**November 3, 2017**

**The Fundamental Science Review: Perspectives as of November 2017**

Speakers: Martha Crago, Vice-Principal Research and Innovation, McGill University; Art McDonald, Professor Emeritus, Queen’s University, Nobel Laureate (Physics 2015); David Naylor, Professor of Medicine and President Emeritus, University of Toronto; Rémi Quirion, Chief Scientist of Quebec

**Panelists discuss government reaction to report and offer advice on next steps**

The Fundamental Science Review (FSR) has triggered a chain of events that could significantly transform government’s approach to research and innovation, including how it implements new programs and organizations designed to maximize the impact of Canada’s scientific community.

Since the report’s release in April, the government has created an Office of the Chief Science Advisor, a Canada Research Coordinating Committee and revamped the Canada Research Chairs program. At the same time, work continues on establishing a National Advisory Council on Research and Innovation (NACRI) to replace the Science, Technology and Innovation Council.

Prepared by the Advisory Panel on Federal Support for Fundamental Science, the report has also energized researchers from coast to coast, particularly many early career researchers, to lobby the government to act on all 35 of the panel’s recommendations as an integrated package.

The Canadian Science Policy Conference organized a plenary session to assess progress to date on the FST report, and what challenges to expect in the run-up to the next federal Budget, due in early 2018. Dr. David Naylor, the chair of the FSR panel, said that governance improvements were essential to ensure accountable and effective use of new funds, but had a message for decision-makers in Ottawa:

“There is a demonstrated, benchmarked urgent need for a major multi-year boost to funding for science … Please don’t even think justifying further delay in investment on the grounds of inadequate governance and accountability.” He emphasized, however, that “NACRI is an urgent need. There’s no overarching body trying to make sense of things … We also need to set priorities better than we do now.”

Nobel laureate Dr. Arthur McDonald and FSR panel member singled out the diversity challenge facing Canadian research and the need for early-career researchers “to have access to new money”. He said boosting funding for the granting councils would have a positive impact.

McDonald also supports the FSR recommendation that Canada Foundation for Innovation support for successful research infrastructure projects be increased from 40% to 60%, adding that the ultimate sharing ratio should be determined by local impact. If a facility is primarily national in scope, he said it’s an undue burden on local institutions to have to find 60% of its cost.

“The fact that (Science minister Kirsty Duncan) has mentioned these problems, I’m very hopeful that that’s another of the recommendations that will be considered seriously by the government,” said McDonald.

Fellow panel member Dr. Rémi Quirion said the recommendations should be responded to as a totality, and cautioned against cherry picking some recommendations over others.

“That’s when Canada could get a lot of payback – international partnerships, larger strategic initiatives, training of the next generation of scientists, money for investigators,” said Quirion. “We need to keep that as a global ecosystem – it should be seen as an ensemble, as a puzzle you want to solve.”

Dr. Martha Crago agreed that more money is essential to support early career researchers. Currently more than half of granting council funding flows through to graduate students.

“If you want the future you have to invest in these graduate students (and) I think we overlook that and (the fact that) 50% of graduate students are women now,” she said.

Naylor said that better governance and more funding were both important to improving diversity and inclusion. Supporting young research talent was crucial because “the new generation of researchers looks a lot more like Canada than the generation to which the four of us (panelists) belong”. Accordingly, any new investments should be accompanied by “some built-in focus on bringing along the trainees and students” and “supporting early-career researchers”, thereby ensuring that diversity and equity considerations were addressed.