


# Canadian Science Meets Parliament: Building relationships between scientists and policymakers

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## Abstract

The first Science Meets Parliament event in Canada was held in November 2018 in Ottawa, where twenty-eight Tier II Canada Research Chairs (a specific class of Canadian university professor acknowledged by their peers as having the potential to lead in their field) from diverse disciplines met with forty-three Members of Canadian Parliament and Senators. The main goal of this event was to facilitate communication between these two key pillars of the society, to promote mutual understanding of the nature of their respective work, roles, and responsibilities, and to build long-term relationships. Here, we, representatives of the first cohort of scientists to participate in the program, summarize our experiences and lessons learned from this event, as well as our assessment of the benefits of attending this event for scientists, policy decision-makers, and institutions. Furthermore, we provide suggestions for similar future events in Canada and elsewhere.

**Key words:** science policy; science communication; outreach; political engagement; Canadian Parliament; Canada Research Chair.

## 1. Introduction

Science has a special place in society—it provides a vision of what we can achieve through pursuing new discovery, integrating diverse understandings of our world, devising solutions to practical problems, building skills in the next generations, and bringing people together around common knowledge and goals (Boyer 1990). However, science is vulnerable in this ‘post-truth’ era, with political and commercial interests threatening to undermine its collective (societal) benefits (Editorial 2013; Groshek and Bronda 2016; Boutron and Ravaud 2018). These vulnerabilities hinder the incorporation of scientific evidence in policy decision-making and may undermine public support for science. Scientific discoveries are often the result of a concerted effort shared between the scientific community and political decision-makers. The uptake of the next medical therapies, climate change mitigations and adaptations, machine learning algorithms, educational advances, innovations in social welfare, and solutions to social inequalities by society depend on effective science policies and decisive actions on funding opportunities. Yet, the gap between state-of-the-art scientific advances and policy setting is wide, often making ongoing policy decisions blind to the latest scientific breakthroughs in many countries. Here, we describe a way to bridge these gaps.

To strengthen the role of science in society, it is no longer sufficient to allow the products of science to ‘speak for themselves’ and rely on traditional means of dissemination. Instead, scientists need to engage with the community, including political decision-makers and stakeholders, to connect scientific research with policy development. The Science Meets Parliament (SMP) model was started 20 years ago in Australia and is part of an emerging ‘movement’ that brings scientific researchers and policymakers together to promote mutual understanding of their respective roles and responsibilities, and to share their knowledge with each other. In November 2018, the Canadian Science Policy Centre, in partnership with Canada’s Chief Science Advisor, Dr Mona Nemer, adapted the Australian model and organized Canada’s first SMP.

## 2. SMP

Over the course of 2 days (5–6 November 2018), a selected group of twenty-eight Tier 2 Canada Research Chairs, considered world-class emerging scientists in their respective fields of research, gathered on Parliament Hill in Ottawa to meet with forty-three Members of Parliament (MPs), Senators, and staff.<sup>1</sup> The event was a first step toward ensuring that the best of Canadian science strengthens strategy and policymaking at the national level. This was the first time in Canadian history that scientific delegates met directly with policy decision-makers with no immediate agenda beyond building a better understanding of how each side operates for the public good. This initial meeting functioned to start breaking down historic misunderstandings between scientists and policy decision-makers. We believe it succeeded in this regard and left participants with a view of the other side as being approachable and eager to build mutually beneficial relationships.

The ultimate goal of SMP was to bring policy decision-makers (parliamentarians) and scientists together to facilitate effective two-way communication between scientific research and public policy communities. Such communications are a critical part of long-term relationship building that will ultimately facilitate incorporating science into the development of policies that are beneficial to the

broader public (Scheufele 2014). This event was timely and critical, especially in an era when the credibility, expertise, and authority of both scientists and public institutions are regularly under attack (Carter et al. 2019). A key strength of this event was the absence of an ‘agenda’ from either group: scientists (university-based researchers in this case) were not seeking funding or advising on particular policy issues, and policy decision-makers were not asking for any specific scientific information (Jasanoff 2009). This allowed for a transparent and direct interaction that was unhindered and free from potential conflict of interest.

On the first day, the scientists met with Dr Mona Nemer, Canada’s Chief Science Advisor, who shared her personal experience of facilitating interactions among scientists, politicians, and policymakers. She also discussed the roles of scientists in advancing evidence-informed policy and provided tips for communicating with legislative representatives. Following this meeting, the delegate scientists attended a policy workshop to learn about the structure of government and legislative processes in Canada and methods for effective political communication. In particular, experienced legislators from across the political spectrum advised scientists on how to adjust their communication methods from source-oriented to audience-oriented. Scientists then received the guidance of communication experts, including current and former MPs and senators, in an interactive session where they practiced research dissemination speeches aimed for a lay audience.

On the second day, each scientist was paired with a number of MPs and Senators (‘policymakers’). Some had several-hour long conversations with policymakers or shadowed MPs for the morning/afternoon sessions. Others attended committee meetings such as the Standing Committee on Health and Finance or the Standing Committee on the Environment and Sustainable Development. In several instances, the paired scientists and policymakers embraced different political ideologies. Despite these ideological differences, many pairs were able to find forward-thinking common ground through their discussions. The Standing Committee meetings were relevant to a wide range of scientific disciplines, and policy themes, including climate change, fisheries protection, energy access in Indigenous communities, small rural businesses, big data, the new relationship between Canada and First Nations, Inuit, and Métis people, advancing gender and health equity, and healthcare funding. Some discussions focused on how science can be most useful to policymakers, the types of evidence that policymakers need for effective decision-making and procedural details on how policymakers seek out scientific evidence. In some cases, both sides also agreed to host events focused on teaching scientists about working with the media to influence policy. Later in the day, the scientists attended Question Period in the House of Commons and the day concluded with a networking reception, where delegates, the Honourable Dr Kirsty Duncan—Minister of Science and Sport, Chief Science Advisor Dr Mona Nemer, MPs and Senators from all four political parties and invited guests came together to celebrate the inaugural event.

## 3. Benefits to scientists

This event offered scientists new ways to consider Parliamentarians and to connect with policymakers on Parliament Hill or in their home constituencies. More importantly, the event initiated the long process of relationship-building between scientists and Parliamentarians that will help the scientific community better

understand the policymaking process and catalyze research efforts in areas that policymakers can use to inform policy with the most up-to-date and relevant scientific evidence. It laid the foundation for creating long-term connections between scientists and policymakers and forging personal connections between their distinctive roles in the science-to-policy pathway. Unlike many visitors to Parliament Hill, scientists at this event were not lobbying for and, in many cases, were not constituents for the MPs with whom they met. Such relationship-building events can bring together two major pillars of society to benefit scientific advancement and policymaking for collective aims. Specific benefits include the following.

- Direct communication with policymakers and their staff: scientists received training to communicate their work with their peers and colleagues. This event created a new channel for research dissemination and exchange of ideas. Scientists were able to communicate (in-person) their research and passion for discovery to politicians and policymakers; as well as were able to maintain their communication with policymakers via their staff over the long-term. In at least three cases, scientists met with the MPs at their constituency office to continue the dialog they started in Ottawa and discussed a further visit to their universities.
- Most scientists are aware that the policymaking process is complex and is a multilayered, multistep, incremental process. However, the benefit of attending SMP was to gain first-hand information and experience on the processes, resources, and expertise involved in policymaking. Policymakers shared insights on how they acquire information; what evidence precisely they may need to make their case; how bills are written, debated, and voted on as part of the legislative process; as well as the process of lobbying. Scientists also discussed national policy issues around the research enterprise and deliberated upon the different ways in which scientists can provide scientific and evidence-based support to legislative matters and procedures. What was clear was that with political, economic, and public health interests in mind, scientific evidence should be an important consideration in policymaking. A continuation of SMP events could offer the potential for scientists to reflect on their own involvement in politics and the economy, as well as support scientists to advocate for the integration of scientific evidence in decision-making. Each opportunity to provide evidence or opinions on pressing issues is valuable.
- Scientists, who are also often educators, gained valuable perspectives that they can share with students who come to them asking for opinions on how to best influence policy-decisions. Armed with knowledge from SMP, scientists can now make specific recommendations to students with these aims, including considering employment in the Parliamentary Library.
- An indirect benefit was that a group of highly accomplished Canada Research Chairs (with diverse personal and professional backgrounds) also had a unique opportunity to communicate with each other and share their common interest in connecting science and policy.

#### 4. Benefits to policymakers

Through reports from the organizers and scientists, participating policymakers explained that they had gained a greater understanding of the role of science in the economy, in training skilled individuals, its socio-economic benefits to communities, and existing contributions to policy development that affect all residents of Canada. Specific benefits include the following.

- SMP provided policymakers with a valuable opportunity to communicate directly with scientists outside of any explicit policy agenda. They gained information on how scientists use public funding for research and innovation activities, how research output provides socio-economic benefits to Canadians, and to gather constructive feedback on developing mechanisms by which previous research investments can be further leveraged. Some policymakers became aware of how the composition and understanding of return on investments in research activities are distinct from other sectors, especially in terms of short-term versus long-term benefits.
- Some policymakers were excited to hear that scientists are passionate about informing policy and that they wish to get involved and are available to provide opinions, evidence, and support for policy development. In multiple instances, where policymakers were not aware of how Canadian research funding agencies work! Through this meeting and discussions, scientists provided an overview of funding agencies and models in Canada. A better understanding of the research funding landscape helps policymakers appreciate the typical timelines needed to generate new policy-relevant research results.

#### 5. Recommendations for future events

The inaugural SMP event was successful, thanks to a number of volunteers, participating scientists, MPs, Senators, and support staff who created a platform for relationship-building. Future events should continue to include scientists from diverse disciplines and backgrounds.<sup>2</sup> Knocking down disciplinary and sectoral silos through communication encourages new relationships to form. Holding a formal, regular program can help in establishing a new norm for interconnectedness between the scientific and policy communities.

#### 6. Monitoring and evaluation

The outcomes and implications of this event should be evaluated to define its impact and justify its continuation. For example, the short-term and long-term benefits versus costs of hosting such events should be evaluated. Evaluating benefits could include tracking whether and how many subsequent interactions (e.g. meetings and email exchanges) occur as a result of the event, and how scientists disseminated their experiences of this event to their local communities and home institutions. Ultimately, the goal should be to track how often scientists are approached by policymakers to provide evidence/expert opinions that can impact policy development and implementation.

One way to evaluate the impact is to create an online repository (e.g. a dedicated website) with a database of researchers who visited Parliament Hill for various occasions, the policymakers they met, and information on any of the follow-up activities. This repository will also serve other scientists participating in such events as they can learn more about what to expect and how to prepare for such events. Such a database could also contain a nationwide network of scientists with direct policy exposure. Positive first-hand experiences at the science-policy interface will encourage researchers to contribute to policy through formal and informal channels, connect with other like-minded scientists to share best practices, and mentor young scientists to do the same.

#### 7. Sustainable funding

A key suggestion for the sustainability of this program is dedicated funding from government agencies (i.e. a line item in the budget) to organize and maintain this program and evaluate its impact. This event

was organized by a volunteer-based committee where professors, students, postdoctoral fellows, and administrative staff spent their valuable time. This volunteer model is not sustainable if we were to continue such a program. In addition, home institutions should encourage scientists to apply for such programs and provide funding support.

## 8. Concluding remarks

SMP was designed to build long-lasting, stable, and non-partisan science–policy relationships. If continued, we envision that this program can truly help strengthen the alliance between science and policymakers for a positive change in society. Scientists and policymakers often misunderstand each other's roles, responsibilities, motivations, and the nature of their work. An effective way to deal with such misconceptions is to initiate a direct, active platform where both groups can meet and discuss their work. SMP was the first such national event that engaged scientists and policymakers, which can be beneficial to other nations as well. Introducing scientists as approachable, committed people who are willing to contribute their expertise for the greater good can engender a political culture in which all actors distinguish between scientific evidence and partisan opinions and recognize science as an apolitical public benefit.

We anticipate that this and future events will encourage the routine translation of science for policy. By training researchers and providing them with opportunities to communicate with a policy audience, the translation of scientific data into politically useful information may become a routine part of research planning. At the core of a program like this is fostering respect for the role of science in society and the recognition that the use of evidence in policy-making is something to be strived for and is in the interest of the broader public. Indeed, providing research findings to political leaders can lead to policy change (Hjort et al. 2019).

## Notes

1. Demographics of the Canada Research Chairs, the MPs, Senators, and staff are listed here: <https://www.sciencepolicy.ca/science-meets-parliament-2018-statistics>
2. Only Tier 2 Canada Research Chairs were selected for the inaugural event because having the tier as a selection criterion saved a lot of time for screening and reading candidates' profiles. In addition, Tier 2 is emerging scientists and Tier 1 is more established and may be less available. Pending funding, the event can include any scientists (e.g. professors, scholars, or post-docs).

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