Research Data Management Faculty and Postdoctoral Survey

Purpose of the research

In order to become better prepared to support research data management practices at University of Toronto in sciences and engineering, librarians at University of Toronto Libraries are conducting a research study of all ranks of faculty and postdoctoral fellows at the Faculty of Applied Science and Engineering as well as at the Canadian Institute for Theoretical Astrophysics, the Dunlap Institute for Astronomy & Astrophysics, and the Departments of Astronomy and Astrophysics, Chemistry, Computer Science, Earth Sciences, Mathematics, Physics, and Statistical Sciences in the Faculty of Arts and Science.

Your participation in this research is important and will help to:

- determine how University of Toronto science and engineering faculty and postdoctoral fellows manage and share research data beyond their project
- determine how University of Toronto Libraries might help to facilitate data management activities
- understand some of the differences in research data management practices and needs across disciplines and sub-disciplines.

Description of the research

You are invited to participate in this research project. Information will be gathered for this research project through the use of a survey. The survey will ask you how you work with research data, how you share your data, your awareness of funding mandates for research data management, and basic demographic questions about your professional status.

The estimated time to complete the survey is 10 minutes. We would appreciate your response by April 28, 2015.
What are the potential benefits of participating in this survey?

Your participation in this survey will potentially benefit your Faculty or Department in that information gathered will help University of Toronto Libraries understand current practices and become better prepared to support faculty’s research data management (RDM) needs in anticipation of a draft policy from the Tri-Agencies (NSERC, CIHR and SSHRC) regarding data management planning. RDM practices are becoming increasingly important to faculty and researchers who may begin to face requirements to submit research data or data management plans along with any journal submissions or funding applications.

What are the potential risks involved in participating in this survey?

The risk involved in participating in this study is minimal, no greater than you would encounter in your everyday life. The proposed research is independent of the Office of Research and Innovation’s new policy of conducting audits of large scale research projects, and therefore has minimal social and legal risks in relation to this policy.

Access to research information

Survey data will be stored electronically on secure U of T servers, in password protected folders accessible only to the research team. Data collected will help U of T Libraries design services for the benefit of U of T’s academic community and will be destroyed after a maximum of ten years.

As a survey participant, you will have the option to provide contact information if you want assistance from the library for current research data management practices or to help facilitate future collaborations.

Participation in the survey is voluntary, you may decline to answer any questions and you may withdraw from the survey at any time before submission of the survey. After the survey has been submitted, you may withdraw your consent until April 29, 2015. Survey submissions which are submitted with no contact information are anonymous and therefore cannot be withdrawn. If contact information is provided, your response will no longer remain anonymous but all responses will remain confidential.

Access to the survey data will be limited to the research team. The survey findings may be published or presented in scholarly communications. If you would like a summary of the survey results or have any questions about the survey, you may contact the Principal Investigator Cristina Sewerin at cris.sewerin@utoronto.ca or 416-946-4020.

Should you have any questions regarding your rights as a participant you may contact the Office of Research Ethics at ethics.review@utoronto.ca or 416-946-3273.
By clicking on the ‘yes I agree’ radio button below, you agree:

- that the goals of the study have been explained to you and that you have had the opportunity to have your questions answered
- that the survey research team has your consent to use the information submitted to prepare library programs and to publish or present findings in scholarly communications
- that the survey research team has your consent to use your information as described in this form
- to take part in this study

If you experience technical difficulties accessing or submitting the survey please contact Angela Henshilwood at 416-978-7681 or angela.henshilwood@utoronto.ca

Thank you for your participation!

☐ Yes I agree to take the survey
☐ No I do not want to participate in the survey

**In this survey**

- a ‘researcher’ can include any individual who worked on the research project that could legitimately claim academic authorship of the research project if the results of the research project were to be published in a scholarly work

- a ‘research project’ can be defined as the research associated with investigating a hypothesis or group of hypotheses (and applicable set of predictions) aimed at answering a distinct or specific research question. A single research grant may support one research project or multiple research projects. In the context of this survey, a research project is associated with a distinct set of research data and is considered to be a subset of a research program, research activity or research area you may investigate

- ‘research data’ can be defined as data that are collected, observed, created or analyzed to produce research results. Research data could include:
  - Observational data such as sensor readings, telemetry, survey results, images
  - Experimental data such as gene sequences, chromatograms, magnetic field
  - Simulation data such as climate models, economic models, Monte Carlo calculations
  - Derived or compiled data such as text and data mining, compiled database, 3D models which can come in many forms including text, numerical, multimedia, models, software, discipline specific or instrument specific
Section 1: Working with Research Data

In this section you will be asked questions about your research data, including how you work with them, document them and store them.

How many research projects did you lead in the past year, for example, as a Principal Investigator or project lead? Select one:

- [ ] 1-2 research projects
- [ ] 3-5 research projects
- [ ] >5 research projects
- [ ] Not sure
- [ ] Not applicable

How much data storage do you estimate you use in an average research project? Select one:

- [ ] <50GB (Gigabyte)
- [ ] 50GB to <500GB
- [ ] 500GB to <1000GB
- [ ] 1TB to <4TB (Terabyte)
- [ ] 4TB to 500TB
- [ ] >500TB
- [ ] Not sure
- [ ] Not applicable

If 'Not Applicable', please explain:
Which of the following best describes the type of research data you generate or use in a typical research project. Select all that apply:

- Geospatial - (e.g. raster, vector, grid)
- Instrument specific – (e.g. Olympus Confocal Microscope Data Format, FLIR Infrared Camera (SEQ))
- Models – (e.g. 3D, statistical, similitude, macroeconomic, causal)
- Multimedia– (e.g. JPEG, TIFF, MPEG, Quicktime, Bitmap)
- Numerical – (e.g. CSV, MAT, XLS, SPSS)
- Software– (e.g. Java, C, Perl, Python, Ruby, PHP)
- Text - (e.g. TXT, DOC, PDF, RTF, HTML, XML)
- Other (e.g. discipline specific such as CIF, FITS, DICOM)

If 'Other', please specify:


Please list any software used for analysis or manipulation of your research data, if applicable:


Please indicate where you store research data from your current project(s). Select all that apply:

- Flash drive/USB
- CD/DVD
- Computer hard drive (i.e. local hard drive)
- Laptop hard drive
- External hard drive
- Hard drive of the instrument/sensor which generates the data
☐ Shared drive/university or departmental server
☐ Cloud/web based solution (e.g. Dropbox, Google Drive, Amazon Cloud, Microsoft Cloud)
☐ External data repository (e.g. Protein Data Bank, Cambridge Structural Database, GitHub, Dryad, Figshare)
☐ Grid/high performance computing (HPC) centre
☐ Physical copy retained (in boxes, cabinets, etc.)
☐ Not sure
☐ Other

If 'Other', please specify:

__________________________

Is there sufficient documentation and description (for example, file naming, cells & values, defined parameters, scripts to run) for another person outside your lab to understand and use the research data?

☐ Yes
☐ No
☐ Not sure

Is there sufficient documentation and description (for example, file naming, cells & values, defined parameters, scripts to run) retained in the same file, folder or document for another person outside your lab to replicate the methodologies that produced the data?

☐ Yes
☐ No
☐ Not sure
Use the chart below to indicate the length of time after project completion that you typically intentionally keep each type of research data. Project completion could include until publication or patent approval, for example.

<table>
<thead>
<tr>
<th></th>
<th>I only keep data for the length of the project</th>
<th>Less than 3 years</th>
<th>Between 3-5 years</th>
<th>Between 5-10 years</th>
<th>More than 10 years</th>
<th>Until the data become inaccessible or lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source material/Raw data.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Intermediate/working data.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Processed data ready for publication. Processed data may include supporting information such as spectra, synthesis methods.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

Section 2: Data Sharing

In this section you will be asked about your current practices and opinions on sharing your research data.

Which methods of sharing your research data do you currently use? Check all that apply. If you do not currently share your data, choose ‘not currently sharing’.

- [ ] Not currently sharing
- [ ] Share by personal request only
- [ ] Share online with restricted access
- [ ] Upload online to an institutional or personal website
- [ ] Include as part of supplementary material files to a journal publisher
- [ ] Deposit in a general or discipline-specific repository, such as Protein Data Bank, Cambridge Structural Database, GitHub, Dryad, Figshare.
If you selected 'deposit in a general or discipline-specific repository, such as Protein Data Bank, Cambridge Structural Database, GitHub, Dryad, Figshare', please specify:

If you selected 'deposit in a general or discipline-specific repository, such as Protein Data Bank, Cambridge Structural Database, GitHub, Dryad, Figshare', please specify. Also, if you plan to use another data repository other than the ones listed above, please specify:

Hypothetically speaking, which methods of sharing your research data would you consider using in the future? Check all that apply. If you do not plan to share your data in the future, choose ‘not planning to share’.

☐ Not planning to share
☐ Share by personal request only
☐ Share online with restricted access
☐ Upload online to an institutional or personal website
☐ Include as part of supplementary material files to a journal publisher
☐ Deposit in a general or discipline-specific repository, such as Protein Data Bank, Cambridge Structural Database, GitHub, Dryad, Figshare
Some research data cannot be shared because of legal or privacy restrictions or embargoes. Which of the following restrictions or embargoes may limit your ability to share your data with others? Select all that apply. If there are no restrictions or embargoes, choose ‘there are no restrictions or embargoes on sharing my data with other parties’.

- There are no restrictions or embargoes on sharing my data with other parties
- I need to publish my data before I can share them
- Sharing my data may jeopardize Intellectual Property rights
- I plan to file for a patent
- My data are commercially vulnerable
- I have a contractual obligation with a third party
- My data are subject to privacy or confidentiality restrictions (e.g. patient data)
- My data are a matter of public safety or of a sensitive nature
- I’m unsure if I am allowed to share my data
- Other

If ‘Other’, please specify:

[Insert response]

If your research data were not affected by such restrictions or embargoes, with whom would you be willing to share them? Select all that apply:

- Nobody
- My immediate collaborators
- Researchers in my department/institute/centre
- Researchers at U of T
- Researchers in my field
- Researchers outside my field
- Anybody, including the general public
What, if any, are the reasons you would *not* be willing to share your research data and associated methods/algorithms? Select all that apply. If you are willing to share, choose ‘I am willing to share them’.

- They are incomplete or not finished
- I still wish to derive value from them
- I do not have the technical skills or knowledge
- I do not hold the rights to share them
- Funding body does not require sharing
- I believe they should not be shared
- I did not know I could share them
- Insufficient time
- Lack of standards to make them usable by others
- Lack of funding
- No place to put them
- They are not useful to others
- There are privacy, legal or security issues
- I am willing to share them
- Other

If 'Other', please specify:

_______________________________
What benefits do you see to sharing your research data? Select all that apply. If you see no benefits, choose ‘I see no benefits to sharing my data’.

- I see no benefits to sharing my data
- Data availability provides safeguards against misconduct, data fabrication and falsification
- Data sharing and/or replication studies help in the training of next generation researchers
- Data sharing enables my data to be cited and increases my research impact
- Data sharing encourages collaborative science
- Data sharing encourages interdisciplinary research
- Data sharing moves my field of research forward
- Data sharing reduces redundant data collection
- Data sharing supports open access to knowledge
- Re-analysis of data helps verify results
- Well-maintained data helps retain data integrity
- Other

If 'Other', please specify:

Are you aware of any discipline-specific research data repositories related to your field? Please list. If you are not aware of any discipline-specific data repositories related to your field please say ‘none’.
Section 3: Funding Mandates and Research Data Management Services

In this section you will be asked about your awareness of funding mandates for research data management, as well as your interest in potential research data management services.

Data management plans typically address questions about research data types and formats: standards to be used for describing data; ethics and legal compliance; plans for preservation, access, sharing, and reuse; and responsibilities assigned and resources needed.

If you were asked to draft a data management plan as part of a grant application, which of the following statements would best describe your situation? Select one:

- [ ] I would be able to draft a data management plan that would address these types of questions without assistance
- [ ] I would be able to draft a data management plan that would address these types of questions, but would prefer to have assistance and/or guided documentation to ensure the success of my application
- [ ] I would need assistance and/or guided documentation to appropriately address some or all of the sections

If data management plans were made part of grant applications from funding bodies such as NSERC, SSHRC, and CIHR, how interested would you be in the following services? Please rate your interest in each service. If the service does not apply to your situation, choose ‘not applicable’.

<table>
<thead>
<tr>
<th>Service</th>
<th>very interested</th>
<th>interested</th>
<th>not interested</th>
<th>not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshops on best practices in data management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for faculty</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Workshops on best practices in data management</td>
<td></td>
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<td></td>
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<tr>
<td>for graduate students</td>
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</tr>
</tbody>
</table>
Personalized consultation on data management practices for specific research groups or projects.

Communication and information about funding requirements and journal requirements regarding research data.

Assistance preparing data management plans to meet funding requirements, or assistance creating formal or documented data management policies.

Digitization of physical records, such as lab notebooks.

Assistance with documenting and describing data (i.e. metadata creation).

Assistance with issues associated with data preservation and/or sharing (confidentiality, privacy, legal, intellectual property rights).

Data storage and backup during active research projects.

An institutional repository for long-term access and preservation of research data.

Assistance with depositing research data in appropriate disciplinary or other external data repositories.

Assignment of permanent digital object identifiers (DOIs) for datasets.

Assistance in finding and accessing data sources.

If there are other services you would like to see offered, please specify:
Section 4: Demographic & General Questions

In this section you will be asked basic questions about your rank, departmental and research affiliations and funding sources so we can put your answers into context.

Please indicate your rank at University of Toronto:

- [ ] Postdoctoral Fellow
- [ ] Lecturer
- [ ] Senior Lecturer
- [ ] Adjunct Professor
- [ ] Assistant Professor
- [ ] Associate Professor
- [ ] Professor (including University Professor)
- [ ] Professor Emeritus
- [ ] Other

If 'Other', please specify:

[ ]
Please, select your faculty, home institute or department at University of Toronto. If your faculty, institute or department is not listed, please select the one with which you are most closely affiliated:

- Faculty of Applied Science & Engineering ¹
- Department of Astronomy & Astrophysics or CITA or Dunlap ²
- Department of Chemistry ³
- Department of Computer Science ⁴
- Department of Earth Sciences ⁵
- Department of Mathematics ⁶
- Department of Physics ⁷
- Department of Statistical Sciences ⁸

¹ Branches to questions in Iteration A
² Branches to questions in Iteration B
³ Branches to questions in Iteration C
⁴ Branches to questions in Iteration D
⁵ Branches to questions in Iteration E
⁶ Branches to questions in Iteration F
⁷ Branches to questions in Iteration G
⁸ Branches to questions in Iteration H
Iteration A: Faculty of Applied Science & Engineering

Please indicate your FASE Department, Division or Institute. Select all that apply:

- Institute for Aerospace Studies (UTIAS)
- Institute of Biomaterials & Biomedical Engineering (IBBME)
- Department of Chemical Engineering & Applied Chemistry (ChemE)
- Department of Civil & Mineral Engineering (CivE)
- Division of Engineering Science (EngSci)
- Division of Environmental Engineering & Energy Systems
- The Edward S. Rogers Sr. Department of Electrical & Computer Engineering (ECE)
- Department of Mechanical & Industrial Engineering (MIE)
- Department of Materials Science & Engineering (MSE)
- Other

If 'Other', please specify:

Please indicate your research institute or centre, if applicable. Select one:

- BioZone
- Centre for Advanced Coatings Technologies (CACT)
- Centre for Advanced Diffusion-Wave Technologies (CADIFT)
- Centre for Advanced Nanotechnology
- Centre for Applied Power Electronics (CAPE)
- Centre for Global Engineering (CGEN)
- Centre for Maintenance Optimization & Reliability Engineering
- Centre for Management of Technology and Entrepreneurship (CMTE)
- Centre for Microelectronics Assembly and Packaging
- Centre for Nanostructured Polymeric and Inorganic Materials (CNPIM)
- Centre for Research in Healthcare Engineering (CRHE)
- Centre for Research in Sustainable Aviation (CRSA)
- Centre for Resilience of Critical Infrastructure (CRCI)
Faculty of Forestry
Faculty of Medicine
Faculty of Pharmacy
Hospital Research Institutes
I do not have a cross-disciplinary affiliation
Prefer not to specify
Other

If 'Other', please specify:

Which funding sources have you used within the past 5 years, or are planning to apply for in the next 5 years? Please exclude funding earmarked exclusively for operations and infrastructure. Select all that apply:

- Canada Foundation for Innovation (CFI)
- Canadian Cancer Society Research Institute (CCSRI)
- Canadian Institutes of Health Research (CIHR)
- Heart & Stroke Foundation
- Industry
- Mitacs
- National Institute of Health (NIH)
- National Science Foundation (NSF)
- NSERC Industry Partnership Program: Collaborative R&D Grant
- NSERC Industry Partnership Program: DND - NSERC Research Partnership Program
- NSERC Industry Partnership Program: Engage Grants (EG) Program
- NSERC Industry Partnership Program: Idea to Innovation (I2I)
- NSERC Industry Partnership Program: Strategic Grants (Individual & Group)
- NSERC Industry Partnership Program: Strategic Research Networks
- NSERC Research Grant: Collaborative Health Research Project
- NSERC Research Grant: CREATE Program Grant
☐ NSERC Research Grant: Discovery Accelerator Supplement
☐ NSERC Research Grant: Discovery Grant
☐ Ontario Centres of Excellence
☐ Ontario Government Ministry of Research and Innovation
☐ Ontario Research Fund
☐ Research contracts
☐ Social Sciences and Humanities Research Council (SSHRC)
☐ Prefer not to specify
☐ Other

If 'Other', please specify:
Iteration B: Department of Astronomy & Astrophysics or CITA or Dunlap

Please indicate your home department. Select one:

- [ ] Canadian Institute for Theoretical Astrophysics (CITA)
- [ ] Department of Astronomy and Astrophysics
- [ ] Dunlap Institute for Astronomy and Astrophysics (Dunlap)

Please indicate your research institute or centre, if applicable. Select one:

- [ ] Canadian Institute for Theoretical Astrophysics (CITA)
- [ ] Department of Astronomy and Astrophysics
- [ ] Dunlap Institute for Astronomy and Astrophysics (Dunlap)
- [ ] I am not part of a research institute or centre
- [ ] Prefer not to specify
- [ ] Other

If 'Other', please specify:


Please indicate your cross-discipline affiliation outside of your home department, if applicable. Select all that apply:

- [ ] Canadian Institute for Theoretical Astrophysics (CITA)
- [ ] Department of Astronomy and Astrophysics
- [ ] Department of Physics
- [ ] Dunlap Institute for Astronomy and Astrophysics (Dunlap)
- [ ] I do not have a cross affiliation
- [ ] Prefer not to specify
- [ ] Other
Which funding sources have you used within the past 5 years, or are planning to apply for in the next 5 years? Please exclude funding earmarked exclusively for operations and infrastructure. Select all that apply:

- [ ] Astrophysical Research Consortium
- [ ] Canadian Foundation for Innovation (CFI)
- [ ] Canadian Institute for Advanced Research
- [ ] Canadian Research Council
- [ ] Canadian Space Agency
- [ ] Connaught Fund
- [ ] Industry
- [ ] NSERC Research Grant: Discovery Grant
- [ ] Ontario Government Ministry of Research and Innovation
- [ ] Universite de Montreal
- [ ] Prefer not to specify
- [ ] Other

If 'Other', please specify:
Iteration C: Department of Chemistry

Please indicate your research area, if applicable. Select all that apply:

- Analytical Chemistry
- Biological and Organic Chemistry
- Chemical Physics
- Environmental Chemistry
- Inorganic Chemistry
- Physical Chemistry
- Polymer and Material Chemistry
- Prefer not to specify
- Other

If 'Other', please specify:

Please indicate your cross-discipline affiliation outside of your home department, if applicable. Select all that apply:

- Department of Astronomy & Astrophysics or CITA or Dunlap
- Department of Computer Science
- Department of Earth Sciences
- Department of Economics
- Department of Physics
- Department of Geography
- Faculty of Medicine
- Faculty of Applied Science and Engineering
- Faculty of Dentistry
- Faculty of Pharmacy
- I do not have a cross affiliation
Prefer not to specify
Other

If 'Other', please specify:

Which funding sources have you used within the past 5 years, or are planning to apply for in the next 5 years? Please exclude funding earmarked exclusively for operations and infrastructure. Select all that apply:

- Alfred P. Sloan Foundation
- Canadian Foundation for Innovation (CFI)
- Canadian Blood Services
- Canadian Institute of Advanced Research
- Canadian Institutes of Health Research (CIHR)
- Canadian Space Agency
- CDQM: Consortium for Drug Discovery
- Department of the Navy (U.S.)
- Environment Canada
- Industry
- MaRS Innovation
- National Institutes of Health (US)
- Network of Centres for Excellence: Arcticnet
- Network of Centres of Excellence: Canadian Institute for Photonic Innovations
- Network for Centres of Excellence: Carbon Management Canada
- NSERC Industry Partnership Program: Collaborative R&D Grant
- NSERC Industry Partnership Program: DND - NSERC Research Partnership Program
- NSERC Industry Partnership Program: Engage Grants (EG) Program
- NSERC Industry Partnership Program: Idea to Innovation (I2I)
- NSERC Industry Partnership Program: Strategic Grants (Individual & Group)
- NSERC Industry Partnership Program: Strategic Research Networks
- NSERC Research Grant: Collaborative Health Research Project
- NSERC Research Grant: CREATE Program Grant
- NSERC Research Grant: Discovery Grant
- NSERC Research Grant: Discovery Accelerator Supplement
- Ontario Centres of Excellence
- Ontario Genomics Institute
- Ontario Government Ministry of Research and Innovation
- Ontario Institute for Cancer Research
- Ontario Research Fund
- SSHRC
- United States Air Force
- United States Department of the Navy
- United States Environmental Protection Agency
- United States National Institutes of Health (NIH)
- Prefer not to specify
- Other

If 'Other', please specify:
Iteration D: Department of Computer Science

Please indicate your research area, if applicable. Select all that apply:

☐ Applied & Discrete Mathematics
☐ Artificial Intelligence
☐ Computational Biology
☐ Computer Graphics
☐ Computer Systems & Networks
☐ Database Systems
☐ Health & Assistive Technology
☐ Human Computer Interaction
☐ Numerical Analysis
☐ Programming Languages & Methodologies
☐ Software Engineering
☐ Theory of Computation
☐ I am not part of a research area
☐ Prefer not to specify
☐ Other

If 'Other', please specify:


Please indicate your cross-discipline affiliation outside of the Department of Computer Science, if applicable. Select all that apply:

☐ Department of Astronomy & Astrophysics or CITA or Dunlap
☐ Banting & Best Department of Medical Research
☐ Department of Cell & Systems Biology
☐ Department of Mathematics
If 'Other', please specify:

Which funding sources have you used within the past 5 years, or are planning to apply for in the next 5 years? Please exclude funding earmarked exclusively for operations and infrastructure. Select all that apply:

- Bell University Laboratories
- Canadian Foundation for Innovation (CFI)
- Canadian Institutes of Health Research (CIHR)
- IBM's Eclipse Innovation Grants
- Industry
- Mathematics of Information Technology and Complex Systems (MITACS)
- National Institute of Health (NIH)
☐ Natural Sciences and Engineering Research Council (NSERC)
☐ NSERC Business Intelligence Network
☐ Ontario Centres of Excellence (OCE)
☐ Ontario Government Ministry of Research and Innovation
☐ Ontario Research Fund
☐ Research contracts
☐ Prefer not to specify
☐ Other

If 'Other', please specify: ________________________________
Iteration E: Department of Earth Sciences

Please indicate your research institute or centre, if applicable. Select one:

- [ ] Centre for Urban & Community Studies
- [ ] School of the Environment
- [ ] Centre for Global Change Science
- [ ] I am not part of a research institute or centre
- [ ] Prefer not to specify
- [ ] Other

If ‘Other’, please specify:

__________________________

Please indicate your cross-discipline outside of the Department of Earth Sciences, if applicable. Select all that apply:

- [ ] Department of Cell & Systems Biology
- [ ] Department of Chemical Engineering and Applied Chemistry
- [ ] Department of Civil Engineering
- [ ] Department of Ecology and Evolutionary Biology
- [ ] Department of Economics
- [ ] Department of Geography & Planning
- [ ] Department of Mechanical & Industrial Engineering
- [ ] Royal Ontario Museum
- [ ] I do not have a cross affiliation
- [ ] Prefer not to specify
- [ ] Other

If ‘Other’, please specify:

__________________________


Which funding sources have you used within the past 5 years, or are planning to apply for in the next 5 years? Please exclude funding earmarked *exclusively* for operations and infrastructure. Select all that apply:

- Canadian Foundation for Climate & Atmosphere Sciences
- Canadian Foundation for Innovation (CFI)
- Canadian Institutes of Health Research (CIHR)
- Industry
- NSERC Industry Partnership Program: Collaborative R&D Grant
- NSERC Industrial Partnership Program: Strategic Grants (Individual & Group)
- NSERC Industry Partnership Program: Engage Grants (EG) Program
- NSERC Industrial Partnership Program: Strategic Research Networks
- NSERC Industry Partnership Program: DND - NSERC Research Partnership Program
- NSERC Research Grant: Discovery Grant
- NSERC Research Grant: Discovery Accelerator Supplement
- NSERC Research Grant: CREATE Program Grant
- NSERC Research Grant: Collaborative Health Research Project
- NSERC Industry Partnership Program: Engage Grants (EG) Program
- Ontario Government Ministry of Research and Innovation
- Research contracts
- Prefer not to specify
- Other

*If 'Other', please specify:*
Iteration F: Department of Mathematics

Please indicate your research institute or centre, if applicable. Select one:

☐ I am not part of a research institute or centre
☐ Prefer not to specify
☐ Other

If 'Other', please specify:


Please indicate your cross-discipline affiliation outside of your home department, if applicable. Select all that apply:

☐ Department of Chemistry
☐ Department of Computer Science
☐ Department of Economics
☐ Department of Physics
☐ Department of Statistical Sciences
☐ I do not have a cross affiliation
☐ Prefer not to specify
☐ Other

If 'Other', please specify:


Which funding sources have you used within the past 5 years, or are planning to apply for in the next 5 years? Please exclude funding earmarked exclusively for operations and infrastructure. Select all that apply:

- Canadian Foundation for Innovation (CFI)
- Canadian Institutes of Health Research (CIHR)
- Industry
- NSERC Industry Partnership Program: Collaborative R&D Grant
- NSERC Industry Partnership Program: DND - NSERC Research Partnership Program
- NSERC Industry Partnership Program: Engage Grants (EG) Program
- NSERC Industry Partnership Program: Idea to Innovation (I2I)
- NSERC Industry Partnership Program: Strategic Grants (Individual & Group)
- NSERC Industry Partnership Program: Strategic Research Networks
- NSERC Research Grant: Collaborative Health Research Project
- NSERC Research Grant: CREATE Program Grant
- NSERC Research Grant: Discovery Accelerator Supplement
- NSERC Research Grant: Discovery Grant
- Ontario Centres of Excellence
- Ontario Government Ministry of Research and Innovation
- Ontario Research Fund
- SSHRC
- Prefer not to specify
- Other

If 'Other', please specify:
Iteration G: Department of Physics

Please indicate your research area, if applicable. Select all that apply:

- Astrophysics
- Atmospheric physics
- Biological physics
- Condensed matter physics
- Earth, atmospheric and planetary physics
- Experimental high energy physics
- Geophysics
- Physics education
- Quantum optics
- Theoretical particle physics
- I am not part of a research area
- Prefer not to specify
- Other

If 'Other', please specify:

[Blank space for input]

Which funding sources have you used within the past 5 years, or are planning to apply for in the next 5 years? Please exclude funding earmarked exclusively for operations and infrastructure. Select all that apply:

- Canadian Foundation for Innovation (CFI)
- Canadian Foundation for Climate and Atmospheric Sciences (CFCAS)
- Canadian Institute for Advanced Research (CIFAR)
- Canadian Institutes of Health Research (CIHR)
- Canadian Space Agency (CSA)
- Industry
- MITACS Accelerate
<table>
<thead>
<tr>
<th>Funding Body</th>
<th>Description</th>
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<td>National Institute of Health (NIH)</td>
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<td>National Science Foundation (NSF)</td>
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<td>NSERC - Climate Change and Atmospheric Research (CCAR)</td>
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<td>NSERC - Collaborative and Thematic Resources Support in Mathematics and Statistics (CTRMS)</td>
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<td>NSERC - Collaborative Research and Training Experience Program (CREATE)</td>
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<td>NSERC - Discovery Accelerator Supplement (RGPAS)</td>
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<td>NSERC - Discovery Frontiers (DF)</td>
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<td>NSERC - Discovery Grants Program - (Individual RGPIN, Team RGPGP)</td>
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<tr>
<td>NSERC - Discovery Grants Program - Subatomic Physics (Individual SAPIN, Team SAPGP, Project SAPPJ)</td>
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<tr>
<td>NSERC - DND/NSERC Research Partnership Program</td>
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<td>NSERC - Engage Grants (EG)</td>
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<td>NSERC - International Polar Year Projects in Natural Sciences and Engineering (IPY)</td>
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<td>NSERC - Major Resources Support - Subatomic Physics (SAP-MRS)</td>
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<td>NSERC - Major Resources Support Program (MRSIF)</td>
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<tr>
<td>NSERC - Research Tools and Instruments Grants Program - Subatomic Physics (SAPEQ)</td>
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<td>NSERC - Research Tools and Instruments Grants Program (EQPEQ)</td>
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<td>NSERC - Strategic Networks Grant (SNG)</td>
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<td>NSERC - Strategic Project Grant (STPGP)</td>
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<tr>
<td>Ontario Centres of Excellence</td>
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<td>Ontario Government Ministry of Research and Innovation (MRI)</td>
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<td>Ontario Ministry of the Environment</td>
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<td>Social Sciences and Humanities Research Council (SSHRC)</td>
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<tr>
<td>Prefer not to specify</td>
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<tr>
<td>Other</td>
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</tbody>
</table>

If 'Other', please specify:

[ ]
Iteration H: Department of Statistical Sciences

Please indicate your research institute or centre, if applicable. Select one:

☐ I am not part of a research institute or centre
☐ Prefer not to specify
☐ Other

If 'Other', please specify:

_________________________________________________________________________

Please indicate your cross-discipline affiliation outside of your home department, if applicable. Select all that apply:

☐ Department of Chemistry
☐ Department of Computer Science
☐ Department of Economics
☐ Department of Mathematics
☐ Department of Physics
☐ I do not have a cross affiliation
☐ Prefer not to specify
☐ Other

If 'Other', please specify:

_________________________________________________________________________
Which funding sources have you used within the past 5 years, or are planning to apply for in the next 5 years? Please exclude funding earmarked exclusively for operations and infrastructure. Select all that apply:

- [ ] Canada Foundation for Innovation (CFI)
- [ ] Canadian Institutes of Health Research (CIHR)
- [ ] Industry
- [ ] NSERC Industry Partnership Program: Collaborative R&D Grant
- [ ] NSERC Industry Partnership Program: DND - NSERC Research Partnership Program
- [ ] NSERC Industry Partnership Program: Engage Grants (EG) Program
- [ ] NSERC Industry Partnership Program: Idea to Innovation (I2I)
- [ ] NSERC Industry Partnership Program: Strategic Grants (Individual & Group)
- [ ] NSERC Industry Partnership Program: Strategic Research Networks
- [ ] NSERC Research Grant: Collaborative Health Research Project
- [ ] NSERC Research Grant: CREATE Program Grant
- [ ] NSERC Research Grant: Discovery Accelerator Supplement
- [ ] NSERC Research Grant: Discovery Grant
- [ ] Ontario Centres of Excellence
- [ ] Ontario Government Ministry of Research and Innovation
- [ ] Ontario Research Fund
- [ ] SSHRC
- [ ] Prefer not to specify
- [ ] Other

If 'Other', please specify:

- [ ]

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**Note:**

- Please exclude funding earmarked exclusively for operations and infrastructure.
Section 5: Feedback, follow-up and additional information about the survey

In this final section you will be asked for your comments on the survey itself, as well as your willingness to be contacted for follow-up. This section also contains information about how the data collected in this survey will be used.

Please provide feedback on the survey content, or your thoughts on research data management practices. Any comments you have will be helpful.

We would be happy to follow up with any faculty or postdoctoral fellows who require immediate assistance from the library for current research data management practices or to help facilitate future collaborations. Are you willing to be contacted for follow up?

☐ No  ☐ Yes

If 'Yes', please provide your email address:


This is the end of the survey.
Thank you for taking the time to participate in the Research Data Management Faculty & Postdoctoral Survey, University of Toronto!

After the survey has been submitted, you may withdraw consent until April 29, 2015. Anonymized survey submissions cannot be withdrawn. All identifying information will be kept private and all data will be anonymized in the event that results collected will be published.

Please click the "Next" button to submit your completed survey.

Thank you again.

Should you have any questions regarding your rights as a participant you may contact the Office of Research Ethics at ethics.review@utoronto.ca or 416-946-3273.

If you have any questions about the research project or would like a summary of the survey results, you may contact the Principal Investigator Cristina Sewerin, Acting Head, Engineering & Computer Science Library, University of Toronto, Sandford Fleming Building, 10 King’s College Road, Room 2402, Toronto, Ontario 416-946-4020, cris.sewerin@utoronto.ca.

If you would like more information or help with research data management, please contact Dylanne Dearborn, Research Data Librarian (Sciences & Engineering), 416-978-5188, dylanne.dearborn@utoronto.ca.

**Principal Investigator:**

Cristina Sewerin, Acting Head, Engineering & Computer Science Library, University of Toronto

**Research Project Team:**

Dylanne Dearborn, Physics Librarian and Research Data Librarian (Sciences & Engineering), University of Toronto

Angela Henshilwood, Faculty Liaison & Instruction Librarian, Engineering & Computer Science Library, University of Toronto

Michelle Spence, Reference and Instruction Librarian, Engineering & Computer Science Library, University of Toronto

Tracy Zahradnik, Liaison and Instruction Librarian, Engineering & Computer Science Library, University of Toronto

Bruce Garrod, Head, Earth Sciences Library (Noranda) and Mathematics Librarian, University of Toronto

Patricia Meindl, Chemistry Librarian, Chemistry Library (A D Allen), University of Toronto

Lee Robbins, Head Librarian, Astronomy & Astrophysics Library, University of Toronto

Jennifer Robertson, Librarian/Collections Assessment & Evaluation, U of T Libraries, Collection Development Department, University of Toronto