

# Digital Research Services Hub

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Library+  
IT+

## Research Data Governance Information Session

April 23, 2024

The presentation will start at 1:03pm.



McGill

Research and  
Innovation

R+

# DRS Hub

Helpdesk:

[drs@mcgill.ca](mailto:drs@mcgill.ca)

<https://www.mcgill.ca/drs/>

“A one-stop shop for support and guidance on digital research topics”

“Accompany the researchers”

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Contact us

## Digital Research Services

New digital technologies have profoundly transformed academic research across all disciplines. The Digital Research Services (DRS) team assists McGill researchers in navigating the increasingly complex digital research ecosystem by providing advice and support on activities related to **Research Data Management (RDM)**, **Research Software (RS)**, and **Advanced Research Computing (ARC)**. DRS is a joint effort by Research and Innovation, Library, and IT Services.

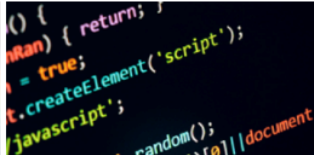
### Research Data Management



From planning and documenting to storing and archiving, our team can help you meet funding agency requirements, provide long-term preservation, and ensure that research data is findable, accessible, interoperable, and reusable (FAIR) by you and others.

[Learn more](#)


### Research Software



Research software is a fundamental component of modern research. Our team can help you identify the right software solution for your specific needs, or help you improve the quality, reproducibility, and sustainability of your code.

[Learn more](#)

### Advanced Research Computing



Our team can help you identify and access the right cyberinfrastructure resources for your needs, including supercomputers, storage and Cloud resources. We can also connect you with the experts to help you with technical tasks like installing software packages and code optimization on national systems.

[Learn more](#)

If you have any questions related to research data management, research software or advanced research computing

[Contact us](#)

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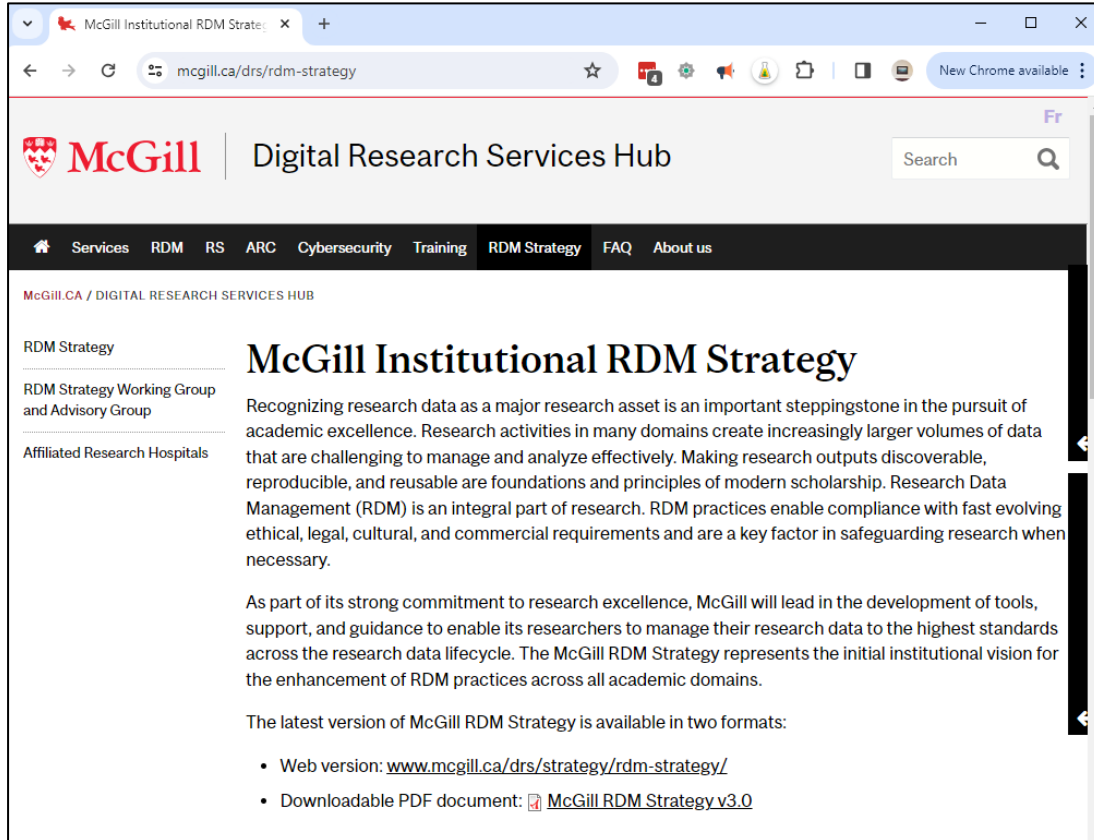
# Agenda

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1. Data governance background
2. Research data governance landscape
3. Research Data Governance Working Group

# Research Data Management (RDM) Strategy

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The screenshot shows the McGill Institutional RDM Strategy page. The browser address bar displays [mcgill.ca/drs/rdm-strategy](http://mcgill.ca/drs/rdm-strategy). The page header includes the McGill logo and the text "Digital Research Services Hub". A navigation menu contains links for Services, RDM, RS, ARC, Cybersecurity, Training, RDM Strategy, FAQ, and About us. The main content area is titled "McGill Institutional RDM Strategy" and includes a sidebar with links to "RDM Strategy Working Group and Advisory Group" and "Affiliated Research Hospitals". The main text discusses the importance of research data as a major asset and the role of RDM in ensuring compliance and safeguarding research. It also mentions that the latest version of the strategy is available in two formats: a web version and a downloadable PDF document.

McGill Institutional RDM Strategy

Recognizing research data as a major research asset is an important steppingstone in the pursuit of academic excellence. Research activities in many domains create increasingly larger volumes of data that are challenging to manage and analyze effectively. Making research outputs discoverable, reproducible, and reusable are foundations and principles of modern scholarship. Research Data Management (RDM) is an integral part of research. RDM practices enable compliance with fast evolving ethical, legal, cultural, and commercial requirements and are a key factor in safeguarding research when necessary.

As part of its strong commitment to research excellence, McGill will lead in the development of tools, support, and guidance to enable its researchers to manage their research data to the highest standards across the research data lifecycle. The McGill RDM Strategy represents the initial institutional vision for the enhancement of RDM practices across all academic domains.

The latest version of McGill RDM Strategy is available in two formats:

- Web version: [www.mcgill.ca/drs/strategy/rdm-strategy/](http://www.mcgill.ca/drs/strategy/rdm-strategy/)
- Downloadable PDF document: [McGill RDM Strategy v3.0](#)

[McGill Institutional RDM Strategy](http://www.mcgill.ca/drs/strategy/rdm-strategy/)



The screenshot shows a page from the Government of Canada website. The browser address bar displays [science.gc.ca/site/science/en/interagency-research...](http://science.gc.ca/site/science/en/interagency-research...). The page header includes the Government of Canada logo and the text "Government of Canada / Gouvernement du Canada". A search bar is visible. The main content area is titled "Published institutional research data management strategies" and includes a breadcrumb trail: "Canada.ca > Science and innovation > Science.gc.ca > Interagency research funding > Policies and Guidelines > Research Data Management". The text discusses the requirements of the Tri-Agency Research Data Management Policy, which requires that by March 1, 2023, each postsecondary institution and research hospital eligible to administer funds from the Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council (NSERC) or Social Sciences and Humanities Research Council (SSHRC) create and share, with the agencies and on its website, an institutional research data management (RDM) strategy that describes how the institution will provide its researchers with an environment that enables and supports RDM.

Published institutional research data management strategies

The [Tri-Agency Research Data Management Policy](#) requires that by March 1, 2023, each postsecondary institution and research hospital eligible to administer funds from the Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council (NSERC) or Social Sciences and Humanities Research Council (SSHRC) create and share, with the agencies and on its website, an institutional research data management (RDM) strategy that describes how the institution will provide its researchers with an environment that enables and supports RDM.

[Tri-Agency list of all Institutional Strategies \(204\)](#)

# What is Data Governance (DG)?

A collection of practices and processes ensuring the consistent and proper handling of data so that its value can be leveraged. It ensures that data is:

- Reliable
- Documented
- Accessible
- Secure

Data Governance provides clear **responsibilities** for managing data quality, integrity, access, security, use, and disposal.

<https://www.mcgill.ca/it/it-governance/data-governance>

# Data Governance in a nutshell

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Data Governance IS	Data Governance IS NOT
<ul style="list-style-type: none"><li>• More about <b>roles</b> and <b>people</b> than data or tools</li><li>• A system that promotes shared agreement</li><li>• Formal (i.e., written down)</li><li>• Adds value by supporting project mission/goals</li></ul>	<ul style="list-style-type: none"><li>• IT's responsibility</li><li>• Solved by technology</li><li>• Equally applied across all disciplines &amp; data assets</li></ul>

Many research groups already have some elements of DG in place (formally or informally)

Source: [Stony Brook University](#)

## Clear DG can help throughout the research lifecycle

- Research proposals
- DMPs
- Ethics review
- Privacy Impact Assessments
- Cloud solutions approvals
- Data use/sharing agreements
- Data anonymization/de-identification
- Access permissions/administration
- Retention or destruction
- Data deposit



# It can be difficult to find clear guidance...

## Directives related to DG can be found in various places:

- McGill policies
- Affiliated Research Hospital policies
- Funder policies and guidelines (e.g., Tri-Agency, FRQ, NIH)
- Agreements and contracts with research partners/funders
- Federal and provincial regulations (e.g., Loi 25)
- International regulations (e.g., GDPR, HIPAA)





# Starting to develop guidance: Data sensitivity tool

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## Sensitive research data classification

Very high sensitivity

High sensitivity

Moderate sensitivity

Low sensitivity

## Sensitive research data classification

The goal of the McGill research data classification tool is to help McGill researchers to identify, understand, and better manage research data in ways that are consistent with laws, disciplinary norms, and funder and institutional policies. This classification must always be used in conjunction with all additional compliance requirements applicable (e.g., Research Ethics Board requirements, contracts, agreements, applicable laws, ethical conduct, etc.).

All members of the university community are required to:

- comply with these obligations;
- use sensitive data only for the purposes for which they are collected;
- respect any restrictions for their use, and;
- collect, store, and dispose of data in ways appropriate to minimize the risk of unintended disclosure or compromised data integrity.

There are four levels in this data sensitivity classification. For descriptions and examples of each level of data sensitivity, please use the tabs on the left.

If you have questions about this tool or require support in determining the sensitivity of or safeguarding your research data, please reach out to the DRS team at [drs@mcgill.ca](mailto:drs@mcgill.ca).

<https://www.mcgill.ca/drs/cybersecurity-0>

# Policies and regulations

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## Institutional Policies & Directives

*Cloud Directive*

*Governance of Personal Information*

*Regulation on Conduct of Research*

*Ethical Conduct of Research involving Human Participants*

Affiliated Research Hospital policies

## Funder Policies & Directives

*Tri-Agency Responsible Conduct of Research*

*Tri-Agency RDM Policy*

*Ethical Conduct of Research involving Humans (TCPS2-2022)*

## Legislation

QC – *Loi 25, Access Act*

EU – *GDPR*

UK – *GDPR*

US – *HIPAA*

# Personal information in research data – New legal requirements

## Consent for research participants for each specific purpose

- Collecting, using, sharing, re-using data containing personal information

## Sharing and processing research data

- Within and outside of Québec

## Data anonymization and destruction

- Anonymization vs. de-identification (Québec regulation on anonymization in development)
- Destruction of data once purposes achieved

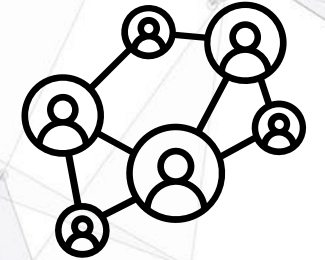
## Research software selection

- Cloud based solutions

# McGill Affiliated Research Hospitals

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- Sensitive Research Personal Health Information (PHI)
  - Separate Research Ethics Boards
  - Clinical trials (usually managed by the Affiliates)
- Mix of McGill and Affiliate staff
- Separate legal entities with their own policies & administrations
- Separate IT infrastructure



# Collaborations and community partnerships

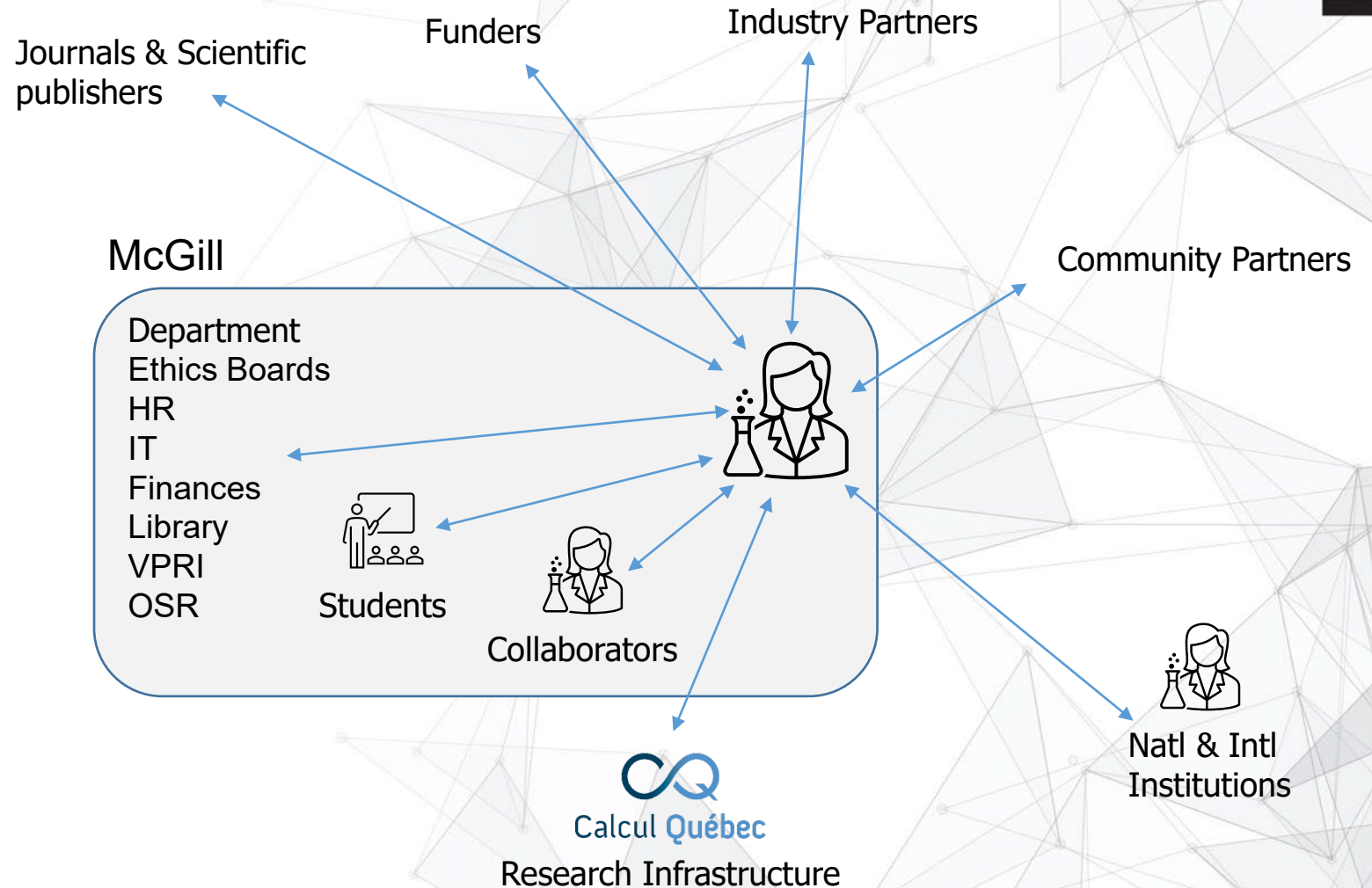
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## Multi-site collaborative research:

- Academic institutions
- Industry partners
- Community organizations

## Contexts:

- Multiple policy and legal frameworks
- Negotiating and navigating data sharing/data transfer (Grants/Partnerships)
- Intellectual property (Legal)



# Working with Indigenous data

## Define relationship to research via meaningful partnership

- What are the processes that need to be in place?
- How can researchers partner with Indigenous communities to ensure data can be fully leveraged within the community?

## Indigenous Data Sovereignty

- To participate, steward, control and access data that is created with or about themselves
- Distinctions-based approach is needed ([Tri-Agency RDM Policy](#))

# Working with Indigenous data – Resources

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- [McGill Office of Indigenous Initiatives](#)
- McGill VPRI Office of Sponsored Research
  - Agreements (no template for Indigenous partnerships, case-by-case)\*
- [First Nations Information Governance Centre \(FNIGC\)](#)

## Goal #3: Establish a formal governance framework for research data at McGill

Form an advisory research data working group to the VP-RI, comprised primarily of **faculty members** with representatives from key stakeholders (e.g., IT, Library, VP-RI, Provost, Research Ethics Boards, etc.)

- 
- Provide steering and guidance for the development of a framework for research data governance at McGill
  - DRS team to coordinate development of framework



# Research Data Governance Working Group

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## Areas of focus:

- Laws, regulations & policies
- McGill Affiliated Research Hospitals
- Indigenous research data
- Collaborations
  - Provincial, federal, international partners
  - Industry partners
  - Community partners

# Research Data Governance Working Group

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## Commitment:

- 1 year (possibility of extension)
- Meetings approx. once a month
- Material to review between meetings

## Possible outcomes:

- Recommendations for harmonization of policies with Affiliated Research Hospitals
- Guidelines for roles and responsibilities
- Data Governance toolkit for researchers

# Research Data Governance Working Group

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## [RDG WG application form](#)

If you are interested in being a part of the WG,  
please complete form by **Friday May 3, 2024**

# Contact DRS

[drs@mcgill.ca](mailto:drs@mcgill.ca)

<https://www.mcgill.ca/drs/>