# ANNUAL REPORT 2018/19



Conseil des académies canadiennes

### THE ACADEMIES

RSC The Royal Society of Canada The Academies of Arts, Busnanities and Sciences of Canada

# The Royal Society of Canada (RSC)

Founded in 1882, the RSC comprises the Academies of Arts, Humanities and Sciences, as well as Canada's first national system of multidisciplinary recognition for the emerging generation of Canadian intellectual leadership: The College of New Scholars, Artists and Scientists. Its mission is to recognize scholarly, research, and artistic excellence, to advise governments and organizations, and to promote a culture of knowledge and innovation in Canada and with other national academies around the world.



# The Canadian Academy of Engineering (CAE)

The CAE is the national institution through which Canada's most distinguished and experienced engineers provide strategic advice on matters of critical importance to Canada. The Academy is an independent, self-governing, and non-profit organization established in 1987. Fellows are nominated and elected by their peers in recognition of their distinguished achievements and career-long service to the engineering profession. Fellows of the Academy are committed to ensuring that Canada's engineering expertise is applied to the benefit of all Canadians.



# The Canadian Academy of Health Sciences (CAHS)

CAHS recognizes excellence in the health sciences by appointing Fellows based on their outstanding achievements in the academic health sciences in Canada and on their willingness to serve the Canadian public. The Academy provides timely, informed, and unbiased assessments of issues affecting the health of Canadians and recommends strategic, actionable solutions. Founded in 2004, CAHS appoints new Fellows on an annual basis. The organization is managed by a voluntary Board of Directors and a Board Executive.

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# MESSAGE FROM THE CHAIR OF THE BOARD

The past year has been an especially busy one at the Council of Canadian Academies (CCA), with the release of five completed assessments, the launch of four new assessments, and the transition of several members off of and on to the CCA Board of Directors and its Scientific Advisory Committee.

Most notably, of course, is the departure of Margaret Bloodworth, C.M., who provided admirable leadership as the chair of the Board of Directors for almost seven years. We are also bidding farewell to: Linda Rabeneck, FCAHS, Lydia Miljan, and Tom Brzustowski, O.C., FRSC, and welcoming back on to the Board, Jeremy McNeil, O.C., FRSC, from the University of Western Ontario and President-elect of the Royal Society of Canada. Our Scientific Advisory Committee welcomed new members: Chris McDonald from Ryerson University; Karen Bakker from the University of British Columbia; Jeffrey A. Hutchings, FRSC, from Dalhousie University; and Gilles G. Patry, C.M., O.Ont., FCAE, from the U15.

CCA's success would not be possible without the active engagement of our expert panel chairs, members, and peer reviewers who care deeply about the topics and volunteer their time over many months to complete assessments. They are widely recognized for their world-leading knowledge and objectivity. Nor would the oversight of the CCA's overall strategy and activity be possible without the leadership of its founding Academies: the Royal Society of Canada, the Canadian Academy of Engineering, and the Canadian Academy of Health Sciences, each of which are well represented on the CCA Board of Directors and Scientific Advisory Committee, as well as on the CCA expert panels and our valued teams of peer reviewers. I thank each of them for their contributions.



We are also delighted that an updated process with the Ministry of Innovation, Science and Economic Development will assure a regular flow of high-priority assessment questions while encouraging other sponsors to request assessments from CCA. This could not have come at a better time, especially as objective, independent evidence to inform policy is increasingly recognized as an essential tool for policy development.

We look forward to the coming year, and continuing to assess evidence and knowledge to inform public policy and decision-making in Canada.

David A.

David Dodge, O.C., FRSC Chair, Board of Directors

# MESSAGE FROM THE PRESIDENT AND CEO

With the publication of this Annual Report, the Council of Canadian Academies (CCA) is completing 14 years of operation, a notable achievement for any organization working at the intersection of science and policy in the service of government. The secret to our longevity? Focus. Our work pursues a singular goal: assessing evidence to inform decisions. Beginning with our first report, *The State of Science and Technology in Canada* (2006), the CCA has now completed more than 50 assessments on topics as diverse as the issues facing Canada itself: climate change, health, research and innovation, energy, and public safety.

Our work this past year reflects that diversity. We released Competing in a Global Innovation Economy: The Current State of R&D in Canada (2018), Improving Innovation Through Better Management (2018); Toward Peace, Harmony, and Well-Being: Policing in Indigenous Communities (2019); Greater Than the Sum of Its Parts: Toward Integrated Natural Resource Management in Canada (2019); and Canada's Top Climate Change Risks (2019). Each of these assessments were carried out using the CCA's well-established approach of bringing experts and evidence together to answer questions of importance to Canada.

2018/19 was also the year that the CCA tackled its largest and perhaps most complex assessment: *Medical Assistance in Dying (MAID) (2018)*. Requested jointly by Health Canada and Justice Canada/Office of the Attorney General, the CCA convened 43 experts from around the world, chaired by former Supreme Court

of Canada Justice Mme. Marie Deschamps, C.C., Ad.E., to examine three challenging topics left unaddressed by Canada's current MAID legislation. The reports, The State of Knowledge on Medical Assistance in Dying for Mature Minors, The State of Knowledge on Advance Requests for Medical Assistance in Dying, and The State of Knowledge on Medical Assistance in Dying Where a Mental Disorder is the Sole Underlying Medical Condition were tabled in Parliament in December 2018. We were honoured to be asked to undertake a topic that raises such profound questions for Canadians.

As we begin our 15<sup>th</sup> year, four projects are already underway. The CCA is assessing issues relating to federal laboratories and infrastructure; the social and economic impact of antimicrobial resistance; the labour market transition of PhD graduates; and the impacts, opportunities, and challenges associated with the emergence of connected and automated vehicles. All of this activity is supported by our professional staff of researchers, who work side-by-side with expert panels to produce assessments of world-class quality with unique value to Canada. Other innovations and updates to watch for: our website has been updated to make it easier for people to access our work and keep track of assessments they're interested in. In the coming year, we'll be including more data visualization tools in our reports and online and creating content specifically designed to deepen the practical impact of our work and mobilize knowledge among policymakers in Ottawa and beyond.

We look forward to another productive year.

Eric M. Meslin, PhD, FCAHS President and CEO



ANNUAL REPORT 2018/19



# MESSAGE FROM THE PRESIDENTS OF THE ACADEMIES

Throughout Canada's history, leaders across diverse fields on campus and in the larger society have contributed insights and evidence to inform thinking and planning about the important issues facing society. Today, this role is more important than ever.

On the one hand, profound and rapid changes are posing increasingly complex and urgent questions that often defy straightforward answers. On the other hand, there is increasing concern that societal leaders are being overwhelmed by "fake news" and "alternative facts" that are disconnected from the latest research findings. Indeed, special efforts must now be made to ensure that evidence-based expert interpretations and analyses will inform public debate.

For this reason, we are delighted to share with you the 12<sup>th</sup> Annual Report of the CCA, founded by Canada's academies — the Royal Society of Canada, the Canadian Academy of Health Sciences, and the Canadian Academy of Engineering — and funded by the Government of Canada.

In fulfilling its mandate for more than a decade to deliver assessments of the current state of knowledge on questions posed by government departments, the CCA has become a world leader in responding compellingly to public demand for insights and evidence on complex topics. This year, CCA assessments and reports ranged from a systematic review of research findings on medical assistance in dying to a report on post-secondary education programs for the emerging generation of business leaders.

Since CCA relies on the voluntary participation of leading experts, we support enthusiastically the active role of Fellows and Members of all the Academies on the impressive panels of experts who conducted each assessment. Many thanks to those who gave so generously of their time and expertise, and thereby illustrated the profound value of knowledge assessment as essential to our efforts to make a better future.

Similarly, in our role as Directors of the CCA, we congratulate the CCA staff on their rigorous and innovative support for each assessment as well as on their efforts to share them widely as key input for decision-making not only among federal supporters but also across Canada and beyond.

We look forward to further collaboration to fulfill this role, and we invite all of you to engage with us in our collective pursuit of a better future for Canada and the world.

Dr. Chad Gaffield, O.C., FRSC Member, CCA Board of Directors

**Dr. Eddy Isaacs, PhD, FCAE** Member, CCA Board of Directors

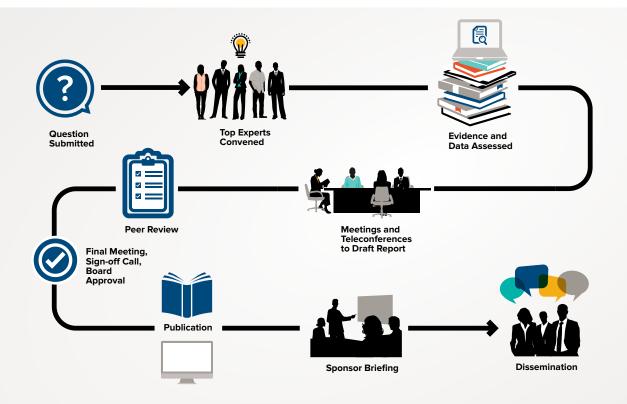
Dr. Linda Rabeneck, MD, MPH, FRCPC Member, CCA Board of Directors

# ABOUT THE COUNCIL OF CANADIAN ACADEMIES (CCA)

The CCA is an independent, not-for-profit organization that convenes the best experts in their respective fields to assess the evidence on complex scientific topics of public interest, in order to inform decision-making in Canada. Led by a Board of Directors and guided by a Scientific Advisory Committee and the Academies, the CCA's work encompasses a broad definition of *science*, incorporating the natural, social, and health sciences as well as engineering and the humanities.

Assessments are conducted by multidisciplinary and multisectoral panels of experts from across Canada and abroad who volunteer their time and lend their expertise and knowledge to the CCA. The overarching goal of CCA assessments is to evaluate the best available evidence on particularly complex issues where the science may be challenging to understand, contradictory, or difficult to assemble. This often means identifying emerging issues, gaps in knowledge and research, Canadian strengths, and international trends and practices. Upon completion, assessments provide government decision-makers as well as researchers and stakeholders with high-quality information and evidence to develop informed and innovative public policy. Assessments can be referred to the CCA (or "sponsored") by foundations, non-governmental organizations, the private sector, or any level of government.

The CCA assessment process is guided by a professional staff and is completed through in-person meetings, teleconferences, and many hours of research. To protect the independence of the assessment process, Sponsors do not participate in the production of assessments, review drafts of reports, or propose any changes to reports before their release. This process ensures the highest integrity and objectivity of the work. All reports undergo formal peer review and are made available to the public free of charge in both official languages.





CCA partners with Royal Society of

Canada, Library and Archives Canada,

and the Social Sciences and Humanities

Research Council to host a G7 research

**DECEMBER 5** 

#### **APRIL 4**

Towards Peace, Harmony, and Well-Being: Policing in Indigenous Communities is released.

# summit on Memory Institutions in the Digital Age. **FEBRUARY 7** CCA launches new project on Science and Technology Infrastructure Investments and welcomes Dr. Wendy Watson-Wright as Chair of the Expert Panel. 2019 **DECEMBER 6** CCA announces Dr. David A. Dodge as Chair of its Board of Directors and welcomes four new members to its Scientific Advisory Committee. **JANUARY 29** CCA launches new project on Connected and Automated Vehicles and Shared Mobility. CCA Internship Program is announced. MARCH 6 **DECEMBER 12** Medical Assistance in Dying reports are released and tabled in Parliament.

**JANUARY 24** 

CCA launches new project on the Labour

Market Transition of PhD Graduates.



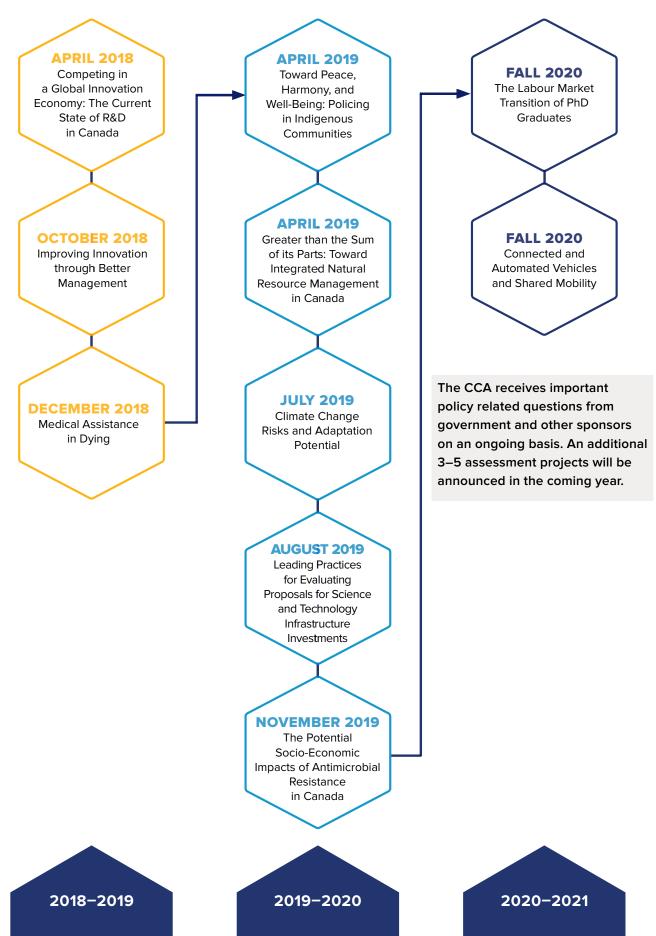
CCA welcomes Dr. Jeremy McNeil, C.M., FRSC, to its Board of Directors.



### APRIL 25

Greater than the Sum of its Parts: Toward Integrated Approaches to Natural Resource Management in Canada is released.

# **ASSESSMENT RELEASE SCHEDULE**



# COMPLETED ASSESSMENTS





# COMPETING IN A GLOBAL INNOVATION ECONOMY: THE CURRENT STATE OF R&D IN CANADA

RELEASE DATE: April 2018

SPONSOR: Innovation, Science and Economic Development Canada

#### **THE QUESTION**

What is the current state of science and technology and industrial research and development in Canada?

#### WHY IT MATTERS

In the 21<sup>st</sup> century, national prosperity, competitiveness, and well-being are inextricably linked to a country's capacity for R&D and innovation. Canada is competing intensely alongside other countries to foster the next wave of research advances and innovations. Ensuring that Canada remains competitive in this evolving landscape requires effective support informed by periodic assessments of the latest evidence on R&D performance. This is the fourth edition in the state of S&T and industrial R&D assessment series by the CCA.



The report was first presented at a plenary session at the Research Money conference on April 10, 2018 to 150 attendees.

#### **FINDINGS**

- Canada remains a leading global contributor to research, and is making important contributions across a wide range of fields.
- Canada's international standing as a leading performer of research is at risk due to a sustained slide in private and public R&D investment.
- Canada is not producing research at levels comparable to other leading countries on most enabling and strategic technologies.
- Canadian research is comparatively less specialized and less esteemed in the core fields of the natural sciences and engineering.
- Canadian industrial R&D spending is declining and concentrated in industries that are intrinsically less R&D intensive. Despite poor overall performance, Canada has pockets of R&D strength across several industries.
- The barriers between innovation and wealth creation in Canada are more significant than those between R&D and innovation. The result is a deficit of technology start-ups growing to scale in Canada, and a loss of economic benefits.
- Data limitations continue to constrain the assessment of R&D activity and excellence in Canada, particularly in industrial R&D and in the social sciences, arts, and humanities.



# IMPROVING INNOVATION THROUGH BETTER MANAGEMENT

RELEASE DATE: October 2018

SPONSOR: Innovation, Science and Economic Development Canada

#### **THE QUESTION**

What are the key skills required to manage innovation? And, what are the leading practices for teaching these skills in business schools, other academic departments, colleges/ polytechnics, and industry?

#### WHY IT MATTERS

Canada has an abundance of raw ideas, talented people, and entrepreneurial spirit. While research is world-class and technology start-ups are thriving, few companies grow and mature in Canada. This cycle — invent and sell, invent and sell — allows other countries to capture much of the economic and social benefits of Canadian-invented products, processes, marketing methods, and business models. Escaping this cycle may be aided through education and training of innovation managers who can systematically manage ideas for commercial success and motivate others to reimagine innovation in Canada

#### **FINDINGS**

*Improving Innovation Through Better Management* explores ways to provide innovation management training to a large, diverse population of students throughout their careers. The report identifies the competencies that are likely to enhance innovation management, describes what's currently known about where and how to effectively teach these competencies, and outlines the implications for academic institutions, industry, and government.



Expert Panel on Innovation Management Education and Training.

The Panel identified five innovation management competencies (IMCs) associated with high-performing innovation managers across a range of companies:

- finding opportunities,
- commercializing opportunities,
- managing diverse teams,
- leveraging innovation ecosystems,
- and leadership.

The competency-based approach adopted by the Panel is intended to begin a dialogue among business schools, companies, and other stakeholders that educate and train innovation managers.

Additionally, the Panel reached the following conclusions:

- Offering more innovation management courses can better prepare Canadian MBAs to manage in an increasingly innovation-driven economy. Joint programs are a leading practice for expanding access to innovation management education to students outside of business schools.
- Specialized programs are a leading practice for providing in-depth innovation management education to mid-career students and focused training scaling high-tech companies to executives.
- Leading practices are not widely recognized in innovation management because it is a nascent field with silos of expertise. Innovation management education could be improved by developing communities of practice for teachers, researchers, and practitioners to share, implement, and expand leading practices.
- Leading innovation management courses and programs provide students with active learning experiences as well as opportunities for risk-taking, failure, and reflection.
- Teacher-practitioners, innovation intermediaries, and lifelong learning are leading practices for effective innovation management education and training throughout the innovation ecosystem and across a student's career.
- Inclusive innovation can underpin both the theory and practice of innovation management, empowering diverse people and institutions to innovate.



# **MEDICAL ASSISTANCE IN DYING**

RELEASE DATE: December 2018 SPONSOR: Health Canada and Justice Canada



#### THE QUESTION

What is the available evidence on, and how does it inform our understanding of, medical assistance in dying (MAID) in the case of mature minors, advance requests, and where mental illness<sup>\*</sup> is the sole underlying medical condition, given the clinical, legal, cultural, ethical, and historical context in Canada?

#### WHY IT MATTERS

In December 2016, the CCA was asked by then Minister of Health and Minister of Justice and Attorney General of Canada to undertake independent reviews related to medical assistance in dying (MAID). Specifically, the CCA was tasked with examining three particularly complex types of requests for MAID that were identified for further review and study in the legislation passed by Parliament in 2016: requests by mature minors, advance requests, and requests where a mental disorder is the sole underlying medical condition.



Expert Panel on Medical Assistance in Dying.

#### **OVERVIEW**

The Expert Panel undertook an evidence-based assessment of the state of knowledge surrounding three topics areas: MAID for mature minors, advance requests for MAID, and MAID where a mental disorder is the sole underlying medical condition.

The three final reports gather and interpret, with the sensitivity required of the subject, the available evidence, and they explore the societal, clinical, legal, and practical implications and issues associated with both permitting and prohibiting MAID in the three topic areas. They reflect a broad range of knowledge, experience, and perspective from relevant healthcare professions, diverse academic disciplines, advocacy groups, and from jurisdictions where MAID is permitted. The reports also reflect a particular moment in Canada's history, in the breadth and availability of evidence, and in the evolution of thinking and practice related to MAID. They do not make policy recommendations and are intended to provide evidence to inform decision-making processes as well as to inform the ongoing national dialogue on MAID in Canada.



Hon. Marie Deschamps, C.C., *Ad. E.*, (Chair of the Expert Panel) sat down with Radio-Canada to discuss the MAID reports.

MAID legislation and the charge use the term mental illness. However, the Working Group chose to use the term mental disorder to be consistent with current clinical and legal practice



# TOWARD PEACE, HARMONY, AND WELL-BEING: POLICING IN INDIGENOUS COMMUNITIES

RELEASE DATE: April 2019 SPONSOR: Public Safety Canada

#### **THE QUESTIONS**

- Building on the research study Policing Canada in the 21<sup>st</sup> Century: New Policing for New Challenges, what could be drawn from the current evidence and knowledge about the present and future role of police services in Indigenous communities in Canada?
- 2. What are some promising and leading practices in policing that could be applied in Indigenous communities?

#### WHY IT MATTERS

In Canada, relations between Indigenous and non-Indigenous people are in a period of transition requiring an awareness of the past and acknowledgement of the harm that has been inflicted in order to move toward an equitable future. The path to reconciliation involves the re-examination of many aspects of Canada's relationship with Indigenous communities, including governance, human rights, culture and — the focus of this particular report — policing.

Policing in Indigenous communities presents challenges that are distinct from those for policing in non-Indigenous communities. These challenges are embedded within a set of cultural, social, historical, legal, political, and geographic considerations.

#### **FINDINGS**

Reflecting on all the evidence available, the Panel came to six main findings:

Current realities with policing in Indigenous communities, as well as crime, victimization and incarceration, are tied to a historical context. The impact of colonialism continues to reverberate in Indigenous communities. Confronting this history is part of the challenge of achieving relevant and decolonized policing.



Expert Panel member Harley Crowshoe presented the report at the First Nations Chiefs of Police Association's annual conference in April.



Expert Panel on Policing in Indigenous Communities.

- A comprehensive understanding of safety and well-being in Indigenous communities requires multi-dimensional thinking, including attention to social and cultural factors. This understanding provides an opportunity for policing approaches that reflect holistic views of safety and wellbeing that are already embedded in Indigenous cultures.
- Policing in Indigenous communities is embedded in a complex legal and policy context marked by a growing emphasis on Indigenous self-determination and the need to recognize Indigenous rights and laws.
- While efforts have been made to improve policing for Indigenous communities in Canada in recent decades, many continue to receive policing services that do not meet their safety and security needs.
- In both Indigenous and non-Indigenous communities, the most promising ways to promote safety and well-being involve relationships among police, other service providers, and community members. Effective relationship-based approaches are community-led and provide opportunities for police to assist in mobilizing communities and to earn their trust.
- Opportunities for change begin with providing meaningful choices for policing arrangements that support self-determination. These choices require resources that allow for sustainability and that can be facilitated by systemic reforms aligned with the need for safety and well-being in Indigenous communities.



# GREATER THEN THE SUM OF ITS PARTS: TOWARD INTEGRATED NATURAL RESOURCE MANAGEMENT IN CANADA

RELEASE DATE: April 2019 SPONSOR: Natural Resources Canada

#### THE QUESTION

What is the state of knowledge and practice of integrated approaches to natural resource management in Canada?

#### WHY IT MATTERS

The rich diversity of Canada's natural resources has always played an important role in the culture, health, safety, and livelihood of people in Canada. In resource-rich regions across the country, overlapping natural resource use can give rise to multiple opportunities and challenges. Changing resource demands, environmental conditions, and legal and social contexts, including commitments to reconciliation, are prompting decision-makers to re-examine natural resource management practices. This has led to growing interest in developing integrated approaches to improve the way natural resources are currently managed.

#### FINDINGS

Greater Than the Sum of Its Parts: Toward Integrated Natural Resource Management in Canada situates the potential contribution of integrated natural resource management (INRM) within Canada's complex natural resource management landscape. The report explores the knowledge and governance processes that can support INRM in Canada, barriers to understanding and implementing INRM, and promising INRM practices. The Panel highlighted the importance of considering multiple ways of knowing in INRM, including Indigenous and local knowledge. Although several forms of governance can apply to INRM, all models benefit from the involvement of all actors to participate in natural resource management decision-making. The report is designed to be of value to leaders working to strengthen the efficacy and legitimacy of resource management systems, and to practitioners and other actors striving to advance INRM.

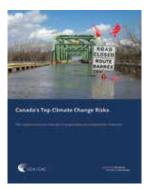
The Panel found that integration is needed to address current realities, and overcome the limitations of conventional approaches which focus on managing individual activities and resources. INRM calls for higher-order decision-making that embraces land-use planning and strategic assessment at regional scales, enabling better and more efficient decision-making at project-specific stages. The report details eight defining characteristics of INRM that can serve as a guide to implementation. It does not call for a complete overhaul of current resource management practices, but notes that there is sufficient knowledge and established tools to start supporting these integrated processes now.



Some of the panel members presented the findings of the report at a lunch and learn hosted by Natural Resources Canada.



Expert Panel on the State of Knowledge and Practice of Integrated Approaches to Natural Resource Management in Canada.



# **CANADA'S TOP CLIMATE CHANGE RISKS**

RELEASE DATE: July 2019 SPONSOR: Treasury Board of Canada Secretariat

#### **THE QUESTION**

What are the top climate change risks facing both Canada and the federal government, and their relative significance, and which have the most potential to be minimized by adaptation measures?

#### WHY IT MATTERS

Climate change is a complex, cross-cutting issue that poses risks to environmental, social, and economic systems. Given the scale of climate change — in terms of cost, consequences, and the pervasiveness of its impact — an effective response and the efficient use of public resources require identifying and addressing the most significant risks. This assessment examines the top climate change risks facing both Canada and the federal government, and their relative significance. The assessment also considers which of these risks have the most potential to be minimized by adaptation measures.

#### **FINDINGS**

*Canada's Top Climate Change Risks* identifies 12 major areas of risk: agriculture and food, coastal communities, ecosystems, fisheries, forestry, geopolitical dynamics, governance and capacity, human health and wellness, Indigenous ways of life, northern communities, physical infrastructure, and

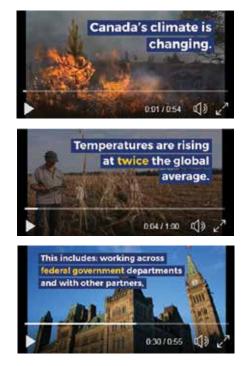


Expert Panel on Climate Change Risks and Adaptation Potential.

water. The Expert Panel concluded while all 12 risk areas have the potential to cause major harm in the coming decades, risks are most acute in six domains: physical infrastructure, coastal communities, northern communities, human health and wellness, ecosystems, and fisheries. Climate change risks are complex and interconnected, and consequences can multiply through natural and human systems in ways that are difficult to anticipate.

All 12 areas of risk considered by the Panel can be meaningfully reduced through adaptation measures that lessen vulnerability or exposure.

Federal government planning and prioritization for adaptation to climate change can be informed by a comprehensive understanding of the nature of the federal role in each risk area across three main categories: coordination and collaboration, capacity building, or managing government assets and operations.



Three videos were created to share the key findings of the Canada's Top Climate Change Risks assessment on social media.

# **ASSESSMENTS IN PROGRESS**

# LEADING PRACTICES FOR EVALUATING PROPOSALS FOR SCIENCE AND TECHNOLOGY INFRASTRUCTURE INVESTMENTS

In *Budget 2018*, the federal government committed \$2.8 billion to renew its science laboratories through an infrastructure initiative. One of the goals of the initiative is to support the construction of multi-purpose facilities that bring together federal scientists from across different departments to pursue collaborative science. Through this initiative, the government will consider how current federal S&T infrastructure and new investments can be used to better position Canadian federal science to overcome barriers to collaboration and be more adaptive and efficient.

The CCA has been asked to assess processes and advisory structures used for making S&T infrastructure investments, as well as related principles and criteria for deciding on investment opportunities.

### THE QUESTION

What is known about leading practices for evaluating proposals for science and technology infrastructure investments that is relevant to Canadian federal science for the future?

#### SPONSOR

Public Services and Procurement Canada

**EXPECTED RELEASE** August 2019



The Leading Practices for Evaluating Proposals for Science and Technology Infrastructure Investments assessment will be released by the end of summer 2019.



The Potential Socio-economic Impacts of Antimicrobial Resistance in Canada assessment will be released in November 2019.

## THE POTENTIAL SOCIO-ECONOMIC IMPACTS OF ANTIMICROBIAL RESISTANCE IN CANADA

The era of antimicrobial use began in the 1920s, with the discovery of penicillin by Alexander Fleming, who cautioned even at that time against the inevitability of antimicrobial resistance (AMR). As anticipated, antimicrobial effectiveness has declined over time, and AMR is emerging. Although AMR occurs naturally, with pathogens' innate ability to adapt to antimicrobials, it's increased by other factors, such as inappropriate use of antimicrobials, emerging mutations, and colonization.

AMR is a rising global health threat. Patients who are affected by drug-resistant pathogens are at risk of increased infections, longer hospitals stays, and even death. As the prevalence of resistant bacteria increases, they become the prominent agents causing human infection. Even common infections are less treatable with available drugs. In spite of the rapid development of AMR, few new antimicrobial agents are being developed. As antimicrobial resistant organisms become more prevalent, it is important to understand how this impacts Canadians, particularly vulnerable populations.

#### THE QUESTION

What is the socio-economic impact of antimicrobial resistance (AMR) for Canadians and the Canadian health care system?

#### SPONSOR

Public Health Agency of Canada

**EXPECTED RELEASE** November 2019



The Connected and Automated Vehicles and Shared Mobility assessment will be released in fall 2020.

### CONNECTED AND AUTOMATED VEHICLES AND SHARED MOBILITY

The automotive industry is experiencing a period of unprecedented change. Consumer preferences and trends toward efficiency, safety, and convenience are driving advancements in vehicle technologies, particularly in the area of connected and autonomous vehicles. These trends in advanced technologies, as well as shared mobility, will have a major impact on the future of transportation.

Connected and automated vehicles have the potential to enhance transportation safety, improve mobility choices, lower costs for users, and create new social and economic opportunities for Canadians. At the same time, in addition to resulting in job losses, they are likely to cause significant disruption to the manufacturing and transportation industries and raise important cybersecurity and privacy concerns.

#### **THE QUESTION**

In light of the current trends affecting the evolution of connected and automated vehicle technologies and shared mobility, what impacts, opportunities, and challenges do these present for Canadian industry, governments, and Canadians more broadly?

#### SPONSOR

Innovation, Science and Economic Development Canada

# EXPECTED RELEASE

Fall 2020

### THE LABOUR MARKET TRANSITION OF PHD GRADUATES

Canada has a growing supply of PhD graduates in its economy, but evidence suggests that more could be done to support the transition of these highly skilled individuals into the labour market. Recent trends, such as an aging population that is remaining in the work force for longer, an increasing number of PhD graduates studying in Canada, the cross-border mobility of doctorate holders, and a perceived increase in competition for academic positions, are affecting the transition of PhD graduates from their academic studies to careers in a broad variety of sectors.

This assessment will take into account how the challenges faced by PhD graduates may differ by field of study, as well as their motivations to migrate in and out of Canada after completing their degree.

#### THE QUESTION

What are the main challenges that PhD students in Canada face in transitioning to the labour market, and how do these differ by field of study?

#### SPONSOR

Innovation, Science and Economic Development Canada

EXPECTED RELEASE Fall 2020



The Labour Market Transition of PhD Graduates assessment will be released in fall 2020.

# ANNEX 1: CORPORATE PROFILE

The Council of Canadian Academies is a not-for-profit organization registered under the Canada Not-for-Profit Corporations Act. It began operation in 2005. The CCA has three founding Academies: the Royal Society of Canada, the Canadian Academy of Engineering, and the Canadian Academy of Health Sciences.

#### **ASSESSMENTS**

Proposed assessment topics requested by the Government of Canada are selected through a cross-government competitive process and submitted to the CCA for consideration. The criteria used to evaluate proposed assessments are listed below. These criteria are also suggested for assessments conducted for the private sector, non-profits, other non-governmental organizations, and provincial and municipal governments.

#### **GOVERNMENT CRITERIA:**

- The proposal is relevant to the agenda of the sponsoring department/agency and to Canada's policy agenda.
- The assessment topic is timely, and the timeframe for assessment is consistent with the needs of the sponsoring department/agency and of Canada.
- The value provided by the CCA is unique.
- The assessment topic is a science-based question that has been coordinated with relevant departments/agencies and external stakeholders.

#### **CCA CRITERIA:**

- The topic is of importance to Canada and its citizens.
- The appropriate expertise can be assembled and the required timeline can be met.
- The existing state of knowledge merits the assessment.
- Science underpins the question and its response.

#### **OTHER CRITERIA:**

- The report is likely to be widely consulted within and outside government (i.e., other levels of government or organizations have a demonstrated interest in the outcome of the assessment).
- The topic is uniquely relevant to Canada.
- The topic is an international issue for which a Canadian assessment is important at this time.

The CCA's Board of Directors, assisted by a Scientific Advisory Committee, oversees the integrity of the assessment process. The Board formally approves assessment questions, expert panel membership, report review processes, and the public release of reports. To protect the independence of the assessment process, the sponsor of an assessment does not participate in conducting the assessment, review drafts of the report, or propose any changes to the report before its release. Assessment reports undergo a formal peer review process to assure quality and objectivity. The Board is responsible for authorizing the public release of final assessment reports, and is advised in this regard by a report review monitor who ensures that expert panels give full and fair consideration to the comments of the external reviewers of every CCA report. Reports are posted on the CCA's website, www.cca-reports.ca, in both official languages, and can be downloaded free of charge to ensure their availability to the public.

#### **FUNDING**

The CCA was established with an investment by the Government of Canada in the form of a 10-year grant worth \$30 million. This founding grant was intended to support core operations of the CCA through to March 31, 2015. In the April 2015 federal budget, this commitment was renewed with an additional contribution of \$15 million over five years. In the March 2018 federal budget, an additional \$9 million was committed over three years commencing in 2020. Conditions on the use of the funds provided by the government are set out in a formal funding agreement between the CCA and the Government of Canada. The CCA also conducts assessments outside of the federal government agreement. These assessments are referred to the CCA by non-profits, non-governmental organizations, the private sector, or provincial and municipal governments.

# STRUCTURE AND GOVERNANCE

The CCA is governed by a 12-member Board of Directors. The Board is responsible for setting the strategic direction of the organization, ensuring that the CCA fulfills its mandate, and overseeing the CCA's operations.

Each founding Academy nominates two directors. The three members elect two directors from the general public. The remaining four directors are nominated by the Minister of Innovation, Science and Economic Development and are formally elected by the Members at the Annual General Meeting.

Governance of the CCA is supported by four committees of the Board of Directors:

- Executive Committee
- Audit, Finance, and Risk Committee
- Nominating and Governance Committee
- Human Resources and Compensation Committee

The work of the CCA is also supported by a Board-appointed Scientific Advisory Committee that provides advice on the substance and procedures of expert assessments, particularly on the following aspects:

- generating potential subjects for future assessments;
- evaluating the suitability of subjects proposed to the CCA for expert assessment;
- setting the terms of reference for the independent expert panels that carry out the assessments;
- seeking out potential members for expert panels; and
- overseeing the process of peer review of draft assessment reports.

Day-to-day operations of the CCA are carried out by a small staff team, under the direction of a full-time President and CEO. Staff provide support to expert panels with research, writing, and overall management of logistics for the assessments and the production of reports. Staff also support the work of the Scientific Advisory Committee, particularly with analyzing proposed assessment topics, identifying panel membership, and managing the report review process.

Members of the Board of Directors, Scientific Advisory Committee, and staff are listed in Annex 2.

### STATEMENT OF INVESTMENT POLICY

The Statement of Investment Policy was formally approved by the Board of Directors and is available on the CCA website.

#### FINANCIAL STATEMENTS: FISCAL YEAR ENDED MARCH 31, 2019

The CCA retained the Ottawa-based accounting firm Parker Prins Lebano to audit the financial results for the fiscal year 2018/19. The CCA's financial statement for 2018/19 is provided in Annex 4. Parker Prins Lebano, an independent financial auditor, wrote the CCA on May 28, 2019 confirming that, based on its audit findings, all expenses associated with the Agreement were eligible in nature.

#### **HUMAN RESOURCES**

The CCA focuses its human resource activity on the values outlined in the strategic plan. Those values are: excellence, independence, integrity, collaboration, and innovation.

# ANNEX 2: BOARD OF DIRECTORS, SCIENTIFIC ADVISORY COMMITTEE AND STAFF

# BOARD OF DIRECTORS

#### David A. Dodge,

O.C., FRSC, Chair\* Senior Advisor, Bennett Jones LLP (Ottawa, ON)

# Margaret Bloodworth,

C.M., Chair\*\*

Former federal Deputy Minister and National Security Advisor (Ottawa, ON)

#### Paul Allison, FCAHS

Dean, Faculty of Dentistry, McGill University (Montréal, QC)

# Tom Brzustowski, O.C., FRSC, FCAE

Member of the Board of the Institute for Quantum Computing, University of Waterloo; Member of the Board, Waterloo Global Science Initiative (Waterloo, ON)

#### Chad Gaffield, O.C., FRSC

Professor of History and University Research Chair in Digital Scholarship, University of Ottawa; President, Royal Society of Canada (Ottawa, ON)

#### **Chantal Guay\***

Chief Executive Officer, Standards Council of Canada (Ottawa, ON)

#### Eddy Isaacs, FCAE\*

President, Eddy Isaacs, Inc.; Strategic Advisor, Engineering, University of Alberta (Edmonton, AB)

#### Jawahar (Jay) Kalra, MD, FCAHS

Professor, Department of Pathology and Laboratory Medicine and Member, Board of Governors, University of Saskatchewan (Saskatoon, SK)

#### Bartha Maria Knoppers, O.C., O.Q., FRSC, FCAHS

Full Professor and Director, Centre of Genomics and Policy, Faculty of Medicine, Human Genetics, McGill University (Montréal, QC)

# Maryse Lassonde, O.C., O.Q., FRSC, FCAHS\*\*

Scientific Director, Quebec Natural Sciences and Technology Granting Agency; Past-President, Royal Society of Canada (Montréal, QC)

#### Pierre Lortie, C.M., FCAE\*\*

Senior Business Advisor, Dentons LLP; Past President of the Canadian Academy of Engineering (Montréal, QC)

#### Jeremy N. McNeil, C.M., FRSC\*

Distinguished University Professor and Helen Battle Professor of Chemical Ecology, Department of Biology, Western University (London, ON)

#### Lydia Miljan

Associate Professor of Political Science and Chair of the Arts and Science program, University of Windsor (Windsor, ON)

#### Linda Rabeneck, FCAHS

Vice President, Prevention and Cancer Control at Cancer Care Ontario; President, Canadian Academy of Health Sciences (Toronto, ON)

#### **Douglas Ruth, FCAE**

Professor and Dean Emeritus, Associate Dean (Design Education), NSERC Chair in Design Engineering, and Director of the Centre for Engineering Professional Practice and Engineering Education, University of Manitoba (Winnipeg, MB)

### SCIENTIFIC ADVISORY COMMITTEE

# Eliot A. Phillipson, O.C., FCAHS (Chair)

Sir John and Lady Eaton Professor of Medicine Emeritus, University of Toronto (Toronto, ON); Former President and CEO, Canada Foundation for Innovation (Ottawa, ON)

#### Karen Bakker\*

Professor, Canada Research Chair, and Director (Program on Water Governance), University of British Columbia (Vancouver, BC)

#### **David Castle**

Vice-President Research and Professor, School of Public Administration; adjunct appointment Gustavson School of Business, University of Victoria (Victoria, BC)

#### Sophie D'Amours, O.C., FCAE

Rector of the Université Laval (Quebec City, QC)

#### Jackie Dawson

Canada Research Chair in Environment, Society and Policy, and Associate Professor, Department of Geography, University of Ottawa (Ottawa, ON)

#### Jeffrey A. Hutchings, FRSC\*

Killam Memorial Chair and Professor of Biology, Dalhousie University (Halifax, NS)

#### Jean Gray, C.M., FCAHS\*\*

Professor Emeritus, Medical Education, Medicine, Pharmacology, Dalhousie University (Halifax, NS)

#### John Hepburn, FRSC\*\*

Vice-President, Research, CIFAR (Toronto, ON)

#### Eddy Isaacs, FCAE\*\*

President, Eddy Isaacs Inc.; Strategic Advisor, Engineering, University of Alberta (Edmonton, AB)

#### Gregory S. Kealey, C.M., FRSC\*\*

Professor Emeritus, Department of History, University of New Brunswick (Fredericton, NB)

#### Malcolm King, FCAHS

Scientific Director, Institute of Aboriginal Peoples' Health at Canadian Institutes of Health Research (Saskatoon, SK)

#### Chris MacDonald\*

Associate Professor; Director, Ted Rogers Leadership Centre; Chair, Law and Business Department; Ted Rogers School of Management, Ryerson University (Toronto, ON)

#### Stuart MacLeod, FCAHS

Professor of Pediatrics (Emeritus), University of British Columbia (Vancouver, BC); Adjunct Professor, Community Health and Epidemiology, Dalhousie University (Halifax, NS)

#### Barbara Neis, C.M., FRSC

John Paton Lewis Distinguished University Professor, Memorial University of Newfoundland (St. John's, NL)

#### Gilles G. Patry, C.M., O.Ont., FCAE\*

Executive Director, The U15 – Group of Canadian Research Universities

(Ottawa, ON)

#### Nicole A. Poirier, FCAE

President, KoanTeknico Solutions Inc. (Beaconsfield, QC)

### SAC SCIENCE AND TECHNOLOGY METHODS SUBCOMMITTEE

# Eliot A. Phillipson, O.C., FCAHS (Chair)

Sir John and Lady Eaton Professor of Medicine Emeritus, University of Toronto (Toronto, ON); Former President and CEO, Canada Foundation for Innovation (Ottawa, ON)

#### Barbara Neis, C.M., FRSC

John Paton Lewis Distinguished University Professor, Memorial University of Newfoundland (St. John's, NL)

#### Nicole A. Poirier, FCAE

President, KoanTeknico Solutions Inc. (Beaconsfield, QC)

#### Kaye Husbands Fealing, PhD (Public member)

Chair and Professor, School of Public Policy, Georgia Institute of Technology (Atlanta, GA)

#### E. Louise Earl (Public member)

Senior Advisor, Treasury Board of Canada Secretariat (Ottawa, ON)

\* appointed in FY 2018/19 \*\* term ended in FY 2018/19

### STAFF

Eric M. Meslin, PhD, FCAHS President and CEO

Erin Bassett, PhD\*\* Research Associate

Jennifer Bassett, PhD\*\* Research Associate

Janet Bax, MA\*\* Project Director

Amanda Bennett, PhD Research Associate

Dane Berry, MPP Research Associate

Anna Buczek, BScH (parental leave for part of 2018/19) Outreach and Communications Specialist

Tom Bursey, MBA, FCPA, FCMA, ICD.D Vice President, Corporate Services and CFO

Rebecca Chapman, PhD Research Associate

**Tijs Creutzberg, PhD** Director of Assessments

Hilary Davies, M.E.S., B.Ed., B.SC.\*\*\* Research Associate Madison Downe, MSc Project Coordinator

Marc Dufrense, MSc Senior Bilingual Publications Specialist

Heather Ennis, MA\* Director of Communications

Andrea Hopkins, MA Lead, Assessment Coordination and Planning

Teresa lacobelli, PhD Research Associate

Matthew Ivanowich, PhD Research Associate

Joanne Linnay, MSc, MES\*\* Project Coordinator

Suzanne Loney, MA Research Associate

Kelly Loverock, MA Website and Communications Specialist

Camilla Sevigny, MSc Project Coordinator

Frédérique Mantha, BA\*\* Communications and Publishing Coordinator

Jérôme Marty, PhD Project Director Anita Melnyk, PhD Project Manager

Emmanuel Mongin, PhD Project Director

Nancy Neil, BGS Executive Assistant to the President

Samantha Rae Ayoub, MA\*\* Communications and Publishing Director

Joe Rowsell, MPhil Project Director

Alexandra Sebben, MPC Communications and Outreach Coordinator

Lennart Trouborst, MSc\*\* Researcher

Jill Watkins, PhD Project Director

Weronika Zych, MSSc Senior Project Coordinator

#### **Ranges of remuneration**

For the fiscal year ending March 31, 2019 compensations was within the following salary ranges: Council Management (Officers) – President [\$216,358-323,715]; Vice President and CFO [\$137,231-\$208,497]; and Director of Assessments [\$111,884-\$176,365].

\* Joined the CCA in 2018/19 \*\* Left the CCA in 2018/19 \*\*\* Parental leave in 2018/19

# ANNEX 3: EXPERT PANEL MEMBERS

## COMPETING IN A GLOBAL INNOVATION ECONOMY: THE CURRENT STATE OF R&D IN CANADA

#### **EXPERT PANEL**

#### Max Blouw,

Chair, Former President and Vice-Chancellor of Wilfrid Laurier University (Waterloo, ON)

#### Luis Barreto,

President, Dr. Luis Barreto & Associates and Strategic Advisor, NEOMED-LABS (Concord, ON)

#### Catherine Beaudry,

Professor and Canada Research Chair in Creation, Development and Commercialization of Innovation, Department of Mathematical and Industrial Engineering, Polytechnique Montréal (Montréal, QC)

#### Donald Brooks, FCAHS,

Professor, Pathology and Laboratory Medicine, and Chemistry, University of British Columbia (Vancouver, BC)

#### Madeleine Jean,

Vice-President, Business Development and Operations, Prompt (Montréal, QC)

#### Philip Jessop, FRSC,

Professor, Inorganic Chemistry and Canada Research Chair in Green Chemistry, Department of Chemistry, Queen's University; Technical Director, GreenCentre Canada (Kingston, ON)

#### Claude Lajeunesse, FCAE,

Corporate Director and Chairperson of the Board of Directors, Atomic Energy of Canada Ltd. (Magog, QC)

#### Steve Liang,

Associate Professor, Geomatics Engineering, University of Calgary; Director, GeoSensorWeb Laboratory; CEO, SensorUp Inc. (Calgary, AB)

#### Robert Luke,

Vice-President, Research and Innovation; Associate Professor, Faculty of Liberal Arts & Sciences and School of Interdisciplinary Studies, OCAD University (Toronto, ON)

#### **Douglas Peers**,

Dean of Arts and Professor, Department of History, University of Waterloo (Waterloo, ON)

#### John M. Thompson, O.C., FCAE, Retired Executive Vice-Chairman,

IBM Corporation (Toronto, ON)

#### Anne Whitelaw,

Vice Provost, Planning and Positioning; Associate Professor, Department of Art History, Concordia University (Montréal, QC)

#### David A. Wolfe,

Professor, Political Science and Co-Director, Innovation Policy Lab, Munk School of Global Affairs, University of Toronto (Toronto, ON)

### IMPROVING INNOVATION THROUGH BETTER MANAGEMENT

#### **EXPERT PANEL**

### John R. McDougall, FCAE,

(Chair of Panel and Workshop), President, DALCOR Innoventures Ltd.; Adjunct Professor, Alberta School of Business and Faculty of Engineering, University of Alberta (Edmonton, AB)

#### Deborah Ancona,

Seley Distinguished Professor of Management, MIT Sloan School of Management (Cambridge, MA)

#### Colleen Collins,

Vice President, Canada West Foundation; Adjunct Professor, Beedie School of Business, Simon Fraser University (Vancouver, BC)

#### C. Brooke Dobni,

Professor, Edwards School of Business, University of Saskatchewan (Saskatoon, SK)

#### Laurent Simon,

Full Professor, Department of Entrepreneurship and Innovation and Co-Director, Mosaic, Creativity and Innovation Hub, HEC Montréal (Montréal, QC)

#### WORKSHOP PARTICIPANTS

#### Max Blouw,

Former President and Vice-Chancellor of Wilfrid Laurier University (Waterloo, ON)

#### Richard Boudreault, FCAE,

Chairman, Sigma Energy Storage (Montréal, QC)

#### Judy Fairburn, FCAE,

Past Board Chair, Alberta Innovates; retired EVP Business Innovation & Chief Digital Officer, Cenovus Energy Inc. (Calgary, AB)

#### Tom Jenkins, O.C., FCAE,

Chair of the Board, OpenText (Waterloo, ON)

#### Sarah Kaplan,

Director of the Institute for Gender and the Economy and Distinguished Professor, Rotman School of Management, University of Toronto (Toronto, ON)

#### Jean-Michel Lemieux,

Senior Vice President of Engineering, Shopify Inc. (Ottawa, ON)

#### Elicia Maine,

Academic Director and Professor, i2I, Beedie School of Business, Simon Fraser University (Vancouver, BC)

#### Kathy Malas,

Innovation Platform Manager, CHU Sainte-Justine (Montréal, QC)

#### John L. Mann, FCAE,

Owner, Mann Consulting (Blenheim, ON)

#### Jesse Rodgers,

CEO, Volta Labs (Halifax, NS)

#### Creso Sá,

Professor of Higher Education and Director of the Centre for the Study of Canadian and International Higher Education, Ontario Institute for Studies in Education, University of Toronto (Toronto, ON)

#### Dhirendra Shukla,

Professor and Chair, J. Herbert Smith Centre for Technology Management & Entrepreneurship, Faculty of Engineering, University of New Brunswick (Fredericton, NB)

#### Dan Sinai,

Senior Executive, Innovation, IBM Canada (Toronto, ON)

#### Valerie Walker,

Executive Director, Business/Higher Education Roundtable (Ottawa, ON)

#### J. Mark Weber,

Eyton Director, Conrad School of Entrepreneurship & Business, University of Waterloo (Waterloo, ON)

The CCA also recognizes the important contribution to this assessment of Robert G. Cooper, ISBM Distinguished Research Scholar, Pennsylvania State University.

### MEDICAL ASSISTANCE IN DYING

# Hon. Marie Deschamps, C.C., *Ad. E.* (Chair of the Expert Panel),

Former Justice of the Supreme Court of Canada and Adjunct Professor, McGill University (Montréal, QC) and Université de Sherbrooke (Sherbrooke, QC)

### THE EXPERT PANEL WORKING GROUP ON MAID FOR MATURE MINORS

# Dawn Davies (Working Group Chair),

Associate Professor, Department of Pediatrics, University of Ottawa; Palliative Care Physician, Roger Neilson House/ Children's Hospital of Eastern Ontario (Ottawa, ON)

#### Gail Beck, O.Ont.,

Clinical Director, Youth Psychiatry Program, The Royal (Ottawa, ON)

#### Carrie Bourassa,

Chair, Northern and Indigenous Health, Health Science North Research Institute, and Scientific Director, Institute of Indigenous Peoples' Health – Canadian Institute of Health Research (Sudbury, ON)

#### Franco A. Carnevale,

Professor, Ingram School of Nursing, McGill University (Montréal, QC)

#### Joanna Chung,

Psychologist, Medical Psychology and Hematology/Oncology/ Bone Marrow Transplant Program, BC Children's Hospital (Vancouver, BC)

#### Joan Gilmour,

Professor, Osgoode Hall Law School, York University (Toronto, ON)

#### Hon. Stephen Goudge,

**Q.C., O.Ont.,** Counsel, Paliare Roland (Toronto, ON)

#### Mary Ellen Macdonald,

Associate Professor, Faculty of Dentistry, McGill University (Montréal, QC)

#### Jean-Pierre Ménard, Ad. E.,

Lawyer, Ménard, Martin, Avocats (Montréal, QC)

#### Cheryl Milne,

Executive Director, David Asper Centre for Constitutional Rights, Faculty of Law, University of Toronto (Toronto, ON)

#### Ubaka Ogbogu,

Assistant Professor, Faculties of Law and Pharmacy & Pharmaceutical Sciences, University of Alberta (Edmonton, AB)

#### Bryan Salte,

Associate Registrar and Legal Counsel, College of Physicians and Surgeons of Saskatchewan (Saskatoon, SK)

#### Kimberley Widger,

Assistant Professor, Lawrence S. Bloomberg Faculty of Nursing, University of Toronto; Nursing Research Associate, Paediatric Advanced Care Team, The Hospital for Sick Children (Toronto, ON)

#### Randi Zlotnik Shaul,

Director, Department of Bioethics, The Hospital for Sick Children (Toronto, ON)

### THE EXPERT PANEL WORKING GROUP ON ADVANCE REQUESTS FOR MAID

#### Jennifer L. Gibson (Working Group Chair),

Sun Life Financial Chair in Bioethics and Director, University of Toronto Joint Centre for Bioethics (Toronto, ON)

#### Benjamin L. Berger,

Professor, Osgoode Hall Law School, York University (Toronto, ON)

#### Martha Donnelly,

Geriatric Psychiatrist; Associate Professor Emeritus, Department of Psychiatry, University of British Columbia (Vancouver, BC)

#### Alika Lafontaine,

Medical Director North Zone Indigenous Health, Alberta Health Services; Assistant Clinical Professor of Medicine, Anesthesiology and Pain Medicine, University of Alberta; Medical Director, Alignment by Design Labs (Grande Prairie, AB)

#### Trudo Lemmens,

Professor and Scholl Chair in Health Law and Policy, Faculty of Law, University of Toronto (Toronto, ON)

#### Susan MacDonald,

Associate Professor, Medicine & Family Medicine, Memorial University of Newfoundland (St. John's, NL)

#### Sheila A.M. McLean,

Emeritus Professor, Law & Ethics in Medicine, Glasgow University (Glasgow, Scotland)

#### Dorothy Pringle, O.C., FCAHS,

Professor Emeritus, Lawrence S. Bloomberg Faculty of Nursing, University of Toronto (Toronto, ON)

#### Patricia (Paddy) Rodney,

Associate Professor, School of Nursing and Faculty Associate, W. Maurice Young Centre for Applied Ethics, University of British Columbia (Vancouver, BC)

#### Harvey Schipper,

Professor of Medicine and Adjunct Professor of Law, University of Toronto (Toronto, ON)

#### Samir Sinha,

Peter and Shelagh Godsoe Chair in Geriatrics and Director of Geriatrics, Sinai Health System and University Health Network; Associate Professor of Medicine, Family & Community Medicine, and Health Policy, Management and Evaluation, University of Toronto (Toronto, ON)

#### Tim Stainton,

Professor, School of Social Work, University of British Columbia (Vancouver, BC)

#### Ross Upshur,

Professor, Department of Family & Community Medicine and Dalla Lana School of Public Health, University of Toronto; Associate Director, Lunenfeld Tanenbaum Research Institute; Scientific Director, Bridgepoint Collaboratory for Research and Innovation, Sinai Health System (Toronto, ON)

#### Agnes van der Heide,

Professor and Researcher, Erasmus University Medical Center Rotterdam (Rotterdam, the Netherlands)

### THE EXPERT PANEL WORKING GROUP ON MAID WHERE A MENTAL DISORDER IS THE SOLE UNDERLYING MEDICAL CONDITION

# Kwame McKenzie (Working Group Chair),

CEO, Wellesley Institute; Professor of Psychiatry, University of Toronto; Medical Director, Health Equity, Centre for Addiction and Mental Health; Commissioner, Ontario Human Rights Commission (Toronto, ON)

#### Melissa K. Andrew,

Associate Professor, Medicine (Geriatrics), Dalhousie University and Nova Scotia Health Authority (Halifax, NS)

#### Jennifer A. Chandler,

Bertram Loeb Research Chair, Full Professor, Centre for Health Law, Policy and Ethics, Faculty of Law, University of Ottawa (Ottawa, ON)

#### Pierre Deschamps, C.M.,

Member of Research Group on Health and Law, McGill University (Montréal, QC)

#### Jocelyn Downie, C.M., FRSC, FCAHS,

University Research Professor, Faculties of Law and Medicine, Dalhousie University (Halifax, NS)

#### Martin Drapeau,

Professor, Counselling Psychology and Psychiatry, McGill University (Montréal, QC)

#### Colleen M. Flood, FRSC, FCAHS,

Director, Centre for Health Law Policy and Ethics; Professor and Research Chair in Health Law and Policy, University of Ottawa (Ottawa, ON)

#### Arthur W. Frank, FRSC,

Professor Emeritus, Department of Sociology, University of Calgary (retired) (Calgary, AB); Professor II, VID Specialized University (Oslo, Norway)

#### K. Sonu Gaind,

Chief of Psychiatry/Medical Director of Mental Health, Humber River Hospital; Associate Professor, University of Toronto; Board Member, World Psychiatric Association (Toronto, ON)

#### Mona Gupta,

Associate Professor and Psychiatrist, Centre hospitalier de l'Université de Montréal (CHUM) (Montréal, QC)

#### Scott Y.H. Kim,

Senior Investigator, Department of Bioethics, National Institutes of Health (Bethesda, MD)

#### Brian L. Mishara,

Director, Centre for Research and Intervention on Suicide, Ethical Issues, and End-of-Life Practices (CRISE), Université du Québec à Montréal (Montréal, QC)

#### Tanya Park,

Assistant Professor, Faculty of Nursing, University of Alberta (Edmonton, AB)

#### Suzanne Stewart,

Director, Waakebiness-Bryce Institute for Indigenous Health, University of Toronto (Toronto, ON)

The CCA also recognizes the important contributions of Yves Beauchamp, Vice-Principal, Administration and Finance, McGill University (Montréal, QC).

### TOWARD PEACE, HARMONY, AND WELL-BEING: POLICING IN INDIGENOUS COMMUNITIES

#### **EXPERT PANEL**

#### Kimberly R. Murray (Chair),

Former Executive Director of the Truth and Reconciliation Commission of Canada (Toronto, ON)

#### Jimmy Sandy Akavak, O.Nu.,

Director of Marketing, Nunavut Eastern Arctic Shipping; former Sergeant, Royal Canadian Mounted Police (Iqaluit, NU)

#### Harley Crowshoe,

Director, Indigenous Health Program, Alberta Health Services (Lundbreck, AB)

#### Mylène Jaccoud,

Professor, School of Criminology, Université de Montréal (Montréal, QC)

#### Laurence J. Kirmayer, FRSC. FCAHS.

James McGill Professor and Director, Division of Social and Transcultural Psychiatry, Department of Psychiatry, McGill University; Director, Culture and Mental Health Research Unit, Lady Davis Institute, Jewish General Hospital (Montréal, QC)

#### Eileen Luna-Firebaugh,

Professor Emeritus, American Indian Law and Policy, University of Arizona (Tucson, AZ)

#### Naiomi W. Metallic,

Assistant Professor and Chancellor's Chair in Aboriginal Law and Policy, Schulich School of Law, Dalhousie University (Halifax, NS)

#### Kent Roach, C.M., FRSC,

Professor and Prichard-Wilson Chair in Law and Public Policy, Faculty of Law, University of Toronto (Toronto, ON)

#### Philip C. Stenning,

Adjunct Professor, Griffith Criminology Institute, Griffith University (Queensland, Australia); Honorary Professor, University of KwaZuluNatal (Durban, South Africa), and Visiting Professor, Centre for Criminal Justice Studies, University of Leeds (Leeds, United Kingdom)

#### John William Syrette,

Chief of Police, Anishinabek Police Service (Garden River, ON)

#### Norman E. Taylor,

President, The Global Network for Community Safety Canada Inc.; Program Director, Canadian Association of Chiefs of Police Executive Global Studies; and Editor-in-Chief, *Journal of Community Safety and Well-Being* (Oshawa, ON)

## GREATER THAN THE SUM OF ITS PARTS: TOWARD INTEGRATED NATURAL RESOURCE MANAGEMENT

#### **EXPERT PANEL**

#### Cassie J. Doyle (Chair),

Former Deputy Minister, Natural Resources Canada; Former Associate Deputy Minister, Environment and Climate Change Canada; Strategic Advisor and former CEO, Canadian International Resources and Development Institute (Vancouver, BC)

#### Fikret Berkes, FRSC,

Distinguished Professor Emeritus, Natural Resources Institute, University of Manitoba (Winnipeg, MB)

#### Stan Boutin, FRSC,

Science Co-Director, Alberta Biodiversity Monitoring Institute; Professor and Alberta Biodiversity Conservation Chair, Biological Sciences, University of Alberta (Edmonton, AB)

Matthew Carlson, Ecologist, ALCES (Ottawa, ON)

#### Thomas Dietz,

Professor, Sociology and Environmental Science and Policy, Michigan State University (East Lansing, MI)

#### George Greene,

Founding Chair, Stratos Inc. (Ottawa, ON)

#### Bram Noble,

Professor, Department of Geography and Planning and School of Environment and Sustainability, University of Saskatchewan (Saskatoon, SK)

#### Nancy Olewiler,

Professor, School of Public Policy, Simon Fraser University (Vancouver, BC)

#### Rachel Olson,

Team Co-Lead, Traditional Knowledge and Use Studies, Firelight Group (Vancouver, BC)

#### Martin Olszynski,

Associate Professor, Faculty of Law, University of Calgary (Calgary, AB)

#### Kirstie E. M. Simpson,

Retired Senior Advisor, Sustainable and Integrated Resource Management, Energy, Mines and Resources, Yukon Government (Whitehorse, YT)

#### Ione L. Taylor,

Executive Director, Earth and Energy Resources Leadership, Department of Geological Sciences and Geological Engineering, Queen's University (Kingston, ON)

#### Alain Tremblay,

Senior Environmental Advisor, Hydro-Québec (Montréal, QC)

### CANADA'S TOP CLIMATE CHANGE RISKS

#### **EXPERT PANEL**

#### L. John Leggat, FCAE (Chair),

Former Assistant Deputy Minister, Science and Technology, Department of National Defence (Ottawa, ON)

#### Elizabeth Beale,

Former President and CEO, Atlantic Provinces Economic Council; Commissioner, Canada's Ecofiscal Commission; and Associate, Harris Centre for Regional Policy, Memorial University of Newfoundland (St. John's, NL)

#### Pierre Gosselin,

Consulting Physician, Institut national de santé publique du Québec; Clinical Professor, Université Laval and Institut national de la recherche scientifique; Coordinator, Health Program, Ouranos; Director, WHO/PAHO Collaborating Centre on Environmental and Occupational Health at CHU de Québec-Université Laval (Quebéc, QC)

#### Bronwyn Hancock,

Associate Vice-President Research Development, Yukon College (Whitehorse, YT)

#### Deborah Harford,

Executive Director, ACT (the Adaptation to Climate Change Team), Faculty of Environment, Simon Fraser University (Burnaby, BC)

#### Paul Kovacs,

Executive Director, Institute for Catastrophic Loss Reduction, Western University (London, ON)

#### Roger B. Street,

Research Fellow, Environmental Change Institute, University of Oxford (Oxford, United Kingdom)

The CCA also recognizes the important contributions of Barry Smit, O.Ont., FRSC, Professor Emeritus, Geography, University of Guelph (Guelph, ON).

#### WORKSHOP PARTICIPANTS

#### Trevor Bell, FRSC,

University Research Professor, Department of Geography, Memorial University of Newfoundland (St. John's, NL)

#### Alain Bourque,

Executive Director, Ouranos Inc. (Montréal, QC)

#### lan Burton, FRSC,

Emeritus Professor, University of Toronto; Independent Scholar and Consultant (Toronto, ON)

#### Ashlee Cunsolo,

Director, Labrador Institute, Memorial University (Happy Valley-Goose Bay, NL)

#### Darrel Danyluk, FCAE,

President, D.J Danyluk Consulting Ltd. (Calgary, AB)

#### lan de la Roche,

Adjunct Professor, University of British Columbia (Vancouver, BC)

#### Jimena Eyzaguirre,

Senior Climate Change Adaptation Specialist, ESSA Technologies Ltd. (Ottawa, ON)

#### Kathy Jacobs,

Director, Center for Climate Adaptation Science and Solutions, University of Arizona (Tucson, AZ)

#### lan Mauro,

Principal, Richardson College for the Environment; Co-Director, Prairie Climate Centre, University of Winnipeg (Winnipeg, MB)

#### Deborah McGregor,

Associate Professor, Osgoode Hall Law School, York University (Toronto, ON)

#### Tamsin Mills,

Sr. Sustainability Specialist, City of Vancouver (Vancouver, BC)

#### Greg Paoli,

Former Principal Risk Scientist and Chief Operating Officer, Risk Sciences International, Inc. (Ottawa, ON)

#### Barry Smit, O. Ont., FRSC,

Professor Emeritus, University of Guelph (Guelph, ON)

#### Rudiger Tscherning,

Assistant Professor, Faculty of Law, University of Calgary (Calgary, AB)

#### Claudia Verno,

Director, Climate Change and Catastrophic Risk Policy, Strategic Initiatives, Insurance Bureau of Canada (Toronto, ON)

#### Elaine Wheaton,

Climate Scientist and Adjunct Professor, University of Saskatchewan; Researcher Emeritus, Saskatchewan Research Council (Saskatoon, SK)

#### Angie Woo,

Lead, Climate Resilience & Adaptation, Fraser Health (Vancouver, BC)

## LEADING PRACTICES FOR EVALUATING PROPOSALS FOR SCIENCE AND TECHNOLOGY INFRASTRUCTURE INVESTMENTS

#### **EXPERT PANEL**

Wendy Watson-Wright (Chair), Chief Executive Officer, Ocean Frontier Institute (Halifax, NS)

#### Axel Guenther,

Associate Professor, Department of Mechanical and Industrial Engineering, University of Toronto (Toronto, ON)

#### Jennifer MacLean,

Director, Collaboration, NGen – Next Generation Manufacturing Canada (London, ON)

#### John Womersley,

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## THE POTENTIAL SOCIO-ECONOMIC IMPACTS OF ANTIMICROBIAL RESISTANCE IN CANADA

#### EXPERT PANEL

# B. Brett Finlay, O.C., O.B.C., FRSC, FCAHS (Chair),

Peter Wall Distinguished Professor, University of British Columbia (Vancouver, BC)

#### John Conly, MD, C.M., FCAHS,

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University Professor Emeritus, Department of Pathobiology, University of Guelph (Guelph, ON)

#### Amélie Quesnel-Vallée,

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#### **Richard Smith,**

Deputy, Pro-Vice Chancellor; Professor, Health Economics, University of ExterMedical School (Exter, United Kingdom)

#### Gerry Wright, FRSC,

Director, Michael G. DeGroote Institute for Infectious Disease Research, McMaster University (Hamilton, ON)

### CONNECTED AND AUTOMATED VEHICLES AND SHARED MOBILITY

#### **EXPERT PANEL**

#### Jeannette Montufar, FCAE, (Chair),

Founding Partner and CEO, MORR Transportation Consulting Ltd. (Winnipeg, MB)

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#### Krzysztof Czarnecki,

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#### Peter Frise, FCAE,

Professor, Department of Engineering, University of Windsor (Windsor, ON)

#### Denis Gingras,

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#### Ted Graham,

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#### Sandra Phillips,

CEO and Founder, movmi (Vancouver, BC)

#### Dan Sinai,

Senior Executive, Innovation, IBM Canada Ltd. (Toronto, ON)

#### John C. Spence, FCAHS,

Professor and Vice Dean, Kinesiology, Sport, and Recreation, University of Alberta (Edmonton, Alberta)

#### David A. Wolfe,

Co-Director, Innovation and Policy Lab, Munk School of Global Affairs and Public Policy, University of Toronto (Toronto, ON)

#### Naomi Zimmerman,

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### THE LABOUR MARKET TRANSITION OF PHD GRADUATES

#### **EXPERT PANEL**

# Elizabeth Cannon, FRSC, FCAE (Chair),

Emerita President and Vice-Chancellor, University of Calgary (Calgary, AB)

#### Marcelline Bangali,

Associate Professor, Department of Foundations and Practices in Education, Faculty of Education, Université Laval (Québec, QC)

#### Dwayne Benjamin,

Professor, Department of Economics; Vice Dean, Graduate Education, Faculty of Arts & Science, University of Toronto (Toronto, ON)

#### John (Jay) Doering, FCAE,

Associate Vice-President (Partnerships), University of Manitoba (Winnipeg, MB)

#### Bryan Gopaul,

Assistant Professor, Warner School of Education and Human Development, University of Rochester (Rochester, NY)

#### Diane Gray,

Founding President and CEO, CentrePort Canada; Chair, Mitacs Board of Directors (Winnipeg, MB)

#### Tina Gruosso,

Scientist, Translational Research, Forbius (Montréal, QC)

#### Jennifer Polk,

Co-founder, Beyond the Professoriate (Toronto, ON)

#### Susan Porter,

Clinical Professor, Faculty of Medicine; Dean and Vice-Provost, Graduate and Postdoctoral Studies, University of British Columbia; President, Canadian Association of Graduate Studies (Vancouver, BC)

#### Reinhart Reithmeier, FCAHS,

Professor, Department of Biochemistry; Director for Professional Development and Alumni Engagement, Institute of Medical Science, University of Toronto (Toronto, ON)

#### David Walters,

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Tomlinson Professor of Shakespeare Studies, Department of English, McGill University (Montréal, QC)

# **ANNEX 4: FINANCIAL STATEMENTS**

### MARCH 31, 2019

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### INDEPENDENT AUDITORS' REPORT

To the Board of Directors,

#### **COUNCIL OF CANADIAN ACADEMIES**

#### Opinion

We have audited the accompanying financial statements of Council of Canadian Academies, which comprise the Statement Of Financial Position as at March 31, 2019, and the Statements Of Changes In Net Assets, Operations, and Cash Flows for the year then ended, and Notes To Financial Statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of Council of Canadian Academies as at March 31, 2019, and the results of its operations and its cash flows for the year then ended in accordance with Canadian accounting standards for not-forprofit organizations.

#### **Basis for Opinion**

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditors' Responsibilities* for the Audit of the Financial Statements section of our report. We are independent of Council of Canadian Academies in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing Council of Canadian Academies' ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate Council of Canadian Academies or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Council of Canadian Academies' financial reporting.

#### Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Council of Canadian Academies' internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on Council of Canadian Academies' ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause Council of Canadian Academies to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

P2L Pi Cobro

Parker Prins Lebano Chartered Professional Accountants Professional Corporation

Authorized to practice public accounting by the Chartered Professional Accountants of Ontario

Ottawa, Canada

June 6, 2019

### STATEMENT OF FINANCIAL POSITION AS AT MARCH 31, 2019

ASSETS	2019	2018
CURRENT		
Cash (note 12)	\$ 36,589	\$ -
Accounts receivable (note 7)	489,087	205,278
Prepaid expenses (note 8)	34,463	45,901
	560,139	251,179
DEFERRED COMPENSATION FUND - CASH (note 11)	1,143,849	1,143,849
CAPITAL (note 4)	84,716	106,819
	\$ 1,788,704	\$ 1,501,847
LIABILITIES		
CURRENT		
Bank indebtedness (note 12)	\$ -	\$ 72,411
Accounts payable	311,609	205,965
Deferred revenue	333,246	64,896
Current portion of long-term debt (note 5)	-	14,726
	 644,855	357,998
NET ASSETS		
Unrestricted net assets	(84,716)	(106,819)
Net assets invested in capital assets	84,716	106,819
Deferred compensation fund (note 11)	1,143,849	1,143,849
	1,143,849	1,143,849
	\$ 1,788,704	\$ 1,501,847

On behalf of the Board:

David A. Dogz

Director

The accompanying notes are an integral part of the financial statements.

### STATEMENT OF CHANGES IN NET ASSETS FOR THE YEAR ENDED MARCH 31, 2019

UNRESTRICTED NET ASSETS	2019	2018
Balance, beginning of year	\$ (106,819)	\$ (153,275)
Excess of revenue over expenditure	_	_
Add: amortization	52,913	71,037
Less: amount invested in capital assets	(30,810)	(24,581)
Recognition of deferred contributions	_	66,380
Allocation to deferred compensation fund	_	(66,380)
BALANCE, END OF YEAR	\$ (84,716)	\$ (106,819)
NET ASSETS, INVESTED IN CAPITAL ASSETS		
Balance, beginning of year	\$ 106,819	\$ 153,275
Invested during the year	30,810	24,581
Less: amortization	(52,913)	(71,037)
BALANCE, END OF YEAR	\$ 84,716	\$ 106,819
<b>DEFERRED COMPENSATION FUND</b> (note 11)		
Balance, beginning of year	\$ 1,143,849	\$ 1,077,469
Allocation from deferred contributions (note 11)	_	66,380
BALANCE, END OF YEAR	\$ 1,143,849	\$ 1,143,849

### STATEMENT OF OPERATIONS FOR THE YEAR ENDED MARCH 31, 2019

REVENUE	2019	2018
Investment income	\$ 24,108	\$ 11,296
Add: grant revenue	3,550,000	3,550,000
Revenue from other sources	1,497,538	1,694,949
	5,071,646	 5,256,245
EXPENDITURE		
Amortization	52,913	71,037
Assessment consultants	102,873	87,045
Central operations	262,073	203,640
Governance	120,996	133,398
Member academy reimbursements	173,899	173,409
Panel meetings	674,725	875,808
Publications	266,033	158,998
Rent	312,130	291,802
Salaries and benefits	3,106,004	3,261,108
	5,071,646	5,256,245
EXCESS OF REVENUE OVER EXPENDITURE FOR THE YEAR	\$ _	\$ _

## STATEMENT OF CASH FLOWS FOR THE YEAR ENDED MARCH 31, 2019

		2019	2018
CASH FLOWS FROM (USED FOR) OPERATING ACTIVIT	IES		
Excess of revenue over expenditure for the year	\$	-	\$ -
Items not requiring an outlay of cash:			
Amortization		52,913	71,037
Allocation to deferred compensation fund		-	66,380
		52,913	137,417
Net change to non-cash items related to operations:			
Accounts receivable		(283,809)	236,599
Prepaid expenses		11,438	(34,641)
Accounts payable		105,644	90,060
Deferred revenue		268,350	(92,580)
Deferred contributions		_	(66,380)
		154,536	270,475
CASH FLOWS USED FOR INVESTING ACTIVITIES Purchase of capital assets		(30,810)	(24,581)
CASH FLOWS USED FOR FINANCING ACTIVITIES			
Advance of long-term debt		(14,726)	(28,372)
NET DECREASE IN CASH		109,000	217,522
CASH, BEGINNING OF YEAR		1,071,438	853,916
CASH, END OF YEAR	\$	1,180,438	\$ 1,071,438
CASH CONSISTS OF:			
Deferred compensation fund – cash	\$	1,143,849	\$ 1,143,849
Cash (bank indebtedness)		36,589	(72,411)
	\$	1,180,438	\$ 1,071,438

The accompanying notes are an integral part of the financial statements.

### NOTES TO FINANCIAL STATEMENTS MARCH 31, 2019

# 1. ORGANIZATION'S PURPOSE

The Council of Canadian Academies is a not for profit organization incorporated in April 2002 under the Canada Corporations Act and began operations in 2005. The Council's main purpose is to provide a source of credible, independent, expert assessments and evidence based advice on the science that is relevant to matters of public interest, and to provide a voice for Canadians on behalf of the sciences on the national and international scene.

# 2. SIGNIFICANT ACCOUNTING POLICIES

These financial statements have been prepared in accordance with Canadian accounting standards for not for profit organizations, and reflect the following policies:

#### CAPITAL ASSETS

Capital assets consisting of furniture and fixtures, computer equipment and software, and leasehold improvements are stated at cost. Amortization has been provided on the diminishing balance or straight line basis as follows with half of amortization taken in the year of acquisition:

Furniture and fixtures30% per annumComputer and software45% per annumLeasehold improvements10 years

#### **REVENUE RECOGNITION**

The organization follows the deferral method of accounting for contributions. Restricted contributions are recognized as revenue in the year in which the related expenses are incurred. Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

# 3. FINANCIAL INSTRUMENTS

Financial instruments reflected in the statement of financial position consist of cash, investments, accounts receivable and accounts payable. The Council does not hold or issue financial instruments for trading purposes and does not hold or issue derivative financial instruments.

### 4. CAPITAL ASSETS

	COST	CUMULATED	2019 NET BOOK VALUE	2018 NET BOOK VALUE
Furniture and fixtures	\$ 400,986	\$ 380,433	\$ 20,553	\$ 17,237
Computer and software	636,743	572,580	64,163	87,315
Leasehold improvements	103,499	103,499	-	2,267
	\$ 1,141,228	\$ 1,056,512	\$ 84,716	\$ 106,819

The accompanying notes are an integral part of the financial statements.

### NOTES TO FINANCIAL STATEMENTS MARCH 31, 2019

# 5. LONG TERM DEBT

Loan, bearing interest at 5%, repayable in blended monthly payments of \$2,490.21 over 20 months beginning February 1, 2017.

		2019	2018
Loan	\$	- \$	14,726
Less current portion		_	14,726
	¢	¢	

# 6. DEFERRED GRANT CONTRIBUTIONS

Prior year grant revenue that was received in excess of expenses was deferred to offset expenses in future years.

# 7. ACCOUNTS RECEIVABLE

Accounts receivable consist of trade receivables of \$283,714 and GST receivable of \$205,373 for a total of \$489,087.

# 8. PREPAID EXPENSES

Prepaid expenses consist of hotel deposits of \$14,576, D&O liability insurance of \$3,153, prepaid quarterly lease charge on photocopier of \$736, a commercial insurance policy of \$789, and group benefits of \$15,209, for a total of \$34,463.

# 9. COMMITMENTS

The organization entered into a four year lease commencing February 1, 2016, as well as office equipment contracts. The annual payments over the next three years are as follows:

F/Y 2020	\$153,701
F/Y 2021	\$8,504
F/Y 2022	\$8,504

# 10. ECONOMIC DEPENDENCE

In March 2006, the Council received a founding grant in the amount of \$30,000,000. The grant was intended to support core operations of the Council for 10 years. The remaining funds within the Council can be used at the Council's discretion. The Council received a further \$15 million over 5 years starting in 2015–16 with mandates on its use as prescribed by the funding agreement.

# 11. DEFERRED COMPENSATION FUND

Based on the original funding agreement, an internally restricted fund was established to set aside funds for potential severance liabilities. The amount included in the deferred compensation fund relating to staff time during the original funding agreement is \$877,633 as at March 31, 2019. Council Management continues to risk manage this situation by working closely with the Audit, Finance and Risk Committees accruing additional potential severance liabilities of \$266,216 relating to staff time subsequent to the original agreement period, thus bringing the total deferred compensation fund to \$1,143,849 (2018 \$1,143,849).

# 12. BANK INDEBTEDNESS

The sum of the balances in the various bank accounts for the year totals \$1,180,438; this consists of cash allocated to the deferred compensation fund of \$1,143,849 with the net residual amount disclosed as cash or bank indebtedness.

# 13. COMPARATIVE FIGURES

Certain of the comparatives figures have been reclassified in order to conform with the current financial statement presentation.



Council of Canadian Academies Canadiennes

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