Friends of CIHR Silver Anniversary: 25 Years of Fostering Canadian Health Research

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Dedication

Acknowledgments

Foreword - Dr. Alan Bernstein, Inaugural President of CIHR

Preface - Dr. Peter N. Lewis, Interim President, Friends of CIHR

1. Origins

CIHR is created

The Medical Research Council, 1960–2000: A Legacy of Excellence

Enter Henry G. Friesen

Conceiving CIHR

CIHR is launched

CIHR leadership

Friends

The Alumni and Friends of MRC

Friends of CIHR is born

2. Governance

Friends of CIHR Executive Council

The Presidency

Vice-President

Secretary

Treasurer

Past Executive Members

Friends of CIHR Board

Former Directors/Board Members

3. Initiatives

The Henry G. Friesen International Prize in Health Research

The COVID-19 Pandemic Year(s)

Roundtables

From Bisons to Bulls: Massey College and Massey Grand Rounds (2007-present)

Janet Rossant Lectureship

4. Past initiatives

Video History of Medicine in Canada

The MaRS Discovery District Interviews

Montreal and Winnipeg interviews

Friends of CIHR Symposia (2001–2006)

Outreach and Public Awareness Efforts

Honours and Awards

5. Partners and Sponsors

Manitoba

Ottawa

Ontario and Québec

Other regions

Sponsorships

6. Friends of CIHR in 2025: Challenges and Opportunities

Appendix: Alumni and Friends of MRC Canada/Anciens et Amis de CRM Canada, 2000

Dedication

To Dr. Henry George Friesen, CIHR founder, patriarch, and guiding light, without whom Friends of CIHR would not exist.

Acknowledgements

Friends of CIHR would not exist without the leadership of Dr. Aubie Angel, dedicated Board members, our academic partners and financial supporters.

We extend our gratitude to the team whose recollections of the Friends' history made this book possible: Cristina S. Castellvi, the organization's exceptionally gifted long-serving Administrative Assistant, Vice-President Dr. Andrea Baumann, Treasurer Dr. Reinhart Reithmeier, Interim President Dr. Peter Lewis, and above all its inaugural President, Dr. Aubie Angel

Foreword

Dr. Alan Bernstein C.C. PhD FRSC FCAHS

Inaugural President

Canadian Institutes of Health Research

Let me begin by congratulating my colleague Professor Brenda Andrews, this year's highly deserving recipient of the Friends of CIHR's Henry G. Friesen International Prize in Health Research. Brenda's work is a beautiful example of the power of science to unravel the complexity of the living cell.

Twenty-five years ago, the Canadian Institutes of Health Research (CIHR) was launched. CIHR's birth, following months of debate within our community led by the formidable Henry Friesen, then president of the Medical Research Council of Canada (MRC), was a significant moment in Canadian science: Canada was taking the uncharacteristically bold step of doing away with an existing research agency and replacing it with a new one with a broadened mandate, structure, and culture. For Canadian health researchers, for our partners in the provinces and health charities, and for my colleagues and me at the helm, this was an exhilarating moment. It was truly a leap into the unknown.

Soon after the creation of CIHR, I was pleased, as CIHR's inaugural president, to provide the former Alumni and Friends of MRC, led by the indefatigable Dr. Aubie Angel, with legal authorization to adopt the name "Friends of CIHR". During my tenure as President of CIHR, I participated in their Ottawa Friesen Prize events, as well as in many Friends of CIHR Roundtables addressing issues of great relevance to science. After returning to Toronto in 2012 as CEO of the Canadian Institute for Advanced Research (CIFAR), I became involved in the Friends of CIHR Massey Grand Rounds (MGR) program and enjoyed serving as a Senior Mentor to Massey Junior Fellows, a group of exceptionally promising scientific trainees. As well, I regularly provided advice, both solicited and unsolicited, and wrote several nominations for the Friesen Prize.

In 2017, I was honoured with the Friesen Prize for my lab's contributions to stem cell and cancer research, science advocacy, and mentorship of junior investigators. My Friesen Address, on "Health Research in an Age of Borderless Science: How Can Canada Best Contribute?", was followed by university visits to McGill, Manitoba, British Columbia, Calgary, and Alberta. In that role and in my role as CIHR president, I have felt truly privileged for the opportunity to be exposed to the extraordinary richness and diversity of our great country. My story is only one of many that are recounted in this commemorative volume that chronicles and celebrates the 25-year history and accomplishments of Friends of CIHR.

As exciting as the past 25 years have been for science and for the world, I have no doubt that the next 25 years will be even more exciting and offer even more opportunities for young scientists. Health and health research has become the meeting ground that is illuminating the complexity of human biology, driving advances today that were not possible just a few years ago, and creating new opportunities translating research into improved health and economic opportunities. No career could be more rewarding and exciting than health research. I have no doubt that as it enters its second quarter century, CIHR and Friends of CIHR will continue providing inspiration and support to Canada's health research community.

Preface

Peter N. Lewis BSc, PhD, FCAHS Professor Emeritus of Biochemistry Interim President, Friends of CIHR

For the past 25 years, Friends of the Canadian Institutes of Health Research (Friends of CIHR) has promoted the value of health research through community-based partnerships with universities, research institutes, and like-minded organizations. This commemorative booklet celebrates the evolving profile of Friends of CIHR since its inception in 2000, a year that coincided with the creation of CIHR. Our stated purpose is to promote the goals and values of CIHR which is well reflected in Friends of CIHR programs that advocate support for health research in Canada with a focus on the development of young trainees. It is noteworthy that the membership and leadership of Friends of CIHR was a rebranding of a predecessor organization, Alumni and Friends of MRC, which was founded by Dt. Aubie Angel in support of the late Dr. Henry Friesen's quest to create CIHR.

2005 marks a significant inflection point in the Friends' history with the establishment of the Henry G. Friesen Prize in Health Research. Over the years, institutional visits by Friesen Laureates have increased in number and duration, resulting in an enhanced programmatic structure. The cumulative impact of annual Friesen Prize Lectures, welcoming events, Leaders' Breakfasts, Policy Roundtables, visits with Deputy Ministers, and social gatherings with trainees reinforced a positive memory of its mission. Details of these various programs and participating personalities are addressed in this booklet.

Friends of CIHR as a science advocate, and its flagship initiative, the Friesen Prize Program, have enjoyed public and institutional support since its beginnings. As a non-profit organization they have been funded by dozens of organizations, universities, and individuals. It is with gratitude that we highlight the following founding and Major sponsors in this space for their early endorsement and continuing encouragement: CIHR, the University of Manitoba, McGill University, University of Toronto, the University of Ottawa, Ottawa Hospital Research Institute, the Government of Ontario, the Government of Quebec, Genome Canada, Alberta Innovates, Massey College, and the Diabetes Research and Treatment Centre.

Susan Bélanger, the principal author of this Jubilee Publication, is commended for her diligence and perseverance in researching the archival records of Friends. Her primary source materials includes past publications, Board minutes, past lectures, and digital materials. Her authentic writing style is both precise and easy to read.

1. Origins

CIHR is created

The Canadian Institutes of Health Research (CIHR)/Insituts de recherche en santé du Canada (IRSC) was created by statute in April 2000¹ Its establishment created "a single federal agency for health research funding in Canada to sustain basic and clinical biomedical research." It also included population-based, health policy, and health sciences research, along with investigations involving the social sciences and humanities which addressed important health issues."²

According to the CIHR Act, its mandate is "to excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system."³

Yet before CIHR, Canada had a long previous legacy of support for health research, primarily through the 40-year history of the Medical Research Council of Canada (MRC).

The Medical Research Council, 1960-2000: A Legacy of Excellence⁴

CIHR continues the 40-year legacy of the **Medical Research Council of Canada**/Conseil de recherches médicales du Canada, established in 1960 as a stand-alone granting agency carved out of Canada's National Research Council.⁵ The MRC was a latecomer to research support compared to the British and American counterparts on which it was modeled,⁶ as well as to Canada's first (private) funding agency, the Banting Research Foundation (BRF).

Britain's Medical Research Council evolved out of the battle against tuberculosis at the beginning of the 20th century. It was created by royal statute in April 1920 with the expanded mission "to promote the balanced development of medical and related biological research in the United Kingdom." The MRC conducts its own research and responds to health issues of concern as well as funding investigations by external bodies and individuals.⁷

The U.S. National Institutes of Health (NIH) have an even longer history, dating back to a small laboratory to study and prevent epidemics, in what would become the U.S. Public Health Service. In 1930, the former Hygienic Laboratory was renamed the National Institute of Health, and eight years later it moved north from Washington, DC, to its present campus in Bethesda, MD. In 1948 it was renamed the National *Institutes* of Health to reflect the establishment of additional Institutes 985. Today its large campus includes 27 separate institutes and centres. 9

In addition to starting later, Canada's MRC also took many years to emerge. The discovery of insulin at the University of Toronto encouraged the scientific community to create an organization to fund health research. The Banting Research Foundation (BRF), named in honour of co-discoverer **Dr.** (later Sir) Frederick G. **Banting**, became the first such agency, founded 22 July 1925 as a registered charity.

Its two mandates were 10:

1. To support the Banting and Best Department of Medical Research at the University of Toronto, and the ongoing work of the two discoverers who remained there. (Dr. J.J. R. Macleod stepped down as Professor of Physiology in 1928 and returned to his native Scotland, while J.B. Collip, responsible for purifying extracts, went back to the University of Alberta as head of its new Department of Biochemistry.¹¹

and more significantly,

2. To fund early-stage researchers with "good ideas but no money, much like the situation of Banting when he approached J.R. Macleod in 1921 with a request for resources to pursue his ideas about insulin." With other sources of funding now available from federal and other agencies, supporting emerging scientists has become its main mission.¹²

A short 1934 news item in *Nature* — soliciting donations to the BRF during the economic crisis of the Depression — recognized the foundation as "the only one in Canada giving support to medical research" and called it "a valuable aid and stimulus to such research in that country." ¹³ It remained virtually the only organization funding medical research in Canada until 1938, when the National Research Council began including it in its programs. ¹⁴ Looking back seven decades later, medical historian Prof. Edward Shorter remarked that "it is hard to imagine by what a slender thread medical research hung in those days and what large benefits flowed from so little money. ¹⁵

The BRF, renamed the Banting Discovery Foundation in 2025, continues to support some of Canada's most talented researchers, having seed-funded more than 1,300 emerging scientist since its inception and invested more than \$25 million in research funding. ¹⁶

An attempt was made during the 1930s to create a full-fledged national health research agency, but with little success. In 1936, the National Research Council established an Associate Committee on Medical Research, helmed by Sir Frederick Banting himself.¹⁷ Two years later, the committee sent Banting and his assistant **Dr. Chester B. Stewart** ¹⁸ on a nation-wide trip to promote medical research in Canada. Apart from the University of Toronto and McGill, however, "few institutions provided the facilities, funding, or time away from students" for concentrated laboratory or clinical work. In addition to lacking the necessary infrastructure, the committee found that it had less than \$50,000 to fund more than \$120,000 in grant requests. A Canadian Medical Research Council along the lines of the MRC in Britain was an idea whose time had yet to come.¹⁹

With the outbreak of war in 1939, Banting and the Associate Committee played a major role in military-related research in collaboration with their British counterparts, ²⁰ By the late 1950s, while research capabilities in Canada had expanded dramatically, funding had not. In 1958, a Special Committee was tabled under the chairmanship of **Dr. Ray F. Farquharson²¹** At the heart of the investigation was how government support for emerging and established medical scientist could fit in among other government ministries, private philanthropy, and voluntary organizations²² such as the BRF.

The committee also considered whether a Canadian Medical Research Council should have central laboratories like the British MRC, or a big campus (and Clinical Center) like the NIH. Yet because Canada's research infrastructure was still more limited and dispersed than these bodies, it made more sense for the government to focus its support through existing universities and teaching hospitals instead. The emphasis

on federal funding for research in the nation's universities and academic hospitals became and remains a fundamental difference in research support in Canada in comparison with the U.S. and Britain.²³

In addition, the Farquharson Committee found that funding for all aspects of biomedical research, from grants and fellowships to the construction of research facilities, was woefully inadequate. Investigators needed "more money, longer grants, and the freedom to … pursue longer term goals." In order to redress these challenges, the committee "and practically all medical research workers in Canada" recommended the establishment of an independent Medical Research Council. Its creation in 1960 fulfilled Banting's dream, and in the words of medical historians Terrie Romano and Alison Li, "demonstrated the coming-of-age of Canadian medical research."²⁴

Although slower to develop than its counterparts in Britain and the U.S., Canada's Medical Research Council quickly developed an exemplary international reputation for supporting biomedical research excellence through peer review. By the late 1980s, it was considered a model funding agency.²⁵

Yet as early as the mid-80s, the political landscape was changing in ways that would impact how research was conducted. MRC President Pierre Bois warned that the agency was not immune to socio-economic changes, and its Priorities and Planning Committee began increasingly to support university-industry collaborations and other interdisciplinary initiatives. ²⁶ Nor were these changes confined to MRC alone. Canada's two other major granting agencies, the Natural Sciences and Engineering Research Council (NSERC), founded in 1976, ²⁷ and the Social Sciences and Humanities Research Council (SSHRC), which began operations in April 1978, ²⁸ were likewise deeply engaged in the Mulroney government's program to create Canadian Networks of Centres of Excellence. ²⁹ By 2017, the Networks of Centres of Excellence (NCE) had invested about \$2 billion in research, commercialization, and knowledge translation – the latter now an essential aspect of research. NCE-funded networks and centres helped train more than 48,000 highly qualified personnel, created 147 spin-off companies, and 1,332 start-up companies. ³⁰ Five of the original 14 NCE networks were in the health sciences and were funded or co-funded by the MRC. ³¹ (In December 2018 support for the NCE program was transferred to the New Frontiers in Research Fund (NFRF), which continues to this day.) ³²³³

Enter Henry G. Friesen

In October 1991 **Dr. Henry George Friesen** became the last President of MRC and would become the chief architect of CIHR. Born in 1934 into a Manitoba Mennonite family, he graduated MD from the University of Manitoba in 1958 and proceeded to the New England Center Hospital in Boston for post-graduate training in Endocrinology. In 1963 he was named a Fellow of the Royal College of Physicians and Surgeons of Canada. Between 1965 and 1973, Dr. Friesen worked at McGill University and the Royal Victoria Hospital, Montreal. Here he successfully introduced human-growth-hormone therapy for children with dwarfism, and isolated the human pituitary hormone prolactin, which stimulates lactation in the mammary glands. He also learned that excessive circulating prolactin causes infertility, resulting in the development by other researchers of an antagonist drug, bromocriptine, to treat the condition. (Endocrine studies would continue to loom large in Canadian health research for decades after the discovery of insulin, resulting in further MRC-supported breakthroughs by Friesen and other investigators. Friesen then returned to his native province as professor and head of the Physiology Department at the University of Manitoba, possibly the strongest such department in Canada, until his retirement from that position in 1991.36

Given Friesen's strong interest in laboratory research, it was somewhat unusual that he would then give it up for health research policy as MRC President. Medical historian **Professor Michael Bliss** later asked him about this in a videotaped interview sponsored by Friends of CIHR:

Friesen: "I came to the conclusion that having been a recipient, having enjoyed the support that I was being asked to head and looking into the future, I thought I could make a difference, and it was perhaps payback time." ³⁷

In 1992, Henry Friesen oversaw an exhaustive self-appraisal of MRC, culminating in a broader vision for the agency which he thought might be too Ottawa-focused. In February 1993, the result of this work was published as *Investing in Canada's Health: A Strategic Plan for the Medical Research Council of Canada*. ³⁸ The strategic plan expanded MRC's mandate from biomedical research to include what Friesen called "the full spectrum of health, from molecules to 'main street," allowing MRC to address previously unmet research needs. ³⁹ The plan also stressed partnerships with both private industry and non-profit organizations, a shift in direction largely attributed to Friesen's vision and "quiet persistence" in implementing this change. ⁴⁰ These attributes are mentioned again and again in biographies of this remarkable leader.

Among his numerous accolades, Friesen was twice honoured by Canada's prestigious Gairdner Foundation. Appropriately the first, in 1977, was for his scientific work, specifically "the identification of human prolactin," and the second, in 2001, as a leader of Canadian medical research policy, and especially for "the establishment of the Canadian Institutes of Health Research." In 2001, he was also inducted the Canadian Medical Hall of Fame, and was later elevated from an Officer to Companion of the Order of Canada, Over the course of his career, Friesen was awarded eight honorary doctorates. One of these, conferred in 1998, was from his alma mater, the University of Manitoba, which also honoured Friesen's achievements with the creation of the Henry G. Friesen Endowed Chair in Metabolic and Endocrine Diseases.

In addition to these many distinctions, in 2005 the Friends of CIHR established **The Henry G. Friesen International Prize in Health Research**, to honour their mentor's "exceptional leadership, vision, and innovative contributions." The Friesen Prize (*see* ch. 3) remains the most prestigious of the Friends' various awards.

In 1993, Friesen also formed a strategic alliance between the MRC and the Pharmaceutical Manufacturers Association of Canada. ⁴⁵ The creation of the **MRC/Rx&D Research Program**, enlisting Canada's 59 research-based pharmaceutical companies, was the first and most significant of MRC's partnerships, a world first. In its first five years the program committed more than \$237 million in health research and funded more than 1,000 projects.⁴⁶

Other early alliances and initiatives included a renewed collaboration with the Juvenile Diabetes Foundation Canada (in the eternal hope of finding a cure for Type 1 diabetes); a \$5 million partnership with Genome Canada, which grew out of the Human Genome Project in the 1990s, and of which Friesen was its inaugural chair⁴⁷; and the Canadian Medical Discoveries Fund, created to provide capital for commercialization through an RRSP plan.⁴⁸

The MRC (and Canada's other federal grant-funding agencies) faced a great challenge during the 1990s, as reducing the national debt became Ottawa's main priority. ⁴⁹ In 1995, MRC's budget was slashed by 10 percent, with a further 3 percent cut the following year, a reduction of \$31 million. ⁵⁰ A brain drain ensued as fewer projects could be approved, awards were reduced, and career prospects in Canada for emerging scientists diminished. Yet lobbying by researchers and a positive public attitude towards the importance of

medical research,⁵¹ resulted in the restoration of its budget to its former levels, and an increase of \$40 million by 1998.⁵²

Despite this budgetary reprieve, MRC remained chronically underfunded. Two years earlier, an International Peer Review Committee chaired by **Dr Arnold Naimark**, president of the University of Manitoba, had found that although MRC was "an outstanding agency ... doing first rate, internationally significant work," sustained government austerity was putting the nation's health science research in jeopardy. "Too much of Canada's potential for research discovery is being lost," he concluded. It was also time for MRC's mandate to expand into a Health Sciences Research Council of Canada. ⁵³ Dr Friesen agreed with both of these points. Dismayed by the federal government's inadequate support for the MRC, he envisioned a new conceptual model which would be realized with the creation of CIHR. ⁵⁴

Conceiving CIHR

Throughout the latter half of the 1990s, MRC began to evolve into CIHR under Henry Friesen's visionary leadership. During a strategic planning meeting in Toronto on 30 Sept. 1997 (with medical historian and later Friends of CIHR interviewer; see ch.3) **Professor Michael Bliss** as one of the participants), Friesen floated the concept of the federal government creating "a Canadian National Institutes of Health system," not on the model of NIH itself, but built on the existing medical university network. Friesen's remark was the initial seed which culminated in the creation of CIHR. This concept succeeded where stand-alone physical institutes or a clone of the American NIH campus had failed.⁵⁵

In March 1998 Friesen presented the Canadian NIH concept at a dinner with federal Health Minister **Allan Rock** in attendance. The next day a senior staffer reported that all attendees were "breathless after Henry's pre-emptive strike/rocket launch. The Canadian National Institutes of Health idea has overtaken everything."⁵⁶

The details of the new agency were worked out over the following months and years. In October 1998, Friesen proposed extending the Canadian research community's existing culture of collaboration and interdisciplinarity "into a *virtual* consortium" across all fields of health research.⁵⁷

Friesen then had to sell the CIHR concept to the universities, teaching hospitals, and above all the federal government, which would be asked for a greatly increased budget than that awarded to MRC. As president of MRC, Friesen "couldn't go around independently and canvass universities"; instead, **Dr. Aubie Angel** was officially appointed as First Scholar in Residence by MRC. Working in collaboration with Friesen, Angel then assembled the Alumni and Friends of MRC, composed of "the most senior membership in health research" to undertake this essential task. The new organization received a grant of \$250,000 as seed money to create this community of scholars.⁵⁸

The fact that this plan succeeded was a testament to Friesen's extensive contacts within both academia and industry, his determination, and his utter sincerity. According to Friesen's colleague **Prof. Kevin Keough** (a past Vice-President of the MRC and recipient of numerous grants for his work in molecular medicine ("If it hadn't been for Henry, it wouldn't have happened." (Keough later brought Alberta universities into the Friesen Prize program; see chapter 5.) According to health policy scholar **Joan Murphy**, Henry Friesen is a prime example of a "merchant scientist," an elite performer in his chosen specialty of endocrinology but also willing to relentlessly pursue the larger goal of transforming the MRC into what would become CIHR.62

During the late 1990s, the MRC broadened its mandate along the lines suggested by the Strategic Plan and the International Review, forming new partnerships and networks both at home and abroad, and creating Standing Committees on Science and Research, Planning and Development, Business Development, and above all Bioethics. In 1998, along with its tri-council partners the Natural Sciences and Engineering Council of Canada (NSERC) and the Social Sciences and Humanities Research Council of Canada (SSHRC), MRC issued a policy statement, *Ethical Conduct for Research Involving Humans* (Ottawa: MRC, 1998), making Canada the first country in the world to create such a detailed bioethics policy. The volume has since gone through several editions, most recently **Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans** TCPS-2 (2022),⁶³ and remains widely used.

Yet despite the restored funding of 1998, MRC was at a grave disadvantage internationally. Other G-7 countries, led by the U.S., were increasing their budgets for research while Canada's was diminishing. Congress was even planning to double the (already enormous) NIH budget. According to Prof. Michael Bliss, "The competitive disadvantages of doing research in Canada were becoming appalling." With NIH offering grants twice the size or more of those available from the MRC, Canadian institutions struggled to attract or retain the best young scientists. Writing in *Nature Medicine* just before the launch of CIHR, Henry Friesen spoke optimistically about the new agency's ability to "stem the 'brain drain' of our top scientists" while "creating a sense of national purpose in health research."

CIHR is launched

On 18 Feb. 1999, the pending creation of the new Canadian Institutes of Health Research was announced at a press conference in Montreal attended by **Prime Minister Jean Chrétien**, Health Minister Allan Rock, and Dr. Friesen. The increased funding that Friesen had sought was a key feature of the new organization: In the federal budget released two days earlier, funding for CIHR for the next three years was pegged at \$484 million by 2002, double the levels of the late 1990s.⁶⁷

Friesen later said of closing the old agency for the new, "It is not often that an organization asks to be disbanded. But that is exactly what the Council of the MRC requested. It was time to implement a new vision of health research for the 21st century, and the best way to do that was through thematically linked institutes creating virtual networks of researchers coast to coast – the CIHR structure" Continuing its decentralized structure, each institute was to be headed by a scientific director and an independent advisory board that would oversee how funding was allocated. 69

The new agency was officially born on 13 April 2000, and opened its doors on 7 June 2000, with prominent cancer researcher **Dr. Alan Bernstein** as its inaugural president. While the final roster of institutes was still under discussion, Bernstein was eager to get CIHR up and running. "We have to operationalize this bold vision, not go back and start from scratch."

Significantly larger grant awards were an important aspect of the new agency. In March 1999, a *BMJ* reporter announced that the Chrétien government would increase its investment in health research by CAD \$550 million over the next three years, with \$240 million of this funding "earmarked for a new national enterprise called the Canadian Institutes of Health Research (CIHR).⁷¹

Dr. Bernstein remarked on the increase in grant awards, citing the example of a Canadian scientist that he was able to recruit back from the U.S. Yet a large gap remained, and Bernstein hoped to see awards reach 75% of those offered by American agencies "in order to compete internationally."⁷²

The new agency also expanded its scope of research beyond medicine to include all aspects of health, thereby increasing outreach, applicability, and outcomes.⁷³

As Friesen envisaged, the new agency consisted not of "a leafy campus and a massive infrastructure," but of "a dozen or so (currently 13) 'virtual' research institutes, grouped by scientific theme." Some are based on specific conditions or bodily systems (Cancer Research; Circulatory and Respiratory Health; Genetics; Infection and Immunity; Neurosciences, Mental Health and Addiction; Nutrition, Metabolism and Diabetes). Others focus on health policy, the health of populations, or specific parts of the life cycle (Health Services and Policy Research; Population and Public Health; Indigenous Peoples' Health; Aging; Gender and Health; Human Development, Child and Youth Health) 5. 25 years later, CIHR continues to endorse the flexibility of this approach, announcing on its website that "unconstrained by bricks and mortar, the Institute's virtual structure encourages partnership and collaboration across sectors, disciplines and regions." Each Institute is led by a Scientific Director, a leader in its specific field, 6 with the support of an Institute Advisory Board, a diverse group of volunteer experts drawn from the public, private, and non-profit sectors.

At the founding of CIHR in 2000, Henry Friesen sought to achieve the goal of "ensuing that the federal government invests one per cent of all health care costs in health research" and to "strive toward an annual investment of \$1 billion for health research from the federal government." This goal came to pass in the years that followed. As it approached its 25th anniversary in June 2025, CIHR was firmly established as Canada's health research agency, investing more than \$1 billion annually through more than 100 funding competitions which support approximately 16,000 investigators and trainees. ⁷⁹

CIHR leadership

During the first 25 years of its existence, the Canadian Institutes for Health Research (CIHR) has had four appointed and two acting Presidents, beginning with the renowned cancer researcher and health promotor **Dr. Alan Bernstein**.

2000–2007: After completing a PhD at the University of Toronto under the supervision of stem cell pioneer James Till, ⁸⁰ Bernstein undertook postdoctoral research on retroviruses at London's Imperial Cancer Research Fund. Following his return to Canada, he made important contributions to cancer and stem cell research, as well as investigations into a vaccine for HIV. In 1974 he joined the Ontario Cancer Institute, and in 1985, joined the staff of the new Samuel Lunenfeld Research Institute at Toronto's Mount Sinai Hospital, serving as its Director of Research from 1994–2000. ⁸¹

Bernstein is the author of more than 225 scientific publications on stem cells, hematopoiesis (blood cell formation), and cancer research.⁸² In addition, he has held numerous transformational leadership positions in the field of health research.⁸³

Alan Bernstein: "My decision to accept the government's offer to become CIHR's first president and CEO was based on three considerations":

1. He shared Henry Friesen's "compelling vision" of health research as multidisciplinary and inclusive of "the social sciences and humanities," which MRC "simply lacked the capacity or culture to do . . . This was an opportunity for Canadas to lead."

- 2. The federal leadership was on board with Friesen's vision. "My second reason was the assurances from the Health Minister, Allan Rock, David Dodge, then Deputy Minister of Health, and Eddie Goldberg in the Prime Minister's Office, that the government was committed to this new vision and in it for the long term."
- 3. "My final reason was that I was both excited and petrified to lead Canadian health research at this pivotal moment."84

As the inaugural president of CIHR, Bernstein oversaw a threefold increase in the budget for health research in Canada during his seven-year tenure. He was a champion of recruiting women and junior investigators, ⁸⁵ and has been credited with leading the transformation of health research in Canada. ⁸⁶

After seven years as President of CIHR, Bernstein announced his resignation in June 2007, stating that "he had completed what he came to Ottawa to do."⁸⁷ He then went on to become the founding Executive Director of the international Global HIV Vaccine Enterprise, based in New York. In 2012 Bernstein returned to Canada, becoming CEO of the Canadian Institute for Advanced Research (CIFAR), and in 2020 was appointed to Canada's COVID-19 Vaccine Task Force. In 2023 he became Director of Global Health at the University of Oxford. ⁸⁸

Bernstein has received many honours for his scientific and leadership achievements. In 2002 he was named a member of the Order of Canada, and was promoted to the rank of Companion is 2023 for his "exceptional contributions to the advancement of science and fundamental research worldwide," including membership in Canada's COVID-19 Vaccine Task Force, ⁸⁹ In 2008 he received a Canada Gairdner Wightman Award for his outstanding contributions as both scientist and director of research. ⁹⁰In 2015 he was inducted into the Canadian Medical Hall of Fame, and in 2017 received the Friends of CIHR's Henry Friesen Prize. ⁹¹

2008: Dr. Pierre Chartrand succeeded Dr. Bernstein as Acting President of CIHR in February 2008. Pchartrand had been appointed by Bernstein as CIHR's Vice-President, Research, in September 2006. He was responsible for establishing the new Institute for Research in Immunology and Cancer and was a full professor in the Department of Pathology and Cell Biology at the Université de Montréal's medical school. Prior to that, Dr Chartrand had served as Director of the Institut de Cancer de Montréal (1995–2001) and was a member of the board of the Fonds de la recherche en santé du Québec (FRSQ) (1999–2006), during which time he reorganized and headed up its Cancer Network.

2008–2017: Dr. Alain Beaudet, a distinguished neuroscientist at the Montreal Neurological Institute (MNI, or "The Neuro") was appointed President of CIHR as of July 2008. Prior to his appointment he was the President and CEO of the Fonds de la recherche en santé du Québec (FRSQ) from 2004–2008, and the recipient of numerous Canadian and international awards, including the Fellowship of the Royal Society of Canada (FRSC) and the Australian Society for Medical Research (ASMR) Medal for his work on aging and indigenous populations. ⁹⁴

During his tenure, Beaudet pioneered a ground-breaking patient-oriented research strategy and increased CIHR's involvement in global health research through the Global Alliance for Chronic Diseases (GACD), which he led from 2015–2017. ⁹⁵ In December 2016 Beaudet announced his intention to retire from the public service and CIHR as of the end of March 2017, saying that "the time is fortuitous to do so. The

government of Canada has committed to making science a priority, and this will provide many new opportunities that should be capitalized on by new leadership." ⁹⁶

2017–2018: With Dr. Beaudet's departure, CIHR again brought in an acting president. **Dr. Roderick R. McInnes**, a renowned geneticist specializing in retinal and eye development, took on the role. McInnes was program director of Developmental Biology at Sick Kids Hospital, Toronto, before moving to McGill University, and inaugural Scientific Director of CIHR's Institute of Genetics. 9798

Despite his "acting" role, McInnes navigated CIHR's affairs during a particularly difficult time. His scientific and leadership contributions have been acknowledged with numerous awards, including the Order of Canada (Member, 2009; Officer, 2019); Friends of CIHR Award of Honour, 2018, and the 2019 Paul Armstrong Lecture Award of the Canadian Academy of Health Sciences.⁹⁹

2018–2023: On 1 Oct. 2018, **Dr. Michael Joseph Strong**, Dean of Western University's Schulich School of Medicine & Dentistry in London, ON, was appointed as President of CIHR for a 5-year term, stepping down from his decanal role on 30 Sept., a position he had held since 2010. He continued his research on Amyotrophic Lateral Sclerosis (ALS; Lou Gehrig's Disease) at Western's Robarts Research Institute. ¹⁰⁰

After graduating MD from Queen's University, he undertook training in neurology and completed postgraduate work at the Laboratory of Central Nervous System Studies at the National Institutes of Health in Bethesda, MD. By 2018 he had published more than 185 peer-reviewed articles, edited four textbooks, and was the only Canadian awarded both the Sheila Essey Award and the Forbes Norris Award for ALS research. In 2012 he was honoured with the Queen Elizabeth II Diamond Jubilee Medal for his contributions to ALS research and care.¹⁰¹

Despite greatly enjoying his exciting interactions with researchers "from coast to coast to coast," Dr Strong stepped down as president of CIHR at the end of his five-year term to return to his life's work of ALS research. (He had in fact continued returning to the lab and his research team in London nearly one day a week throughout his term as president.) A selection committee was struck for his successor as soon as Strong's departure was announced, yet this took some time to be accomplished. 102

2 Jan. 2025–present. At the start of 2025, Dr **Paul C. Hébert**, a proud Acadian, a practicing palliative care and former critical care specialist, was appointed as the President of CIHR. A professor of medicine at the University of Ottawa and former professor at the Université de Montréal, Hébert has secured more than \$65 million in research funding and published more than 480 papers in major peer-reviewed journal. He is best known for the landmark trial "Transfusion Requirements in Critical Care (TRICC)," published in 1999 in the *New England Journal of Medicine*. This study demonstrated that giving less rather than more blood to critically ill patients was definitely no worse and possibly a superior treatment. This finding resulted in decreased blood use in acute care settings worldwide. 103

FRIENDS

Like its successor the Canadian Institutes of Health Research, the Medical Research Council had in its last three years an organized group of supporters.

The Alumni and Friends of MRC

The budget cuts of the mid-1990s were met with alarm by the scientific community, with harsh criticism being directed at MRC and at Henry Friesen personally. His colleague **Dr Calvin Stiller¹⁰⁴** recalled "He was under attack as no MRC president had ever been ... the scientific community as almost in a lynching mood ... Dr Friesen spent a lot of time in universities talking to hostile crowds." Friesen responded to this vitriol in his own quiet but forthright way, simply telling his critics that there was no money. "When the world changes, I will be putting forward the new reality." According to Stiller, this honesty earned him political capital on which he was able to draw in creating what would become CIHR.¹⁰⁵

In response to the hostile climate of the mid-1990s, a group of friends, colleagues, and former MRC grant recipients began to rally around the embattled organization. In March 2000, **Dr. Aubie Angel**, then head of Internal Medicine at the University of Manitoba, recalled the creation of the Alumni and Friends of the Medical Research Council (AFMRC)/Anciens et Amis du Conseil Recherche Médicale Canada (ACRMC) in 1995: "With President Friesen's encouragement, a group of us embarked on a project to gather together former MRC awardees ... to form an alumnae association which would increase its profile in the community and among decisions makers." AFMRC was established as a non-profit organization ¹⁰⁶ which grew continuously, numbering both active members and corporate. It published a widely-read newsletter that informed MPs, senators, university presidents and research deans about MRC's activities, and during its relatively brief existence (1996–99) collaborated extensively with other health organizations including the Association of Canadian Teaching Hospitals and the Association of Canadian Medical Colleges. ¹⁰⁷

In December 1999, as the Medical Research Council was about to give way to the Canadian Institutes for Health Research, Dr. Angel asked medical historian **Prof. Michael Bliss** to prepare a history of MRC in the 1990s in time for a March 2000 celebration of its legacy. The resulting volume, which Bliss modestly termed "a quick sketch," was published in 2000 as *Beyond the Granting Agency: The Medical Research Council in the 1990s.* ¹⁰⁸ While not claiming to a definitive history of the agency, the book provides a valuable overview of the MRC's latter years, its challenges,, and the reasons for its replacement by CIHR. It is complemented by two other volumes published by MRC the same year. *Celebrating the Medical Research Council of Canada, A voyage in time,* 1960–2000: 40 Years, by **Terrie Romano** and **Alison Li** chronicles the emergence of MRC out of the National Research Council, its (gradual) shift to a free-standing agency in 1968, and its eventual expansion into what would become the CIHR. ¹⁰⁹ The third volume, *A Legacy of Excellence, 1960–2000: 40 Years*, by the staff of the MRC, reviews the agency's history in more detail, including its succession of presidents, the development of partnerships, and its many achievements. ¹¹⁰

Friends of CIHR is born

According to Dr. Aubie Angel, the shift from MRC to CIHR "created quite a stir" among the members of the Alumni and Friends. Its Board undertook a review to see what role the group could play in the new agency. ¹¹¹ After canvassing the membership, the executive found that most of them felt strongly that they should continue to preserve the high standards of MRC's 40-year legacy, while also supporting CIHR and its

expanded mandate. They felt it was important to seek out new partnerships beyond the medical community and engage in a broader health research paradigm.

Above all, the group felt it should adjust its name and goals in alignment with the new organization, and in 2000, the AFMRC became **Friends of Canadian Institutes of Health Research** /Ams des instituts de recherche en santé du Canada. 112 At that point, there were 257 founding membership of AFMRC/Friends of CIHR, including a Who's Who of Canadian healthcare researchers. A good number of these individuals will be profiled in succeeding chapters. The initial Board and Members of this organization appear in the Appendix, with further details of Friends' leadership given in chapter 2, below.

Soon after its creation, Friends of CIHR published a brochure, "Please Join Us & Invest in Our Future Health," which briefly outlined its activities, history, mission, and leadership, as well as soliciting new members. Its founding goals are worth reproducing in full, as these continue to inform the Friends' many initiatives.

"Our Mission

- 1. The objective of "Friends" is to assist the Canadian Institutes of Health Research (CIHR) in realizing its strategic goal of an enhanced research support structure that encompasses medical, social and environmental determinants of health.
- 2. To serve as an advisory resource for CIHR and to the individual CIHR institutes.
- To provide a community link on behalf of CIHR regionally and nationally by involving volunteer
 agencies, community groups, universities, hospitals, and private corporations in the promotion of
 heath research.
- 4. To advocate and promote a consistent message supporting increased research funding from all levels of government.
- 5. To organize an annual meeting coincident with other national societies and feature scientific achievements that are interdisciplinary and intersectoral in the health sciences.
- 6. To involve individuals and organizations among the lay community with experience and interest to support the goals and purposes of CIHR.¹¹³

In fall 2002, Friends of CIHR published a brief progress report, outlining its various activities (see ch.4 below) and soliciting the advice of its membership on updating its mandate "to better serve CIHR" for reporting to its parent agency. ¹¹⁴ In 2001 it had launched a successful recruitment drive, which added 111 new members, increasing its membership base by more than 30 per cent by November 2002 to a total of 368. While its network or partners and sponsors has expanded and shifted over the years, it was particularly strong during this early period, with support from CIHR President **Dr. Alan Bernstein** and **Dr. Mark Bisby**, VP Research Programs, Partners In Research, the" generous endorsement" of the University of Manitoba's Faculty of Medicine, and several other Canadian health care organizations. ¹¹⁵

Since its inception, Friends of CIHR has endeavoured to enrich the healthcare landscape, encourage a broader understanding of health research, and further strengthen Canada's reputation for innovation,

philanthropy and expertise. It is a national organization, operating in both of Canada's official languages/langues officiels, as well as respecting Canada's Indigenous heritage as part of Turtle Island and its First Nations. The organization plays a key role in disseminating health research to the public, promoting knowledge transfer, attracting and facilitating the career development of junior researchers, and establish and sustain community-based partnerships.116

2. Governance

Friends of CIHR is governed by a Board of Directors that includes an appointed Executive Group consisting of the following: President, Vice-President, Secretary, and Treasurer. The Executive Group manages day-to-day operations subject to the approval of the Board. At this writing, the Friends of CIHR Executive team consists of Interim President **Dr. Peter N. Lewis**, Vice-President **Dr. Andrea Baumann**, Treasurer **Dr. Reinhart Reithmeier**, and Secretary **Dr. Alex Mackenzie**. There are currently 10 Board members as well as two Honorary Directors (President Emeritus **Dr. Aubie Angel** and long-serving Vice-President **Dr. Bruce McManus**).¹

Additional Ad Hoc and Standing Committees are created as required. An Advisory Committee assists in managing the Henry Friesen International Prize in Health Research,² and two new committees were struck in 2024 to consider the future of Friends of CIHR: Planning & Priorities and Governance & Nominating. Their deliberations are expected to produce new ideas to revitalize the organization.³

Dr. Henry Friesen, chief architect of both CIHR and Friends of CIHR remained the Friends' patriarch for many years, retiring as Honorary Director only in 2024,⁴ and passing away on April 30, 2025. Dr. Aubie Angel posted an announcement on May 5: "Friends of CIHR mourn the death of Dr. Henry Friesen, a towering figure in Canadian biomedicine. His legacy is immortalized by his contributions in endocrine science, for his leadership in health research policy and by the many scholars who carry his name in recognition of their outstanding research." Tributes from other members of the executive and links to the official CIHR announcement followed, along with a video of his friend **Dr. Cal Stiller's** eulogy at Friesen's May 5 funeral, and a link to health columnist **André Picard**'s May 9 obituary in the *Globe and Mail.*⁶

Friends of CIHR Executive Council

The Presidency

Dr. Aubie Angel, C.M., MD, BSc (Med), MSc (Exp Med), FRCPC, FCAHS, *Professor Emeritus*, *University of Manitoba*, a noted endocrinologist, is the Inaugural Founding President and chief driving force of both Friends of CIHR⁷ and its predecessor, the Alumni and Friends of the Medical Research Council). Dr. Angel hails from Winnipeg, having attended St. John's High School and the University of Manitoba, ⁸ graduating MD and B.Sc. (Med) in 1959. He went on to train as a clinician-scientist at McGill University's Department of Experimental Medicine under the supervision of Dr. Charles H. Hollenberg. After completing a Fellowship in Internal Medicine and Diabetes at McGill, he was appointed a Medical Research Scholar in its Departments of Pathology and Medicine, specializing in adipose tissue and lipoprotein metabolism. ⁹ His research led to the discovery that the total body cholesterol pool is enlarged in obesity because of the accumulation of cholesterol in fat tissue. ¹⁰

Dr. Angel moved to Toronto in 1968, joining the Department of Medicine and the Endocrine Metabolic Division at the Toronto General Hospital. ¹¹ He went on to become Director of the Institute of Medical Sciences and Director of the Clinical Sciences Division at the University of Toronto from 1980–1990 ¹² In 1990, Angel returned to Winnipeg as Professor and Head of Internal Medicine at the University of Manitoba

and Head of Medicine at the Health Sciences Centre. In 1996, during his tenure in Winnipeg, he founded the Diabetes Research & Treatment Centre (DRTC). This organization was initially conceived of as an interdisciplinary centre for "research, education and treatment of Diabetes in the province of Manitoba," then subsequently evolved into a national charity closely aligned with the Friends of CIHR.¹³ (See also in Sponsors and Partners, below). In 2012 the University of Manitoba created the Aubie Angel Young Investigators Award for Clinical Research in tribute to his decades-long dedication to mentoring junior researchers.¹⁴

In 2005, Dr. Angel returned to Toronto as a consultant at the University Health Network (UHN) and a member of its Endocrinology Division. Although he no longer held hospital admitting privileges, he continued to attend rounds and continued part-time clinical consulting until 2018 at the Polyclinic in North York to maintain his skill set.¹⁵

Apart from his contributions to endocrinology, Dr. Aubie Angel is best known as "a builder and champion of health care organizations in Canada," for which he was named a Member of the **Order of Canada** in 2015. In 1973, he co-founded the Canadian Society of Endocrinology and Metabolism, and later was instrumental in the creation of CIHR and its Friends. Above all, he is noted for his lifelong dedication to promoting health research and mentoring young scholars in the health sciences. Since returning to Toronto in 2005 as a Senior Fellow at Massey College, Angel has served as a member of the College's Board and as Founding Mentor of the Massey Grand Rounds program. See also in Sponsors and Partners, below). In 2021 Dr. Angel was awarded an Individual Leadership in Advocacy Award by Research Canada. In his final statement as President of Friends of CIHR, he said "this could not have happened without the committed volunteerism of the Board Members, past and present, and the loyal dedication of Cristina S. Castellvi, our Administrative Assistant of over 15 years. In April 2023 Dr. Angel and his wife were honoured by Massey College and Friends of CIHR with the launch of the Dr. Aubie and Esther-Rose Angel Leadership Prize, a special award to Junior Fellows in recognition of his extraordinary contributions to the College and its Junior Fellows.

In January 2020, Dr. Angel announced his intention to step down from the Presidency of Friends of CIHR, saying, "This seemed appropriate after 20+ years at the helm." He also recommended the creation of a succession planning team, and an official Succession Planning Committee was accordingly established in a teleconference meeting on 28 Oct. 2020. At that point the COVID-19 pandemic was raging, and the Friends of CIHRs programs were either cancelled or shifted to virtual events;²⁴ yet as President Emeritus and Senior Advisor to Friends of CIHR, he remains deeply engaged in its activities and especially its mentorship programs. This also includes spending "many hours," as Dr. Peter N. Lewis put it, mentoring his presidential successors" in their complex role."²⁵

Dr. David Malkin

On 1 January 2022, Dr. Aubie Angel was succeeded as Inaugural Founding President of Friends of CIHR by SickKids pediatric oncologist and clinician-scientist **Dr. David Malkin,** MD, FRCPC, FRSC.

Dr. Angel expressed his delight with this appointment, as Dr. Malkin "brings new energy and perspective to the vision and mission of Friends of CIHR and will provide fresh leadership and direction for the many members of our vibrant enterprise."²⁶

A professor of Pediatrics and Medical Biophysics at the University of Toronto, and the CIBC Foundation Chair in Child Health Research and Director of the Cancer Genetics Program at the Hospital for Sick Children (SickKids), Dr Malkin leads regional and national programs to improve outcomes for young cancer patients through genetic and genomic mechanisms of cancer susceptibility.²⁷

Dr Malkin graduated MD from the University of Toronto in 1984, and following a residency in pediatrics and hematology/oncology at SickKids, completed his postdoctoral research training in molecular genetics at Massachusetts General Hospital, a Harvard affiliate. ²⁸ There he was a member of the team that in 1990 found that a mutation in the p53 tumour suppression gene is responsible for a high cancer rate in families with the inheritable Li-Fraumeni syndrome. ²⁹ Since returning to Toronto in 1992, Malkin has developed a treatment plan ("the Toronto protocol") to monitor children and adults with LFS and detect tumours sooner. He is currently advancing precision medicine in children with cancer as director of the Precision Oncology for Young People (PROFYLE) initiative, a program which uses genetic testing tools to provide customized treatments for hard-to-treat tumours. In 2021, Dr Malkin was awarded the Canadian Cancer Society's O. Harold Warwick Prize for his "world-class research and leadership," which is "transforming the future of pediatric cancer not just in Canada, but around the world. ³⁰

In 2022, his first year as President, Dr. Malkin connected with many leading Canadian scientists, "delved into discussions of the future of Canadian science," and "explored the societal and health policy challenges that we face."³¹ The following year, he expressed his pleasure at meeting both Dr. Lorne Tyrell and Zulfiqar Bhutta, the 2022 and 2023 Friesen Prize Laureates. ³² However, the time commitments demanded of the presidency proved to be too much. Although originally elected for a five-year term, Dr. Malkin found the position too time-consuming and submitted his resignation after 18 months. He continues to serve on the Friends of CIHR Board. Dr. Peter N. Lewis took over as Interim President on 1 January 2024.³³

Prof. Peter N. Lewis

On 1 Jan 2024, **Professor Peter N. Lewis**, PhD, FCAHS began a two-year appointment as Interim President of Friends of CIHR.

A prominent biochemist, Lewis has a long association with the University of Toronto, as an academic leader, faculty member, and researcher from 1974 until he became emeritus in 2018.³⁴ Between 1991 and 2001 (apart from a one-year administrative leave) he served as Chair of Biochemistry; according to veteran department member/historian Marian Packham "this was the longest chairmanship of the department in 40 years." The department was extensively revitalized during Lewis's tenure, with the creation of five new tenure-track positions and a new multidisciplinary collaborative doctoral program in 1996. Two years later, a new multidepartmental program in Proteomics and Bioinformatics (P&B) was created, with Lewis as Director, and by 1999 he was involved in the planning of the new Centre for Cellular and Biomolecular Research³⁵ (CCBR), eventually named the Donnelly CCBR in honour of philanthropist Terence Donnelly, its chief benefactor.³⁶

Following his term as head of Biochemistry, Lewis took on a number of leadership roles within the university, including Vice-Dean Research and International Relations in the Faculty of Medicine (2002-2010) and Associate VP Research – Global Research Partnerships within the central university administration at Simcoe Hall (2010-2016). In addition to helping establish the Donnelly CCBR, he was involved in the creation of the Structural Genomics Consortium³⁷ (an international consortium which "aims to understand the function(s) of all proteins encoded by the human genome and accelerate the discovery of new medicines" as well as several science and technology-translation startups.

Prof. Lewis's research interests include neurodegeneration; the structure and function of chromosomes with specific reference to gene regulation; protein folding and artificial intelligence applied to drug discovery. ³⁹ He has always recognized the importance of interdisciplinary initiatives and collaborations across university departments and hospital research institutes, ⁴⁰ a vision fully aligned with the goals of Friends of CIHR as well as CIHR itself.

Vice-President

Dr. Andrea Baumann, PhD, FCAHS, FAAN, C.M., is a member of the Order of Canada and a Fellow of the Canadian Academy of Health Sciences (CAHS). She is a Distinguished University Professor at the Faculty of Health Sciences, McMaster University and Vice-President of FCIHR. She held previous positions within the health sector as well as academic positions at the University of British Columbia and the University of Ottawa.

She joined McMaster University as Associate Dean (Nursing). During her tenure, she tripled enrolment, expanded research capacity, and developed new academic programs, including Ontario's first Nurse Practitioner Program using a multi-university consortium. Some of her accomplishments included the development of a Leadership and Management Program, the first distance education program and a unique bilingual program offered to practitioners serving Canada's northern indigenous regions. She also led the creation of Master's and PhD programs and established a faculty development initiative enabling nursing faculty to complete their PhD within a ten-year time framework.

Dr. Baumann was instrumental in forming an educational consortium that included McMaster, Mohawk, and Conestoga Colleges. She led the McMaster School of Nursing's designation as a PAHO/WHO Collaborating Centre. This expansion has enabled McMaster to play a pivotal role in fostering international collaboration in education and research. Internationally, she directed major capacity-building projects in Pakistan (CIDA-funded) and the United Arab Emirates, developing educational infrastructure and programs in health sciences.

In addition to her university academic and clinical roles, she served as a Board Chair of the Clarke Institute of Psychiatry, implementing the creation of what is now known as The Centre for Addiction and Mental Health (CAMH). She was responsible for overseeing and implementing the merger of four major facilities managing the integration of finances, human resources, and guiding the development of governance structures, vision and mission.

She then assumed the role of Associate Vice-President of Health Sciences (Global Health), where she focused both on research and higher education as a means to address emerging challenges in globalization and health. She founded the creation of the innovative award-winning graduate program in global health, which is offered in collaboration with Maastricht University in the Netherlands and global partners, for a truly global offering. The graduate program in Global Health was designed to equip future healthcare leaders, educators and researchers for success in a globalized world. The program is not only interdisciplinary, but it brings together faculties of social sciences, health sciences, business and humanities and includes partnerships across seven institutions including McMaster, Canada; Maastricht, The Netherlands; Manipal Academy of Higher Education, India; Thammasat University, Thailand; Vestfold University, Norway; Universidad del Rosario, Colombia, and Ahfad University for Women, Sudan.

Dr. Baumann is an accomplished health researcher who is supported by a variety of funding agencies at the provincial, national and international levels such as the Canadian Institutes for Health Research (CIHR), Social Sciences and Humanities Research Council of Canada (SSHRC), International Development Research Centre (IDRC), Global Affairs Canda (GAC), Employment and Social Development Canada (ESDC), EU Erasmus fund, Norwegian High North Program, and the Sustainable Development Goals (SDG). She is widely recognized for her expertise in health systems, health human resources and workforce integration as demonstrated by her extensive portfolio of published work. ⁴¹

Secretary

The present Secretary, **Dr. Alex MacKenzie**, assumed the position in 2008. Dr. MacKenzie is an attending pediatrician at the Children's Hospital of Eastern Ontario (CHEO) in Ottawa, and a Senior Scientist in its Research Institute⁴² with a cross-appointment in the University of Ottawa's Department of Cellular and Molecular Medicine.⁴³ MacKenzie's laboratory has carried out translational research on spinal muscular atrophy, a rare pediatric disorder, for the past 25 years. It has more recently broadened its focus through CHEO's Care4Rare project⁴⁴ to seek therapies for other rare genetic diseases.⁴⁵

Treasurer

Since 2006, the role of Treasurer has been filled by **Prof. Reinhart Reithmeier**, Dr. Peter N. Lewis' successor as Chair of U of T's Department of Biochemistry (2002-2013).⁴⁶ An internationally recognized expert on anion membrane transport proteins, Prof. Reithmeier is also an award-winning lecturer who delights in teaching introductory biochemistry to as many as 1,000 undergraduate students annually, as well as ensuring that graduate students are fully prepared to succeed in the international scientific marketplace.⁴⁷ (With his colleague Prof. Nana Lee, Director of Graduate Professional Development and Mentorship, he published a book on the subject, **Success After Graduate School** in 2016; ^{2nd} edition 2024⁴⁸). In 2012, Prof. Reithmeier was named a Fellow of the Canadian Academy of Health Sciences (CAHS).⁴⁹

Past Executive Members

The inaugural Friends of CIHR executive were carry-overs from Alumni and Friends of MRC.

Vice-Presidents. The inaugural Vice-President of Friends of CIHR was **Dr. Martin James Hollenberg** Born into a Manitoba medical family (including his brother Charles), Marty graduated MD in 1958 from the University of Manitoba Medical School and went on to create world-class research centres at both Western University and the University of British Columbia, serving as the sixth Dean of Medicine at UBC from 1990–96. Dr. Hollenberg passed away in 2021.⁵⁰ Other VPs succeeded, including **Drs. David McLean** of UBC and **Henry Dinsdale** of Kingston.

In 2011 **Dr. Bruce McManus** took on the role. Dr. McManus is currently a Professor Emeritus in the Department of Pathology and Laboratory Medicine at the University of British Columbia, and CEO of the Centre of Excellence for Prevention of Organ Failure (PROOF Centre) and Co-Director, Institute for Heart + Lung Health at UBC. He previously served as department head (1993–2000), inaugural Scientific Director of CIHR's Institute of Circulatory and Respiratory Health from 2000–2006, and Director of Vancouver's James Hogg Research Centre (now the Centre for Heart Lung Innovation⁵¹) from 2006–2012.

In 2020, McManus became an Honorary Director and was succeeded by **Dr. Bev Holmes** (2020–24). Dr. Holmes is the former President and CEO of the Michael Smith Foundation for Health Research in British Columbia, with more than two decades of experience in applying evidence-based research to improving health. ⁵²)

Secretaries. The inaugural AFMRC/CIHR secretary was **Kevin Smith, D.Phil**. After graduating BA from Hamilton's McMaster University in 1986, proceeded to earn a D.Phil. at the University of Sussex, England, and complete the CEO program in Healthcare Leadership at the Wharton School of Business, University of Pennsylvania. Smith took on a succession of leadership roles in Ontario and federal health organizations before becoming President and CEO of St. Joseph's Health System, Hamilton, and then in 2018 as President and CEO of Toronto's world-class University Health Network (UHN) .53

In 2003, **Mr Glenn Brimacombe**, then CEO of the Association of Canadian Academic Healthcare Organizations (ACADO) became Secretary of Friends of CIHR.⁵⁴ Trained as a health economist, Mr Brimacombe is involved in a wide range of health care policy issues, with a strong focus on mental health.⁵⁵

Treasurers: The inaugural treasurer of Friends was **Dr. David Hawkins**. He established the pediatric rheumatology program at McGill University before serving as Chair of Medicine (1980–86) and Dean of Medicine (1987–95) at Memorial University of Newfoundland. Dr. Hawkins passed away in 2011.⁵⁶

Friends of CIHR was then privileged to have **Mr Patrick D. Lafferty** join the executive as Treasurer in 2003. Mr Lafferty was an eminent health research facilitator whose expertise "helped to transform the Medical Research Council into the Canadian Institutes of Health Research." ⁵⁷ He had worked for 38 years with the Pricewaterhouse Coopers accounting firm before his retirement in 2002, in addition to serving as Assistant Auditor General of Canada and in a number of other senior financial management roles. ⁵⁸

Friends of CIHR Board⁵⁹

Friends of CIHR has had a Board of up to 15 Directors (initially called Councilors⁶⁰). As of 2025, there are 10 Board Members (including the four members of the Executive), as well as two Honorary ones (**Dr. Aubie Angel**, inaugural president, and **Dr. Bruce McManus**, former vice-president.) All are distinguished leaders in healthcare research and/or administration.

Pediatric oncologist **Dr. David Malkin** of SickKids Hospital, formerly the second president of the Friends, 2022–23.

Ms. Deborah Gordon-El-Bihbety of the Ottawa Hospital Research Institute (OHRI)'s Board of Directors, appointed to the Board in 2024. She has extensive executive-level experience in public policy, health advocacy, and government relations as past president and CEO of Research Canada (2003–2023), and prior to that as Associate CEO of the Canadian Public Health Association.⁶¹⁶²

Dr Lynne-Marie Postovit, a leading authority on ovarian cancer. After receiving her PhD in Anatomy and Cell Biology at Queen's University, Dr. Postovit completed a CIHR Postdoctoral Fellowship at Northwestern University's Department of Cancer Biology and Epigenomics. Dr. Postovit was an Assistant Professor at Western University from 2007–2013 and an Associate Professor at the University of Alberta from 2014–2018, where she co-directed the Cancer Research Institute of Northern Alberta. ⁶³. In 2019 Dr. Postovit returned to Queen's as head of the Department of Biomedical and Molecular Sciences, and as of 1 January 2025 took up a five-year appointment as Vice-Provost (Academic Affairs). ⁶⁴ She joined the Friends of CIHR Board in 2018. ⁶⁵

Prof. Bhagirath Singh, Emeritus Professor, Department of Microbiology and Immunology, Western University, London, ON, and Inaugural Scientific Director of the CIHR Institute of Infection and Immunity.⁶⁶ He joined the board in 2011⁶⁷

Dr. Duncan J. Stewart is a distinguished cardiovascular researcher and head of the Ottawa Research Institute (OHRI) since 2007, as well as former CEO & Scientific Director of OHRI and Executive Vice-President, Research, at The Ottawa Hospital. Stewart is recognized for many important discoveries in blood vessel biology and for translating these findings into innovative gene and cell therapy clinical trials for cardiovascular and pulmonary disease.⁶⁸ When did he join the Board?

Dr. Lorne Tyrrell, a specialist in the prevention and treatment of viral diseases, is a recent addition to the Friends of CIHR Board, joining in 2024 after his term as 2021 Henry Friesen Prize laureate. Yet his association with CIHR dates back to its transition from the Medical Research Council during his tenure as chair of the Association of Canadian Medical Colleges. A Distinguished Professor at the University of Alberta, Dr. Tyrrell led its Faculty of Medicine and Dentistry from 1994–2004.⁶⁹

Former Directors/Board Members

Dr. Paul W Armstrong, an internationally recognized investigative and clinical cardiologist and professor at the University of Alberta. His work on the treatment of acute heart attacks has been instrumental in increasing patient survival rates. Armstrong was inducted into the Order of Canada in 2017.⁷⁰

Dr. Stephanie Atkinson, Professor of Pediatrics, McMaster University71

- **Dr. Patricia Baird**, a founding member of Friends of CIHR, dates of service unknown (FCIHR 2000-2007 site); geneticist and bioethicist, Chair of the Roya Commission on New Reproductive Technologies, she was inducted into the Order of Canada in 2000.⁷²
- **Dr. Pierre Bois**, a founding member and later Director Emeritus of Friends of CIHR, Dean of Medicine at the Universitá de Montréal Ø1970–81) and President of the Medical Research Council of Canada (1981–91); Dr Bois died in 2011.⁷³
- **Dr. Serge Carrière**, a founding member. A specialist in urology and pioneer of men's sexual health at McGill University⁷⁴⁷⁵
- **Mr Michael Cloutier**, then director of InterMune Canada, subsidiary of a multinational biotech company focused on developing treatments for lung diseases, specifically Idiopathic Pulmonary Fibrosis (IPF). The company was acquired by Roche Iin 2014 and marketed Esbriet (pirfenidone), a drug for IPF) ⁷⁶ T
- **Dr. William A. (Bill) Cochrane**, a founding member, ⁷⁷ established the Faculty of Medicine at the University of Calgary before moving into the government and business sectors. He was inducted into the Canadia Medical Hall of Fame in 2010, and passed away in 2017. ⁷⁸
- **Dr. Juliette (Archie) Cooper**, emerita in the College of Rehabilitation Sciences, University of Manitoba and psst Chair of CIHR's Institute of Musculoskeletal Health and Arthritis.⁷⁹
- **Dr. David Evans**, director emeritus from 2016. Virologist at the University of Alberta, an international leader in the study of poxviruses and a long-standing commitment to developing immunology and infectious disease research in Alberta. ⁸⁰
- **Dr. John Foerster**, a specialist in hematology-oncology and inaugural Executive Director of Research at St. Boniface Hospital, Winnipeg (1986–2005), named to the Order of Canada in 2016. Dates of service unknown. Dr Foerster died in 2021.⁸¹
- **Dr. Cy Frank**, an orthopedic surgeon and founder of the Alberta Bone and Joint Institute. He was inducted into the Order of Canada in 2014 for his contributions to advancing bone and joint repair, with a 30-year history of grant support from MRC/CIHR, ⁸² and was a generous supporter of Friends of CIHR. For a three-year period, Dr. Frank made \$25,000 annual contributions to help bring the Friesen Prize program to Calgary. ⁸³ Following his sudden death in 2015, the Friends' Distinguished Service Award (created in 2002) was renamed in his honour. (see also ch. 3).
- **Dr. Phil Gold** of McGill University, a founding member of the Friends, co-discovered carcinoembryonic antigen (CEA), the first clinically useful human tumour marker, in 1965, and went on to create and lead the McGill Cancer Centre in 1976, the first university-based oncology department in North America. ⁸⁴ Named an Emeritus Director in 2019.
- **Dr Pavel Hamet**, a founding member, is Professor of Medicine at the Université de Montréal, the founding director of the Centre Hospitalier de l'Université de Montréal's Research Centre (1996–2006) and holds a Canada Research Chair in Predictive Genomics of Hypertension and Cardiovascular Diseases.⁸⁵
- **Dr Marie-Josée Hébert** (served 2022–) is a nephrologist-transplant specialist and researcher at the Centre hospitaller de l'Université de Montréal and a founder of the National Transplantation Research Program of Canada, which she co-directed until 2022.86

Dr. Morley Hollenberg (served 2013–23), head of Pharmacology & Therapeutics at the University of Calgary . 1979–89, where he developed molecular pharmacology research and investigated hormonal mechanisms involved in inflammatory disease. Dr Hollenberg passed away in April 2025.⁸⁷

Dr. Roderick (Rod) McInnes (served 2022–) is Chair in Human Genetics and Professor of Human Genetics and Biochemistry at McGill University, as well as Senior Investigator at the Lady David Institute of the Jewish General Hospital, Montreal. An expert on the genetics of eye development, he was promoted to Officer of the Order of Canada in 2021.⁸⁸

Dr. David McLean, a founding member of Friends of CIHR, is a dermatologic oncologist, and served for more than 30 years as head of cancer prevention at the B.C. Cancer Foundation.⁸⁹

As of 2000, **Dr. Barry McLennan** was assistant dean of research at the University of Saskatchewan Medical School during the creation of CIHR and chair of the Coalition for Biomedical and Health Research, a non-profit lobby group.⁹⁰

Ms Cathleen Morrison, past president Canadian Cystic Fibrosis Foundation (now Cystic Fibrosis Canada), 1981–2011.⁹¹

Dr Cameron (Cam) Mustard, an expert in epidemiology and health policy, is a professor at the Dalla Lana School of Public Health at the University of Toronto, and former president and senior scientist at the Institute for Work & Health in Toronto.⁹² His father, the late Fraser Mustard, had been a founding member of the Friends of CIHR Board. ⁹³

Dr. Fraser Mustard was known for discovering the cardioprotective effect of Aspirin and as an international authority on early childhood development. Known as an enthusiastic supporter of the Friends' mission, Mustard was interviewed by **Prof. Michael Bliss** for the Video History of Medicine series before passing away in 2011.⁹⁴

Dr. Grant Pierce is a Distinguished Emeritus Professor in the Department of Physiology and Pathophysiology, Max Rady College of Medicine, University of Manitoba. He previously served as executive director of research at St. Boniface Hospital (2005–2020) and is currently serving as World President of the International Academy of Cardiovascular Sciences (2022–2025).

Dr. Brian D. Postl (served 2021–23), pediatrician and former dean of medicine at the University of Manitoba; founding president of the Winnipeg Regional Health Authority⁹⁵

Dr. Dorothy Pringle, a professor emeritus at U. of T.'s Faculty of Nursing, is an expert on the care of people with cognitive impairment and served as Dean of the Faculty from 1988–1999.⁹⁶

Dr. Linda Rabeneck (served 2018–23), gastroenterologist, clinician scientist, and past president of the Canadian Academy of Health Sciences⁹⁷

Prof. Stephen Robbins, Director of the Lady Davis Institute for Medical Research (LDI) at the Jewish General Hospital in Montreal, Glaxo Smith Kline Chair in Pharmacology and Professor in the Gerald Bronfman Department of Oncology at McGill University. Throughout his career he has taken a translational approach to research, including creating new therapies for malaria, discovering a novel class of anti-inflammatory agents, and identifying new therapeutic targets for brain tumours. 98 He was appointed to the Friends of CIHR Board in 2022, 99 and stepped down in July 2025.100



<u>Inaugural 2006 Friesen Prize Public Forum – Ottawa – National Gallery:</u>

Left to Right: Dr. Alan Bernstein, President, CIHR; Dr. Joseph B. Martin, 2006 Friesen Prizewinner; Dean, Harvard School of Medicine; Dr. Henry G. Friesen, Distinguished University Professor, University of Manitoba; Dr. Aubie Angel, FCIHR Founding President; Founding Chair, Friesen Prize Program **Dr. Robert (Bob) Roberts** (served 2015–23), cardiologist, former president and CEO of the University of Ottawa Heart Institute and its Research Corporation; currently professor and department chair of the International Society for Cardiovascular Translation Research at the University of Arizona College of Medicine in Phoenix. 101102

Dr. Emil Skamene, a founding member, was Scientific Director of the McGill University Health Centre (MUHC) from 1999–2005. He paved the way for immunogenetics by making major contributions to scientific knowledge of infection and immunity. He passed away in 2024.¹⁰³

Dr. Calvin Stiller (served 2000–2023), a founding member. pioneered the second wave of organ transplantation in the 1970s with his discovery of the immunosuppressant cyclosporine. ¹⁰⁴ In 2002 he was awarded the inaugural **Friends of CIHR Distinguished Service Award** (renamed the **Cy Frank Distinguished Service Award** in 2015.

Dr Aubrey Tingle, a specialist in pediatric and maternal health research, was instrumental in creating B.C.'s Research Institute for Children & Women's Health and later the Michael Smith Foundation for Health Research. 105

3. Initiatives

Throughout its history, the Friends of CIHR have developed and carried out a variety of programs and activities that enrich, inform, and inspire. The explicitly-stated goals of these initiatives according to the Friends of CIHR website are to:

- Support the mandate and programs of CIHR
- Communicate the benefits of health research to the public at large
- Support health research trainees in their career development

and

Establish community-based partnerships with other research- and health-oriented organizations.¹

The Henry G. Friesen International Prize in Health Research

Friends of CIHR's most high-profile and prestigious award program was created in 2005 to honour "an individual of international stature who best exemplifies Henry Friesen's organizational creativity and broad impact on health research and health research policy," not least as the chief architect of CIHR. The Prize highlights a pre-eminent Canadian or international researcher and the significant contributions they have made to health research or policy.

The nomination and award process are overseen by the Friesen Advisory Committee. This body was originally composed of seven members: three each from the Board of Directors of Friends of CIHR and the Canadian Academy of Health Sciences (CAHS), plus a unanimously selected Chair. In the early years of the Prize, the Committee was co-chaired by the presidents of the two organizations, Drs. Aubie Angel and Paul Armstrong.⁴

Dr. Aubie Angel: "Paul Armstrong and I collaborated heavily in parallel development of both Academy of Health Sciences and Friends." ⁵

Both organizations were established in 2005, and under the leadership of their respective presidents coordinated their annual meetings until 2014. This collaboration was paused when CAHS opted to rotate their meetings through various centres, while Friends of CIHR preferred to keep theirs in Ottawa for various reasons: Several of the Friends' major supporters are based there, including the University of Ottawa, the Ottawa Heart Institute and its late founder **Dr.** (later Senator) Willy Keon⁶, and the Children's Hospital of Eastern Ontario (CHEO). There was also the opportunity to access and maintain a relationship with the federal government. Thanks to Henry Friesen's influence, deputy ministers of health always met with the Friends of CIHR President and Friesen Laureate. The Friends continued to invite the CAHS to their events, but the two groups only came back together in 2022 during Lorne Tyrrell's tenure as Friesen laureate. ⁷

Members of Friends of CIHR may nominate candidates for the Friesen prize at any time. Presidents and Deans of Medicine at Canadian universities are canvassed each year to nominate suitable honorees, and scientific directors of research institutes are also welcome to propose candidates. Nominations from universities and research centres outside of Canada are also considered. The Friesen Prize Advisory Committee reviews all submissions and selects the honouree through a series of ballots.8

The Committee is also responsible for selecting the venue for an annual Public Forum and Award Presentation, in addition to long-term planning, fundraising, and the establishment of partnerships and sponsorships.⁹

The Friesen Prize winner is announced in the spring, and engages in a series of public events beginning in the fall. These include a Public Lecture at a leading Canadian academic institution, followed by one or more "Institutional Visits" to sponsoring universities and research institutes. ¹¹ These lectures expose Canadian doctoral, postdoctoral, and medical trainees to the seminal research supported by CIHR and its real-world outcomes. As well, they provide a forum for discussions concerning the importance of Canadian investigations and innovation. The community of trainees has developed interdisciplinary perspectives providing insight into such critical issues in health as inequities, social determinants, and intersectionality. There is a strong commitment to collaborating and connection in order to effect change. Knowledge is not siloed. During Dr. Aubie Angel's tenure as President, there was even some advance discussion of the lecture topic, with three potential titles solicited to help ensure that the speech was of broad general interest. ¹²

The Prize includes a cash award of \$35,000 plus a framed Citation.¹³ The Public Lecture itself is subsequently published in the *Friesen Prize Lectures* series.¹⁴

To date, 19 Friesen Prizes have been awarded, beginning in 2006.¹⁵ At the time of writing, the 2025 Prize has just been awarded to internationally acclaimed geneticist **Dr. Brenda Andrews**, founding director at the Donnelly Centre for Cellular and Biomedical Research at the University of Toronto. Her lecture will be on "Accelerating discovery: The catalytic impact of interdisciplinary environments on basic biomedical research," a topic very much aligned with the goals of CIHR and Friends of CIHR. A pioneer of post-genomic biology and interdisciplinary biomedical research, Andrews is also a keen mentor who has supervised dozens of graduate and post-graduate trainees. ¹⁶

A full listing of Friesen laureates appears on Friends of CIHR's Henry Friesen International Prize website (www.fcihr.ca/prize), along with links to details about the Prize, Lectures, Institutional Visits, and published versions of the Friesen Prize Lectures (Books). Teight Books have been published to date with dual English and French texts, with between one and three Lectures apiece. These are available for download from the Friesen website. 18

Details of the Friesen Prize winners follow.

2006: The inaugural Friesen Prize went to Canadian-born neuroscientist **Dr. Joseph B. Martin**, Dean of the Harvard Faculty of Medicine. Martin led pituitary hormone research at McGill University and the Montreal Neurological Institute before taking up an appointment as professor of neurology at the Harvard Medical School. Martin served for four years as dean of medicine and four years as chancellor at the University of California, creating several integrative centres (including an institute for AIDS research) during his tenure. In 1997 he returned to Harvard as dean of medicine, where he established an innovative cancer centre integrating seven separate institutions (1999), as well as a virtual institute of more than 500 scientists and clinicians to advance the treatment of brain disease (2001)²⁰. In announcing the award, Dr. Aubie Angel hailed Martin's collaborative model at Harvard as "an extraordinary feat," comparable to Henry Friesen's creation of CIHR and Genome Canada.²¹

Martin's Friesen Lecture took place at the National Gallery of Canada Auditorium in Ottawa in September 2006, on the subject of "Brain Disease: Health Policy for the Public Good."²² The following March, he gave



September 23, 2025 – U of T Friesen Prize Program – Presentation of Citation Certificate to Dr. Brenda Andrews at Faculty Club

Left to Right: Dr. Brenda Andrews, 2025 Friesen Prizewinner; Founding Director, Donnelly Centre, U of T

Dr. Peter N. Lewis, Interim President, FCIHR.

this lecture again as part of a two-day institutional visit to the University of Manitoba. Closing remarks were made by Henry Friesen himself.²³

2007: The following year, **Dr. John R. Evans** was chosen as Friesen laureate. In addition to serving as the University of Toronto's ninth president (1972–78), Evans held among other prominent positions,, among them founding Dean of the McMaster University School of Medicine, founding director of the World Bank's Population, Health and Nutrition Department, and founding chair of the Canadian Foundation for Innovation.²⁴ His lecture, held at the Université de Montréal in September 2007. was on "The Infinite Horizon of Health Research: Is Canada Visible?" ²⁵ Evans was interviewed several years later by his colleague and friend Prof. Michael Bliss as part of the Friends' History of Medicine in Canada project (see below), and two excerpts from their conversation were posted on the Friends' website. ²⁶

Evans was inducted into the Canadian Medical Hall of Fame in 2000 for his numerous leadership roles, in particular for creating McMaster University's new medical school.²⁷ Established in 1965, it was based on small group, self-directed, problem-based learning, an approach adopted in whole or part around the world.²⁸ Upon his death in 2015, Evans was memorialized by Prof. Meric S. Gertler, President of the University of Toronto, as having "made a profound impact on the advancement of Canadian medical education and higher education, on Canada's capacity for world-leading research and innovation, and on public policy and philanthropy in Canada and abroad."²⁹

Martin's and Evans's lectures were published as *Friesen Prize Lectures Book #1*, and are available for download from the Friends' Friesen Award site.³⁰

2008: American cancer researcher **Dr. Harold E. Varmus** was awarded the 2008 Friesen Prize "for inspired leadership in creating institutions that foster the free flow of scientific information and worldwide collaborations in health research and care" as the Friends' citation put it.³¹ At the time, Varmus had been President and CEO of Memorial Sloan-Kettering Cancer Center since 2000; prior to that he had served as Director of the National Institutes of Health between 1983 and 1999. In both positions he expanded these organizations and introduced innovative new programs³²³³

These leadership activities followed an exemplary 23-year scientific career at the University of California San Francisco Medical School, where Varmus and his colleague Dr. J. Michael Bishop headed a team which demonstrated that cellular genes which normally control growth and development often mutate in cancer ("retroviral oncogenes"). For this discovery, Bishop and Varmus were awarded the 1989 Nobel Prize in Medicine or Physiology.³⁴³⁵ For his public lecture, Dr. Varmus spoke on "Advancing Global Health by Encouraging Medical Science World-Wide."³⁶

2009: The 2009 Prize was awarded to **Prof. Sir John Bell**, Regius Chair in Medicine at Oxford (2002–23) and president of the Academy of Medical Sciences (2006–2011). Born in Alberta, Bell came to Oxford as a Rhodes Scholar, going on to found the Wellcome Trust Centre for Human Genetics and an advisor to the British government. Bell became only the second Canadian after Sir William Osler (1905–1919) to become Regius Chair of Medicine, was knighted in 2015, and inducted into the Canadian Medical Hall of Fame in 2022. As of February 2024, he was to step down from the Regius Professorship to become president of the Ellison Institute of Technology, Oxford.37 38 39



<u>Platform Party at MaRS Discovery District Auditorium – 2008 Friesen Prize Public Forum featuring Dr. Harold Varmus, 2008 Friesen Prizewinner:</u>

Left to Right: Mr. Paul Kennedy, Master of Ceremonies; Host, CBC Radio One "Ideas"; Dr. Catharine Whiteside, Dean of Medicine, University of Toronto; Dr. Harold Varmus, 2008 Friesen Prizewinner; Nobel Laureate; President & CEO, Memorial Sloan-Kettering Cancer Center, New York; Dr. Aubie Angel, FCIHR Founding President, Founding Chair, Friesen Prize Program; Dr. Henry G. Friesen, Distinguished University Professor, University of Manitoba; Dr. Martin Schechter, President, Canadian Academy of Health Sciences CAHS.

Bell was honoured "for his advances in genomic science and his global impact on health research and healthcare policy." On 22 Sept. 2009, he was welcomed by the British High Commission in Ottawa at the Leaders' Breakfast at Earnscliffe. His lecture, given later the same day, was on "Redefining human disease through genetics," and was followed the next day by the Wilder Penfield Lecture, "Will genetics transform clinical medicine?" at McGill's Montreal Neurological Institute." He was the same day, was on "Redefining human disease through genetics," and was followed the next day by the Wilder Penfield Lecture, "Will genetics transform clinical medicine?" at McGill's Montreal Neurological Institute.

2010: Dr. Shirley M. Tilghman, then President of Princeton University, was awarded the 2010 Friesen Prize "for her outstanding leadership in genetic research, in science policy and education, and advancing the role of women in science, 42 according to the Friends citation. Born in Canada, Tilghman completed an Honours B.Sc. from Queen's University in 1968, and after two years of teaching in Sierra Leone, earned her PhD in Biochemistry from Temple University, Philadelphia. While at the National Institutes of Health during her postdoc, she was involved in cloning the first mammalian gene, then went on to make more discoveries in molecular biology as a researcher at the Institute for Cancer Research in Philadelphia. Tilghman took up a professorship at Princeton in 1986, and became founding director of the university's Lewis-Sigler Institute for Integrative Genomics. She was also a founding member of NIH's National Advisory Council of the Human Genome Project, and from 1993–2000 was chair of Princeton's Council on Science and Technology, which promotes STEM teaching to students outside those disciplines. Among many honours, Tilghman was inducted into the Order of Canada in 2015 for her scientific achievements and support for women in science and technology. Her Friesen speech was on "Science and Enterprise as a Social Good: The Role of Universities."

Bell's and Tilghman's lectures were published as Friesen Prize Lectures Book #2, available for download from the Friends of CIHR's Friesen Award site.⁴⁶

2011: Dr. Victor Dzau, then Chancellor for Health Affairs, Duke University, was selected for the 2011 Friesen Prize. Dr. Dzau was born in Shanghai, raised in Hong Kong, and completed his MD at McGill University in 1972. ⁴⁷ After moving to the U.S.to pursue a career in cardiovascular physiology, Dr. Dzau went on to demonstrate the role of the renin-angiotensin in cardiovascular regulation, and publish the first report on the efficacy of an angiotensin-converting enzyme (ACE) inhibitor in congestive heart failure while at Boston's Brigham and Women's Hospital (1980). ⁴⁸ He continued to pioneer innovative stem cell and genetic treatments for cardiovascular diseases, in addition to focusing on efforts to reduce health disparities at home and worldwide. At Duke University, he launched the Duke Global Health Institute in 2012 to create an interdisciplinary collaboration among many disciplines to address health care problems among disadvantaged populations countries. Its establishment was inspired by the poverty, illness, and disparities that Dr. Dazu witnessed as a child in postwar China. ⁴⁹⁵⁰

Dr. Dzau has served on numerous national and international committees, and proud of his Canadian roots, has given his time generously to serve several organizations in Canada, among them CIHR's International Review Panel, the Gairdner Foundation, the Peter Munk Cardiac Centre at the Toronto General Hospital, and the McGill School of Population and Global Health.⁵¹ His Friesen lecture was given on 14 Sept. 2011 in Ottawa on "Innovations in Cardiac Care: Stem Cells in the Repair and Regeneration of Heat Muscle." ⁵²

2012: The Friesen Prize for 2012 was awarded to neuroscientist **Dr. Marc-Tessier Lavigne**, President of Rockefeller University from 2011–2023. Born in Trenton, Ontario, Dr. Tessier-Lavigne received undergraduate degrees in physics from McGill, in philosophy and physiology from Oxford University as a Rhodes Scholar, and a PhD in physiology from University College London (UCL). After completing postdoctoral work at UCL, he took up faculty positions at the University of California, San Francisco and then at Stanford. In 2011, Dr. Tessier Lavigne became President of Rockefeller University in New York City, a major biomedical research university, developing a major recruitment and expansion project.⁵³

A specialist in brain development, Dr. Tessier-Lavigne pioneered the identification of molecules (netrins) that direct nerve cells to form neuronal circuits in the brain and spinal cord. His work is significant in understanding the formation of the central nervous system in normal development as well as nerve regeneration in spinal cord lesions and neurodegeneration in Alzheimer's disease.⁵⁴ His Friesen lecture, held in Ottawa in September 2012, was on "The Future of Translational Medicine and Drug Discovery: Is the Glass Half Empty or half Full?"⁵⁵

Dzau's and Tessier-Lavigne's lectures were published as Friesen Prize Lectures Book# 2, and are available for download from the Friends of CIHR's Friesen Prize site.⁵⁶

2013: The 2013 Friesen Prizewinner, **Dr. Harvey V. Fineberg**, is an American expert on public health policy and medical decision-making. After spending 13 years as dean of the Harvard School of Public Heath, he served as provost of Harvard (1997–2001), then became president of the National Academy of Sciences' Institute of Medicine. Under Fineberg's leadership the Institute produced 60–70 influential studies annually on various aspects of healthcare policy. According to Dr. Aubie Angel in announcing the award, "Dr. Fineberg's public discussions are exceptional in their clarity, objectivity, and fundamental soundness." ⁵⁷

Fineberg's public lecture, given on 18 Sept. 2013 in Ottawa, was on "The power of an idea to bring ideas to power." He then made three institutional visits in 2013–14, in Ottawa, Winnipeg, and Alberta. 59

2014: Chinese-born geneticist **Dr. Lap-Chee Tsui** was honoured with the 2013 Prize for his groundbreaking 1989 discovery of the gene responsible for cystic fibrosis while working as geneticist-in-chief at Toronto's Hospital for Sick Children. His team's findings were published in three foundational papers in the journal *Science*, and received worldwide acclaim as the first defective gene identified through linkage mapping and positional cloning, a proof of principle for the Human Genome Project. This achievement was called the most important breakthrough in human genetics in 50 years. Tsui went on to become a leader of the Human Genome Project in Canada and internationally with further work on disease mapping to chromosome 7.60

In addition to these scientific breakthroughs, Tsui was honoured by Friends of CIHR for his earlier policy and government contributions to the Medical Research Council of Canada and CIHR, and for helping establish Genome Canada.⁶¹ Between 2002 and 2014, Tsui served as president and vice-chancellor of the University of Hong Kong, leading it through extensive reforms and increased collaboration with the West.⁶² His lecture, given on 17 Sept. 2014 in Ottawa, was on "A scientist's journey from basic research to senior academic leadership."⁶³ In 2014–15, Tsui made four institutional visits, in Toronto, Ottawa, Vancouver, and Alberta.⁶⁴

Friesen Prize Lectures Book #4 featured the lectures by Fineberg and Tsui.



<u>2012 Friesen Prize Award Dinner at Canadian Museum of Nature in honour of Dr. Marc Tessier-Lavigne, 2012 Friesen Prizewinner – Ottawa:</u>

Left to Right: Dr. Tom Marrie, President of CAHS; Dr. Aubie Angel, President of FCIHR; 2012 Friesen Prizewinner Dr. Marc Tessier-Lavigne, President of Rockefeller University; Dr. Catharine Whiteside, Dean of Medicine at University of Toronto; Dr. David Eidelman, Dean of Medicine at McGill University; Dr. Alain Beaudet, President of CIHR; Mr. Allan Rock, President of University of Ottawa



September 17, 2014 -Dr. Lap-Chee Tsui's Leaders' Breakfast in Ottawa

Left to Right: Dr. Thierry Mesana, President and CEO, U Ottawa Heart Institute; Dr. Aubie Angel, President, Friends of CIHR; Dr. Henry G. Friesen, Distinguished Professor Emeritus, U Manitoba; Dr. Lap-Chee Tsui, 2014 Friesen Prizewinner; Dr. Rose Goldstein, Vice-Principal (Research and International Relations), McGill; Dr. Bruce McManus VP FCIHR

2015: Friends of CIHR celebrated its 15th anniversary (and the 18th anniversary of its predecessor, Alumni and Friends of MRC) in 2015, along with the 10th anniversary of the Friesen Prize. The Friesen Laureate for that year was British geneticist **Sir Paul Nurse**, CEO of the Francis Crick Institute, a consortium of six of the U,K.'s leading scientific and academic institutions, and President of the (British) Royal Society. ⁶⁵ Sir Paul had been awarded the 2001 Nobel Prize in Physiology or Medicine along with Leland Hartwell and Tim Hunt for their discoveries of protein molecules that control cell division. ⁶⁶ (This marked the second time that a Nobel laureate received a Friesen award, after 2008 Laureate Dr. Harold E. Varmus.)

Sir Paul is la also a well-known public advocate and media personality who promotes interest in science Dr. Aubie Angel: "Sir Paul Nurse has an uncanny ability to explain the most complex issues in Science, Research & Health that everyone can understand." His Friesen Lecture was on "The Fundamental Significance of Discovery Science in the Creative Process."

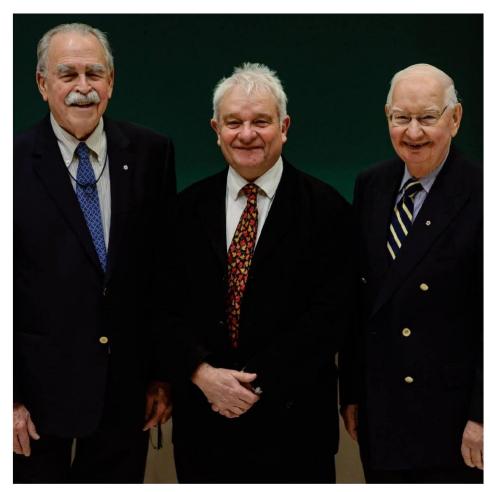
2016: Dr. Janet Rossant, President & Scientific Director, Gairdner. Foundation. Janet Rossant was born in the UK, completing a BA in Zoology at Oxford University in 1972 and a PhD in Mammalian Development at Cambridge four years later. In 1977 she relocated to Canada as a member of the Department of Biological Science at Brock University in St. Catharines, ON. In 1985 Rossant came to the University of Toronto as a Professor of Medical Genetics with appointments first at the Lunenfeld-Tanenbaum Research Institute at Mount Sinai Hospital, and from 2005 at the Hospital for Sick Children, where she served as Chief of Research until 2015. She continues to maintain a research lab there after taking up her latest position as the Gairdner Foundation's President and Scientific Director in 2016. 6970,71

Rossant's work involves studying the role of genes in embryonic development. She has discovered some key genes responsible for the first cell differentiations in the early embryo and has derived stem cell lines from the mouse embryo to study development in vitro. She is currently deriving stem cells from the embryonic mouse that could potentially develop into any cell type, including the placenta, with the aim of better understanding early miscarriage in humans.⁷²

As University Professor (an eminent position at the Univers ity of Toronto) in the Department of Molecular Genetics, Dr. Rossant is a noted educator. She has supervised dozens of graduate and postgraduate students, who now hold many senior academic and administrative positions in Canada and abroad. She also led the establishment of U. of T.'s Collaborative Program in Developmental Biology. As a public policy advocate, Dr. Rossant has played a key role in establishing guidelines for human embryonic stem cell research in Canada and abroad. (See also The Janet Rossant lecture, below)⁷³ Appropriately, her Friesen lecture was on "Stem Cell and Genome Editing: Ethical Challenges in Human Health," held on 18 November 2016 in Ottawa.⁷⁴

Nurse's and Rossant's public lectures were published as Friesen Lectures Book # 575

2017: Dr. Alan Bernstein, then President of the Canadian Institute for Advanced Research CIFAR), a global research organization based at the MaRS Discovery District in Toronto (2012–2022). ⁷⁶ Bernstein is renowned as a stem cell and cancer researcher, and as the inaugural President of CIHR (2000–2007). During his tenure, its budget tripled, the number of investigators doubled, and Canadian health research became



December 7, 2015 -Sir Paul Nurse's Friesen Lecture at U Ottawa

Left to Right: Dr. Aubie Angel, President, FCIHR; Sir Paul Nurse, 2015 Friesen Prizewinner; Dr. Henry G. Friesen, Distinguished Professor Emeritus, University of Manitoba



November 7, 2016 - Dr. Janet Rossant's Award Dinner at Rideau Club

Left to Right: Dr. Grant Pierce, Executive Director of Research, Albrechtsen Research Centre, St Boniface Hospital Winnipeg and FCIHR Board; Dr. Bruce McManus, Prof. Med, UBC and FCIHR Executive; Dr. Henry G. Friesen, Distinguished Professor Emeritus, U Manitoba; Dr. Reza Moridi, Minister of Research and Innovation, Government of Ontario; Dr. Janet Rossant, 2016 Friesen Prizewinner; Dr. Aubie Angel, President, FCIH R; Dr. Reinhart Reithmeier, Special Advisor to the Dean of Graduate Studies, U of T, and FCIHR Executive; Mr. Simon Kennedy, Deputy Minister, Health Canada

recognized internationally. Throughout his career, Bernstein has been a vocal advocate of fundamental research and has spent 30 years mentoring outstanding graduate students and postdocs. ⁷⁷

After completing a PhD at the University of Toronto and postdoctoral work st the Imperial Cancer Research Fund in London, Bernstein worked at the Ontario Cancer Institute, followed by a series of positions at Mount Sinai's Samuel Lunenberg Institute (1994–2000). He is the recipient of numerous honours, including Companion of the Order of Canda, the Gairdner Foundation's Wightman Award, and Induction into the Canadian Medical Hall of Fame. His Prize address was "Health Research in an Age of Borderless Science: How Can Canada Best Contribute?" held on 31 October 2017 in Ottawa.

2018: Dr. David Naylor, one of Canada's leading health scientists and President Emeritus of the University of Toronto, was awarded the Friesen Prize for 2018. In announcing the honour, Dr. Aubie Angel said, "David's remarkable capacity to analyze and unravel the complexities of Canada's healthcare system, together with the ability to communicate it eloquently and lucidly, is unique and explains his reputation as a thought leader.⁸⁰

Naylor completed his MD at U. of T., and as a Rhodes Scholar earned a DPhil in Social and Administrative Studies at Oxford. He specialized in Internal Medicine and undertook post-fellowship work in Clinical Epidemiology before joining the Department of Medicine at U. of T. in 1988.⁸¹ Four years later, he was named the inaugural CEO of the Institute for Clinical Evaluative Sciences (ICES). During his seven-year tenure, ICES became the leading force in expanding the use of evidence-based medicine in Canada.⁸² In addition, he was involved in the transition from Canada's Medical Research Council to CIHR, and CIHR's inaugural governor (2000–2004). He chaired Canada's national review of public health in the wake of the SARS outbreak as well as federal advisory panels on healthcare innovation and support for basic science ("The Naylor Report").⁸³ Meanwhile, he served as Dean of Medicine (1999–2005) and President (2005–2013) at U. of T.⁸⁴ Reflecting his expertise in clinical epidemiology and biostatistics, Naylor's Friesen Prize Public Forum Lecture was on "Emergence of Health Research as a Data Science," taking place on 6 November 2018 in Ottawa.⁸⁵

Freisen Lectures Book #6, featuring the public lectures by Bernstein and Naylor, is available to download on the Friends' Friesen site.⁸⁶

2019: Prof. Bartha Knoppers, a specialist in Comparative Medical Law, is the Founding Director of the Centre of Genomics & Policy at McGill University's Faculty of Medicine. ⁸⁷ Born in Hilversum, the Netherlands, she came to North America in 1955, growing up in Alberta and then Montreal. ⁸⁸ After obtaining an LL.B. at McGill followed by additional graduate studies at the Université de Paris and Cambridge, she obtained her Ph.D. from the Sorbonne in 1985. Knoppers is a world authority on bioethics in health research policy, stem cell research, human gene editing, biobanks, and global data sharing. She served as Professor of Law and Medicine at the Université de Montréal (1985–2009). She founded both P3G (Public Population in Genomics and Society) and CARTaGENE, Quebec's national biobank, in 2017, and has been involved in numerous other genomics projects.

Among her many honours are Officer of the Order of Canada (2002) and of Quebec (2012), Commander of the Order of Montreal (2017). Knoppers is a Fellow of the Royal Society of Canada, the Canadian Academy of Health Sciences (CAHS), and the American Association for the Advancement of Science..⁸⁹ Her lecture



October 31, 2017 - Dr. Alan Bernstein's Friesen Lecture at U Ottawa

Left to Right: Dr. Alex MacKe nzie, Senior Scientist, CHEO and FCIHR Executive; Dr. Rod McInnes, Acting President, CIHR; Dr. Henry G. Friesen, Distinguished Professor Emeritus, U Manitoba; Dr. Alan Bernstein, 2017 Friesen Prizewinner; Dr. Mona Nemer, Chief Science Advisor of Canada; Dr. Sylvain Charbonneau, Interim Vice-President, Research, U Ottawa; Dr. Aubie Angel, President, FCIHR; Mr. Allan Rock, President Emeritus, U Ottawa



November 6, 2018 - Dr. David Naylor's Award Dinner at Rideau Club, Ottawa

Left to Right: Dr. Henry G. Friesen, Distinguished Professor Emeritus, University of Manitoba; Dr. Alan Bernstein, President, Canadian Institute for Advanced Research (CIFAR) and 2017 Friesen Prizwinner; Dr. David Naylor, 2018 Friesen Prizewinner and Emeritus President, University of Toronto; Dr. Aubie Angel, President, FCIHR; Dr. Janet Rossant, President, Gairdner Foundation and 2016 Friesen Prizewinner.



September 18, 2019 -Prof. Bartha Knoppers' Award Dinner at Rideau Club, Ottawa

Left to Right: Prof. Daniel Turp, Professeur de droit public à la Faculté de droit de l'Universitéde Montréal; Dr. Alan Bernstein, President, Canadian Institute For Advanced Research (CIFAR); Dr. Aubie Angel, President, FCIHR; Prof. Bartha Knoppers, 2019 Friesen Prizewinner; Prof. Jacques Frémont, President, University of Ottawa; Dr. Eric Meslin, President & CEO, Council of Canadian Academies (CCA).

on "Scientific Breakthroughs: the Prohibition Reflex (from IVF to AI)," was given in Ottawa on 18 Sept. 2019.90

The COVID-19 Pandemic Year(s)

The year 2020 witnessed a great upheaval worldwide due to the rampaging COVID-19 pandemic. In April, the Friends of CIHR's home at the University of Toronto's Massey College was shut down, though Dr. Aubie Angel and Administrative Assistant Cristina Castellvi continued to work out of the Friends' office in House III, Room 2. In-person events were cancelled, including the planned western Canada tour by 2019 Friesen prizewinner Prof. Bartha Knoppers.⁹¹

The 2020 Friesen Prize was awarded to Sir Mark Walport, former Chief Executive of U.K. Research and Innovation (UKRI), (2017–2020). Although his in-person appearances were delayed until December 2021, Friends of CIHR was able to successfully pivot from live events to virtual lectures. On 6 October 2020, an International Virtual Launch of the Friesen Prize program was held in cooperation with the High Commission of Canada in the UK and Her Excellency Janice Charette, High Commissioner. With Canada House as a backdrop, Sir Mark gave "a prelude" to his Friesen Prize lecture, "Health Research Funding in a Post-COVID World" The event also featured a Roundtable of noted British and Canadian health leaders, 4 including six former Friesen Laureates and the Prize's namesake himself, Dr. Henry Friesen. Participants were linked across eight time zones thanks to advanced ZOOM. Technology. 95

Sir Mark completed his clinical and Ph.D. degrees at Cambridge, going on to become Professor of Medicine and Head of Medicine at Imperial College, London, where he led research into the immunology and genetics of rheumatic disease. From 2000–2013, he served as Director of the Wellcome Trust before becoming Government Chief Scientific Adviser (GCSA) and Head of the U.K. Government Office for Science (2013–2017). He was awarded a knighthood in 2009 for services to medical research, and was elected a Fellow of the Royal Society (FRS) in 2011. Sir Mark is currently Foreign Secretary and Vice-President of the FRS.

2020–2021: In the annual *Spotlight* of December 2021, Dr. Aubie Angel noted that "at this writing, there is little relief from a 20-month cloud of COVID-19 suppression of in-person events" with the Delta variant raging and Omicron about to follow. Despite this ongoing challenge, Sir Mark Walport was able to visit Canada during the week of 6–10 December, 2021 for a series of hybrid live and virtual lectures at Massey College, the University of Waterloo, and McGill University. 98 On 6 December. Sir Mark gave his Friesen Prize Lecture "Medical Research and Innovation: Post-Pandemic Priorities," in s hybrid live and virtual event at the Upper Library Massey College on 6 December 2021 –the first in nearly two years, according to Dr. Aubie Angel. 99 The lecture was followed the next day by a ZOOM Roundtable held in collaboration with U of T's Dalla Lana School of Public Health on "Pandemic Preparednes s: Science Informing Policy." 100

Despite delays in the Friesen and other programs, and the shift from live to remote events, the Friends of CIHR's activities were not greatly impacted by COVID-19. Some funding was lost, but Friends of CIHR was able to sustain its income through the federal Canada Emergency Wage Subsidy (CEWS) and Canada Emergency Rent Subsidy (CERS) programs of 2021–22. 101 The virtual international Friesen event featuring

Sir Mark Walport and the High Commission was a great success. Dr. Aubie Angel: "That event wasn't harmed at all, I mean, even though it was virtual, it was very well done.¹⁰²

Knoppers' and Walport's lectures were published as Friesen Prize Lectures Book #7 has been published and is available on the Friends' Friesen Prize site, 103

2021–2022: With 2020 prize activities being delayed by the ongoing pandemic, the 2021 Friesen Prize was awarded later than usual, with **Dr. Lorne Tyrrell**, Distinguished Professor at the University of Alberta, being confirmed only on 10 December 2021.¹⁰⁴ Dr. Tyrrell obtained an MD from the University of Alberta and a PhD from Queen's in pharmacology 1972. In 1976, Tyrrell returned to Alberta to complete specialist training in Internal Medicine with a subspecialty in Infectious Diseases. The same year he was awarded a Medical Research Council of Canada Fellowship, which played a key role in Tyrrell's medical career. He spent two years of his postdoctoral training in Virology at the Karolinska Institute in Stockholm, inspiring a lifelong research focus. ¹⁰⁵¹⁰⁶ Dr. Tyrrell's best-known achievement, with colleague Morris Robbins, was the discovery and licensing of the first oral anti-viral drug for chronic Hepatitis B, Lamivudine, in 200 countries. This breakthrough resulted in the creation of the Li Ka Shing Institute of Virology at the University of Alberta in 2010, with Tyrrell as its Founding Director.

Tyrrell has received numerous awards, including the Canadian Liver Foundation's Gold Medal (2000), Officer of the Order of Canada (2002), and Fellow of the Royal Society of Canada (2004). He was inducted into the Canadian Medical Hall of Fame in 2011, and in 2015 was awarded the Killam Prize in Health Science. In addition to the 2021 Friesen Prize, Tyrrell had received the 2018 Friends of CIHR Award of Honour. ¹⁰⁷ As a noted expert on vaccines, Tyrrell was an apt choice of Friesen laureate at this time. His talk, on "Canada's Vaccine Task Force: Once in a lifetime experience," given in Ottawa in September 2022, was similarly timely ¹⁰⁸ with the COVID pandemic now beginning to wane but still top of mind.

2023: The following year, things got back on track, with **Dr. Zulfiqar Bhutta** receiving the Prize in March 2023. ¹⁰⁹ Dr. Bhutta graduated in medicine (MBBS) at the University of Peshawar in his native Pakistan, going on to complete a PhD at the Karolinska Institute in Stockholm. He is Founding Director of the Institute for Global Health and Development and the Centre of Excellence in Women and Child Health at the Aga Khan University in Karachi, as well as Co-Director of the SickKids Centre for Global Child Health. Among numerous other achievements, Dr Bhutta was a member of the Independent Expert Review Group (iERG) appointed by the UN Secretary General to monitor global progress in maternal and child health Millenium Development Goals (2011–2015), along with representing the global academic and research organizations on the Global Alliance for Vaccines and Immunizations (GAVI) Board, and serving on its Evaluation Advisory Committee. He has received numerous awards over the years, most recently being recognized by the Canadian Senate with its Canada 150 Medal for his contributions to Global Child Health, admission to the National Academy of Medicine and elected as a Fellow of the Royal Society. He was awarded the 2021 Roux Prize for his work on evidence-based public health impact, and is the recipient of the 2022 John Dirks Canada Gairdner Global Health award. ¹¹⁰

Tyrrell's and Bhutta's Friesen Prize lectures are currently being prepared for publication in the *Friesen Prize* Lectures series.



November 18, 2022 – U Manitoba Friesen Prize visit – Dr. Lorne Tyrrell

Left to Right: Dr. Arnold Naimark, Emeritus President and Vice-Chancellor of the University of Manitoba; Dr. Aubie Angel, FCIHR Founding President & Founding Chair, Friesen Prize Program; Dr. Lorne Tyrrell, 2021-2022 Friesen Prizewinner; Founding Director, Li Ka Shing Institute of Virology, University of Alberta); Dr. Peter Nickerson, Dean, Rady College of Medicine, University of Manitoba; Dr. Henry G. Friesen. Distinguished University Professor, University of Manitoba.

2024: Dr. Gordon Guyatt, a Distinguished University Professor in the Department of Health Research Methods, Evidence & Impact at McMaster University in Hamilton, Ontario, was awarded the Friesen Prize for 2024 for pioneering the concept of "Evidence-Based Medicine" (EBM) to describe a new approach in medical education, research, and practice. Dr. Guyatt received his MD from McMaster in 1977, and after completing residency training in Toronto and McMaster, ¹¹¹ joined the McMaster Medical School in 1983. There, he served as Director of the Internal Medicine Residency Program, creating a training program founded on what would become EBM and coining the term in 1990. ¹¹² The term first appeared in Guyatt's 1991 paper "Evidence-based Medicine," in the American College of Physicians *Journal Club*. ¹¹³ Guyatt went on to lead the "Evidence-based Medicine Working Group" to refine the new approach, and led a series of more than 30 "Users' Guides to the Medical Literature," published in *JAMA*, a series that helps clinicians integrate the principles of EBM into practice. ¹¹⁴¹¹⁵ The influence of Evidence-based Medicine has been enormous: in 2008, the *British Medical Journal* chose EBM as one of the top 15 innovations in healthcare since the journal began publication in 1840. ¹¹⁶

Dr. Guyatt has also played a major role in the planning and implementation of randomized controlled trials (including trials stopped early) for presumed clinical benefit (2005) and the creation of standards for systematic reviews and meta-analysis. He was instrumental in creating the hugely influential GRADE model of rating evidence and making recommendations, an approach adopted by more than 110 organizations worldwide. Guyatt is among the world's 20 most cited living scientists, with more than 1,500 peer-reviewed papers that have been cited more than 200,000 times. He is the recipient of many awards, including Officer of the Order of Canada, the Canadian Medical Hall of Fame, and the Einstein Foundation Award for promoting the quality of medical research. Br. Guyatt's Friesen lecture, given on 31 Oct. 2024 at U. of T.'s Leslie Dan Pharmacy Building, was on "The Foundations of Evidence-Based Medicine."

Gordon Guyatt's Friesen Prize lecture has been published as Friesen Prize Lectures, #10.

Roundtables

The final piece of the International Friesen Prize Program is a series of high-level Roundtables designed to address major issues in Canadian science and education. These Policy Roundtables were introduced in 2015¹²⁰ to commemorate the 10th anniversary of the Friesen Prize and the 15th anniversary of Friends of CIHR. The first was held at the University of Ottawa in connection with Sir Paul Nurse's tenure as Friesen laureate on two topics: "The Role of Discovery Research in the Health of Canadians" and "Does Canada Have Too many PhDs?," included numerous experts, and was sponsored by the Friends, the Royal Canadian Institute for Science (RCIS), and the Banting Research Foundation (BRF). 121 (There was actually a 2014 Munk-U. of T. Friends of CIHR Roundtable featuring Dr. Lap-Chee Tsui, but no formal Proceedings were published. 122) The Policy Roundtables have continued since at various sites, but mostly in Ottawa, with topics ranging from artificial intelligence and federal-provincial collaboration to pandemic preparedness and child health inequities. 123



October 31, 2024 – Faculty Club, U of T – Friesen Prize Award Presentation to Dr. Gordon Guyatt

Left to Right: Dr. John Dirks, Emeritus President, Gairdner Foundation; Dr. Cindy Sinclair, FCIHR Member; Dr. Aubie Angel, FCIHR Founding President & Founding Chair, Friesen Prize Program; Dr. Gordon Guyatt (2024 Friesen Prizewinner); Dr. Peter N. Lewis, Interim President, FCIHR; Dr. Ross Upshur, Division Head, Clinical Public Health, Dalla Lana; Jane Zhao, 2023-2024 + 2024-2025 Massey Grand Rounds MGR Co-Chair; Junior Fellow, Massey College; Dr. Andrea Baumann, Vice President, FCIHR.

From Bisons to Bulls: Massey College and Massey Grand Rounds (2007–present)¹²⁴

After returning to Toronto in 2005, **Dr Aubie Angel** became a Senior Fellow at Massey College. The brainchild of former Governor-General Vincent Massey and endowed by the Massey Foundation, the college opened in 1963 on the campus of, but independent from, the University of Toronto.

The college is an academic community¹²⁵ for graduate students (Junior Fellows) from a wide range of disciplines, either from the School of Graduate Studies or enrolled in professional degree programs including medicine, business, law, or dentistry. There are 60 spots available each year for resident Junior Fellows plus 20 to 30 slots for non-resident ones. Beginning in 2021, a limited number of post-docs were added. Junior fellowships are highly competitive, with not only high academic achievement but ambition and commitment to learning and community participation are also considered. ¹²⁶ According to Dr. Angel, Massey College's Junior Fellows are exceptional students even within the elite environment of graduate and professional studies at the University of Toronto. ¹²⁷

Senior Fellows at Massey College are likewise selectively chosen — "prominent members of society with academic and professional interests from around the world. Their nomination must be approved by the College's governing board, and they are expected to contribute to college life by interacting in a major way with the Junior Fellows (dining in-hall, mentoring JFs, and inviting them to dinners outside of College), participating and donating to its activities, and introducing the Colleges facilities and services by hosting events. "128

After joining Massey College, Dr. Aubie Angel launched a new program, the **Massey Grand Rounds** (MGR). Inspired by the Friesen Prize, MGR was designed to nurture Junior Fellows of the Massey College community with monthly talks during the academic term from medical and scientific leaders on topics related to the health sciences and issues of current interest. A major symposium organized by Junior Fellows is held every spring, and **The Janet Rossant Lectureship** (*see below*) was added to the annual MGR Symposium beginning in 2019. The College's Junior Fellows played a key role in establishing the Rounds at its initial organizational meeting of April 2006.¹²⁹ Dr. Aubie Angel shows a Powerpoint slide paying tribute to this group at such events as the annual Rossant lectures: Junior Fellows Fiona Menzies, Jai Shah, Janice Wong, Martin Betts, and Lori Waters; Dons John Neary and Amdrew House; and Senior Fellows Drs Aubie Angel and **John Dirks**¹³⁰ Dr. Dirks, a clinician-scientist specializing in nephrology and a former Dean of Medicine at the University of Toronto, is responsible for transforming the Gairdner Foundation and its Canada Gairdner Awards program into one of the top three most prestigious prizes in medical research. He was inducted into the Canadian Medical Hall of Fame in 2012.¹³¹ Junior Fellows continue to play a major role in organizing this program, an important leadership opportunity for these emerging scholars.

The inaugural MGR symposium in 2007 explored the advantages and potential risks of medical schools and health science centres at the "Nexus of Education and Industry." Featured speakers included **Larry Altman**, *New York Times* medical correspondent, on "Medical Education: Tensions and Conflicts of Interest for Students, Faculty and Patients"¹³²

MGR symposia, in the years that followed, delved into such topics as "Medicine and the Media: Exploring the Issues" (2011), "Addressing Disparities in Canadian Healthcare" (2014), "Addressing Personalized



Inaugural Meeting of Massey Grand Rounds Massey College, upstairs Private Dining Room – April 26, 2006

Left to Right: Fiona Menzies, JF; Jai Shah, JF; Janice Wong, JF; Martin Betts, JF; John Neary, Don; Lori Waters, JF; Dr. John Dirks, SF; Andrew House, Don; Dr. Aubie Angel, SF.

Photographer: Uli Germann, JF.



MGR-LEAD Dinner

Massey College, Junior Common Room – November 28, 2012 Left to Right: Dr. Aubie Angel, Founding MGR Mentor & Master John Fraser, Massey College. Medicine through Big Data" (2016), "Tackling the Opioid Crisis: From Understanding to Intervention" (2018), and "Mind Over Matter: Innovations in Brain Cancer Research" (2024).

In spring 2020 the MGR symposium was postponed due to the COVID-19 pandemic, with the rescheduled 2020 and the 2021 symposia given virtually over ZOOM. For 2021 the live symposia resumed, yet COVID remained on the Junior Fellows' radar, with the topic "Shaping our Post-Pandemic Future," featuring speaker **Dr. Samira Mubareka** of Sunnybrook Hospital. ¹³³ In 2022–23, the members posted a series of their activities on X (formerly Twitter), including hosting the 2020 Gairdner Global Health Awareness Awardees, a visit from 2021 Friesen Laureate *Dr. Lorne Tyrrell*, and a two-minute thesis event. ¹³⁴

The latest MGR symposium, which took place on 29 April 2025, celebrated "20 Years of Leadership," and was sponsored by Friends of CIHR, the Diabetes Research and Treatment Centre, Massey College, and U. of. T.'s Temerty Faculty of Medicine and Departments of Medicine, Surgery, and Family & Community Medicine). Policy documents emanating from MGR influence decisions about healthcare and inform strategies to improve health quality, equity, and outcomes.

Janet Rossant Lectureship

The Janet Rossant Lectureship was established in 2018 as part of the Massey Grand Rounds (MGR) Program in recognition of world-renowned developmental biologist **Dr. Janet Rossant**, the 2016 Friesen Prizewinner. The Lectureship is a signed partnership between Friends of CIHR and Massey College, ¹³⁶ supported by a special fund. Janet Rossant donated \$25,000 (a portion of her Friesen Prize Award) to Massey College, and then-Principal Hugh Segal in turn directed the funds to enhance the Massey Grand Rounds Program. The McLaughlin Foundation contributed a further \$45,000 grant. The Lectureship is now a feature of the annual MGR symposium, showcasing the excellence and impact of Canadian health research. ¹³⁷

The inaugural Rossant Lecture was given in March 2019 by leading pediatric heart transplantation surgeon and immunobiologist **Dr. Lori West** of the University of Alberta on "Heart Transplantation Through the Ages: A Success Story." Dr. West increased the availability of donor hearts in infants by pioneering ABO incompatible transplantation in this population. ¹³⁸ Subsequent Rossant lecturers also participated in panel discussions as part of the MGR Symposia. For instance, infectious disease specialist **Dr. Samira Mubareka** from the Sunnybrook Research Institute on the origin and impact of SARS-CoV-2 (the COVID-19 virus) in 2021¹³⁹. Because of COVID-19 restrictions, the 2020 MGR Symposium featuring the Rossant Lecture was delayed from March to September and the 2020 and 2021 symposia were given virtually over Zoom. ¹⁴⁰ The latest lecture, given in 2024, was by Toronto neurosurgeon **Dr. Sunit Das** on "improving outcomes for patients with glioblastoma." ¹⁴¹

At this writing, **Dr. Danielle Rodin**, a radiation oncologist and clinician scientist at Toronto's Princess Margaret Hospital and Associate Professor at U. of T.'s Department of Radiation Oncology, has just been selected as the 2025 Janet Rossant lecturer. Her research focuses on equalizing access to cancer treatment and improving outcomes for individuals with the disease.142

4. Past Initiatives

In addition to the current Friesen Prize program, Massey Grand Rounds, and Janet Rossant Lectures, Friends of CIHR has introduced numerous other events and programs over the years. These vintage initiatives include a series of lengthy videotaped interviews, several Symposia held during Friends of CIHR's early years in Winnipeg, and various awards and honours separate from the major Friesen Prize program. The Symposia have been essentially replaced by the events associated with the Friesen Prize and Massey Grand Rounds, yet reviving these other projects could be a worthwhile goal for the second quarter-century of the Friends.

Video History of Medicine in Canada was a series of in-depth videotaped interviews with great Canadian health researchers and leaders nationwide, One indication of the calibre of individuals chosen for this project is that all 14 subjects had also been inducted into the Canadian Medical Hall of Fame (CMHF)¹ either before or after the Friends of CIHR interviews took place. All but two of the interviews were conducted by **Prof. Michael Bliss**, a distinguished Canadian historian of medicine, and himself a CMHF laureate for his definitive study of *The Discovery of Insulin* (1982) and many other books on the history of medicine, business, and politics.²

The Video History became a big project in every sense, with interviews running between three and six hours. The full interviews have been preserved on DVD, ³ with excerpts of various lengths posted on the Friends' YouTube channel https://www.youtube.com/@FriendsofCIHR/playlists. The excerpts were created through a Summer Studentship Program launched by Friends of CIHR in May 2021 during the COVID-19 pandemic. As Dr. Angel put it, this government-funded program "provided opportunities to these students to develop, to examine these interviews and extract excerpts of vignettes." Examining the interviews also provided a great opportunity to experience the interaction between stars of Canadian medicine and the nation's pre-eminent medical historian and public intellectual, Prof. Bliss. ⁴

In addition to the interviews and excerpts, Bliss followed up with commentaries on each of his interviews, noting his extensive preparation for each talk and his evolving expertise in drawing out his subjects.⁵

In the very first Video History interview, recorded in 2000 on VHS tape, Bliss spoke with **Dr. Charles H. Hollenberg**. Part of a group of physicians who came to the University of Toronto from McGill University during the threat of Québec separatism, Hollenberg became Chair of the Department of Medicine in 1970 and shifted its focus firmly toward research. By the time he died in 2003 he had held a succession of other leadership positions, including U. of T.'s vice-provost of health sciences and CEO of the Ontario Cancer Treatment and Research Foundation (which he transformed into Cancer Care Ontario). Hollenberg was also a founding member and Board member of the Friends of CIHR and its predecessor, the Alumni and Friends of MRC (AAFMRC). In 2003 he was awarded the Friends' Distinguished Service Award, its highest honour, but sadly passed away in April 2003 before the award could be conferred.

Bliss conducted two further interviews in 2002, with **Dr. Henry Friesen**, architect of CIHR,⁸ and renowned orthopedic surgeon **Dr. Robert Salter** of the Hospital for Sick Children. Both were founding members of the Friends and its predecessor AFMRC. ⁹

Following a lengthy hiatus there was a flurry of renewed activity in 2010. In January, Québec broadcaster **Bernard Derome** interviewed **Dr. Jacques Genest, Sr,** an expert on the treatment of hypertension and heart failure from the Université de Montréal, in both English and French. Later the same month, **Stephen**

Strauss, a long-time science writer for the *Globe and Mail*, interviewed pioneer molecular biologist and geneticist **Dr. Lou Siminovitch**. Upon Siminovitch's passing in 2021, Dr. Aubie Angel published a tribute, lauding his "contributions to Basic Medical Sciences" as "panoramic, as well as his impact on institution-building, primarily in Toronto-based teaching hospitals in the University of Toronto." He also found Siminovitch "a helpful advisor" on the Board of U of T's Institute of Medical Science (IMS) during his term as Director there during 1980s, "and latterly, on my return to Toronto in 2005, in guiding the development of Friends of CIHR." ¹⁰

Between 2010 and 2012, Michael Bliss returned to conduct four additional interviews at Toronto's MaRS Discovery District. Following these, he travelled to Montreal in 2013 to do three more, and to Winnipeg in 2013–14 for a final two interviews before retiring from the project. Following Bliss's death in 2017, Dr. Aubie Angel described his involvement in the Video History as "a new role" for "Canada's most prolific and eminent medical historian." The video tribute strings together excerpts from several of Bliss's more compelling interviews, showing his evolution as "a thoughtful documentarian." ¹¹

The MaRS Discovery District Toronto interviews

Among the four interviews held at this location, 2007 Friesen Prizewinner **Dr. John R. Evans** was prominently featured. ¹² Among his many claims to fame was the creation of the MaRS Discovery District in 2000, an incubator for medico-commercial startups housed in the old wing of the Toronto General Hospital where insulin was first administered in 1922 . ¹³

The other subjects were as follows:

Dr. Fraser Mustard, known for the cardioprotective effect of Aspirin and as an international authority on early childhood development. Mustard, who passed away in 2011, was a founding member of the Friends of CIHR Board, and his son Cam became a Board member as well.¹⁴

Dr. Calvin (Cal) Stiller, whose research on Cyclosporine A resulted in its worldwide use in transplantation. In 1985, Stiller established a Multi-Organ Transplant Service in London, Ontario, arguably one of the first in the world, and is a co-founder of the MaRS Centre, the Ontario Genomics Institute and the Ontario Institute for Cancer Research.¹⁵

Biophysicist **Prof. James Till,** ¹⁶ who recounted his ground-breaking 1961 discovery with hematologist **Dr. Ernest ("Bun") McCulloch** of hematopoietic stem cells. ¹⁷ Along with molecular biologist **Lou Siminovitch**, they went on to prove that marrow cells were capable of self-renewal, laying the foundations for contemporary stem cell therapies. A bronze sculpture installation of the two discoverers by Ruth Abernethy was unveiled in 2016 at Science World, Vancouver, with a duplicate installed at the MaRS Discovery District the following year. ¹⁸

Montreal and Winnipeg interviews

In 2013, Bliss proceeded to McGill University for three further interviews. The first of these was with Montreal pediatrician and geneticist **Dr. Charles Scriver**, renowned for discovering the cause and treatment of seasonal rickets among Québec infants, and for creating the Quebec Genetic Network.¹⁹ Next up was **Dr. Brenda Milner** (née Langford), Canada's preeminent neurophysiologist, an expert on memory and its dysfunctions. Her chief claim to fame is her decades-long study of "H.M.," a patient in Hartford, CT, unable

to form new memories following neurosurgery to relieve intractable epilepsy. Well into her 90s at the time, Milner's own memory and recall of events many decades past was remarkably undimmed by time, making for a particularly lively and engaging interview. 20 21 Finally, Bliss spoke with cancer researcher **Dr. Phil Gold** of the Montreal General Hospital, known for discovering the first identified tumour biomarker, and as the creator of a first-class Montreal cancer centre. ^{22,23}

Bliss's final three interviews took place back in Winnipeg in 2013–14, beginning with **Dr. Arnold Naimark**, former dean (1971–81) and president (1981–86) of the University of Manitoba.²⁴ A prominent feature of their talk were Naimark's comments on Manitoba physiology professor **Dr. Joseph Doupe** (pronounced "Dope") as a uniquely inspirational teacher of medical undergraduates. Despite having a shy and awkward personality (according to Naimark, Doupe "didn't speak fluently") he "essentially understood that what was really important was to way awaken the students intellectually rather than have them go through laboratory exercises by rote." ²⁵

Both Winnipeg interviewees spoke about the influence of this remarkable figure, as did **Drs. Henry Friesen** and **Charles Hollenberg**. The latter remarked, "I think that Joe Doupe was one of the first to realize that if you expose medical students to medical research during their undergraduate experience you will influence their thinking through their lives in medicine. Not many people understood that at that time."²⁶

Admiration for Joe Doupe within the Manitoba contingent was so pervasive that in his final interview, conducted in 2014 with microbiologist and infectious disease specialist **Dr. Allan Ronald**, Bliss raised the issue, describing it as "a kind of Golden Age at the medical school ... they speak in the most reverential terms about Joe Doupe." Although not part of the physiology program, Ronald was exposed nonetheless, commenting on how Doupe instilled in him what would later become an evidence-based approach. ²⁷

Doupe (1910–1966)²⁸ remains a legend in his native province, returning from wartime service abroad doing nerve-injury research to become medical research director and by 1949 head of physiology at the University of Manitoba. Within a few years he transformed the medical school, introducing a research-based program and putting it on a par with the top institutions in Britain and the US. His legacy at U of Manitoba is commemorated with the Joe Doupe Centre, a recreation facility, and the Joe Doupe Concourse, both at its Bannatyne campus, as well as an annual lecture in his honour.²⁹

Friends of CIHR is well aware of Doupe's contributions to health research in Canada, having made two nominations (2001 and 2014) to have him inducted into the Canadian Medical Hall of Fame. Only one individual is inducted posthumously each year, however, and thus far Doupe has not been selected.³⁰

Since Michael Bliss's retirement from the project in 2014, the Video History has continued with excerpts from the Friesen Prize lectures instead of interviews. Prof. Bliss passed away in 2017, and Friends of CIHR posted a video tribute to him on the Video History web page.³¹

Although the Canadian Medical Hall of Fame continues to celebrate our health care leaders past and present, Dr. Aubie Angel's ambition of collecting their reminiscences in extended conversations with a distinguished medical historian remains a worthwhile idea. The main challenge here would be recruiting someone with the necessary breadth and depth of knowledge to undertake the task.

A few possibilities follow: Professor **Shelley McKellar**, Hannah Chair in the History of Medicine at Western University would be an excellent candidate,³² as would writer/historian **Alison Li**,³³ both students of Michael Bliss. Professor **Chrstopher Rutty**, an independent medical historian and adjunct professor at U. of T.'s Dalla Lana School of Public Health, has written extensively on Canadian health history, especially infectious disease and biotechnology.³⁴ There are no doubt other candidates based in other parts of the country. The other major option is to go with a seasoned journalist or broadcaster (as was done early on with Derome and Strauss). Here the top choice would be the *Globe & Mail's* eminent health journalist and writer **André Picard**.³⁵ Engaging any of these people would admittedly be a costly undertaking, but reviving the Video History – and promoting it adequately this time – promises to be a valuable investment for preserving our medical heritage in an era where diaries and (auto)biographies have all but vanished.

Friends of CIHR Symposia (2001–2006)

Following its renaming as a continuation of the Alumni and Friends of MRC, Friends of CIHR wasted no time in introducing itself to Canada's scientific community. On April 30, 2001, the Friends held their inaugural symposium at the Westin Harbour Castle Hotel in Toronto. The topic, "Interdisciplinary research in the health sciences," focused on CIHR's "special commitment to interdisciplinary research." In his opening remarks, Dr. Aubie Angel encouraged the nation's medical schools, research institutes, and teaching hospitals to "facilitate collaborations." To further promote the renewed organization among Canada's medical schools, Dr. Arnold Naimark of the University of Manitoba published a summary of the proceedings in the Association of Medical Colleges *Forum.* ³⁶

A second symposium, on academic freedom, was held in Calgary on April 29, 2002,³⁷ and the four subsequent ones took place in Winnipeg. Despite being a national organization, Friends of CIHR in its early years had a strong University of Manitoba presence. Dr. Aubie Angel, Inaugural Founding President, Friends of CIHR, was based in Winnipeg until 2005 (when he moved to Toronto), as was Dr. Henry Friesen, the driving force behind the creation of CIHR and patriarch of the Friends.

The Friends' third symposium (2003) was held in collaboration with Genome Canada, on how genomic science can improve social well-being and human health.³⁸ Held at the Canadian Museum of Nature in Ottawa, this symposium and public forum was a major event.

Outreach and Public Awareness Efforts

Another key initiative at the time was the publication of a 15-month calendar, "Honouring the Past and Celebrating the Future," commemorating the 50th anniversary of the discovery of the DNA structure and other international achievements.³⁹ This calendar, co-sponsored by **Genome Canada, Partners in Research**, and **Great West Life/London Life**, was the third and final calendar issued by the Friends and various partners "to promote health research nationally and to communicate directly with high school students potentially interested in careers in the health sciences." The calendars were distributed to high school science program directors as well as MPs, Senators, Deans of Medicine in all (then) 16 Canadian

medical schools, Canadian University presidents, teaching hospital presidents, CIHR Institute directors, their advisory board chairs, and university directors. The previous two calendars, devoted to Canadian Medical Historical Greats (see also below) and the new Institutes of CIHR, appeared in 2000 and 2001/2, and were considered a success based on the feedback the Friends received from recipients.⁴⁰

In late 2002, Friends published a brief progress report of its activities since its foundation. In addition to its three "interdisciplinary symposia" and three calendars highlighting Canadian health research, these included the annual "Ottawa Evening" fundraising gala held since 1999 in collaboration with Partners In Research. This popular event, sponsored by CIHR and the University of Ottawa Faculty of Medicine, honoured individuals in the community who contributed to promoting health research, and since 2000 included the winners of the Ontario Students' Science Fair. Proceeds from the gala, which attracted numerous business leaders, MPs, Senators, and Research Institute directors, helped subsidize the Friends' calendar series and its website www.fcir.ca, which has existed in one form or another almost from the beginning.

Other public awareness activities, aimed at promoting health research funding, included

- a series of Parliamentary Days held in association with Health Research Awareness Week and later
 the Canadian Health Research Coalition (CHRC) with a goal of stable funding for CIHR of \$1
 billion within three years
- and the establishment in spring 2002 of a Health Research Advocacy Network (HRAN) to coordinate promotional efforts with numerous other interested organizations⁴¹

The three next symposia (2004–2006) were also held in Winnipeg, in collaboration with the **CIHR National Research Forum for Young Investigators in Circulatory and Respiratory Health**. The 2004 symposium was the inaugural event in this series, hosted by Dr. Naranjan S. Dhalla, Distinguished Professor and Director of Cardiovascular Sciences at the University of Manitoba.⁴² The last symposium in this series, which took place on May 4, 2006, was on "Addressing the Acute Shortage of Clinician Scientists in Canada."⁴³

In 2005, as previously mentioned, Dr. Aubie Angel relocated to Toronto, becoming a Senior Fellow at the University of Toronto's Massey College.⁴⁴ The Winnipeg Symposia were succeeded by new initiatives, specifically the Friesen Prize and the Massey Grand Rounds (MGR). The latter, established by Dr. Angel in 2006, is primarily a Massey College activity and is discussed in chapter 3.

Honours and Awards

In addition, Friends of CIHR has bestowed a number of occasional honours and awards over the years, assessed by ad-hoc Awards Committees appointed by the President and Executive. Dr. Aubie Angel would consult the Executive regarding Special Awards that could be bestowed in conjunction with the annual Friesen Prize Conference events. There is no monetary component associated with these honours.

The most noteworthy of these was the **Friends of CIHR Distinguished Service Award**, established in 2002 and renamed the **Cy Frank Distinguished Service Award** in memory of Calgary orthopedic surgeon **Dr. Cy Frank** following his sudden death in March 2015. Frank had been CEO of Alberta Innovates – Health Solutions and founder of the Alberta Bone and Joint Institute. He had been inducted into the Order

of Canada in 2014 for his contributions to advancing bone and joint repair, with a 30-year history of grant support from MRC/CIHR,⁴⁵ and was a major advocate and sponsor of Friends of CIHR. According to Dr. Angel, Frank "appreciated the value of the Friesen Prize program coming to the west," and contributed \$25,000 annually for three years to fund Friesen Prize visits to Calgary.⁴⁶

The inaugural recipient of the Award was **Dr. Calvin Stiller** (2002), pioneer of the second wave of organ transplantation thanks to his discovery of cyclosporin as an anti-rejection agent. The following year it was awarded posthumously to **Dr. Charles Hollenberg**. Both met its conditions of "exceptional contribution to the advancement of the Friends of CIHR mission and goals," ⁴⁷ and both also participated in its Video History of Medicine in Canada series. In all there have been four recipients of the original award (including **Dr. Henry Friesen** in 2005) and three further ones as the "Cy Frank." Fittingly, two of these awardees, **Drs. Douglas R. Wilson** and **Joel Weiner**, have strong connections with Alberta. Dr. Wilson served as Dean of Medicine at the U. of A. (1984–94) and was instrumental in the establishment of its School of Public Health (2006). ⁴⁸ Dr. Joel Weiner is an eminent Professor of Biochemistry and lead of the School of Molecular & Systems Medicine in the U. of A. Faculty of Medicine and Dentistry, and was past director of the MRC Group on the Molecular Biology of Member Proteins. ⁴⁹

The Friends of CIHR Founders' Award was introduced in 2010 to recognize an individual of high scientific achievement in research and/or enterprise in Canadian biomedicine, in particular those involved in the early years of the Friends of CIHR and its predecessor AFMRC. The award includes an invitation to give a "Founders' Award Lecture." The Founders' Award has been bestowed twice, on **Dr. Duncan Stewart** (2010) and **Dr. Michel Chrétien** (2015)⁵⁰ Dr. Stewart, President and CEO of the Ottawa Hospital Research Institute, spoke on "Challenges in translating innovative therapeutics to the clinic." Dr. Chrétien is an endocrinologist responsible for discovering human β-endorphin (1976) and advancing the pro-hormone theory (1990), which has benefited many aspects of human biology. He also spent six years as health research advisor to the MRC as well as to his brother, Prime Minister Jean Chrétien. Dr. Chrétien was inducted into the Canadian Medical Hall of Fame in 2017.⁵²

The Friends of CIHR Award of Honour recognizes an individual or organization whose work has contributed significantly to Canadian Health Research. The award is presented at a dinner, annual meeting, or other similar Friends gathering.⁵³ This honour has been given twice to date: in 2004 to **Dr. Peter Walker** (Dean of Medicine at the University of Ottawa, 1995–2006, instrumental in establishing collaborations with seven teaching hospitals)⁵⁴ and **Dr. Robert Korneluk**, a specialist in the study of apoptosis (cell death) there and at the Children's Hospital of Eastern Ontario.⁵⁵ It was awarded twice again in 2018, to virologist **Dr. Lorne Tyrrell** and **Dr. Rod McInnes**, inaugural scientific director of CIHR's Institute of Genetics.⁵⁶

The Friends of CIHR Lecture was held occasionally in collaboration with national meetings or other events highlighting topics and themes aligned with Friends of CIHR's mandate. It may be linked to the Friends' awards program or an independent presentation. The Lecture has been given three times.to date under this program at the annual meeting of the Canadian Society for Clinical Investigation (CSCI).⁵⁷ In 2015, endocrinologist **Dr. Michel Chrétien** spoke on the topic "From the Pro hormone theory to PCSK9 hypocholesterolemic mutation in French Canadian families." The following year, **Dr. Linda Rabeneck**, President-Elect of the Canadian Academy of Health Sciences (CAHS) addressed the membership of the CSCI

and Clinician Investigator Trainee Association of Canada (CITAC) on "Academic Success or Significance?" In 2017, **Dr. Alex MacKenzie** addressed CSCI and CITAC on "Treating rare diseases in the era of next generation DNA sequencing: after the deluge." 60

These occasional awards have fallen by the wayside during the COVID and post-COVD years. Reinstating these or similar honours would be a worthy project for the Friends of CIHR's next 25 years.

5. Partners and Sponsors

As a charity rather than an endowed foundation, Friends of CIHR has always been dependent on donations from organizations and individuals to fund its various initiatives. From the beginning – and even extending back into the MRC / AFMRC era of the 1990s – the Friends" have enjoyed generous support from various like-minded groups.

The Year 2000 Calendar, "A Celebration of Canadian Healthcare Research" was produced by what was still the Alumni and Friends of MRC in collaboration with the **Association of Canadian Medical Colleges** (ACMC), the **Association of Canadian Teaching Hospitals (ACTH)**, and **Partners in Research (PIR)**.² PIR, based in London, ON, was another charity dedicated to promoting scientific research, especially among students. It continued to join with Friends of CIHR until 2003 for a fundraiser called the "Ottawa Evening, a major event." (On these initiatives, see also ch. 4)³

The Canadian Institutes for Health Research (CIHR) and its various component institutes, including Gender and Health, and especially the Institute of Circulatory and Respiratory Health (ICRH)⁴ were involved in Friends of CIHR events from the outset, apart from a hiatus after its fifth president, **Dr. Michael Strong**, ended his term on 30 Sept. 2023.⁵⁶ A series of symposia were also held between 2004 and 2010 in collaboration with CIHR's National Research Forum for Young Investigators in Circulatory and Respiratory Health, initially in Winnipeg,⁷ then at a variety of other sites nationwide.⁸ The ^{6th} joint forum, held in Ottawa, was chaired by **Drs. Aubie Angel** and cardiovascular specialist **Bruce McManus** of the University of British Columbia, a long-serving Vice President of Friends of CIHR and member of the Board and Executive, on the topic "Better Health for Heart and Lung Patients, with a personalized approach." ⁹

Canada's major universities, hospitals, and research institutes have always played a prominent role among the Friends' partners and sponsors..

Manitoba

Institutions in Winnipeg were initially in the forefront as the birthplace of AFMRC/Friends of CIHR. Among the sponsors for Friends of CIHR's early symposia were the University of Manitoba's Department of Internal Medicine (headed by Dr. Aubie Angel) and the Centre for the Advancement of Medicine, then headed by Dr. Arnold Naimark, former President of the University of Manitoba. ¹⁰ The Diabetes Research and Treatment Centre (DRTC) of Winnipeg, founded and led by Dr. Aubie Angel since 1996, also sponsored Friends of CIHR initiatives from the beginning. Initially created as an interdisciplinary centre to promote diabetes awareness in Manitoba, the Diabetes Research and Treatment Centre evolved into a national charity based in both Winnipeg and Toronto, aimed at drawing attention to diabetes as a major public health problem. ¹¹ The final longstanding Manitoba partner is St Boniface Hospital Research, which Drs. Henry G. Friesen and Arnold Naimark were instrumental in establishing, together with support for Friends of CIHR from Dr. Grant Pierce. ¹²

Ottawa

Because of Friends of CIHR's status as a national organization, numerous Ottawa-based institutions have likewise figured prominently over the years, including the **University of Ottawa**, its **Heart Institute** (and its founder Dr. Wilbert Keon, cardiovascular surgery pioneer and Senator), its **Mental Health Research Institute**, the **Ottawa Hospital Research Institute**, and the **Children's Hospital of Eastern Ontario Research Institute.**¹³ Several other Ottawa-based organizations have also partnered with Friends of CIHR, including

- **Genome Canada**, established in 2000 as the federal government's chief corporation for genomics research. This organization was another brainchild of Dr. Henry Friesen, who served for five years as its inaugural chair. ¹⁴ Genome Canada was one of the sponsors of Friends of CIHR's 2003 Ottawa symposium on genomic science, ¹⁵ and has continued to support the Friends since 2010. ¹⁶
- Canadian Society for Clinical Investigation (CSCI), created in 1951,¹⁷ is a long-standing partner of Friends of CIHR, with activities including the Young Investigators' Forum. In 2010 a symposium on "Technology in Medicine" was held there,¹⁸ and for its 2017 Annual Lecture, Dr. Alex Mackenzie from the Children's Hospital of Eastern Ontario Research Institute in Ottawa¹⁹ spoke on "Treating Rare Diseases in the era of next generation DNA sequencing."²⁰
- Canadian Academy of Health Sciences (CAHS), founded in 2004 as an independent national advisory body on health-related issues in Canada. CAHS has partnered with Friends of CIHR on a number of occasions, including Henry Friesen Prize events. ²¹ This association ended only after CAHS decided to hold its annual meetings in various cities rather than Ottawa, with which Friends of CIHR had a particularly close relationship.²²
- Canadian Science Policy Centre (CSPC), established in 2009, ²³ partnered with Friends of CIHR for several Roundtables beginning in 2016, with a session on how young investigators in Canada are disadvantaged by funding agency policies. ²⁴ The following two years, Friends of CIHR organized and sponsored its opening fora, on Artificial Intelligence and Federal-Provincial collaboration, respectively. ²⁵

Ontario and Québec

In 2005, Dr. Angel relocated to Toronto as a consultant in the Endocrine Division of UHN. Friends of CIHR's centre of gravity shifted to the University of Toronto and in particular to its new home at Massey College. Although the Friends of CIHR partners in Manitoba and Ottawa continued their support, much of the group's funding now came from central Canada: from such institutions as the University of Toronto, the Ontario Government's Ministry of Research and Innovation, and McGill University. Ontario institutions have been well represented over the years, mostly medical/research centres such as U of T, University of Ottawa, SickKids Hospital, and Hamilton's McMaster University with its groundbreaking medical program, but also more recently the University of Waterloo (for institutional visits by Friesen laureates Lorne Tyrrell in 2022, Zulfiqar Bhutta in 2024, and Gordon Guyatt in 2025).

Other organizations such as the **Banting Research Foundation** (now **Banting Discovery Foundation**) have also served as sponsors from time to time, for instance for the 2016 Policy Roundtable in Ottawa, on "The Role of Early Career Scientists in Research Policy Development." The Toronto-based Foundation, helmed at the time by cardiologist **Dr. John Floras** of the Lunenfeld-Tanenbaum Research Institute at Mount Sinai Hospital, had Aubie Angel as Vice Chair. ²⁷ The following year, **Dr. Catharine Whiteside**, who had just stepped down as Dean of Medicine at the University of Toronto, became chair of the Foundation. ²⁸ The BRF continued to sponsor Friesen laureates **Sir Paul Nurse** and **Dr. Janet Rossant**, and had funded both Drs. Rossant and Henry G. Friesen early in their careers. ²⁹

As a national institution, Friends of CIHR is officially bilingual – "Les Amis des Instituts de recherche en santé du Canada" (AIRSC) 30 – and though most of its activities to date have been in English, most of its documents are available in both languages and it has several francophone Québec sponsors, including Fonds de la recherche du Québec – Santé (FRQS), Génome Québec, and the Institut de recherches cliniques de Montréal (IRCM). As well, the 2007 Friesen Lecture by Dr John Evans was held at the Université de Montréal.³¹

Other regions

Western Canada is well represented, especially the University of British Columbia and St. Paul's Hospital Research Institute, Vancouver, the sites for instance of a 2012 visit by 2011 Friesen Laureate Dr. Victor Dzau. (UBC pathology professor and then-Friends of CIHR Vice-President Dr. Bruce McManus³² was instrumental in facilitating this institutional visit.)³³ The Universities of Alberta and of Calgary are also sponsors, as is Alberta Innovates – Health Solutions (AIHS). ³⁴ Alberta began participating in the Friesen Prize program thanks to the involvement of Prof. Kevin Keough during his term as head of the Alberta Foundation for Medical Research, the predecessor of AIHS.³⁵

Several regions, however, have thus far remained outside of Friends of CIHR's orbit, namely Northern Canada, Saskatchewan, and all of Atlantic Canada. There is plenty of room for growth among our medical schools alone, including one each in Saskatchewan, Nova Scotia, and Newfoundland & Labrador, ³⁶ with the University of Prince Edward Island's Faculty of Medicine scheduled to open in the fall of 2025 in partnership with the Memorial University of Newfoundland. ³⁷

Québec's three francophone faculties of medicine are likewise largely absent from Friends of CIHR/Amis des IRSC, as are Ontario's newer medical schools, such as the Northern Ontario School of Medicine University (NOSM), which has a strong community/rural/Indigenous focus.³⁸ An initial contact was made in 2012 to bring NOSM into the Massey Grand Rounds program, but continuing efforts failed due to lack of institutional support. Dr. Aubie Angel: "if you have awards, then you can get deliverables. ... But there isn't a core of volunteer interest." ³⁹

Dr. Angel has also admitted that Friends of CIHR's current partners are primarily the larger medical schools and high-profile hospitals and research institutes, and that the reason for this imbalance is largely economic. Participation in the Friesen Prize program is a partnership, with host universities contributing significantly, in both direct support and in-kind costs. The six or seven larger Canadian universities have discretionary budgets to cover these visits, which the smaller ones lack. The Atlantic universities, for instance, have been

"approached many times," but their deans and vice-presidents of research do not have the means to accept these invitations, whether they wish to or not.".⁴⁰

Expansion into a more inclusive and truly national organization is a goal for the Friends' second quartercentury.⁴¹

Sponsorships

Institutions have always been encouraged to sponsor Friesen Laureates or interview subjects with whom they have affiliations. For example, the 2002 video interview with renowned SickKids orthopedic surgeon Drs. Robert Salter and Lap-Chee Tsui were funded by the **Hospital for Sick Children.**.⁴²

The number of sponsors, especially for the Friesen Prize, increased significantly as time went on, especially where major scientific "stars" were involved. The 2014 Friesen events for Dr. Lap-Chee Tsui, discoverer of the gene mutation responsible for cystic fibrosis, involved nine "major sponsors," including McGill, the U of Ottawa and the U of Manitoba, along with Cystic Fibrosis Canada and Genome Canada. The numerous sponsors included CIHR, several more universities (among them a number of U of T units), a couple of additional genomic organizations, SickKids, and Massey College. As past president and vice-chancellor of the University of Hong Kong, Dr. Tsui gave a lecture to the University of Toronto's Munk School of Global Affairs (Asian Institute), followed by institutional visits to the University of Ottawa, UBC and St. Paul's Hospital, Vancouver.

The number of institutional visits made by Friesen Laureates likewise increased during the 20-teens and since the COVID-induced hiatus of 2019–21, with as many as five or six given at universities in different parts of the country by each individual. Stem cell researcher Dr. Janet Rossant gave six lectures in 2016–17, at Ottawa, McGill, Manitoba, UBC, U Calgary, and U Alberta. In 2024–25, evidence-based medicine pioneer Dr. Gordon Guyatt gave a record seven talks, accompanied by Interim President Dr. Peter N. Lewis, at UofT, Ottawa, Waterloo, Alberta, Calgary, McMaster, and Manitoba.⁴⁴

Yet the numbers don't tell the whole story. Dr. Angel has expressed concern about the quality of the recent **Friends of CIHR Policy Roundtables**, introduced in 2015 as part of the Friesen Prize program to bring together leading scientists and educators to address major issues in Canadian science and education. ⁴⁵ The proceedings of the early Roundtables were substantial, with well-thought-out remarks delivered by expert speakers. Yet the Roundtables (at least in their published form) have diminished over the years to the point that the proceedings for 2022 and 2023 are brief summaries of what took place. ⁴⁶ Aubie Angel: "It's a wasted opportunity. ... Each institution has talented people, bring them together and have some rigor, and have an output that is immortalized in the records of both Friends of CIHR and the institution." ⁴⁷

6. Friends of CIHR: 2025 and Beyond.

The year 2025 marks the Silver Anniversary of the founding of CIHR, followed by the launch of Friends of CIHR. As outlined in this document, Friends of CIHR has had a lasting impact on the health research landscape in Canada. Most notably, the Friesen Prize is recognized internationally as one of the premier awards in health research. Friends of CIHR has engaged trainees in its activities and has highlighted the importance of supporting early career researchers. Significantly, Friends of CIHR has also acted as a convener, bringing together leaders in health research and administration in celebratory events, lectures, and roundtable discussions. Friesen Prize winners have crisscrossed the country giving public lectures on current health research topics. Friends of CIHR could carry out none of these activities without the loyal support of its partners and funders. Most importantly, it has been the vision, leadership, and drive of **Dr. Aubie Angel** that has sustained Friends of CIHR since its creation.

In 2025 Friends of CIHR is at a crossroads, with unprecedented challenges and opportunities in several key areas.

• Leadership: In January 2020, founding president Dr. Aubie Angel announced his intention to retire from this position by year end, and a Succession Planning Committee was struck in October. The committee reviewed a long list of potential candidates familiar with Friends of CIHR, but was unable to attract a suitable candidate. A year later, pediatric oncologist Dr. David Malkin was approached and was appointed for a five-year term beginning in January 2022. Unfortunately, as Dr. Aubie Angel noted, Dr. Malkin resigned the following year "with six months' notice," 3creating an awkward interregnum in the Friends of CIHR presidency. Dr. Malkin was able to sustain the organization in the post-pandemic era, but as a busy clinician-scientist he recognized that he could not dedicate sufficient time and energy to the position at this point in his career.

As of January 2024, **Prof. Peter Lewis** assumed the position of Interim President. He remains in this post until the end of 2025, while a new President continues to be sought.⁴ In Friends of CIHR's annual *Spotligh*t newsletter, Drs. Malkin and Lewis both expressed their gratitude to Dr. Aubie Angel and Friends of CIHR's long-serving administrator **Cristina Castellvi** for guiding them through the transition and the complexities of the president's role.⁵

Sadly, Friends of CIHR also lost their founder and greatest champion when **Dr. Henry G. Friesen** passed away on 30 April 2025. An outpouring of tributes to Dr. Friesen's innovations and many achievements as both scientist and creator of CIHR appears on the Friends of CIHR website, along with a video recording of his funeral.⁶ Friesen had remained the patriarch of the Friends, and an active participant in its events until 2024, when he stepped down as Honorary Director.⁷

The Board of Friends of CIHR has recognized the importance of leadership and its role in supporting the President. Prof. Lewis created two committees (Planning & Priorities and Governance & Nominating) with clear terms of reference to assist the President. These Committees are charged with the responsibility of ensuring that the Board represents the broader health research community and has the expertise to advise and support the President. Furthermore, the Board is

dedicated to creating a plan to sustain the legacy of Henry Friesen and Aubie Angel, in particular the Friesen Prize and its associated activities.

• Fundraising and membership renewals: Raising funds to support Friends of CIHR and the Friesen Prize has been an ongoing challenge. Yet, Friends of CIHR has been supported by many institutions, including CIHR, over its 25-year history. Friends of CIHR does not have an endowment and is sustained on an annual basis by donations from our supporters, mostly universities and research institutes. Once a Friesen Prize winner has been identified, the President sends out a letter of request for support of Friends of CIHR and the Friesen Prize to VPs and Vice Directors of Research. This includes the opportunity for institutions to host the Friesen Prize winner, as part of the Friesen Prize program. The annual budget of Friends of CIHR is \$150,000, and it has been difficult to meet this goal in recent years as institutions grapple with their own budgetary issues. Friends of CIHR needs to ensure that it is a "value-added" organization which continues to play an important role nationally in supporting the health research enterprise.

A two-year hiatus at the helm of CIHR itself resulted in a loss of funding for the Friends from that key source, as its acting leadership declined to continue support.⁸ With the appointment of critical and palliative care physician **Dr. Paul C. Hébert** as CIHR president in January 2025, the situation is more promising.⁹ Discussions are in progress with the CIHR leadership to support Friends of CIHR and a preliminary Memorandum of Understanding has been created.

With Dr. Angel's departure from the presidency of Friends of CIHR in 2020 and the COVID-19 pandemic, there has been a loss of momentum, which has translated into further reductions in support. In his 2024 *Spotlight*, . Lewis expressed the hope that "these issues can be resolved in the coming year." During the transitional period at CIHR, meanwhile, funding levels decreased. During Dr. Malkin's tenure there were discussions about finding a new home for the popular Friesen Prize program and breaking up or renaming the organization ("Friends of Health Research"). A survey of the membership, however, demonstrated that despite these challenges there was still strong support for retaining Friends of CIHR in its existing form to support the Friesen Prize. 11

• Leaving Massey College. Friends of CIHR rented an office at Massey College beginning in 2005 at the invitation of its then-Master John Fraser. In late 2024, Friends of CIHR moved out of Massey College for fiscal reasons. The College generously facilitated the transfer of Dr. Angel's personal assets to his home office. All active files, historical documents, and paraphernalia were subsequently relocated to Prof. Lewis' office in the University of Toronto Medical Sciences Building, which now serves as Friends of CIHR's base of operations.¹²

Dr. Aubie Angel considers this development a major loss to the Friends: "The significance of the relationship of Friends of CIHR to Massey College can't be overstated, and there was a symbiotic relationship. Both ways. Everybody benefited. Friends of CIHR benefited tremendously, because we were in an environment of supporting young people in their careers and research and at the forefront of innovation, of opportunity and track traffic of people in science, so that things went on here, organized here, maintained here, that sustain the goals of Friends of CIHR very, very well." Angel himself continues to retain a strong connection as a Senior Fellow and by leading the Massey Grand Rounds (MGR) Program at Massey College, but the symbiosis between Massey College and Friends of CIHR has been considerably weakened.

Yet at the same time, there have been many positive developments. As the preceding chapters demonstrate, the past quarter-century has been an eventful and productive period for the Friends, including:

- A major shift in its home base from the University of Manitoba in Winnipeg to the University of Toronto in 2005.
- A growing number of programs and activities, in particular the addition of the prestigious Friesen Prize program in 2005, as well as Dr. Aubie Angel's mentorship initiative, the Massey Grand Rounds (MGR); and the latter's spin-off, the Janet Rossant Lectureship.

Some former initiatives, meanwhile, could potentially be revived, including various Friends of CIHR awards, and possibly the Video History of Medicine in Canada.

- Maintaining and developing a growing network of partners and sponsors among Canada's major universities, research institutes, and other health-related organizations.
- Thriving during COVID-19 lockdowns by successfully pivoting from live events to virtual lectures. In particular, the international Virtual Launch of Sir Mark Walport's keynote address as the 2020 Friesen Prize laurate, which brought together Canadian and British health leaders.
- As of 2024–25, under Dr. Malkin's and Lewis' leadership the Friends of CIHR have hosted an unprecedented number of institutional visits by the 2023 Friesen Prize Laureate, global child health specialist Dr. Zulfiqar Bhutta (6 visits), and the 2024 Friesen Laureate, Evidence-Based Medicine (EBM) pioneer Dr. Gordon Guyatt (8 visits). Its Executive was enriched by the arrival of a new Vice-President (Dr. Andrea Baumann) and two new Board Members, Dr. Duncan Stewart (former CEO of the Ottawa Hospital Research Institute) and Ms Deborah Gordon (former CEO of Research Canada).
- The Friends of CIHR website has been updated, and social media is being used to promote its activities.

POSTSCRIPT

The quarter-century mark is an appropriate time to take stock, and to look forward.

So, where to from here? Perhaps like CIHR's recent period of transition, some of the challenges currently facing the Friends of CIHR will be resolved with "new leadership" and "fresh vision" in the form of a new successor to the presidency. Dr. Angel believes that the organization's mandate " is still valid in terms of supporting science and all its manifestations through CIHR and other agencies and through partnerships, attracting young people, young minds, to careers and supporting them throughout." Getting more universities involved in events such as Friesen Prize Lectures is also essential, Angel says, "having some strategic approach so that in five years, all universities are part of it," 14 unlike the present situation, where large regions of the country, including all four Atlantic provinces, are not engaged. With the connection to Massey College now largely dissolved, it is possible that Friends of CIHR's centre of gravity will shift again, as it once did from Winnipeg to Toronto. There have always been strong connections with Ottawa, as well as a sizeable Western contingent among the supporters. Reaching out to partner with more institutions in Quebec and the Atlantic Provinces will make FCIHR a truly national organization.

The two committees created by Prof. Lewis will be active in planning the next steps for the Friends of CIHR, including revitalization of the Board, recruiting a new president, and refining its role in Canada's health research landscape. The next few years will be a critical time for health research in Canada and for the Friends of CIHR.

To learn the latest about FCIHR check out the website at FCHR.ca or FCIHR.ca

Appendix

Alumni and Friends of MRC Canada/Anciens et Amis di CRM Canada, 2000^1

President Dr. Aubie Angel

Vice-President Dr. Martin Hollenberg

Secretary Dr. Kevin Smith

Treasurer Dr. David Hawkins

Councilors Dr. Pat Baird

Dr. Serge Carrière

Dr. William (Bill) Cocrane

Dr. Henry Dinsdale Dr. Phil Gold

Dr. Charles Hollenberg Dr. David McLean Dr. Fraser Mustard Dr. Emil Skamene Dr. Calvin Stiller

Members (by province): The founding members of Friends of CIHR hailed from across Canada.

Alberta

Dr. Roland Auer, Calgary Dr. Donald Boisvert, Edmonton Dr. William Cochrane, Calgary Dr. David Cumming, Edmonton Dr. Marvin Fritzier, Calgary Dr. R. Hurlbert, Calgary Dr. Dennis Jirsch, Edmonton Dr. G. Melville Jones, Calgary Dr. Ian MacDonald, Edmonton Dr. Eldon Shaffer, Calgary Dr. Matthew Spence, Edmonton Prof. Alan Thomson, Edmonton Dr. D. Tyrrell, Edmonton Dr. Warren Veale, Calgary Prof. Leonard Wiebe, Edmonton Dr. Douglas Wilson, Edmonton Dr. Sara Zalik, Edmonton

British Columbia

Dr. Patricia Baird, Vancouver Dr. John Cairns, Vancouver Dr. Donald Cameron, Vancouver Dr. Brian Conway, Vancouver Dr. Stephen Drance, Vancouver Dr. Samuel Foo, Vancouver Dr. Jiri Frolich, Vancouver Prof. John Gilbert, Vancouver Dr. Judith Hall, Vancouver Dr. Jennifer Hamilton, Vancouver Prof. Robert Hancock, Vancouver Dr. David Hardwick, Vancouver Dr. Richard Hegele, Vancouver Dr. Martin Hollenberg, Vancouver Dr. Brian Lentle, Vancouver Dr. James Hogg, Vancouver Mr. Bill Liaskas, Delta Dr. David McLean, Vancouver

Dr. Bruce McManus, Vancouver Dr. Stephen Sacks, Vancouver Dr. Stanley Szomathy, Kelowna Dr. Jack Rootman, Vancouver Dr. Andrew Seal, Vancouver Dr. Wah Tze, Vancouver

New Brunswick

Prof. Didier Gauthier, Moncton

Newfoundland and Labrador

Prof. M. Ian Bowmer, St John's

Dr. Kevin Keough, St. John's

Nova Scotia

Dr. Elizabeth Cowden, Halifax Dr. Micheline Ste-Marie, Halifax Halifax Dr. Choong You , Halifax Dr. Thomas Murray, Halifax

Dr. Robin Whyte,

Manitoba

Dr. Aubie Angel, Winnipeg Dr. Fred Aoki, Winnipeg Dr. Peter Cattini, Winnipeg Dr. Naranjan Dhalla, Winnipeg Dr. Larry Jordan, Winnipeg Dr. Grant Pierce, Winnipeg Dr. Brent Schacter, Winnipeg Dr. Nick Anthonisen, Winnipeg Dr. Robert Beamish, Winnipeg Dr. Colin Dawes, Winnipeg Dr. John Jeffery, Winnipeg Dr. Arnold Naimark, Winnipeg Dr. Alan Ronald, Winnipeg Dr. Pawan Singh, Winnipeg

Ontario

Dr. Jane Aubin, Toronto Dr. S. Baryshnik, North York Dr. Bhagu Bhavnani, Toronto Dr. W. Biggar, Toronto Dr. Alan Bocking, London Dr. S. George Carruthers, London Dr. Mario Castelli, Toronto Dr. Howard Clarke, Toronto Dr. Paul Cooper, London Dr. John Dirks, Toronto Mr. Colin Deacon, Gloucester Dr. Henry Dinsdale, Kingston Dr. Al Edwards, Toronto Dr. Christopher Forrest, Toronto Dr. Peter Garner, Ottawa Dr. Avrum Gotlieb, Toronto Dr. Victor Han, London Dr. David Hawkins, Ottawa Dr. Rob Hegele, London Dr. Charles Hollenberg, Toronto

Dr. Maung Aye, Ottawa Dr. Catherine Bergeron, Toronto Dr. J. Bienenstock, Hamilton Dr. Charles Bird, Kingston Dr. Kathleen Bury, Etobicoke Dr. Robert Casper, Toronto Dr. John Chan, Mississauga Dr. Joe Clarke, Toronto Dr. M. Costa, Toronto Dr. Anna Day, Toronto Dr. N. Diamant, Toronto Dr. Merrill Edmonds, London Dr. Ernest Fallen, Hamilton Dr. Paul Garfinkel, Toronto Dr. Clément Gauthier, Ottawa Dr. Denis Grant, Toronto Dr. Ian Hart, Ottawa Prof. Jean Himms-Hagen, Ottawa Dr. David Hill, London Mr. D. Irvine, Ottawa

Dr. W. Jackson, Ottawa Dr. Firouz Khamsi, Toronto Dr. John Laidlaw, Toronto Dr. Donald Layne, Toronto Dr. David Levine, Ottawa Dr. H. Lickley, Toronto Dr. Neil McAlister, Whitby Dr. Jack McDonald, London Dr. Mark Mandelcorn, Toronto Dr. Timothy Murray, Toronto Dr. C. David Naylor, North York Dr. Jeffrey Nisker, London Dr. Eliot Phillipson, Toronto Dr. Howard Price, Scarborough Dr. Leo Renaud, Ottawa Dr. Alex Rivlin, North York Dr. Francis Rolleston, Ottawa Dr. Barry Rubin, Toronto Dr. Robert Salter, Toronto Dr. W. Sibbald, London Dr. Kevin Smith, Hamilton Dr. Calvin Stiller, London Dr. Sheldon Tobe, North York Dr. Lap-Chee Tsui, Toronto Mrs. Ursula Verstraete, North York

Dr. Paul Walfish, Toronto Dr. Ronald Worton, Ottawa Dr. Edmund Yendt, Kingston Dr. Wilbert Keon, Ottawa Dr. Kieran Killan, Hamilton Dr. David Lau, Ottawa Mr. Marc LePage, Ottawa Dr. Jim Lewis, London Dr. J. Lowden, Toronto

Dr. Ernest McCulloch, Toronto Dr. Nancy McKee, Toronto Dr. Rajiv Midha, North York Dr. J. Fraser Mustard, Toronto Dr. Michael Nicolle, London Dr. Beverley Orser, Toronto Dr. Mark Poznansky, London Dr. Kenneth Pyke, Dundas Dr. Brian Richardson, London Dr. Margot Roach, London Dr. Janet Roscoe, Scarborough Dr. James Rusthoven, Hamilton Dr. John Seely, Ottawa

Dr. John Seely, Ottawa
Dr. Barry Smith, Kingston
Dr. Alexander Sorisky, Ottawa
Dr. Charles Tator, Toronto
Dr. James Trotman, Mississauga
Dr. Peter Tugwell, Ottawa
Dr. Mladin Vranic, Toronto
Prof. John Wallace, Cochrane
Dr. James Wright, Toronto
Prof. Walter Zingg, Stevensville

Québec

Dr. Albert Aguayo, Montreal
Dr. François Auger, Québec
Dr. Henri Benoualid, Montreal
Dr. Jacques Billette, Montreal
Dr. Pierre Blier, Montréal
Dr. Guy Boileau, Mont Royal
Dr. Claude Bouchard, Ste-Foy
Dr. Michel Bouvier, Montréal
Prof. Jean-Real Brunette, Magog-Orford
Dr. Michel Bureau, Sherbrooke
Dr. Jacques de Champlain, Montréal
Dr. Gilles Charpenter, Ste-Foy
Dr. Sylvain Chernitob, Cote St-Luc
Dr. Manuel Cosio, Montréal

Dr. Richard Cruess, Montréal

Dr. Jack Antel, Montreal
Dr. Luc Bélanger, Québec
Dr. Yves Berthiaume, Montreal
Dr. Ghassan Bikaily, Sherbrooke
Dr. Pierre Bois, Pierrefonds
Dr. Pierre Borgeat, Sillery
Dr. Danielle Bourgaux, Sherbrooke
Mr. Peter Brenders, Pointe-Claire
Dr. John Burgess, Montreal
Dr. Serge Carrière, Vaudreuil
Dr. T.M.S. Chang, Montréal
M. Marcel Chartrand, Chelsea
Dr. Nicolas Christou, Montréal
Dr. François Coutlée, Montréal
Dr. Pierre D'Amour, Outremont

Dr. Sharon Dauphinée, Montréal

Dr. Régen Drouin, Québec

Dr. William Duguiid, Montreal

Dr. Mostafa Elhilall, Montreal

Dr. F. Fraser, Montreal

Dr. Ana Garcia, Cote St-Luc

Dr. Phil Gold, Montreal

Dr. Harry Goldsmith, Montreal

Prof. Edith Hamel, Montreal

Dr. J. Richard Hamilton, Montreal

Dr. Leonard Hoffer, Montreal

Dr. Paul Jolicoeur, Montreal

Dr. Charles Leblond, Montreal

Dr. Mara Ludwig, Montreal

Dr. Jean-:Luc Malo, Montreal

Dr. Jean Moutquin, Quebec

Dr. Robert Murgita, Montreal

Dr. Pierre Paré, Quebec

Dr. Leonard Pinksy, Montreal

Dr. A. Poole, Montreal

Dr. Eugenio Rasio, Montreal

Mrs. Tannis Richardson

David Rosenblatr, Montreal

Dr. Charles Scriver, Montreal

Dr. Theodore Sourkes, Montreal

Mr. Alan Tenenhouse, Montreal

Dr. Mark Wainberg, Montreal

Dr. Bernard Willems, Montreal

Montreal Dr. Leonard Wolfe, Montreal

Dr. Jean Davignon, Montréal

Dr. Gilles Duguid, Montréal

Dr. Jean Dumesnil, Saint-Foy

Dr. Nacia Fauré, Montreal

Dr. William Friend, Verdun

Dr. Jacques Genest, Jr., Montreal

Dr. Victor Goldbloom, Montreal

Dr. Maria Hadjopoulous, Montreal

Dr. Pavel Hamet, Montreal

Dr. Peter Hechtman, Montreal

Dr. Andrew Jakubowski, Quebec

Dr. Fernand Labrie, Saint-Foy

Dr. Bernard Leduc, St-Laurent

Dr. Peter Macklem, Montreal

Dr. Brenda Milner, Montreal

Dr. David Mulder, Montreal

Dr. Dennis Osmond, Montreal

Dr. Denis Phaneuf, Montreal

Prof. Ervin Podgorsak, Montreal

Dr. Rémi Quirion, Verdun

Dr. Michael Rasminsky, Montreal

Dr. Fernand Roberge, Montreal Dr.

Dr. Claude Roy, Montreal

Dr. Emil Skamene, Montreal

Dr. Gloria Tanenbaum, Montreal

Dr. Patrick Vinay, Montreal

Dr. V. Michael Whitehead, Montreal

Dr. Simon Wong,

Saskatchewan

Dr. R. Bala, Saskatoon

Prof. Sergey Federoff, Saskatoon

Saskatoon Prof. Ashfaq Shualb, Saskatoon

Dr. James Dosman, Saskatoon

Dr. D. Johnson,

References

Chapter 1: Origins

Canadian Institutes of Health Research Act, S.C. 2000, c. 6, Assented to 2000-04-13, https://laws.justice.gc.ca/eng/acts/c-18.1/page-1.html, accessed 18 Jan. 2025.

- ² Canadian Institutes of Health Research. CIHR at 25. https://cihr-irsc.gc.ca/e/54265.html, accessed 1 SApril 2025.
- ³ Canadian Institutes of Health Research Act, S.C. 2000, c. 6, Assented to 2000-04-13, https://laws.justice.gc.ca/eng/acts/c-18.1/page-1.html, accessed 18 Jan. 2025.
- A commemorative history of MRC was published under the title A Legacy of Excellence: 40 Years, 1960–2000. Ottawa: The Council, 2000.
- ⁵ Friesen HG. The Medical Research Council of Canada: Integrating research to Canada's health care system. Nature Medicine 4 (12): Dec. 1998: 1353–1355.
- Modeled on the British MRC, Romano T, Li A, Celebrating the Medical Research Council of Canada: A voyage in time, 1960--2000. Ottawa: MRC, 2000), 7–8.
- ⁷ Records created or inherited by the Medical Research Council | The National Archives,, accessed 19 Feb. 2025.
- A Short History of the National Institutes of Health Office of NIH History and Stetten Museum, accessed 15 Feb. 2025.
- National Institutes of Health Wikipedia, accessed 19 Feb. 2025.
- ¹⁰ What We Do Banting Research Foundation, accessed 25 Feb.2025.
- ¹¹ Bliss, M. The Discovery of Insulin. McClelland & Stewart, 1982.
- ¹² What We Do Banting Research Foundation, accessed 25 Feb. 2025.
- ¹³ "Banting Research Foundation." Nature. 10 Feb. 1934: 206
- ¹⁴ Banting Research Foundation Wikipedia, accessed 10 Feb. 2025.
- ¹⁵ Shorter E. Partnership for Excellence: Medicine at the University of Toronto and Academic Hospitals. Toronto: University of Toronto Press, 2013, 56.
- ¹⁶ About Us Banting Research Foundation; Banting Discovery Foundation | LinkedIn, accessed 20 Feb. 2025.
- Friesen, HG. The Medical Research Council of Canada: Integrating research to Canada's health care system. Nature Medicine. 4 (12) (Dec. 1998), 1353—1355.
- ¹⁸ Hodd C. Dal Med Innovator, Dr. Chester Stewart, <u>Dal Med Innovator | Dr. Chester Stewart Faculty of Medicine Dalhousie University</u>, accessed 20 Feb. 2025. Stewart went on to become dean of medicine at Dalhousie, 1954—1971.
- Romano T, Li A. Celebrating the Medical Research Council of Canada: A voyage in time, 1960-2000. Ottawa: MRC, 2000), 7-9.
- Friesen HG. The Medical Research Council of Canada: Integrating research to Canada's health care system. *Nature Medicine*. 4 (12) (Dec. 1998), 1353—1355.
- ² Ray Farquharson, MD | CMHF, accessed 11 March 2025; https://deptmedicine.utoronto.ca/. Farquharson was a member of the National Research Council, and instrumental in the creation of the MRC, of which he was the first president (1960-1968); he was also Chair of the University of Toronto's Department of Medicine between 1947 and 1960.
- ²² Romano T, Li A. Celebrating the Medical Research Council of Canada: A voyage in time, 1960--2000. Ottawa: MRC, 2000), 9.
- ²³ Romano T, Li A. Celebrating the Medical Research Council of Canada: A voyage in time, 1960--2000. Ottawa: MRC, 2000), 9.
- Romano T, Li A. Celebrating the Medical Research Council of Canada: A voyage in time, 1960-2000. Ottawa: MRC, 2000), 10-11.
- ²⁵ Bliss, M. Beyond the Granting Agency: The Medical Research Council in the 1990s. Ottawa: Medical Research Council of Canada, 2000, 7.

- ²⁶ Bliss, M. Beyond the Granting Agency: The Medical Research Council in the 1990s. Ottawa: Medical Research Council of Canada, 2000, 8.
- ²⁷ NSERC History Chronicle of Past Events, accessed 11 March 2025.
- ²⁸ <u>Social Sciences and Humanities Research Council</u>, accessed 11 March 2025.
- ²⁹ Bliss, Beyond the Granting Agency, 8–9.
- ³⁰ NCE History, accessed 11 March 2025.
- 31 Bliss, Beyond the Granting Agency, 9.
- ³² https://www.nce-rce.gc.ca/About-APropos/Index eng.asp About the Networks of Centres of Excellence.
- ³³ <u>https://sshrc-crsh.canada.ca/funding-financement/nfrf-fnfr/about-au_sujet-eng.aspx,</u> About the New Frontiers in Research Fund.
- ³⁴ Romano T, Li A. Celebrating the Medical Research Council of Canada: A voyage in time, 1960-2000. Ottawa: MRC, 2000), 18.
- ³⁵ FCIHR, Board of Directors, http://www.fcihr.ca/directors, accessed 9 April 2025.
- ³⁶ Bliss, Beyond the Granting Agency, 9; <u>Henry Friesen, MD | CMHF</u>, accessed 13 March 2025; <u>Henry G Friesen, CC MD FRSC FCAHS Banting Research Foundation</u>, accessed 13 March 2025.d
- ³⁷ Bliss, Beyond the Granting Agency, 9.
- 38 Bliss, Beyond the Granting Agency, 11—12.
- ³⁹ Friesen HG. The Medical Research Council of Canada: Integrating research to Canada's health care system. *Nature Medicine* 4 (12): Dec. 1998: 1353—1355.
- ⁴⁰ Bliss, Beyond the Granting Agency, 11.
- 41 Henry G. Friesen Gairdner Foundation Award Winner, accessed 21 March 2025.
- ⁴² Friesen biography resource. Henry Friesen, MD | CMHF, accessed 18 March 2025.
- 43 FCIHR, Board of Directors, http://www.fcihr.ca/directors, accessed 9 April 2025.
- ⁴⁴ The Henry G. Friesen International Prize in Health Research » CALL FOR NOMINATIONS 2025 Henry G. Friesen International Prize in Health Research, accessed 18 March 2025.
- ⁴⁵ Bliss, Beyond the Granting Agency, 13
- 46 A Legacy of Excellence: 40 Years, 1960-2000. Ottawa: The Council, 2000, 44.
- ⁴⁷ Genome Canada timeline Genome Canada, accessed 21 March 2025.
- Friesen HG. The Medical Research Council of Canada: Integrating research to Canada's health care system. *Nature Medicine* 4 (12): Dec. 1998: 1353–1355.
- ⁴⁹ Romano T, Li A. Celebrating the Medical Research Council of Canada: A voyage in time, 1960--2000. Ottawa: MRC, 2000), 19
- ⁵⁰ Friesen HG. The Medical Research Council of Canada: Integrating research to Canada's health care system. *Nature Medicine* 4 (12): Dec. 1998: 1353—1355.
- 51 Bliss, Beyond the Granting Agency, 15.
- ⁵² Friesen HG. The Medical Research Council of Canada: Integrating research to Canada's health care system. *Nature Medicine* 4 (12): Dec. 1998: 1353—1355.
- 53 Bliss, Beyond the Granting Agency, 17
- Murphy J. From the Medical Research Council to the Canadian Institutes of Health Research: Understanding Transformational Institutional Change. PhD Dissertation, Ottawa: School of Public Policy and Administration, Carleton University, 2008.
- 55 Bliss, Beyond the Granting Agency, 21.
- 56 Bliss, Beyond the Granting Agency, 23.
- ⁵⁷ Bliss, Beyond the Granting Agency, 23. Italics as in original.
- 58 Interview with Aubie Angel, 3 Sept. 2025, and comment, 15 Sept. 2025.
- 59 Bliss, Beyond the Granting Agency.
- ⁶⁰ Canadian Academy of Health Sciences, <u>Kevin Keough PhD Canadian Academy of Health Sciences |</u>
 <u>Académie canadienne des sciences de la santé.</u>
- 61 Bliss, Beyond the Granting Agency, 25.
- ⁶² Murphy J. From the Medical Research Council to the Canadian Institutes of Health Research: Understanding Transformational Institutional Change. PhD Dissertation, Ottawa: School of Public Policy and Administration, Carleton University, 2008.

- 63 <u>Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans TCPS 2 (2022)</u>, accessed 19 March 2025.
- 64 Bliss, 20
- ⁶⁵ Boulakia C, CIHR Replaces Medical Research Council Canada, *Science* 23 June 2000, doi:10.1126/article64535.
- 66 Bliss, Beyond the Granting Agency, 21.
- ⁶⁷ Bliss, Beyond the Granting Agency, 27.
- [∞] A Legacy of Excellence: 40 Years, 1960–2000. Ottawa: The Council, 2000, 6.
- Mondro W. New Virtual Institutes for Biomed Research. Science 288 (5473) 16 June 2000, 1944.
- ⁷⁰ Kondro W. New Virtual Institutes for Biomed Research. *Science* 288 (5473) 16 June 2000, 1944.
- ⁷ Basky G. Canadian government boosts health research. BMJ 318)7185) 13 Mar 1999: 692.
- ⁷² Boulakia C, CIHR Replaces Medical Research Council Canada, *Science* 23 June 2000, doi:10.1126/article64535.
- ⁷³ Campbell HC (ed) (1967) Medicine. In *How to Find Out About Canada*. Commonwealth 0and International Library, 138–142.
- ⁷⁴ Kondro W. New Virtual Institutes for Biomed Research. Science 288 (5473) 16 June 2000, 1944.
- ⁷⁵ About the Institutes CIHR, accessed 19 March 2025.
- ⁷⁶ About the Institutes CIHR, accessed 19 March 2025.
- "Institute Advisory Boards (IABs) CIHR, accessed 19 March 2025.
- ⁷⁸ MRC. A Legacy of Excellence: 40 Years, 1960-2000. Ottawa: The Council, 2000., 6.
- ⁷⁹ CIHR at 25, https://cihr-
- <u>irsc.gc.ca/e/54265.htm</u> |#:~:text=In%202025%2C%20the%20Canadian%20Institutes,ve%20had%E2%80%94 along%20the%20wa, accessed 23 March 2025.
- https://www.aacr.org/governance/alan-bernstein-phd/, accessed 13 Oct. 2025.
- Pioneering health researcher Alan Bernstein receives U of T honorary degree | University of Toronto, https://www.utoronto.ca/news/pioneering-health-researcher-alan-bernstein-receives-u-t-honorary-degree, accessed 13 Oct. 2025.
- ⁸² Friends of CIHR, Henry G. Friesen International Prize In Health Research, 2015/16, Alan Bernstein, Science as a Global Public Good
- ** https://www.cdnmedhall.ca/laureates/alanbernstein, accessed 13 Oct.; 2025.
- 44 Email from Dr. Alan Bernstein, 14 Oct. 2025.
- ** https://www.aacr.org/governance/alan-bernstein-phd/, accessed 13 Oct. 2025.
- ** https://www.gairdner.org/winner/alan-bernstein, accessed 3 Oct. 2025.
- ** https://www.cbc.ca/news/science/head-of-canada-s-health-funding-agency-to-step-down-1.658160, accessed 13 Oct. 2025.
- ** https://www.cdnmedhall.ca/laureates/alanbernstein, accessed 13 Oct. 2025.
- https://www.gg.ca/en/honours/recipients/146-2373 https://www.gg.ca/en/honours/recipients/146-2373, 13 Oct. 2025.
- ⁹⁰ https://www.gairdner.org/winner/alan-bernstein, accessed 13 Oct. 2025.
- 91 https://www.cdnmedhall.ca/laureates/alanbernstein, accessed 13 Oct. 2025.
- ** https://www.canada.ca/en/news/archive/2008/02/minister-clement-appoints-president-new-member-canadian-institutes-health-research-governing-council.html, accessed 13 Oct. 2025.
- ⁹³ <u>canada.ca/en/news/archive/2008/02/minister-clement-appoints-president-new-member-canadian-institutes-health-research-governing-council.html</u>, accessed 13 Oct. 2025.
- ** newswire.ca/news-releases/minister-aglukkaq-announces-reappointment-of-dr-alain-beaudet-as-president-of-the-canadian-institutes-of-health-res, accessed 13 Oct. 2035.
- https://www.shifthealth.com/people-culture/alain-beaudet/, accessed 13 Oct. 2025.
- ** https://www.canada.ca/en/institutes-health-research/news/2016/12/cihr-president-alain-beaudet-announces-retirement-public-service.html, accessed 14 Oct. 2025.
- 97 https://www.mcgill.ca/biochemistry/faculty-members/mcinnes, accessed 13 Oct. 2025.
- * https://www.cdnmedhall.ca/rodmcinnes, accessed 13 Oct. 2025.
- <u>https://jghnews.ciussswestcentral.ca/dr-roderick-mcinnes-promoted-to-officer-of-the-order-of-canada/</u>, accessed 13 Oct. 2025.

- https://www.schulich.uwo.ca/about/news/2018/june/announcement dr michael j strong moving on to new role as president of cihr.html, accessed 17 Oct. 2025.,
- 101 Biography of Dr. Michael J. Strong Canada.ca https://www.canada.ca/en/institutes-health-research/news/2018/06/biography-of-dr-michael-j-strong.html, accessed 17 Oct. 2025.
- 102 Message from the President of CIHR CIHR https://cihr-irsc.gc.ca/e/53502.html, accessed 17 Oct. 2025., 103 https://www.cihr-irsc.gc.ca/e/10308.html.,accessed 17 Oct. 2025.
- ¹⁰⁴ Calvin R. Stiller, MD | CMHF. Accessed 19 March 2025. Stiller, a transplantation pioneer, joined the MRC Board in 1987, created the Canadian Medical Discovery Fund in 1994 (resulting in a huge number of commercial start-ups) and was inducted into the Canadian Medical Hall of Fame in 2010.
- 105 Bliss, Beyond the Granting Agency, 16.
- ¹⁰⁶ FCIHR Archives, box 51, The Medical Research Council of Canada, Scientific Legacy Symposium, 23 March 2000/
- ¹⁰⁷ FCIHR, The Friends of Canadian Institutes of Health is Born! A brief history, Old website, <u>Friends of Canadian Institutes of Health Research</u>, accessed 16 Jan. 2025.
- 108 Bliss, Beyond the Granting Agency. 24–25.
- 109 Romano T, Li A, Celebrating the Medical Research Council of Canada: A voyage in time, 1960-2000.
- 110 MRC. A Legacy of Excellence: 40 Years, 1960—2000. Ottawa: The Council, 2000.
- 111 FCIHR papers, box 51.
- 112 FCIHR, The Friends of Canadian Institutes of Health is Born! A brief history, Old website, Friends of Canadian Institutes of Health Research, accessed 16 Jan. 2025.
- 113 Friends of CIHR, "Please Join Us & Invest in Our Future Health," brochure, undated but ca. early 2000s.
- ¹¹⁴ Friends of CIHR, "Enhancing the Health of Canadians Through Research Support and Community Advocacy," brochure, fall 2002.
- ¹¹⁵ Friends of CIHR, "Enhancing the Health of Canadians Through Research Support and Community Advocacy," brochure, fall 2002.
- 116 Per email from Dr Andrea Baumann, 2 July 2025.

Chapter 2: Governance

- ¹ FCIHR, Board of Directors, http://www.fcihr.ca/directors, accessed 7 April 2025, and comment by Dr. Aubie Angel, 30 Sept. 2025.
- ² FCIHR, Board of Directors, http://www.fcihr.ca/directors, accessed 7 April 2025.
- ³ FCIHR, 2024 Spotlight on FICHR, accessed 7 April 2025.
- ⁴ FCIHR 2024 Spotlight on FCIHR. Dr. Friesen was born in 1934.
- ⁵ Dr. Henry G. Friesen, Friends of Canadian Institutes of Health Research, http://www.fcihr.ca/, posted 5 Amy 2025.
- Picard A, Visionary Dr. Henry Friesen reinvented Canada's premier health research funding agency, https://www.theglobeandmail.com/canada/article-visionary-dr-henry-friesen-reinvented-canadas-premier-health-research/?utm_source=dlvr.it&utm_medium=bluesky, accessed 16 May 2025.
- ⁷ Governor General of Canada, Honours, https://www.gg.ca/en/honours/recipients/146-9915, accessed 28 March 2025, and comment from Dr. Aubie Angel, 30 Sept. 2025.
- Aubie Angel LinkedIn profile,
- https://www.linkedin.com/search/results/all/?keywords=Aubie%20Angel&origin=GLOBAL SEARCH HEADER &sid=UBP, accessed 28 March 2025.
- FCIHR, Biographical sketch of Dr. Aubie Angel, http://www.fcihr.ca/directors/, accessed 7 April 2025.
- ¹⁰ SCHED, <u>h.ttps://2016canadiansciencepolicyconfere.sched.com/speaker/aubieangel</u>, accessed 28 March 2025.
- FCIHR, Biographical sketch of Dr. Aubie Angel, http://www.fcihr.ca/directors/, accessed 7 April 2025.
- ¹² SCHED, <u>https://2016canadiansciencepolicyconfere.sched.com/speaker/aubieangel</u>, accessed 28 March 2025.
- 13 https://drtc.ca/about/, accessed 28 March 2025.

- 14 FCIHR, Biographical sketch of Dr. Aubie Angel, http://www.fcihr.ca/directors/, accessed 7 April 2025.
- 15 Interview with Dr Aubie Angel, 28 May 2025, and comment by Dr. Angel, 30 Sept. 2025.
- ¹⁶ Governor General of Canada, https://www.gg.ca/en/honours/recipients/146-9915, accessed 28 March 2025.
- 17 https://www.endo-metab.ca/welcome-to-the-csem/our-history, accessed 28 March 2025.
- ¹⁸ Governor General of Canada, https://www.gg.ca/en/honours/recipients/146-9915, accessed 28 March 2025.
- ¹⁹ FCIHR, Biographical sketch of Dr. Aubie Angel, http://www.fcihr.ca/directors/, accessed 7 April 2025.
- ²⁰ FCIHR, What is Massey Grand Rounds? http://www.fcihr.ca/massey-grand-rounds-program/, accessed 28 March 2025.
- ²¹ FCIHR, Biographical sketch of Dr. Aubie Angel, http://www.fcihr.ca/directors/, accessed 7 April 2025.
- ²² FCIHR, 2022 Spotlight on FCIHR.
- ²³Massey College, https://www.masseycollege.ca/events/dr-aubie-and-esther-rose-angel-leadership-prize-reception/, accessed 28 March 2025.
- ²⁴ FCIHR, 2020 Spotlight on FCIHR.
- ²⁵ FCIHR, 2024 Spotlight on FCIHR.
- ²⁶ FCIHR, Biographical sketch of Dr. David Malkin, http://www.fcihr.ca/directors/, accessed 7 April 2025
- ²⁷ FCIHR, Biographical sketch of Dr. David Malkin, http://www.fcihr.ca/directors/, accessed 7 April 2025. ²⁸Massey Grand Rounds, Conversations with Dr. David Malkin,

https://www.masseycollege.ca/events/massey-grand-rounds-dr-david-malkin/

- ²⁹ Marx J. Genetic defect identified in rare cancer syndrome. *Science* 250 (4985) 30 Nov. 1990; Malkin D, Li FP, Strong LC, Fraumeni JF, et al. Germ Line p53 mutations in a familial syndrome of breast cancer, sarcomas, and other neoplasms. *Science* 250 (4985) 30 Nov. 1990.
- ³⁰Canadian Cancer Society, https://cancer.ca/en/research/for-researchers/funding-results/2021-awards-for-excellence-winners, accessed 7 April 2025.
- ³¹ FCIHR, 2022 Spotlight on FCIHR.
- 32 FCIHR 2023 Spotlight on FCIHR.
- 33 Conversation with Dr Aubie Angel, 12 May 2025.
- FCIHR, Board of Directors, http://www.fcihr.ca/directors; Announcement-Dr-Peter-N-Lewis-Interim-President-Friends-of-CIHR-Effective-January-1-2024-rev-PNL-DM.pdf, both accessed 9 April 2025
- ³⁵ Packham, Marian A. *100 Years of Biochemistry at U of T, 1908--2008: An Illustrated History* (Toronto: University of Toronto Press, 2008), 41-47.
- ³⁶ Shorter Edward, *Partnership for Excellence: Medicine at the University of Toronto and Academic Hospitals* (Toronto: University of Toronto Press, 2013), 710—712.
- ³⁷ FCIHR, Board of Directors, http://www.fcihr.ca/directors; https://www.teer-N-Lewis-Interim-President-Friends-of-CIHR-Effective-January-1-2024-rev-PNL-DM.pdf, both accessed 9 April 2025

 ³⁸ https://www.thesqc.org, accessed 9 April 2025
- ³⁹ FCIHR, Board of Directors, http://www.fcihr.ca/directors; Announcement-Dr-Peter-N-Lewis-Interim-President-Friends-of-CIHR-Effective-January-1-2024-rev-PNL-DM.pdf, both accessed 9 April 2025.
- ⁴⁰ Shorter Edward, *Partnership for Excellence: Medicine at the University of Toronto and Academic Hospitals* (Toronto: University of Toronto Press, 2013), 710—712.
- ⁴¹ Information per Dr Andrea Baumann, 9 Oct. 2025.
- 42 https://www.uottawa.ca/faculty-medicine/dr-alexander-mackenzie, accessed 10 April 2025.
- ⁴³ CIHR Institute of Genetics, 3rf Annual Canadian Human and Statistical Genetics Meeting, 2014, http://epigen3.mcgill-cihr-iq.ca/people/78, accessed 10 April 2025.
- 44 https://www.care4rare.ca/, accessed 10 April 2025.
- 45 https://www.cheoresearch.ca/research/find-a-researcher/alex-mackenzie/, accessed 10 April 2025.
- 46 https://rhse.temertymedicine.utoronto.ca/reinhart-reithmeier-phd, accessed 10 April 2025.
- 47 https://rhse.temertymedicine.utoronto.ca/reinhart-reithmeier-phd, accessed 10 April 2025.
- ** https://ims.utoronto.ca/news/book-release-success-graduate-school-and-beyond, accessed 10 April 2025.
- * https://cahs-acss.ca/directory/#/action/Listing/value/1015/cid/617/id/401/Reithmeier%2C-Reinhart. Accessed 10 April 2025.

- 50 UBC Faculty of Medicine, "Remembering Dr Martin Hollenberg (1934–2021); "Martin James Hollenberg (1934–2021) Globe and Mail, 23 Dec. 221.
- Who We Are Centre for Heart Lung Innovation https://www.hli.ubc.ca/who-we-are/#!/director-message, accessed 19 June 2025.
- ⁵² https://healthresearchbc.ca/news_article/leadership-announcement/, accessed 10 April 2025. Dr.

Holmes announced her intention to retire from Health Research BC in September 2024.

- ⁵³ McMaster Alumni Community Dr. Kevin Smith '86, accessed 14 Sept. 2025; www.uhnresearxh.ca/news/welcome/dr.kevin smith, accessed 14 Sept. 2025.
- 54 54 FCIHR, News Archives, 2003, http://www.fcihr.ca/newsarchive2003.htm, accessed 7 April 2025.
- ⁵⁵ <u>Glenn Brimacombe | The Royalhttps://www.theroyal.ca/board-trustees/glenn-brimacombe,</u> accessed 10 July 2025."m
- https://dai.mun.ca/sites/earlydays/pages/02deans/03later_deans/01_hawkins.html, accessed 14 July 2025.
- FCIHR, News Archives, 2003, http://www.fcihr.ca/newsarchive2003.htm, accessed 7 April 2025.
- 58 https://movepainfree.org/wp-content/uploads/Patrick-Lafferty-EN.pdf, accessed 10 July 2025.
- ⁵⁹ Who Are We | FCHR, https://fchr.ca/who-are-we, accessed 11 July 2025.
- http://www.fcihr.ca/index2.htm, Executive and Board to 2007, accessed 11 July 2025.
- 61 FCIHR 2024 Spotlight on FCIHR.
- ⁶² https://www.ohri.ca/Leadership/bios/DeborahGordon-El-Bihbety.aspx, accessed 10 April 2025.
- ⁶³ <u>Postovit | Biomedical and Molecular Sciences | School of Medicine | Queen's University</u>, accessed 11 July 2025.
- https://www.queensu.ca/gazette/stories/lynne-marie-postovit-appointed-vice-provost-academic-affairs, accessed 11 July 2018.
- 65 Date per Cristina S. Castellvi.
- https://www.rotman.uwo.ca/portfolio-items/singh-bhagirath/, accessed 11 July 2025/
- 67 Date per Cristina S. Castellvi.
- 68 https://www.ohri.ca/profile/DuncanJStewart, accessed 10 April 2025.
- ⁶⁹ Friends of Canadian Institutes of Health Research » FCIHR Board 2025
- 70 FCIHR 2000-2007 site; LinkedIn entry)
- ⁷¹ Stephanie Atkinson Profile Overview, accessed 10 July 2025.
- ⁷² Dr. Patricia A. Baird | The Governor General of Canada, accessed 10 July 2025.
- ⁷³ Pierre Bois (1924 2011) Archives and Information Management Université de Montréal, https://archives.umontreal.ca/histoire-de-luniversite/pionnieres-et-pionniers/pierre-bois-1924-2011/, accessed 11 July 2025.
- 74https://www.mcgill.ca/urology/serge-carrier/, accessed 11 July 2025
- ⁷⁵ htps://pharmaboardroom.com/directory/intermune-canada/ttp://www.fcihr.ca/directors/, accessed 11 July 2025.
- https://www.gg.ca/en/honours/recipients/146-9528, accessed 11 July 2025
- 77 Friends of Canadian Institutes of Health Research, accessed 12 July 2025.
- 78 https://www.cdnmedhall.ca/laureates/williamcochrane, accessed 11 July 2025.
- ⁷⁹ profile Juliette Cooper | College of Rehabilitation Sciences | University of Manitoba. Accessed 11 July 2025.
- <u>David Evans Directory@UAlberta.ca</u>, https://apps.ualberta.ca/directory/person/devans, accessed 11 July 2025.

Farewell to a legendary leader and mentor | St. Boniface Hospital Research⁸¹

https://www.sbrc.ca/2021/09/farewell-to-a-legendary-leader-and-mentor/, accessed 11 Jul7 2025.

- EFERGUSON E. Medical community mourns loss of innovator Dr. Cy Frank, Calgary Herald, 5 March 2015.
- 3 Interview with Dr. Aubie Angel, 3 Sept. 2025.
- 84 https://www.cdnmedhall.ca/laureates/philgold, accessed 11 July 2025.
- * Montreal Diabetes Research Center, https://www.montreal-diabetes-research-center.org/en/hamet/hamet.html, accessed 11 July 2025.

- 86 https://www.chumontreal.gc.ca/en/crchum/chercheurs/marie-josee-
- hebert#:~:text=Marie%2DJos%C3%A9e%20H%C3%A9bert%20is%20a,and%20Renal%20Transplantation%2 Oand%20Regeneration., accessed 14 July 2025.
- ** http://www.fcihr.ca/about/in-memoriam-fcihr/ Friends of Canadian Institutes of Health Research » In Memoriam, accessed 10 July 2025.
- ** https://www.mcgill.ca/biochemistry/faculty-members/mcinnes, accessed 14 July 2025.
- ⁸⁹ For the Love of Humanity BC Cancer Foundation, accessed 14 July 2025.
- ⁹⁰ Canada hopes to climb the DNA ladder to success | CMAJ, accessed 14 July 2025.
- ⁹¹ Cathleen Morrison Toronto, Ontario, Canada | Professional Profile | LinkedIn, accessed 14 July 2025.
- ⁹² Cameron Mustard https://www.iwh.on.ca/people/cameron-mustard, accessed 14 July 2025.
- ⁹³ http://www.fcihr.ca/video-history-of-canadian-medicine/video-history-of-medicine-in-canada-7/, accessed 13 April 2025.
- http://www.fcihr.ca/video-history-of-canadian-medicine/video-history-of-medicine-in-canada-7/, accessed 13 April 2025.
- ** https://manitobalg.ca/oom-recipients/brian-d-postl/, https://manitobalg.ca/oom-recipients/brian-d-postl/, accessed 10 July 2025.
- 9 Dorothy Pringle Lawrence Bloomberg Faculty of Nursing, accessed 14 July 2025.
- <u>https://www.dlsph.utoronto.ca/faculty-profile/rabeneck-linda/ https://www.dlsph.utoronto.ca/faculty-profile/rabeneck-linda/, accessed 10 July 2025</u>
- ** Executive Director Lady Davis Institute, https://www.ladydavis.ca/en/about/governance/executive-director/, accessed 11 July 2025.
- 99 Date per Cristina S. Castellvi.
- 100 Email from Peter Lewis, 14 Oct. 2025.
- 101 https://www.ottawaheart.ca/sites/default/files/legacy/uploads/documents/RobertRoberts-Bio-OHRC.pdf Microsoft Word - Robert Roberts short bio 1, accessed 10 July 2025.
- 102 Friends of Canadian Institutes of Health Research » BOARD OF DIRECTORS http://www.fcihr.ca/directors/, accessed 11 July 2025
- 103 In Memoriam: Emil Skamene, MD, PhD Research Institute of the McGill University Health Centre RI-MUHC, accessed 14 July 2025.
- 104 https://www.cdnmedhall.ca/laureates/calvinstiller, accessed 14 July 2025/
- 105 A 20-year journey of health research in BC: Birth of a Foundation Health Research BC, accessed 14 July 2015.

Chapter 3: Initiatives

- ¹ About Friends of CIHR, Goals & Purpose, http://www.fcihr.ca/about/, accessed 27 April 2025.
- ² The Henry G. Friesen International Prize in Health Research, Overview with vignettes, http://www.fcihr.ca/prize/about/overview, accessed 27 April 2025.
- ³ The Henry G. Friesen International Prize in Health Research » Governance, http://www.fcihr.ca/prize/about/governance, accessed 27 April 2025.
- ⁴ FCIHR Archives, Box #22 box list.
- 5 Aubie Angel interview, 26 May 2025.
- 6 http://www.fcihr.ca/about/in-memoriam-fcihr/, Dr. Wilbert Keon.
- 77 Aubie Angel interview, 26May 2025.
- ** The Henry G. Friesen International Prize in Health Research » CALL FOR NOMINATIONS 2025 Henry G. Friesen International Prize in Health Research, http://www.fcihr.ca/prize/about/nomination, accessed 27 April 2025.
- ⁹ The Henry G. Friesen International Prize in Health Research » Governance, http://www.fcihr.ca/prize/about/governance, accessed 27 April 2025.
- ¹⁰ The Henry G. Friesen International Prize in Health Research » Institutional visits, http://www.fcihr.ca/prize/friesen-prize-institutional-visits, accessed 27 April 2025.

- 11 The Henry G. Friesen International Prize in Health Research » CBC Radio One "Ideas", http://www.fcihr.ca/prize/friends-of-cihr-cbc-radio-one-ideas-paul-kennedy, accessed 27 April 2025.
- ¹² Conversation with Dr. Aubie Angel, 12 May 2025.
- <u>"fcihr.ca/prize/ http://www.fcihr.ca/prize/about/overview,</u> accessed 27 April 2025.
- The Henry G. Friesen International Prize in Health Research » Friesen Prize Books http://www.fcihr.ca/prize/friesen-prize-books, accessed 27 April 2025.
- ¹⁵ The Henry G. Friesen International Prize in Health Research » OVERVIEW with vignettes, http://www.fcihr.ca/prize/about/overview, accessed 27 April 2025.
- The Henry G. Friesen International Prize in Health Research » Dr. Brenda Andrews, 2025 Friesen Prize, http://www.fcihr.ca/prize/dr-brenda-andrews-2025-friesen-prize, accessed 27 April 2025.
- ¹⁷ The Henry G. Friesen International Prize in Health Research » OVERVIEW with vignettes, http://www.fcihr.ca/prize/about/overview, accessed 27 April 2025.
- ¹⁸ The Henry G. Friesen International Prize in Health Research » Friesen Prize Books, http://www.fcihr.ca/prize/friesen-prize-books, accessed 27 April 20925.
- ¹⁹ Chase J. Martin wins prize for research, innovation. *Harvard Gazette*, 14 Sept. 2006.
- ²⁰ The Henry G. Friesen International Prize in Health Research, http://www.fcihr.ca/prize/prizewinners/martin, accessed 27 April 2025.
- ²¹ Chase J. Martin wins prize for research, innovation. *Harvard Gazette*, 14 Sept. 2006.
- ²² The Henry G. Friesen International Prize in Health Research » Friesen Prize Lectures.
- ²³ FCIHR, Friesen Prize, Institutional visits, 2007 program, http://www.fcihr.ca/wp-content/uploads/2007/11/2007-institutional-visit-dr-martin-program-winnipeg.pdf
- ²⁴ Meric S Gertler, In Memoriam: Dr. John Evans, U of T News, <u>In Memoriam: Dr. John Evans |</u>
 University of Toronto
- Edits 3 Initiatives FCIHR As of June 18 2025 at 122 pm.docx, https://utoronto-my.sharepoint.com/:w:/r/personal/susan_belanger_utoronto_ca/Documents/FCIHR/Book%20edits/Edits%2_0-%203%20In itiatives%20-%20FCIHR%20-
- <u>%20As%20of%20June%2018%202025%20at%20122%20pm.docx?d=wc640a298198446b298620a5ad8351</u> 6dc&csf=1&web=1&e=2Pmfc1&nav=eyJjIjo5MDqwMjA2MjZ9, accessed 16 June2025.
- http://www.fcihr.ca/video-history-of-canadian-medicine/video-history-of-medicine-in-canada-8/, accessed 16 July 2025.
- ²⁷ John Evans, MD DPhil | CMHF, accessed 16 July 2025.
- ²⁸ https://zeidler-evans.healthsci.mcmaster.ca/about-page/john-robert-evans/, accessed13 April 2025.
- Friends of Canadian Institutes of Health Research » In Memoriam, Dr. John R. Evans, accessed 16 July 2025.
- ** The Henry G. Friesen International Prize in Health Research ** Friesen Prize Books, accessed 20 July 2025.
- ** The Henry G. Friesen International Prize in Health Research, Dr. Harold Varmus, accessed 16 July 2025.
- ³² http://www.fcihr.ca/prize/prizewinners/dr-harold-varmus, accessed 16 July 2025.
- ³³ Harold E. Varmus, M.D. | National Institutes of Health (NIH), https://www.nih.gov/about-nih/what-we-do/nih-almanac/harold-e-varmus-md, accessed 29 April 2025.
- ³⁴ The Henry G. Friesen International Prize in Health Research, accessed 16 July 2025.
- ³⁵ Harold E. Varmus Facts <u>NobelPrize.org</u>, accessed 16 July 2025.
- ³⁶ http://www.fcihr.ca/prize/friesen-prize-public-forum, accessed 16 July 2025.
- "The Henry G. Friesen International Prize in Health Research, accessed 28 April 2025.
- ** Regius Professor of Medicine, Sir John Bell, to step down from Oxford role | University of Oxford. https://www.ox.ac.uk/news/2024-02-21-regius-professor-medicine-sir-john-bell-step-down-oxford-role, accessed 28 April 2028.
- "Sir John Bell, BMBCh DM | CMHF, https://www.cdnmedhall.ca/laureates/johnbell, accessed 28 April 2025.
- The Henry G. Friesen International Prize in Health Research > OVERVIEW with vignettes http://www.fcihr.ca/prize/about/overview, accessed 20 June 2025.
- ⁴¹ The Henry G. Friesen International Prize in Health Research » Institutional visit Prof. Sir John Bell http://www.fcihr.ca/prize/friesen-prize-institutional-visits/friesen-prize-institutional-visit-john-bell-montreal-neurological-institute, accessed 28 April 2025.
- "http://www.fcihr.ca/prize/prizewinners/shirley-m-tilghman, accessed 16 July 2025.
- 16 July 2025.

- 44 ttps://www.gq.ca/en/honours/recipients/146-11537, accessed 16 July 2025.
- 45 The Henry G. Friesen International Prize in Health Research » Friesen Prize Lectures, accessed 16 July 2025.
- * The Henry G. Friesen International Prize in Health Research » Friesen Prize Books, accessed 20 July 2025.
- The Henry G. Friesen International Prize in Health Research, http://www.fcihr.ca/prize/prizewinners/drdzau, accessed 17 July 2025; Bench to Bedside Discovery, Innovation, Global Health Equity, and Security Circulation, accessed 16 July 2025.
- ** Bench to Bedside Discovery, Innovation, Global Health Equity, and Security | Circulation, accessed 16 July 2025.
- 49 http://www.fcihr.ca/prize/prizewinners/dr-dzau, accessed 16 July 2025.
- https://www.ahajournals.org/doi/10.1161/CIRCULATIONAHA.121.054151?url ver=Z39.88-
- 2003&rfr id=ori:rid:crossref.org&rfr dat=cr pub%20%200pubmed, accessed 16 July 2025.
- 51 https://www.ottawaheart.ca/dr-victor-dzau-md, accessed 16 July 2025.
- ⁵² The Henry G. Friesen International Prize in Health Research » Friesen Prize Lectures, accessed 16 July 2025.
- 53 https://tessier-lavigne.stanford.edu/biography, accessed 16 July 2025.
- ⁵⁴ http://www.fcihr.ca/prize/dr-marc-tessier-lavigne, accessed 16 July 2025.
- ⁵⁵ The Henry G. Friesen International Prize in Health Research » Friesen Prize Lectures, accessed 216 July 2025.
- 56 http://www.fcihr.ca/prize/friesen-prize-books, accessed 20 July 2025.
- The Henry G. Friesen International Prize in Health Research, http://www.fcihr.ca/prize/dr-harvey-v-fineberg, accessed 28 April 2025.
- ** The Henry G. Friesen International Prize in Health Research, http://www.fcihr.ca/prize/dr-harvey-v-fineberg, accessed 28 April 2025.
- ⁵⁹ The Henry G. Friesen International Prize in Health Research » Institutional visits, http://www.fcihr.ca/prize/friesen-prize-institutional-visits, accessed 28 Aril 2025.
- ⁶⁰ Lap-Chee Tsui, PhD | CMHF, https://www.cdnmedhall.ca/laureates/lapcheetsui, accessed 28 April 2025.
- The Henry G. Friesen International Prize in Health Research » Dr. Lap-Chee Tsui, 2014 Friesen Prizewinner, http://www.fcihr.ca/prize/prizewinners/dr-lap-chee-tsui-2014-friesen-international-prize-in-health-research,
- 62 https://www.cdnmedhall.ca/laureates/lapcheetsui, accessed 28 April 2025.
- 53 The Henry G. Friesen International Prize in Health Research » Friesen Prize Lectures,
- http://www.fcihr.ca/prize/friesen-prize-public-forum, accessed 29 April 2025.
- 64 The Henry G. Friesen International Prize in Health Research » Institutional visits,

http://www.fcihr.ca/prize/friesen-prize-institutional-visits, accessed 29 April 2025.

- ww.fcihr.ca/prize/prizewinners/sir-paul-nurse-2015-friesen-prizewinner, accessed 16 July 2025.
- 66 Paul Nurse | Crick, https://www.crick.ac.uk/research/find-a-researcher/paul-
- nurse#:~:text=Awards%20and%20recognition,cells%20in%20the%20cell%20cycle, accessed 29 April 2025.
- ⁶⁷ The Henry G. Friesen International Prize in Health Research » Sir Paul Nurse, 2015 Friesen Prizewinner, accessed 16 July 2025/
- http://www.fcihr.ca/prize/friesen-prize-public-forum, accessed 16 July 2025.
- The Henry G. Friesen International Prize in Health Research » Dr. Janet Rossant, 2016 Friesen Prize, http://www.fcihr.ca/prize/prizewinners/dr-janet-rossant-2016-friesen-prizewinner, accessed 07 June 2025.
- ⁷⁰ Janet Rossant | SickKids Directory https://www.sickkids.ca/en/staff/r/janet-rossant/, 6 June 2025.
- ⁷¹ Janet Rossant https://www.gairdner.org/bio/janet-rossant, accessed 7 June 2025.
- ⁷² Janet Rossant | SickKids Directory, accessed 20 July 2025.
- ⁷³ The Henry G. Friesen International Prize in Health Research » Dr. Janet Rossant, 2016 Friesen Prize, http://www.fcihr.ca/prize/prizewinners/dr-janet-rossant-2016-friesen-prizewinner.accessed 07 June 2025.
- ⁷⁴ http://www.fcihr.ca/prize/friesen-prize-public-forum, accessed 20 July 2025.
- ⁷⁵ The Henry G. Friesen International Prize in Health Research » Friesen Prize Books. Accessed 20 July 2025.
- ⁷⁶ Presidents Emeriti CIFAR, accessed 20 July 2025.
- "The Henry G. Friesen International Prize in Health Research » Dr. Alan Bernstein, 2017 Friesen Prize, accessed 20 July 2025.
- ⁷⁸ Presidents Emeriti CIFAR, accessed 20 July 2025.
- ⁷⁹ The Henry G. Friesen International Prize in Health Research » Friesen Prize Lectures, accessed 20 juy 2025.

- 80 The Henry G. Friesen International Prize in Health Research » Dr. David Naylor, 2018 Friesen Prize, accessed 20 July 2025.
- http://www.fcihr.ca/prize/prizewinners/dr-david-naylor-2018-friesen-prize, accessed 2- July 2025.
- ** https://www.cdnmedhall.ca/laureates/davidnaylor, accessed 20 July 2025.
- http://www.fcihr.ca/prize/prizewinners/dr-david-naylor-2018-friesen-prize, accessed 20 July 2025.
- ** The Henry G. Friesen International Prize in Health Research » Dr. David Naylor, 2018 Friesen Prize, 20 July 2025.
- *5 http://www.fcihr.ca/prize/friesen-prize-public-forum, accessed 20 July 2025.
- ** ThThe Henry G. Friesen International Prize in Health Research » Dr. Alan Bernstein, 2017 Friesen Prizee Henry G. Friesen International Prize in Health Research » Friesen Prize Books, accessed 20 July 2025.
- https://www.genomicsandpolicy.org/en/team/profile/9/%20Knoppers, accessed 20 July 2025.
- ** https://stemcellnetwork.ca/wp-content/uploads/2021/07/Knoppers-Interview-WEB-FINAL-2.pdf, accessed 20 July 2025.
- The Henry G. Friesen International Prize in Health Research » Prof. Bartha Knoppers 2019 Friesen Prize http://www.fcihr.ca/prize/prizewinners/dr-bartha-knoppers-2019-friesen-prize, accessed 29 April 2025.
- The Henry G. Friesen International Prize in Health Research Friesen Prize Lectures, http://www.fcihr.ca/prize/friesen-prize-public-forum, accessed 29 April 2025,
- 91 2020 Spotlight on FCIHR.
- ⁹² https://www.youtube.com/watch?v=oTSDM9Z0LH, accessed 20 July 2015.
- ⁹³ <u>International Virtual Launch of the 2020 Friesen Prize Program October 6, 2020 London, UK</u>, accessed 20 July 2025.
- ⁹⁴ 2020 and 2021 Spotlights on FCIHR; The Henry G. Friesen International Prize in Health Research » 2020 Friesen Prize Program, http://www.fcihr.ca/prize/2020-friesen-prize-program, accessed 29 April 2025.
- 5 2020 Spotlight on FCIHR.
- Mark Walport HDR UK, accessed 20 July 2025.
- 97 Fellow Detail Page | Royal Society, accessed 20 July 2025/
- ∞ 2021 Spotlight on FCIHR.
- http://www.fcihr.ca/prize/friesen-prize-public-forum, accessed 20 July 2025.
- 100 Friends of Canadian Institutes of Health Research » 2021 DALLA LANA-MASSEY COLLEGE-FCIHR POLICY ROUNDTABLE, http://www.fcihr.ca/2021-dalla-lana-massey-college-fcihr-policy-roundtable/, accessed 29 April 2025.
- 101 FCIHR Archives, Box 32
- 102 Interview with Aubie Angel, 26 May 2025.
- 103 www.fcihr.ca/prize/friesen-prize-books, accessed 20 July 2025.
- 104 2021 Spotlight on FCIHR.
- ¹⁰⁵ The Henry G. Friesen International Prize in Health Research » Dr. Lorne Tyrrell, 2021 Friesen Prize, accessed 20 July 2025.
- 106 https://www.alberta.ca/aoe-lorne-tyrrell, accessed 20 July 2025.
- 107 <u>The Henry G. Friesen International Prize in Health Research » Dr. Lorne Tyrrell, 2021 Friesen Prize, accessed 20 July 2025.</u>
- 108 The Henry G. Friesen International Prize in Health Research » Friesen Prize Lectures,
- http://www.fcihr.ca/prize/friesen-prize-public-forum, accessed 29 April 2025.
- 109 2022 Spotlight on FCIHR.
- $_{110}$ The Henry G. Friesen International Prize in Health Research » Dr. Zulfiqar Bhutta, 2023 Friesen
- Prize, http://www.fcihr.ca/prize/dr-zulfiqar-bhutta-2023-friesen-prize, accessed 20 June 2025.
- "http://www.fcihr.ca/prize/dr-gordon-guyatt-2024-friesen-prize, accessed 21 July 2025. 112
- https://www.cdnmedhall.ca/laureates/gordonguyatt, accesses 21 July 2025.
- https://pmc.ncbi.nlm.nih.gov/articles/PMC3263217/#ref1, accessed 21 July 2025/
- 114 <u>The Henry G. Friesen International Prize in Health Research » Dr. Gordon Guyatt, 2024 Friesen Prize, accessed 21 July 2025.</u>
- 115 ttps://brighterworld.mcmaster.ca/articles/gordon-guyatt-awarded-henry-g-friesen-international-prize-in-health-research/, accessed 21 July 2025.
- 116 Gordon Guyatt, MD | CMHF, accessed 21 July 2025.

- <u>The Henry G. Friesen International Prize in Health Research » Dr. Gordon Guyatt, 2024 Friesen Prize, accessed f21 July 2015.</u>
- 118 http://www.fcihr.ca/prize/dr-gordon-guyatt-2024-friesen-prize, accessed 21 July 2025.
- 119 Poster-2024-U-of-T-Dalla-Lana-Friesen-Lecture-Gordon-Guyatt-October-31-FCIHR.pdf, accessed 21 July 2025.
- 120 Friends of Canadian Institutes of Health Research » 2019 OTTAWA FCIHR POLICY

ROUNDTABLE, http://www.fcihr.ca/2019-ottawa-fcihr-policy-roundtable/, accessed 20 June 2025.

 $_{121}$ Friends of Canadian Institutes of Health Research » 2015 FCIHR Policy Roundtables,

http://www.fcihr.ca/2015-roundtables-proceedings/, accessed 5 June 2025.

- 122 The Henry G. Friesen International Prize in Health Research » U of T & Munk School of Global Affairs (Asian Institute) Institutional visit Sept. 16, 2014, http://www.fcihr.ca/prize/friesen-prize-institutional-visits/2014-u-of-t-munk-school-asian-institute-institutional-visit-sept-16-2014, accessed 22 June 2025.
- 123 Friends of Canadian Institutes of Health Research » 2022 Ottawa Leaders' Breakfast & Roundtable, http://www.fcihr.ca/2022-ottawa-leaders-breakfast-roundtable/, accessed 5 June 2025.
- ¹²⁴ The University of Man itoba's sports teams are called the Bisons, while Massey College's mascot is a bull, depicted in the Massey Grand Rounds logo with a stethoscope
- 125 About Us Massey College https://www.masseycollege.ca/about/#history, accessed 23 May 2025.
- 126 Junior Fellows Massey College https://www.masseycollege.ca/our-community/junior-fellows/, accessed 23 May 2025.
- 127 Conversations with Dr. Aubie Angel, various dates.
- 128 Senior Fellows Massey College https://www.masseycollege.ca/our-community/senior-fellows/, accessed 23 May 2025.
- 129 Friends of Canadian Institutes of Health Research » What is "Massey Grand Rounds"?, accessed 15 Jan. 2025.
- 130 Friends of Canadian Institutes of Health Research » Dr. Sonia Anand 2020 Janet Rossant Lecture http://www.fcihr.ca/the-janet-rossant-lectureship/dr-sonia-anand-2020-rossant-lecture/, accessed 8 June 2025.
- 131 https://www.cdnmedhall.ca/laureates/johndirks, https://www.cdnmedhall.ca/laureates/johndirks, accessed 8 June 2025.
- 132 Friends of Canadian Institutes of Health Research » 2007 MASSEY GRAND ROUNDS SYMPOSIUM.
- 133 Friends of Canadian Institutes of Health Research » What is "Massey Grand Rounds"?
- 134 Friends of Canadian Institutes of Health Research » 2022-2023 Massey Grand Rounds (MGR) Program

http://www.fcihr.ca/massey-grand-rounds-program/2022-2023-mgr-program/, accessed 5 Un e 2025.

- 135 Friends of Canadian Institutes of Health Research » April 29, 2025 Anniversary MGR Event at Massey College 20 years http://www.fcihr.ca/massey-grand-rounds-program/april-29-aniversary-mgr-event-20-years/, accessed 5 June 2025.
- 136 2024 Spotlight on FCIHR; interview with Aubie Angel, 3 Sept 2025.
- 137 Interview with Aubie Angel, 3 Sept 2025; comment by Aubie Angel, 30 Sept. 2025.
- 138 Microsoft Word Announcement Dr Lori West As of February 27, 2019 at 332 pm.docx
- http://www.fcihr.ca/wp-content/uploads/2019/03/Announcement-Dr-Lori-West-As-of-February-27-2019-at-332-pm.pdfMicrosoft Word Announcement Samira Mubareka 2021 Janet Rossant Lectureship May 25, 2021 at 9 am SM.docx, accessed 7 June 2025.
- ¹³⁹ Microsoft Word Announcement Samira Mubareka 2021 Janet Rossant Lectureship May 25, 2021 at 9 am SM.docx Microsoft Word Announcement Samira Mubareka 2021 Janet Rossant Lectureship May 25, 2021 at 9 am SM.docx, accessed 7 June 2025.
- ¹⁴⁰ Friends of Canadian Institutes of Health Research » Dr. Sonia Anand 2020 Janet Rossant Lecture http://www.fcihr.ca/the-janet-rossant-lectureship/dr-sonia-anand-2020-rossant-lecture/, accessed 8 June 2025.
- ₁₄₁ <u>Friends of Canadian Institutes of Health Research » Dr. Sunit Das 2024 Janet Rossant Lecture,</u> accessed 8 June 2025.
- 142 Friends of Canadian Institutes of Health Research » DR. DANIELLE RODIN 2025 JANET ROSSANT LECTURE http://www.fcihr.ca/the-janet-rossant-lectureship/dr-danielle-rodin-2025-janet-rossant-lecture/, accessed 8 June 2025.

Chapter 4 Past Initiatives

- ⁴ Canadian Medical Hall of Fame, https://www.cdnmedhall.ca/, accessed 2 May 2025.
- ² Canadian Medical Hall of Fame, https://www.cdnmedhall.ca/laureates/michaelbliss, accessed 2 May 2025.
- ³ FCIHR, Video History of Medicine Project: An Overview, excerpt from a talk by Professor Michael Bliss at the 2011 conference of the Science Teachers' Association of Ontario," 20 Dec. 2011. https://www.youtube.com/watch?v=zXpP1K79tRU, accessed 12 April 2025.
- ⁴ Interview with Dr Aubie Angel, 3 Sept. 2025.
- 5 Conversation with Dr. Aubie Angel, 13 May 2025.
- http://www.fcihr.ca/DistServAward2003 news.htm, accessed 12 April 2025.
- ⁷ http://www.fcihr.ca/CHollenberg news.htm, accessed 12 April 2025.
- http://www.fcihr.ca/video-history-of-canadian-medicine/video-history-of-medicine-in-canada-2/, accessed 12 April 2025.
- http://www.fcihr.ca/video-history-of-canadian-medicine/video-history-of-medicine-in-canada-3/. accessed 12 April 2025.
- http://www.fcihr.ca/video-history-of-canadian-medicine/video-history-of-medicine-in-canada-4/, accessed 12 April 2025.
- ¹ FCIHR, In Honour of Michael Bliss, Interviewer for the Video History of Medicine in Canada, https://www.youtube.com/watch?v=XUDGDZrEGik&t=29s, accessed 12 April 2025.
- http://www.fcihr.ca/video-history-of-canadian-medicine/video-history-of-medicine-in-canada-8/, accessed 13 April 2025,
- 13 https://www.marsdd.com/about/, accessed 13 April 2025.
- http://www.fcihr.ca/video-history-of-canadian-medicine/video-history-of-medicine-in-canada-7/, accessed 13 April 2025.
- https://www.marsdd.com/bio/calvin-r-stiller/, accessed 16 April 2025.
- http://www.fcihr.ca/video-history-of-canadian-medicine/james-till-fcihr-video-history-of-medicine-in-canada/, accessed 16 April 2025.
- https://www.cdnmedhall.ca/laureates/jamestill, accessed 16 April 2025.
- https://www.ruthabernethy.com/till-mcculloch.html, accessed 16 April 2025.
- https://www.cdnmedhall.ca/laureates/charlesscriver, accessed 16 April 2025.
- ** http://www.fcihr.ca/video-history-of-canadian-medicine/dr-brenda-milner-interview-with-prof-michael-bliss/, accessed 16 April 2025.
- ²¹ https://www.mcgill.ca/neuro/about/brenda-milner, accessed 16 April 2025.
- ²² http://www.fcihr.ca/video-history-of-canadian-medicine/dr-phil-gold-interview-with-prof-michael-bliss/, accessed 16 April 2025.
- ²³ https://www.cdnmedhall.ca/laureates/philgold, accessed 16 April 2025.
- ** http://www.fcihr.ca/video-history-of-canadian-medicine/dr-arnold-naimark-interview-with-prof-michael-bliss/, accessed 16 April 2025.
- ²⁵ http://www.fcihr.ca/video-history-of-canadian-medicine/dr-arnold-naimark-interview-with-prof-michael-bliss/, accessed 16 April 2025.
- ²⁶ http://www.fcihr.ca/video-history-of-canadian-medicine/charles-hollenberg/, accessed 16 April 2025.
- "https://www.youtube.com/watch?v=DfkItzuuuuU&list=TLPQMTcwNDIwMjVG8E9adT-__Uq&index=2, accessed 16 April 2025.
- https://www.mhs.mb.ca/docs/people/doupe j2.shtml, accessed 17 April 2025.
- Pruys S. Lecture honour Joe Doupe, the man who revived U of M's medical school. UM Today, 2014, https://news.umanitoba.ca/lecture-honours-joe-doupe-the-man-who-revived-u-of-ms-medical-school/, accessed 17 April 205.
- ³⁰ FCIHR archives, box # 43; Nominate a Health Leader | CMHF, https://www.cdnmedhall.ca/nominate, accessed 2 June 2025.

- 31 Friends of Canadian Institutes of Health Research » A Tribute to Professor Michael Bliss http://www.fcihr.ca/video-history-of-canadian-medicine/a-tribute-to-professor-michael-bliss/, accessed 22 June 2025.
- ³² Shelley McKellar History Dept. Western University, accessed 23 July 2025.
- ³³ Alison Li writer & historian, accessed 23July 2025.
- ³⁴ Rutty, Christopher James Dalla Lana School of Public Health, 23 July 2025.
- 35 André Picard The Globe and Mail, accessed 23 July 2025.
- Friends of the Canadian Institutes of Health Research, Interdisciplinary Research in the Health Sciences, Inaugural Symposium, Westin Harbour Castle, Toronto, April 30, 2001. Summary of Proceedings by Arnold Naimark, University of Manitoba, published in Association of Medical Colleges *Forum* 35 (2002), 13-20.
- Friends of Canadian Institutes of Health Research » Archives Past Activities [2001 2006], http://www.fcihr.ca/fcihr-past-activities-2001-2006/, accessed 30 April 2025.
- ³⁸ FCIHR, *Proceedings/Public Forum 2003: The translation of genomic science to social well-being and human health*, Canadian Museum of Nature, Ottawa, May 14, 2003.
- ³⁹ FCIHR website. <u>Friends of Canadian Institutes of Health Research</u> » <u>Archives Past Activities [2001 2006]</u>, accessed 15 Jan. 2025.
- ⁴⁰ FCIHR brochure, "Enhancing the Health of Canadians through Research Support and Community Advocacy, "fall 2002.
- FCIHR brochure, "Enhancing the Health of Canadians through Research Support and Community Advocacy, "fall 2002.
- ⁴² CIHR Institute of Circulatory and Respiratory Health. Annual report, 2002—2003, 12-13.200
- ⁴³ Friends of Canadian Institutes of Health Research » Archives Past Activities [2001 2006], http://www.fcihr.ca/fcihr-past-activities-2001-2006/, accessed 30 April 2025.
- 44 Interview with Aubie Angel, 26 May 2025.
- Ferguson E. Medical community mourns loss of innovator Dr. Cy Frank, Calgary Herald, 5 March 2015.
- ⁴⁶ Interview with Dr Aubie Angel, 3 Sept. 2025.
- ⁴⁷ Friends of Canadian Institutes of Health Research » Honours, http://www.fcihr.ca/awards/, accessed 5 May 2025.
- ⁴⁸ Douglas R. Wilson Lecture | Public Health, https://www.ualberta.ca/en/public-health/about/academic-events/douglas-r-wilson-lecture/index.html, accessed 5 May 2025.
- ⁴⁹ Loop | Joel Weiner, https://loop.frontiersin.org/people/32498/bio, accessed 5 May 20925.
- ⁵⁰ Friends of Canadian Institutes of Health Research » Honours, http://www.fcihr.ca/awards/, accessed 5 May 2025.
- 51 2010 Spotlight on FCIHR.
- ⁵² Michel Chrétien, MD | CMHF, https://www.cdnmedhall.ca/laureates/michelchretien, accessed 5 May 2025. ⁵³ Friends of Canadian Institutes of Health Research » Honours, http://www.fcihr.ca/awards/, accessed 5 May 2025.
- ⁵⁴ Past deans | Faculty of Medicine, https://www.uottawa.ca/faculty-medicine/history/past-deans, 5 May 2025.
- ⁵⁵ Robert Korneluk CHEO Research Institute, https://www.cheoresearch.ca/research/find-a-researcher/robert-korneluk/, accessed 5 May 2025.
- ⁵⁶ Roderick R. McInnes | CMHF, https://www.cdnmedhall.ca/rodmcinnes, accessed 5 May 2025.
- ⁵⁷ Friends of Canadian Institutes of Health Research » Honours, http://www.fcihr.ca/awards/, accessed 5 May 2025, plus additional details provided by Cristina S. Castellvi, 22 June 2025.
- 58 2015 Spotlight on FCIHR.
- 59 2016 Spotlight on FCIHR.
- ∞ 2017 Spotlight on FCIHR.

Chapter 5: Partners and Sponsors

¹Eastport Financial, What Is the Difference Between a Foundation and a Charity in Canada? https://www.eastportfinancialgroup.com/keel-magazine/philanthropy/difference-between-foundation-and-

charity-

canada#:~:text=Fo undation%20&%20Charities%20Explained&text=The%20primary%20aim%20of%20a,Wh at%20Is%20A%20Private%20Foun dation?, accessed 15 May 2025.

- ½ http://www.fcihr.ca/wp-content/uploads/2012/05/year-2000-mrc-calendar.pdf, accessed 15 May 2025.
- ³² Friends of Canadian Institutes of Health Research » Archives Past Activities [2001 2006], http://www.fcihr.ca/fcihr-past-activities-2001-2006/, accessed 15 May 2025. FCIHR Archives, Box #10. 4 fcihrsymposium2004.pdf, accessed 15 May 2025.

⁵Canadian Institutes of Health Research, President's office, Past presidents of CIHR, https://cihrirsc.gc.ca/e/10308.html, accessed 15 May 2025.

- ⁶ Conversation with Dr. Aubie Angel, 13 May 2025.
- Friends of Canadian Institutes of Health Research » Archives Past Activities [2001 2006], http://www.fcihr.ca/fcihr-past-activities-2001-2006/, accessed 15 May 2025.
- Friends of Canadian Institutes of Health Research, http://www.fcihr.ca/friends-of-cihr-symposia/yi-forum-icrh/, accessed 15 May 2025.
- http://www.fcihr.ca/wp-content/uploads/2007/09/symposium2006brochure.pdf, accessed 15 May 2025.
- ¹⁰ Arnold Naimark, MD | CMHF, https://www.cdnmedhall.ca/laureates/arnoldnaimark, accessed 15 May 2025.
- Diabetes Treatment and Research Centre, https://drtc.ca/about/, accessed 15 May 2025.
- ¹²Arnold Naimark, MD | CMHF, https://www.cdnmedhall.ca/laureates/arnoldnaimark, accessed 15 May 2025. This institution is mentioned by 2008 among the sponsors for Friesen laureate Dr Harold Varmus and in the 2010 *Spotlight on FCIHR*. Conversation with Dr. Aubie Angel, 27 May 2025; Conversation with Dr. Aubie Angel, 27 May 2025.
- ¹³ Spotlight on FCIHR. The Honourable Wilbert Keon, MD | CMHF_The Honourable Wilbert Keon, MD | CMHF, accessed 27 May 2025.
- Henry Friesen, MD | CMHF, https://www.cdnmedhall.ca/laureates/henryfriesen, accessed 21 May 2025.
- ¹⁵ 2003symposium_en.pdf_http://www.fcihr.ca/wp-content/uploads/2007/09/2003symposium_en.pdf, accessed 21 May 2025.
- ¹⁶ Spotlights on FCIHR.
- ¹⁷ About Canadian Society for Clinical Investigation <u>About Canadian Society for Clinical Investigation</u>, accessed 22 May 2015.
- □ 2010 Spotlight on FCIHR.
- ¹⁹ Alex MacKenzie CHEO Research Institute https://www.cheoresearch.ca/research/find-a-researcher/alex-mackenzie/, accessed 22 May 2025.
- 2017 Spotlight on FCIHR,
- ² CAHS 15-212 10th-anniversary Report E WEB.pdf, https://cahs-acss.ca/wp-content/uploads/2015/09/CAHS 15-212 10th-anniversary Report E WEB.pdf, accessed 21 May 2025.
- ²² Conversation with Aubie Angel, 27 May 2024.
- ²³ About the Canadian Science Policy Centre CSPC, https://sciencepolicy.ca/about-cspc/, accessed 21 May 2025.
- [∞] 2016 Spotlight on FCIHR.
- 2017 and 2018 Spotlight on CIHR.
- 26 Spotlight on FCIHR.
- ²⁷ Dr. John S. Floras | Lunenfeld-Tanenbaum Research Institute, https://www.lunenfeld.ca/researchers/floras/, accessed 6 June 2025.
- ²⁸ FY16 BRF AnnualReport.pdf, https://www.bantingresearchfoundation.ca/wp-content/uploads/2022/06/FY16_BRF_AnnualReport.pdf, accessed 06 June 2025.
- ** FY18 BRF AnnualReport.pdf, https://www.bantingresearchfoundation.ca/wp-content/uploads/2022/06/FY18 BRF AnnualReport.pdf, accessed 06 June 2025.
- ³⁰ Amis des Instituts de Recherche en Santé du Canada » À PROPOS DES Amis des IRSC, http://www.fcihr.ca/fr/about, accessed 23 May 2025.
- ¹² The Henry G. Friesen International Prize in Health Research » Friesen Prize Lectures, http://www.fcihr.ca/prize/friesen-prize-public-forum, accessed 23 June 2025.

- ³² Pathology and Laboratory Medicine https://pathology.ubc.ca/2022/12/01/bruce-m-mcmanus/, accessed 22 May 2025.
- 33 2012 Spotlight on FCIHR
- 34 2013 Spotlight on FCIHR.
- Interview with Aubie Angel, 3 Sept. 2025,
- ** Accredited medical schools https://www.royalcollege.ca/en/about/resources/accredited-medical-schools.html, accessed 23 May 2025.
- ³⁷ University of Prince Edward Island Faculty of Medicine Wikipedia <u>University of Prince Edward Island</u> <u>Faculty of Medicine Wikipedia</u>, accessed 23 May 2025.
- 38 NOSM U | NOSM University https://www.nosm.ca/, accessed 23 May 2025.
- Interview with Aubie Angel, 26 May 2025.
- ⁴⁰ Interview with Aubie Angel, 3 Sept. 2025.
- ⁴ Conversation with Dr. Aubie Angel, 13 May 2025.
- Friends of Canadian Institutes of Health Research » Video History of Medicine in Canada, http://www.fcihr.ca/video-history-of-canadian-medicine/video-history-of-medicine-in-canada-3/, accessed 21 May 2025.
- The Henry G. Friesen International Prize in Health Research » Friesen Prize Lectures http://www.fcihr.ca/prize/friesen-prize-public-forum, accessed 23 May 2025.
- The Henry G. Friesen International Prize in Health Research » Institutional visits http://www.fcihr.ca/prize/friesen-prize-institutional-visits, accessed 23 May 2025.
- ⁴⁵ Friends of Canadian Institutes of Health Research » 2015 FCIHR Policy Roundtables http://www.fcihr.ca/2015-roundtables-proceedings/, accessed 2 June 2025.
- Friends of Canadian Institutes of Health Research » 2022 A Report on "The Future of Infectious Disease Research and Innovation in Canada" http://www.fcihr.ca/fcihr-report-on-2022-roundtable-discussion/, accessed 2 June 2025.
- ⁴⁷ Interview with Dr. Aubie Angel, 26 May 2025.

Chapter 6: FCIHR at 25 / The Next 25

- 2020 Spotlight on FCIHR.
- ² 2021 Spotlight on FCIHR.
- ³ Interview with Dr. Aubie Angel, 26 May 2025.
- 4 2023 Spotlight on FCIHR.
- 5 2022, 2023, 2024 Spotlight on FCIHR.
- Friends of Canadian Institutes of Health Research » In Memoriam http://www.fcihr.ca/about/in-memoriam-fcihr/, accessed 13 April 2025.
- ⁷ 2023 Spotlight on FCIHR.
- Conversation with Dr. Aubie Angel, 13 May 2025.
- ⁹ Government of Canada appoints new President of the Canadian Institutes of Health Research Canada.ca https://www.canada.ca/en/health-canada/news/2024/11/government-of-canada-appoints-new-president-of-the-canadian-institutes-of-health-research.html, accessed 13 June 2025.
- ¹⁰ 2024 Spotlight on FCIHR.
- ¹¹ Interview with Dr. Aubie Angel, 26 May 2025.
- ²² Comment by Dr. Aubie Angel, 1 ct. 2025.
- ¹³ Interview with Dr. Aubie Angel, 26 May 2025.
- 4 Interview with Dr. Aubie Angel, 26 May 2025.

Appendix

¹ Alumni and Friends of MRC Canada, Board and Members, 2000.