November 2, 2017

**Keynote session with Minister of Science, Honourable Kirsty Duncan**

**A 3-point plan for re-energizing Canadian science**

#1: Strengthen science

#2: Strengthen evidence-based decision making

#3: Strengthen the culture of curiosity in Canada

Science minister Kirsty Duncan used her keynote at this year’s Canadian Science Policy Conference to outline her government’s three-point plan for re-energizing Canadian science.

“Right now, Canada is seen around the world as a progressive country empowering its scientists to make breakthroughs that could change the way we understand ourselves and the world around us,” she told delegates. “I believe we have an opportunity to seize the moment and fulfill a vision that promotes Canada as an internationally recognized champion of science and scientists.”

The three priorities were informed, in large part, by the recommendations made in Canada’s Fundamental Science Review. The independent review panel released 35 recommendations, including a $1.3-billion increase in the budgets of the three granting councils, the Canada Foundation for Innovation and related funding groups.

“There was concern in the spring that this report would be buried, hidden and never see light of day. I commissioned this report for a reason. I wanted to get the evidence and use that evidence as a path forward,” said Duncan, noting that she agrees with the majority of the report’s recommendations, particularly those related to governance and coordination.

**Strengthening science**

How the federal government will respond to the report’s call for more science funding was on the minds of everyone at this year’s CSPC. Even Duncan acknowledged “the elephant in the room”.

“My priorities are investing in investigator-led research and making sure we have sustainable, predictable funding for our labs and tools,” she said. “And I have real difficulty right now. I have world-renowned labs in Canada that don’t operate all year round. I want to fix that. It is a big ask. Is it something we can do in one budget, in one mandate? Look, the previous government dug a big hole; it’s going to take time to fix, but you have someone who is a champion for you.”

She described the funding boost to granting councils announced in Budget 2016 as a “down payment” and the “highest amount of new annual funding for discovery research in more than a decade”.

In addition to more science funding, Duncan said strengthening science in Canada also depends on having a more diverse, equitable and inclusive scientific community. The government made an important step towards this goal earlier in the day by announcing changes to the Canada Research Chairs program, including a cap on the renewal of Tier 1 chairs. The changes are designed to give mid-career researchers—particularly women, Indigenous peoples, visible minorities and persons with disabilities—a greater opportunity to become a chairholder.

“I don’t think I need to make the case to this group that when our research community includes people from diverse backgrounds with unique experiences, knowledge and perspectives, we are all one step closer to the next breakthrough idea or discovery. Broad perspectives breed great science,” said Duncan, who recalled the discrimination she experienced during her career as a scientist.

“I was told the reason I was getting paid in the bottom 10th percentile was because I was a woman. I was asked by a fellow faculty member during a staff meeting when I planned on getting pregnant. I was asked to choose how I wanted to be treated: as a woman or as a scientist.”

Another new initiative is the creation of the Canada Research Coordinating Committee, comprised of the presidents of the three granting councils and the deputy ministers from Innovation, Science and Economic Development Canada and Health Canada. The CRCC’s goal is to harmonize programs and policies of the federal granting councils and the Canada Foundation for Innovation.

“This committee will look at how we fund multidisciplinary research better, how we fund multinational research better and multidisciplinary and multinational research better,” said Duncan.

**Strengthening evidence-based decision making**

The current federal government has committed to rebuild its capacity to deliver on evidence-based decision-making. Key to that pledge, said Duncan, has been the appointment of a new Chief Science Advisor (CSA). Dr. Mona Nemer’s job is to provide Duncan, the Prime Minister and Cabinet with independent scientific.

“It is then my job, as Minister of Science, to incorporate her findings into decisions made at the Cabinet table—decisions that affect the lives of Canadians,” said Duncan. “Science, in other words, is part of the mix of economic, social, regional, health, gender and diversity advice put forward by other members of Cabinet.”

The CSA is also assessing the merits of creating a network of departmental chief scientists, even in departments that aren’t science-based (e.g. foreign affairs). Duncan is also urging deputy ministers of all science-based departments to discuss how they can break down barriers and take a whole-of-government, multidisciplinary approach to complex issues such as Arctic research, artificial intelligence and climate change, as well as crises that require a fast policy response, like a pandemic.

“The work to build these bridges has already begun… The result? Stronger evidence that supports better decision making,” she said.

**Strengthening the culture of curiosity**

Duncan acknowledged that culture changes take time. That’s why efforts have to begin with young people, she stressed, with programs like Choose Science, PromoScience, Let’s Talk Science and Science Odyssey.

“I ask that you help me by encouraging the young people in your life to ask bold questions, challenge assumptions and find a way around any obstacle that may lie in their path.”

Duncan further challenged everyone in the room to “tell the story of how science helps us build a better world”.

“Show the people in your communities how science leads to new cancer treatments, advanced therapies for dementia, new technologies that fit in the palm of your hand and new horizons that have yet to be explored. If we work together, I am certain we will achieve our goals: a better society, a cleaner environment, a strong middle class and a better quality of life for everyone.”

**The government’s science deliverables to date:**

* Implementing changes to the Canada Research Chairs program, such as limiting renewals of the Tier 1 Chairs to two, 7-year terms, to increase diversity, equity and inclusiveness.
* Introducing new equity requirement in the Canada Excellence Research Chairs and Canada Research Chairs programs, and firm equity targets for universities.
* Establishing the Canada Research Coordinating Committee (CRCC) to harmonize programs and policies of the federal granting councils and the Canada Foundation for Innovation (CFI).
* Appointing a Chief Science Advisor (CSA).
* Charging the CSA with assessing the merits of creating a network of departmental chief science advisors in government.
* Launching a Networks of Centres of Excellence competition that emphasizes multidisciplinary and multinational research initiatives.
* New investments in research and research infrastructure (e.g. $2 billion for the Post-Secondary Institutions Strategic Investment Fund; $554 million for CFI; $125 million for artificial intelligence).
* Reinstated the long-form census.
* Unmuzzled scientists.
* Reintroduced the University and College Academic Staff System survey and expanded it to include part-time faculty, as well as gender breakdowns.

**Initiatives still pending**

* Replacing the Science, Technology and Innovation Council with a more open and transparent body.
* Working with the Minister of Health to revise the Canadian Institutes of Health Research legislation to separate the function of the President and the Chair of the Governing Council.
* CRCC has been tasked with submitting a work plan within two months to map out how it will address issues such as:
  + How Canada can increase its capacity to support international, multidisciplinary, risky and rapid-response research;
  + How we can collectively advance efforts to support Canada’s strengths in strategic research areas; and
  + What more can be done to increase equity and diversity and improve support for early-career researchers.
* Universities have until mid-December to submit Equity, Diversity and Inclusion Action Plans that will map out how they will meet their equity and diversity targets in the Canada Research Chairs program or risk having funding withdrawn.