People. Discovery. Innovation.
Les gens. La découverte. L'innovation.

NSERC
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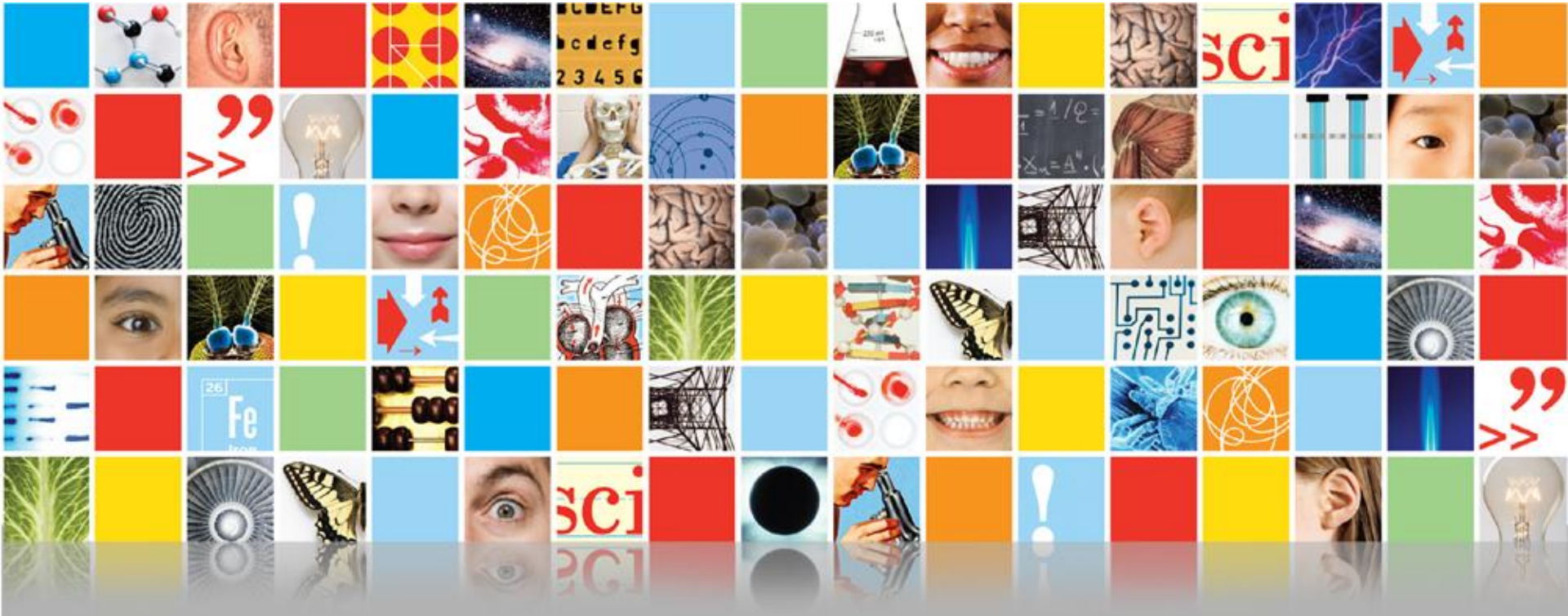


Natural Sciences and Engineering Research Council of Canada

Conseil de recherches en sciences naturelles et en génie du Canada

Canada

Open Science Pre-Workshop

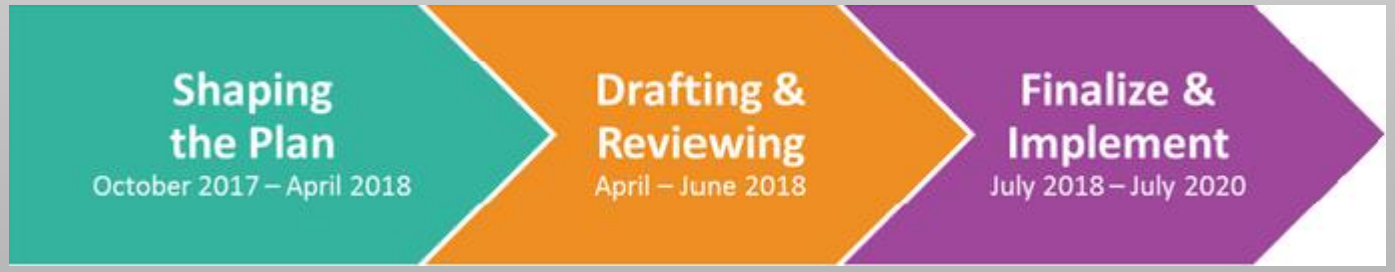
Canadian Society for
Brain, Behaviour and Cognitive Science
2018 Annual Meeting
St. John's, NL
July 4, 2018

Shannon Cobb
Policy Analyst
Policy and International Relations
NSERC

Natural Sciences and Engineering Research Council of Canada
Conseil de recherches en sciences naturelles et en génie du Canada
Canada

Canada's Commitment to Open Government

- **Open Government is about making government more accessible to everyone.**
- Ministerial Mandate Letters
- Open Government Portal https://open.canada.ca
- Open Government Partnership – over 70 countries (including Canada) and 15 subnational governments
  - Plan every 2 years
  - Third Biennial Plan (2016-18)
  - Canada's 4th Plan on Open Government 2018-20



Canada's Commitment to Open Science

- Third Biennial Plan to Open Government Partnership (2016-18)

  Commitment 14: Increase Openness of Federal Science Activities (Open Science)

  "The Government of Canada will take appropriate steps to make the science performed in support of Government of Canada programs and decision-making open and transparent to Canadians."

Canada's Commitment to Open Science

- **G7 Science and Technology Ministers** Meeting Japan, May 2016 (Canada, France, Germany, Italy, Japan, UK, US, and European Commissioner for Research, Science and Innovation)
  - Canada supported recommendation to establish an **international working group on open science**
    - ❖ focus on sharing open science policies, exploring supportive incentive structures, and identifying good practices for **promoting increased access to the results of publicly funded research (including scientific data and publications).**

Tri-Agency Initiatives Supporting Open Science

Third Plan (2016-18), Commitment 14: Open Science

- **Granting Agencies and Grants and Contributions**

CIHR IRSC
Canadian Institutes of Health Research | Instituts de recherche en santé du Canada

NSERC CRSNG

SSHRC CRSH

1. Develop and implement an open access policy for scientific research funded through grants and contributions.
2. Work toward the development of policies on digital data management for research funded through the Granting Councils.

1. Develop and implement an open access policy for scientific research funded through grants and contributions.

Tri-Agency Open Access Policy on Publications

http://www.science.gc.ca/eic/site/063.nsf/eng/h_F6765465.html

- Researchers must make articles freely available online within 12 months of publication
- Applies to all grants awarded May 1, 2015 and onward
- How to comply:
  - Deposit final, full-text, peer-reviewed manuscript in a repository; and/or
  - Submit final, peer-reviewed manuscript to journal that offers open access within 12 months

Why Develop an Open Access Policy?

2. Work toward the development of policies on digital data management for research funded through the Granting Councils.

Draft Research Data Management Policy

2013

- Capitalizing on Big Data: Toward a Policy Framework for Advancing Digital Scholarship in Canada

2016

- Tri-Agency Statement of Principles on Digital Data Management (based on research community feedback)

2017-18

- *Draft* Tri-Agency Research Data Management Policy
  http://www.science.gc.ca/eic/site/063.nsf/eng/h_83F7624E.html?OpenDocument

What is Research Data Management?

- **Research data are** contents that are used as primary sources to support research, scholarship, artistic activity or research-creation, and that are used as evidence in the research process and commonly accepted in the research community as necessary to validate research findings and results.

- Data management **planning** -- the importance and value of considering, at the start of a research project, how the data will be collected, managed, stored for the duration of the project and beyond.

Research Data Management = Research Excellence

- With increased use of digital methods, in many fields data management is **becoming a part of research excellence – methodology**
- Data management **enhances research dissemination**, for example by making it easier to share data
- This, in turn, leads to **greater research impact** (ability to use and build upon data)
- As a result, **data management is coming to be seen as research best practice** – and research funders and governments around the world are acting, often by requiring grant holders to complete data management plans

Tri-Agency Research Data Management *Draft* Policy

- **Proposed policy includes 3 possible requirements:**
    1. Institutions: Institutional Strategy
    2. Researchers: Data Management Plans
    3. Researchers: Data Deposit

- **Consultation, feedback will inform final policy**

- **Implementation: Phased, incremental**

Tri-Agency Research Data Management *Draft* Policy

1. Institutions: Institutional Strategy

- Each institution administering tri-agency funds could be required to create an institutional research data management strategy. The strategy could outline how the institution will provide its researchers with an environment that enables and supports world class research data management practices.
- The strategy could be posted and made publicly available on the institution's website, with contact information to direct inquiries about the strategy.

Tri-Agency Research Data Management *Draft* Policy

2. Researchers: Data Management Plans

- Grant recipients could be required to create data management plans (DMPs) for research projects supported wholly or in part by tri-agency funds. Grant recipients could submit these plans to their institution's research office as a condition of the release of grant funds.
- For specific funding opportunities, the agencies could require DMPs to be submitted to the appropriate agency at time of application; in these cases, they may be considered in the adjudication process.

Tri-Agency Research Data Management *Draft* Policy

3. Researchers: Data Deposit

- For all research data and code that support journal publications, pre-prints and other research outputs that arise from agency-supported research, grant recipients could be required to deposit these data and code in an appropriate public repository or other platform that will ensure safe storage, preservation, curation, and (if applicable) access to the data.

Intended Impact of a Tri-Agency Research Data Management Policy

- Strong **data management as an accepted signifier of research excellence** across disciplines, and a regular feature in the conduct of research
- **More Canadian datasets cited, and valued** as a product of research in tenure, promotion and peer review processes
- **Canadian researchers equipped and ready to engage in international research collaboration** where data management requirements are becoming the norm
- **Canadian research institutions ready to support the management of the data** their researchers produce
- **Increased ability for research data to be archived, found and responsibly reused**, to fuel new discovery and innovation

Tri-Agency Research Data Management *Draft* Policy - Consultation

- NSERC, SSHRC and CIHR are **seeking input from the research community on the draft policy text** and how best to realize the principles presented in the Statement of Principles.

- **Visit** http://www.ic.gc.ca/eic/site/063.nsf/eng/h_97610.html and **send your feedback by August 31, 2018** to:

  NSERC: ResearchData-Donneesderecherche@nserc-crsng.gc.ca
  CIHR: ResearchData-Donneesderecherche@cihr-irsc.gc.ca
  SSHRC: ResearchData-Donneesderecherche@sshrc-crsh.gc.ca

Questions? Comments?

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NSERC: openaccess@nserc-crsng.gc.ca
SSHRC: openaccess@sshrc-crsh.gc.ca

***Draft* Tri-Agency Research Data Management Policy**
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NSERC: ResearchData-Donneesderecherche@nserc-crsng.gc.ca
SSHRC: ResearchData-Donneesderecherche@sshrc-crsh.gc.ca