November 3, 2017
**Short Talk Series: Advancing Science in Society**
Organized by: CSPC

Speakers: Kei Koizumi, Visiting Scholar in Science Policy, American Association for the Advancement of Science (AAAS); Mahlet N. Mesfin, Deputy Director, Center for Science Diplomacy, AAAS; Nicole Mahoney, Director, Global Regulatory Policy, Merck; Melisssa Mathers, Project Coordinator, Let's Talk Science; Kelly Cobey, Senior Clinical Research Associate, The Ottawa Hospital; Raymond Ng, Director, Data Science Institute, Professor, Computer Science, UBC; Mark Leggott, Executive Director, Research Data Canada

**Takeaways and recommendations**

1. Lessons learned from the U.S. White House on using science to meet policy challenges:
* Close links between the science advisor and president ensured the president received timely advice on the latest research.
* A scientific advisor must be able to translate scientific advice into policy language.
* Science rarely gives the full policy solution.
1. Recommendations from the AAAS report, Connecting Scientists to Policy Around the World:
* Cultivate and connect boundary-spanning STEM leaders around the world to engage at the science-policy interface,
* Communicate with the public the applications of science and how they serve society, and
* Facilitate knowledge sharing and collaboration.

3. Global perspectives on antimicrobial resistance (AMR) innovation: what does this mean for Canada?

* Policy leaders recognize that incentives will be need to drive innovation to address AMR.
* Ways Canada can be a leader in AMR: develop pathways for development/regulatory approval of new products; create special designations for priority antimicrobials with expedited development and approval pathways; collaborate with global regulators; and support scientific leadership on development pathways for alternative approaches to address bacterial infections.
* Canada will be the G7 president in 2018: continue momentum on AMR and move into action.
1. Breaking down barriers for science outreach:
* Simplify protocols and procedures for student involvement in outreach activities.
* Be vocal in praising outreach initiatives.
* Avocate for rewarding researchers and students who participate in science outreach.
1. How to ensure the transparency of scientific study designs, their conduct and reporting:
* Solutions for becoming more transparent and accountable in the scientific process: register research programs (addresses publication bias and selective outcome reporting), set reporting guidelines, and establish evidence-based and explicit scientific processes.
* Research results need to be reported in a timely manner, without undue restriction.
1. Data science and social implications:
* Better tools need to be developed for open data management.
* Sensitive individual data must be linked effectively to open data.
* Biases embedded in data collections must be considered.
* Smart governance and the exploitation of diversity can be provided by combining the perspectives of data science and social science.
1. Open Science: The new normal for knowledge dissemination:
* Research Data Canada works with stakeholders to ensure research data is re-usable in support of innovation that benefits all Canadians.
* A new ecosystem is being created by research communities based on past data.
* “A closed book is but a block of wood.”