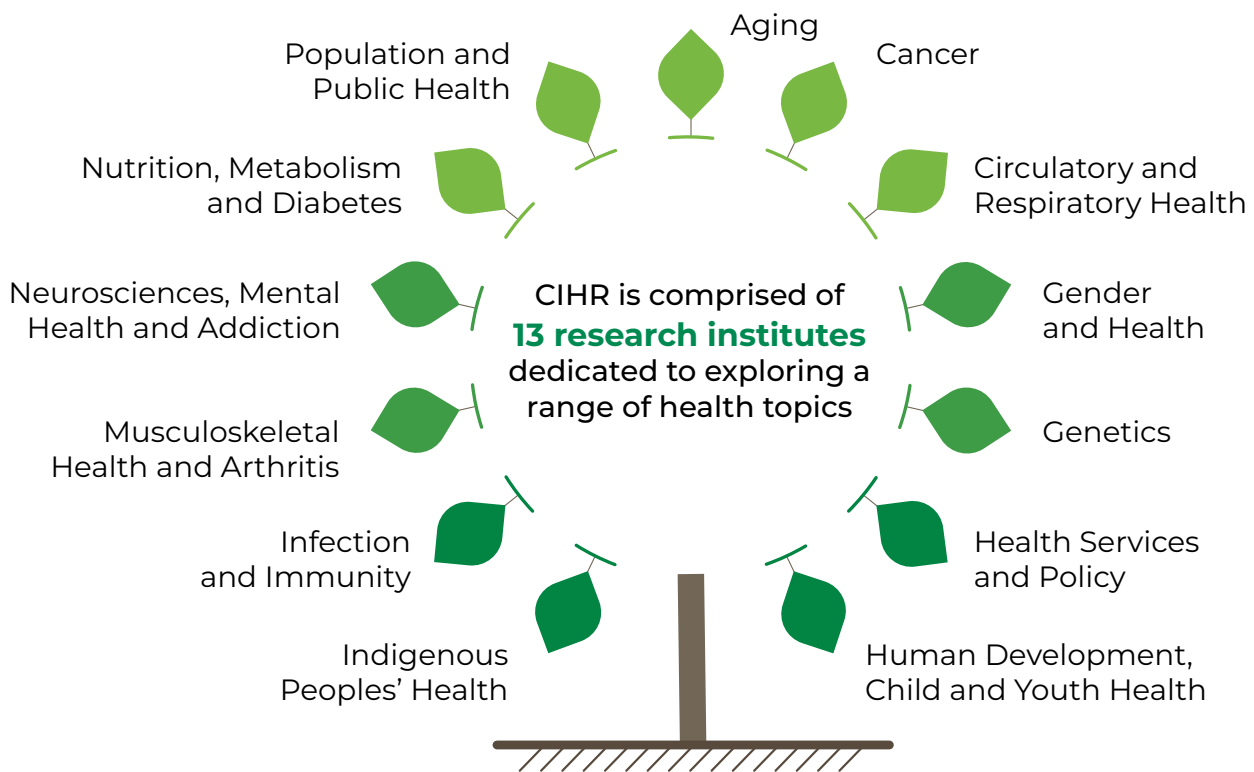
One of the most important investments we can make as a nation



At the Canadian Institutes of Health Research (CIHR), we believe research has the power to change lives.

As the Government of Canada's health research investment agency, we fund world-class research across the country to strengthen our health care system, find solutions to the most pressing health challenges, and improve the health of Canadians and people around the world.

Comprised of [13 research institutes](#) and headquarters in Ottawa, we are an independent agency that reports to Parliament through the Minister of Health. CIHR was created in 2000 when the [Canadian Institutes of Health Research Act](#) was signed into law.



Overall strategic directions are set by our [Governing Council](#), which has a mandate to oversee the direction and management of the property, business and affairs of CIHR.

The [executive management team](#) provides leadership and strategic decision-making for Agency-wide management areas, including Corporate Services, Research Programs, Operations, Strategy, and Government and External Relations.

A Vision for a Healthier Future

CIHR's [2021-2031 Strategic Plan](#) envisions a future where Canadian researchers are global leaders in the development of ground-breaking discoveries that improve lives in Canada and around the world. CIHR will achieve this vision by prioritizing activities that:



advance research excellence in all its diversity by championing a more inclusive concept of research excellence, supporting stronger research teams, promoting open science, and enhancing national and international collaboration;



strengthen Canadian health research capacity by strengthening investigator-initiated research, promoting equity, diversity, and inclusion among researchers, and enhancing training and career support as well as CIHR's rapid response capacity;



accelerate the self-determination of First Nations, Inuit, and Métis Peoples in health research by implementing the strategic plan of the Institute of Indigenous Peoples' Health and CIHR's Building a Healthier Future action plan, and by removing barriers to Indigenous-led research;



pursue health equity through research by championing research on inequitable health outcomes, access to health care in Canada, and the determinants of health, and by driving progress on global health research; and



integrate evidence in health decisions by advancing the science of knowledge mobilization, maximizing results for Canadians, and strengthening Canada's health systems through innovation.

CIHR Investments: By the Numbers

CIHR has a big role to play in keeping Canadians healthy.

In 2022-23, we invested:

\$1B+

of taxpayer money

plus

\$125M+

of partner funding

TO SUPPORT

16,000



independent health
researchers and trainees

THROUGH

100 +



funding competitions

Of this **\$1 BILLION**,
CIHR invests **more than 90%**
of its budget [directly into health research activities](#).

Each year, CIHR's grants and awards expenditures are divided into **two main categories** to reflect CIHR's financial management investment flexibility in its programs:

CATEGORY 1: DISCRETIONARY FUNDING

The discretionary funding category represents the portion of funding over which CIHR has financial management and investment flexibility. These funds support a variety of programs, including [investigator-initiated research programs](#), [training and career support programs](#), and [research in priority areas](#).

In 2022-23, the discretionary funding category represented about **64% of the total grants and awards expenditures**, or approximately **\$804.7 million**.

CATEGORY 2: NON-DISCRETIONARY FUNDING

The non-discretionary funding category is divided into Government of Canada Priorities (also known as Ring-Fenced Funds) and Tri-Agency Programs (also known as Separately Listed Grants). Investments in this category are prescribed by the Government of Canada and can only be used for the prescribed purposes.

For 2022-23, the non-discretionary funding category represented about **36% of the total grants and awards expenditures**, or approximately **\$453.7 million**.

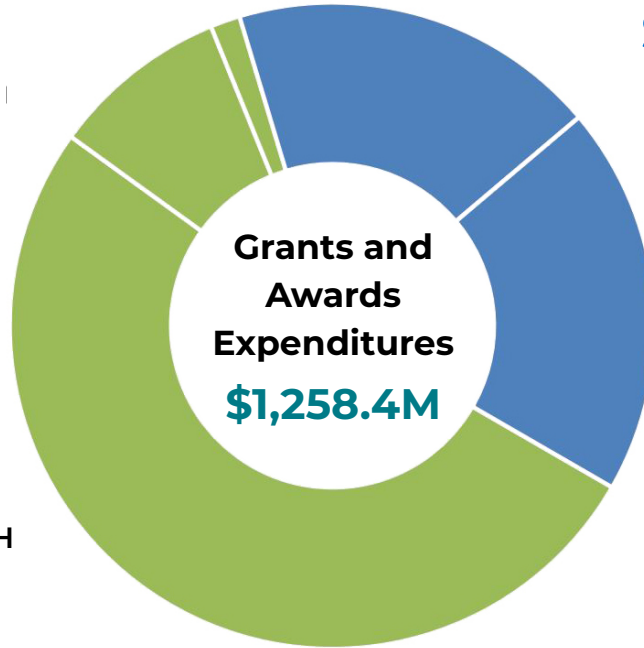
Budget Overview (2022-23)

DISCRETIONARY
\$804.7M

TRAINING AND CAREER SUPPORT
\$19.4M

RESEARCH IN PRIORITY AREAS
Institute and Corporate-led Initiatives
\$130.2M

INVESTIGATOR-INITIATED RESEARCH
Project and Foundation Grants
\$655.1M



NON-DISCRETIONARY
\$453.7M

TRI-AGENCY PROGRAMS
Separately Listed Grants
\$231.1M

GOVERNMENT OF CANADA PRIORITIES
Ring-Fenced Initiatives
\$222.6M

Partnerships for Impact

It takes a village to support innovative and life-changing health research. This is why CIHR is proud to work with national and international partners across all sectors to fund top research projects. By playing a leadership role in convening a united community of partners, CIHR helps to create a vibrant health research ecosystem and achieve maximum impact for Canadians.

Leveraged Partner Funding by Sector in 2022-23 (in millions of dollars)

16.4% INTERNATIONAL \$23M

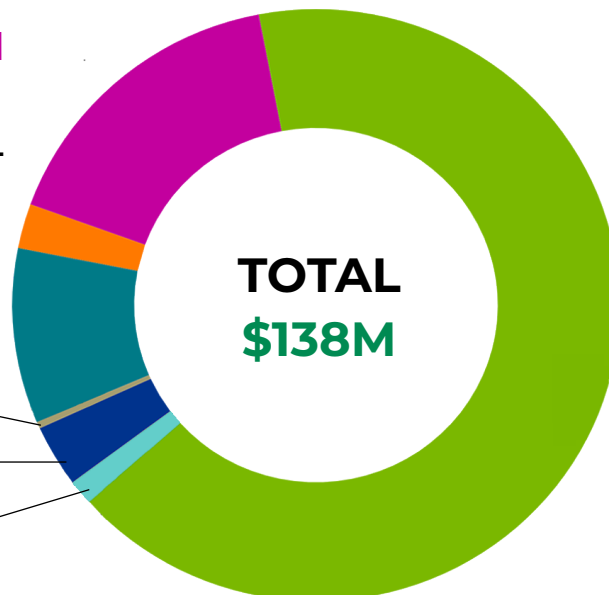
2.4% MUNICIPAL/PROVINCIAL FUNDER \$3M

9.5% NOT-FOR-PROFIT \$13M

0.4% PROFIT \$1M

3.4% UNSPECIFIED \$5M

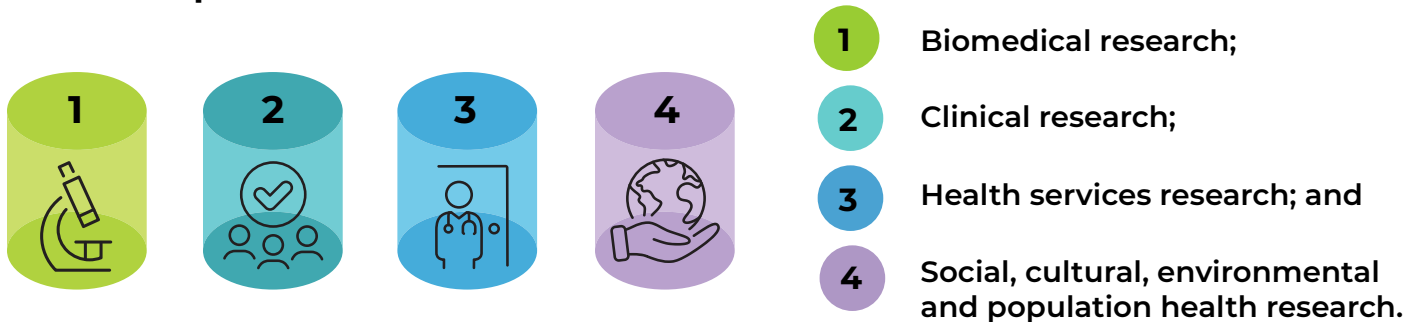
1.3% ACADEMIA \$2M



66.5%
FEDERAL PARTNER
\$91M

Supporting All Pillars of Health Research

CIHR's investments cover a vast range of health challenges spanning across **four main pillars:**



Together, these pillars aim to improve the overall health of communities across Canada and around the world.

1. BIOMEDICAL RESEARCH

Biomedical research focuses on understanding how every part of the human body works—right down to our cells. By studying the normal and abnormal workings of the body at the molecular, cellular, organ system, and whole-body levels, biomedical research leads to new:



Ways of identifying and diagnosing disease



Interventions to prevent illness in the first place



Tools and equipment to enhance patient care and health outcomes



Medicines, vaccines, and therapies to improve our health

SPOTLIGHT ON:

Learn more at: cihr-irsc.gc.ca/biomedical.html



Dr. Juliet Daniel | McMaster University

There isn't currently a cure for breast cancer – but that isn't stopping Dr. Juliet Daniel from finding new treatments and therapies for women living with Triple Negative Breast Cancer, an aggressive form that predominantly affects young Black women. [Read more >](#)

Dr. Edan Foley | University of Alberta

Did you know that studying the guts of fruit flies can help us learn more about human immunity and disease? Through these flies, Dr. Edan Foley is uncovering how inflammatory bowel disease and colorectal cancers develop in humans. [Read more >](#)



2. CLINICAL RESEARCH

Clinical research aims to find new ways of preventing, diagnosing, and treating disease and illness. With the help of volunteer participants, clinical research leads to new and improved:



Medications, vaccines, therapies and treatments



Medical tests, procedures and practices



Medical tools, equipment and devices



Scientific knowledge and understanding of illness and disease

THERE ARE TWO MAIN TYPES OF CLINICAL RESEARCH:



OBSERVATIONAL STUDIES

In observational studies, researchers use questionnaires and medical tests to collect and analyze data about patients' health, habits and behaviours, biology, bodily functions and changes, and more. This helps researchers better understand the factors that contribute to health or disease.



CLINICAL TRIALS

In clinical trials, researchers test a new intervention – like a vaccine, medical device, or health program – and compare the results with a placebo group (i.e., a group that did not receive the intervention). This helps researchers determine whether the new intervention is safe and (more) effective for patients.

SPOTLIGHT ON:

Learn more at: cihr-irsc.gc.ca/clinical.html



Dr. Mohammad Auais | Queen's University

A hip fracture can be life-changing for older adults, but it doesn't have to be this way. With his "Stronger at Home" program, Dr. Mohammad Auais is helping hip fracture patients recover and rehabilitate in their own homes—and regain their independence in the process. [Read more >](#)

Dr. Erin Michalak | University of British Columbia

Bipolar disorder is a serious health condition that affects over half a million people in Canada – but with proper care and support, people living with this condition can flourish. Dr. Erin Michalak is developing practical, accessible and personalized online tools and resources to help people with bipolar disorder thrive. [Read more >](#)





Dr. Elaine Biddiss | Holland Bloorview Kids Rehabilitation Hospital

For children living with physical disabilities like cerebral palsy, it can be challenging (and boring!) to stick to a regular physical and rehabilitation therapy program. To keep them on track, Dr. Elaine Biddiss created “Bootle Blast,” an interactive video game for children that helps them improve their motor skills in a fun and engaging way. [Read more >](#)

3. HEALTH SERVICES RESEARCH

Health services research helps improve the efficiency and effectiveness of Canada’s health care system so all Canadians can get the help they need, when they need it. By studying how health care services are organized, supported, and delivered across the country, this multidisciplinary field of research has four primary goals:



Enhance
the quality of
care for patients



Improve
the health care
provider experience



Reduce
costs by maximizing
the value of care



Improve
the overall health
of the population

SPOTLIGHT ON:

Learn more at: cihr-irsc.gc.ca/healthservices.html



Dr. Emily Gard Marshall | Dalhousie University

We know that more than 5 million Canadians do not have a family doctor. It’s a complicated issue, but Dr. Emily Gard Marshall argues that research is part of the solution. Her own research on primary care can help us understand what is working, what is not, and why. [Read more >](#)

Dr. Tom Stelfox | University of Calgary

In theory, the transition and support system for patients being discharged from the intensive care unit (ICU) sounds straightforward. In practice, however, it’s not so easy. That’s why Dr. Tom Stelfox is developing practical, evidence-based tools to help patients, their families, and care providers navigate the path to long-term recovery after a stay in the ICU.

[Read more >](#)



4. SOCIAL, CULTURAL, ENVIRONMENTAL AND POPULATION HEALTH RESEARCH

Social, cultural, environmental, and population health research aims to improve the health of entire communities by understanding how our health is impacted by:



SOCIAL FACTORS

Such as your age, sex and gender, education, and social support network



ENVIRONMENTAL FACTORS

Such as the city and country you live in, housing, and living conditions



CULTURAL FACTORS

Such as practices, beliefs, expectations and norms



OCCUPATIONAL FACTORS

Such as employment status, security, and work conditions

Learn more at: cihr-irsc.gc.ca/pophealth.html



ECONOMIC FACTORS

Such as household income, stability, and cost of living

SPOTLIGHT ON:



Dr. Daniel Fuller | University of Saskatchewan

Urban planning and infrastructure design can affect our health in big ways. Dr. Daniel Fuller's research focuses on how different interventions – from bicycle share programs, to bridge construction, to snow clearing services – can help create healthier cities and encourage Canadians to be more physically active. [Read more >](#)

Dr. Arijit Nandi | McGill University

We know that our biology plays an important role in determining our health, but public policies can also have a significant impact. Dr. Arijit Nandi believes building the 'right' policies to improve population health involves asking the right questions first. That's why his team works with partners around the world to find the best ways to bring positive change. [Read more >](#)

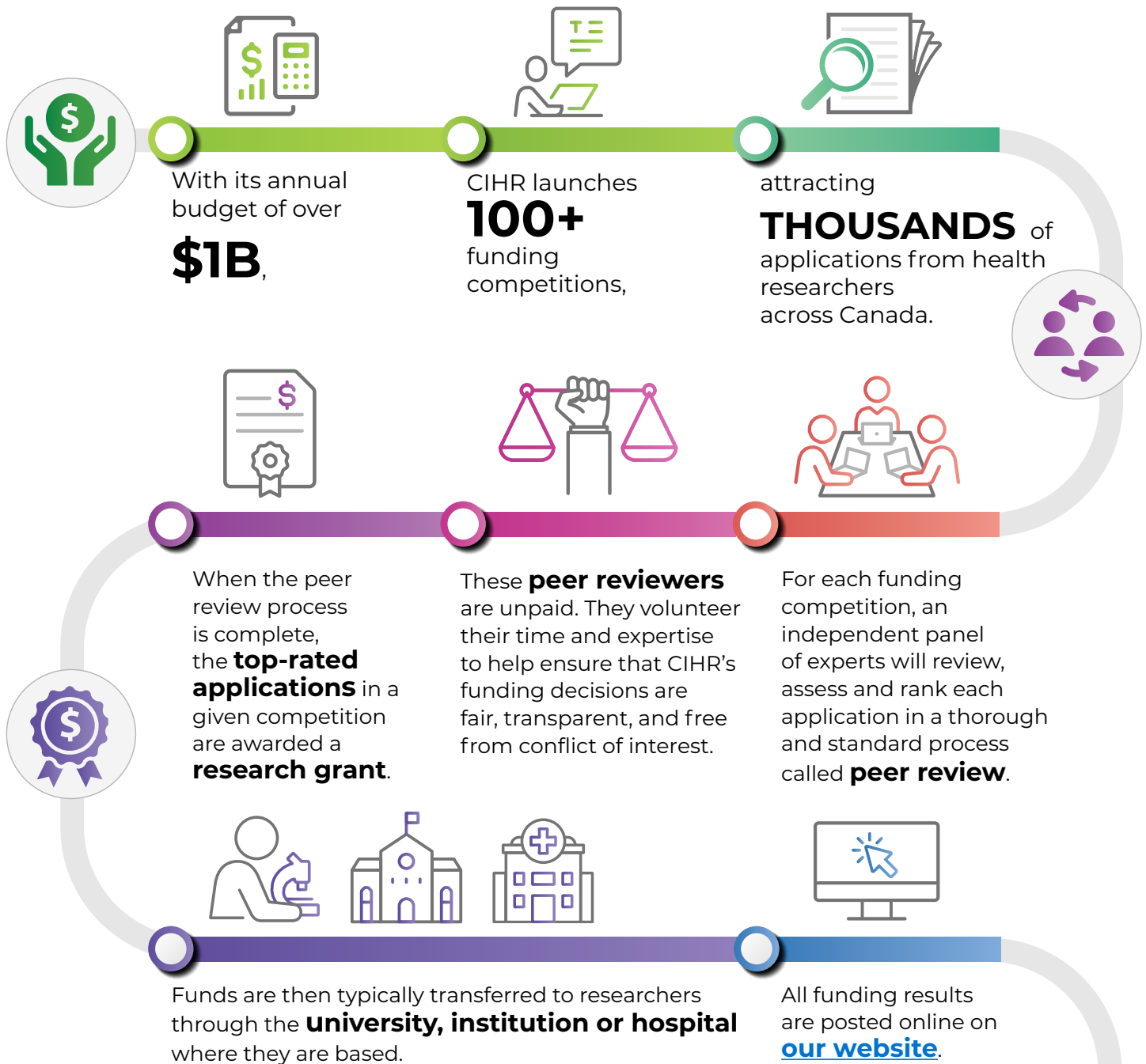


Dr. Alexandra King | University of Saskatchewan

Across Canada, Indigenous women are disproportionately represented in the criminal justice system. This can have significant impacts on their physical, emotional, and spiritual health—but Dr. Alexandra King is here to help. Her research includes a program called *Apihkatatan* ("Weaving Our Baskets") to support these women in their healing journey. [Read more >](#)

How Our Funding Process Works

With CIHR funding, researchers across all four health research pillars can study a problem, test an idea, and find a solution that will, in time, lead to new and improved health treatments, practices, products, and policies that keep Canadians safe and healthy. In this way, our work affects every person in Canada.



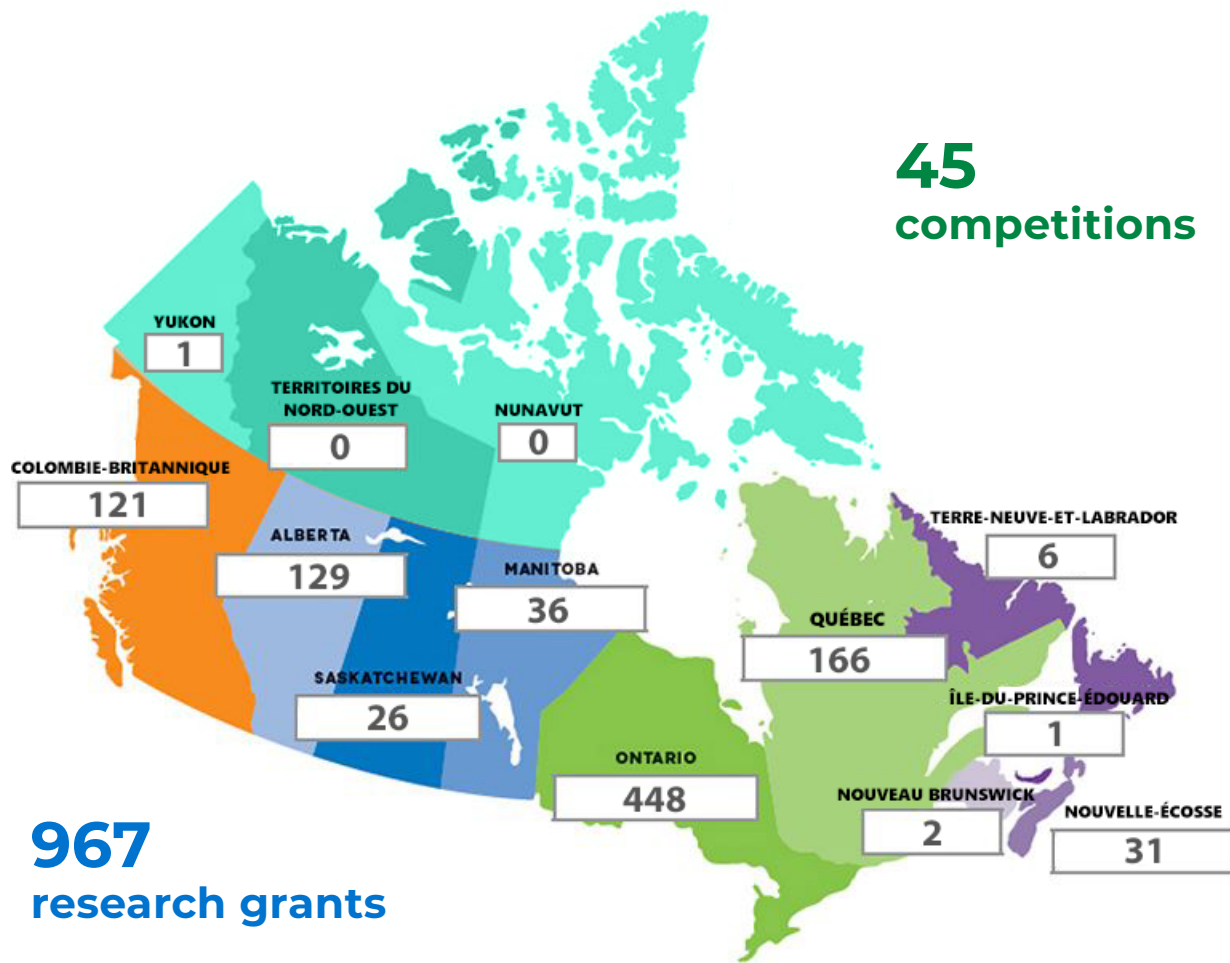
DID YOU KNOW?

Canada is lucky to be home to many talented health researchers. But this also means that research funding is very competitive, as CIHR receives more high-quality applications than current budgets alone can support.

Responding to National Health Emergencies

When health crises such as the COVID-19 pandemic arise, CIHR is quick to respond. Since the start of the pandemic, **CIHR has invested \$430 million in COVID-19 research**, with an **additional \$20.5 million contributed by partner organizations**, for a **[total investment of approximately \\$450 million](#)**. The majority of this funding has come from one-time investments in CIHR from the Government of Canada specifically for COVID-19 research.

These funds have been used to support **967 research grants** across the country through **45 different competitions**.



Research to tackle COVID-19: Mobilizing the research community to support Canada's pandemic response

Canada's research community has been a driving force behind the country's COVID-19 pandemic response – and CIHR is immensely proud to support this work.

[Learn more about how Canadian research offered hope in the fight against COVID-19.](#)

Investments in health research are investments in a stronger, healthier, and more prosperous Canada



Letting experts lead the way

The majority of our budget is devoted to open-ended funding competitions. This means that researchers can submit an application on any health-related topic of their choice.

This type of unfettered, investigator-led research has resulted in some of Canada's—and the world's—greatest scientific advancements, including:

- The [mRNA technology](#) that was used to develop the COVID-19 vaccine
- Evidence that [sex and gender](#) influence the ways men and women experience pain, respond to medications, and present symptoms of different health conditions
- Discoveries about how cells communicate—and the role this 'cell signalling' plays in cancer
- Better understanding of the social determinants of health (and, conversely, what puts people at greater risk for disease)



Research in priority areas

CIHR also supports national and international research projects that focus on specific health challenges, often because they have been identified as priorities by the Government of Canada or by one of CIHR's Institutes.

This has included research to:

- [Respond to the COVID-19 pandemic](#)
- [Address the opioid crisis](#)
- [Improve care for pediatric cancers](#)
- [Develop better treatments for dementia](#)
- [Build healthier cities](#)
- Find solutions to rising mental health challenges



Supporting the next generation

While research grants provide the “operating money” that enables great research to take place, salary awards for graduate students and doctoral fellows help ensure that the next generation of researchers will get the experience and support they need.

Among other programs, CIHR awards Canada Graduate Scholarships for [health research trainees](#), investing over \$1.98B since 2009.

We also create innovative [skills training programs](#), [design resources](#) to support diverse career prospects, and [collaborate with stakeholders](#) to enhance training best practices.