# University of Windsor Research Data Management Strategy

# Executive Summary

In March 2021, the Tri-Agency[[1]](#footnote-1) released the [Tri-Agency Research Data Management Policy](https://science.gc.ca/eic/site/063.nsf/eng/h_97610.html) to promote sound research data management (RDM) and data stewardship practices as part of its commitment to furthering Canadian research excellence. This policy requires each post-secondary institution and research hospital eligible to administer Tri-Agency funds to implement and publicly post an institutional research data management strategy and notify the Tri-Agency when this is complete.

The University of Windsor is committed to meeting the Tri-Council requirements and to supporting effective RDM practices for its researchers through effective service and training support, tools, and infrastructure. The strategy will initiate and guide ongoing dialogue and collaboration for the advancement of RDM at the University of Windsor and will evolve as we move to implement activities that will be supportive and responsive to the needs of our research community while aligning with the changes in the Canadian data environment.

The institutional Research Data Management Strategy is only the first step of this process. The strategy outlines the current state as well as the underlying principles. This strategy will need to be followed by concentrated effort, resource investment, and shared responsibility.

# Strategic RDM Goals for the University of Windsor

# The following four strategic institutional goals guide and prioritize the collaborative work between the University and its researchers to ensure the University is an environment that enables and supports research data management to meet the goals of good research data management and comply with the Tri-Agency RDM requirements for publicly funded data. In these goals, the University of Windsor recognizes and makes explicit that research data management is a shared responsibility. Both the University of Windsor and individual researchers will be required to take an active and lead role in research data management.

# Streamlining access to RDM supports and services

* The University of Windsor will maintain the [RDM Steering Committee](https://leddy.uwindsor.ca/rdm/institutional-strategy)[[2]](#footnote-2) to develop and implement centralized and coordinated RDM supports, services, and communication across all RDM service providers, including the Leddy Library, ITS, and Office of Research and Innovation Services. This would include the provision of training and development opportunities for staff and faculty.
* With the support of campus services including the Library, ITS, REB and ORIS, researchers will develop and implement research data management plans appropriate to support their research, creative activity, and scholarship. The development and implementation of research data plans, including data deposit, will be required for all publicly funded research.

### Ensuring data security throughout the research data life cycle

* The University of Windsor will provide, or support access to, repository services or other platforms that securely preserve, curate, and provide appropriate access to research data. This includes both active storage and long-term preservation solutions with sufficient security for research data in all formats, classifications, and sensitivity levels, depending on the disciplines and/or agencies involved. The potential establishment of a working group of researchers will help to identify conventions for data storage and preservation based on data type.
* The University of Windsor will also leverage national infrastructure for secure active storage and long-term preservation which are developed through the Digital Research Alliance of Canada and other RDM partners.
* Researchers will follow university protocols and make use of solutions recommended and provided to them, in order to ensure alignment and compliance with requirements provided by the University, funding agencies, and best practices.

### Protecting Research Data Sovereignty with First Nations, Métis, and Inuit People and Communities

Data created in the context of research by and with Indigenous Peoples (First Nations, Métis, and Inuit) communities, collectives, and organizations will be managed according to principles developed and approved by those communities, collectives, and organizations, and in partnership with them. The unique rights, interests, and history of Indigenous Peoples are acknowledged, affirmed, and implemented.

* Research by and with Indigenous Peoples is guided by the needs of Indigenous Peoples and Indigenous communities. Researchers and the University have a responsibility to ensure respectful, reciprocal, and ongoing relationships with Indigenous Peoples and communities.
* The University will provide education, support, and resources to ensure that data created by and with Indigenous Peoples, communities, collectives, and organizations, ensures data sovereignty and incorporates Indigenous data protocols and principles such as OCAP (Ownership, Control, Access, Possession) and community-based principles. In 2023, Indigenous Research Forums at the University of Windsor will build greater knowledge and awareness of the needs of Indigenous researchers and build connections with Indigenous researchers and communities.
* Researchers working with Indigenous communities and creating data in the context of research by and with Indigenous Peoples communities, collectives, and organizations, will ensure that Indigenous knowledge and practices are aligned with principles developed and approved by those communities, collectives, and organizations. Importantly, researchers will also ensure the data and the scholarship outputs are managed in close partnership with Indigenous communities and guided by Indigenous Peoples.

### Providing campus-wide training and development

* University partners, including but not limited to, Leddy Library, Office of Research and Innovation Services, Information Technology Services, and the Research Ethics Board (REB) will offer robust and consistent RDM training and education opportunities across disciplines and will continuously re-evaluate the needs of researchers to ensure training is addressing knowledge deficits and emerging research data types and storage requirements.
* Researchers will apply their knowledge of RDM best practices and stay up to date with evolving RDM requirements to ensure compliance with institutional, funding agency, and best practice requirements.
* It is recognized that Indigenous knowledges and methodologies is a knowledge deficit at the University of Windsor and will require training and development.

# Background

The Tri-Agency communicated the following phased-in deployment schedule:

* **Data management plans:**In spring 2022, the three major Canadian funding agencies (NSERC, SSHRC and CIHR) identified an initial set of targeted funding opportunities which would require Data Management Plans (DMP) to be submitted as part of the funding application. These initial funding opportunities for the DMP pilot have been communicated[[3]](#footnote-3) to the campus research community.
* **Institutional strategies:**By March 1, 2023, each post-secondary institution and research hospital eligible to administer CIHR, NSERC or SSHRC funds is required to create an institutional RDM strategy and notify the agencies when it has been completed.
* **Data deposit:**The funding agencies will phase in the data deposit requirement after reviewing the institutional strategies to be in line with the readiness of the Canadian research community. There is currently no timeline for this requirement.[[4]](#footnote-4) This requirement will ensure that all digital research data, metadata, and code that directly support the research conclusions in journal publications and pre-prints that arise from agency-supported research is deposited into a digital repository.

The development of this RDM strategy was informed by several formal needs assessment activities between March 2017 and August 2022, including:

* Strategy update presentations at Campus Technology Days in 2017 and 2018.
* Portage 2017 Needs Assessment Survey (68 respondents)
* Research Infrastructure Self-Evaluation (RISE) Framework
* Two focus groups with twelve members of the University’s RDM Advisory Group
* Research Data Management Day held in November 2019 (67 participants)
* Data management planning online seminar held March 2022 (hosted by the Leddy Library, the Office of Research & Innovation Services (ORIS) and the University of Windsor’s Research Ethics Board (REB) (19 participants)
* Strategy update presentations to the University’s Provost Council and Data Governance Committee

# Definitions

### Research Data Management (RDM)

* + An umbrella term that describes the activities researchers perform when they collect, manage, store and archive research data
	+ *Good* research data management means collecting, documenting, backing up and preserving data in a way that facilitates reproducible research, data security, and long-term usability of data

Research Data

* Data created or generated as part of a research project. Research data takes many forms and may include numeric data, instrument readings, models, text, transcripts, images, video, and audio

See Appendix 1 for a more comprehensive RDM definitions list.

# Importance of Research Data Management

Data created or generated as part of a research project directly contributes to research excellence including the reach, impact, and relevance of research. Strategically supporting effective organization, secure storage and access, long-term preservation, discoverability, and reuse of research data across the entire research data life cycle ensures continuous access to research data throughout the course of research programs and careers. Robust University-wide RDM support according to best practices not only promotes scientific integrity through research transparency and reproducibility, but it also fuels innovation and the creation of new knowledge at lower costs within and across disciplines. Additionally, as the requirement for dataset deposit expands and the citation of datasets becomes more common, data will become increasingly valued as research asset in peer review and tenure processes.

Formalizing RDM best practices for the University of Windsor promotes new data sharing and collaboration opportunities among researchers—locally and internationally. Considering our geographical proximity to the United States, sound RDM practices will further foster international research collaborations and build upon the University’s already existing cross- border research programs in key areas intersecting our research institutes.

Further driving the need for sound research data management services and infrastructure are the University of Windsor’s comprehensive research and creative activities which span a broad range of disciplines. The University is home to six research institutes and more than 75 faculty-level research centres. The university also operates several off-campus research facilities, many of which run in collaboration with industrial and community partners.

# Scope

This RDM strategy outlines, to the Tri-Council, the University, and the broader research community, the current and planned RDM capacity for data stewardship and research data management at the University of Windsor and the broader research community. The Strategy outlines key areas for consideration and investment. The Strategy aims to initiate and guide ongoing dialogue and collaboration for the advancement of RDM at the University of Windsor.

The Strategy will help establish services and supports to assist researchers in the establishment and implementation of effective data management practices that are consistent with ethical, legal, and commercial obligations, as well as Tri-Agency requirements.

# Oversight and Review

As a living document, the RDM strategy will be revised on an ongoing basis through the continued work of the University RDM Steering Committee in close consultation with faculty and administrators within and beyond the University of Windsor. As gaps are identified and new RDM services and resources are developed—either locally, or leveraged through provincial, national, and/or international infrastructure—the University of Windsor will continue to grow scalable RDM support for its research community.

Consultation with the research and leadership community at the University of Windsor will be completed (Appendix 2).

# Institutional Support

The University of Windsor has a well-established, cohesive RDM Steering Committee which will continue to actively provide strategic direction for the research data management services and infrastructure at the University of Windsor. Additionally, the RDM Advisory Group, comprised of engaged faculty from across the disciplines, provide input on RDM best practices and conventions to ensure that RDM services, tools, and infrastructure meet the diverse needs of researchers at the University of Windsor.

In support of the RDM strategy, the University of Windsor research community currently has access to the following established RDM services and resources:

* A locally-hosted [RDM knowledge portal](https://leddy.uwindsor.ca/rdm) which provides access to, and support for, RDM services and resources available to University of Windsor researchers
* A data management planning tool offered through the [Digital Research Alliance of Canada](https://alliancecan.ca/en) (DRAC) which includes a customized template for the University of Windsor: [DMP Assistant](https://assistant.portagenetwork.ca/)
* A dedicated data repository branded for University of Windsor: [Borealis](https://borealisdata.ca/dataverse/windsor) the Canadian Dataverse Repository
* [REDCap](https://www.wesparkhealth.com/tools-for-our-researchers/redcap) (Research Electronic Data Capture), a secure web application for building and managing online surveys and databases. The University of Windsor’s Information Technology Services hosts a local, secure instance to assist researchers requiring secure active storage for sensitive data collection. REDCap also offers de-identification options to help protect data confidentiality when data is exported
* The University’s membership in the Digital Research Alliance of Canada provides researchers with accounts for active storage of larger datasets requiring advanced research computing—even datasets larger than 10TB can be supported through DRAC’s annual Resource Allocation Competition (RAC)
* DRAC membership also provides University of Windsor researchers with access to advanced open-source research software for better managing research data—including access to electronic notebooks such as JupyterHub
* A scalable, federated platform for digital research data ingestion, curation, preservation, and discovery offered through the Digital Research Alliance of Canada: [The Federated Research Data Repository (FRDR)](https://www.frdr-dfdr.ca/repo/)
* A seamless integration of DMPs into the Research Ethics Board application in order to ensure RDM processes are initiated at onset of research process
* Staff supporting awareness raising and promotion, training, and RDM consultative services through the following campus entities: Leddy Library, Office of Research and Innovation Services, Office of Research Ethics, and Information Technology Services

It is well recognized that the current RDM strategy is only the first step in developing institutional supports and services that enable research data management practices at the University of Windsor. In order to address the needs of the research community, there needs to be continued investment into research data management. Key stakeholders, including the Leddy Library, the Office of Research and Innovation Services, Information Technology Services, as well as the Research Ethics Board will continue their ongoing collaborative efforts to understand the needs of staff and faculty and to coordinate and deliver services to support research data management. Building on the consultation process from the development of this strategy, there will be continued conversations with the University of Windsor community which will inform the priorities and initiatives that will follow. It will be essential that education and training be continuous. It is anticipated that as research data management supports mature, processes, procedures, and policies will be developed.

The University of Windsor has RDM expertise and resources across and within various units across campus, including the Leddy Library, Research Ethics, Information Technology Services, Office of Research and Innovation Services, and individual Faculties, departments, and research institutes. It is recognized that a coordinated, unified approach to RDM support and communications would be beneficial. Additionally, research data management is a dynamic field requiring constant skill up grading to stay up to date. In addition to ensuring the development of RDM skills and knowledge practices among staff who support and conduct research, there also must be commitment to ensure appropriate staffing for research data management services such as data management planning, data security services, and data stewardship.

# Stakeholders

The following list reflects both established as well as to be formalized partnerships with envisioned RDM stakeholders.

* The Leddy Library
* Office of Research and Innovation Services (ORIS)
* Office of the Vice-President, Research & Innovation
* University of Windsor Research Ethics Board (REB)
* Information Technology Services (ITS)
* Senior Advisor to the President on Indigenous Relations and Outreach
* University administrators, including Associate Deans, Research
* Faculty researchers
* Graduate and undergraduate students
* University research institutes, centres, and collaborations[[5]](#footnote-5).
* Aboriginal Education Council
* Department of Legal Services
* University of Windsor RDM Steering Committee and University of Windsor RDM Advisory Group[[6]](#footnote-6)
* St. Clair College
* Affiliated hospitals

### Communication to Stakeholders

Communication strategies for announcing new institutional RDM policies and services will continue to utilize established forums, including University Senate, Provost Council, and official campus communication channels such as the Daily News.

# Ethics, Legal, and Commercial Considerations

### Ethical Considerations

Research projects involving humans, their data and/or biologicals, undergo proportional review by the University of Windsor’s Research Ethics Board (REB) depending on risk level. They are either reviewed at an executive, delegated, or full board level by either the Socio-behavioural Board or the Biomedical Board. The REB in consultation with the Leddy Library has developed and incorporated data management questions on the main application form, which consider the ethical treatment of the research data, but do not replace a data management plan. We will also leverage guidance developed by the Digital Research Alliance of Canada, for example, the Sensitive [Data Toolkit for Researchers Part 2: Human Participant Research Data Risk Matrix](https://zenodo.org/record/4088954#.YtV2XXbMK5c).

Informing the REB oversight, the [Chapter 9 of the TCPS](https://ethics.gc.ca/eng/tcps2-eptc2_2018_chapter9-chapitre9.html) provides considerations in research involving First Nations, Inuit, and Métis Peoples of Canada. The University of Windsor recognizes that a distinctions-based approach is needed to ensure that the unique rights, interests and circumstances of the First Nations, Métis and Inuit are acknowledged, affirmed, and implemented (Tri-Agency RDM Policy, Government of Canada 2021). Additionally, the Aboriginal Education Centre and the Office of the Vice President Equity, Diversity, and Inclusion (OVPEDI), and Senior Advisor to the President on Indigenous Relations and Outreach supports researchers collaborating with Indigenous Peoples and organizations and provide advice in relation to funding and ethics applications that focus on Indigenous-related research. In addition to complying with Tri-Agency best practices and the Institution’s research ethics process, the University of Windsor consults with Indigenous experts to inform wise practices in research by and with Indigenous groups, such as the application of the four Rs of Respect, Relevance, Reciprocity, and Responsibility: Respecting Indigenous Peoples for who they are, ensuring *relevance* to their view of the world, offering r*eciprocity* in their relationships with others, and assisting to exercise *responsibility* over their own lives (Kirkness & Barnhardt, 2001[[7]](#footnote-7)).

### Cybersecurity and Data Security Considerations

The RDM Strategy will follow applicable University policies and best practices for data security and cybersecurity with respect to the storage of data and general infrastructure required to support research. All research agreements will need to take into account University security considerations where possible.

### Legal and Commercial Considerations

The RDM Strategy will adhere to applicable collective agreements and the policies and procedures of the University of Windsor.  All research agreements will ensure that they will be construed and governed by the applicable jurisdiction and will consider commercial considerations where applicable.

### Data Sovereignty and RDM with First Nations, Métis, and Inuit People and Communities

The University of Windsor respects that First Nations, Métis, and Inuit (Indigenous) communities have not benefited from, or had access to, research which uses Indigenous data, and that this perpetuates harm and further stigmatizes Indigenous Peoples. Indigenous communities themselves must prioritize the collection, use and analysis of Indigenous research data, as well as ensure research data meets the needs and values of Indigenous communities. Initiatives arising from this strategy will promote and ensure that Indigenous people control what and how data is collected about them, and how such data is shared. This work will be guided by the Indigenous Scholars and Indigenous communities, as well as the guidance provided by the TCPS2 Chapter 9 (Research Involving the First Nations, Inuit, and Métis Peoples of Canada). Ongoing consultation with Indigenous scholars at the University of Windsor continues to inform and guide the research data management strategy.

In response to the historic under-representation of Indigenous peoples in leadership roles on campus, the University allocated five tenure-track faculty positions for the appointment of Indigenous scholars. In keeping with the findings of the Truth and Reconciliation Commission and the Universities Canada Principles of Indigenous Education, the University of Windsor also established the President’s Indigenous Peoples Scholars Program. In January 2022, the University appointed Dr. Beverly Jacobs as Senior Advisor to the President on Indigenous Relations and Outreach at the University of Windsor. Dr. Jacobs’ appointment is a vital step to the University’s commitment to respectful collaboration with Indigenous faculty, students, and communities, as well as the University’s commitment to truth and reconciliation. In addition to this vital role, multiple Indigenous Knowledge Keepers have been hired at the University. Indigenous Research Forums will be held in 2023 to educate the campus community on the nature and meaning of Indigenous research and data.

The University of Windsor also recognizes that Tri-Agency funded researchers working with data involving Indigenous peoples should develop data management plans which are jointly developed and approved by the communities representing those engaged in the research activities. There is also clear recognition by the University that individual Indigenous communities have developed, or are developing, their own research ethics protocols, data management principles, research data governance models, and Indigenous data sovereignty frameworks which need to be respected and followed.

# Relevant Policies and Guidelines for RDM

As the University of Windsor moves ahead in formalizing its RDM services, existing internal University policies and guidelines relating to research data will become aligned according to RDM best practices.

It is anticipated that as work in this area continues to evolve, additional policies may be developed, including policies relating to data security, confidentiality, deposit, administrative data retention, and RDM workflow guidance.

The University will also collaborate with, and leverage, RDM existing and developing policies from regional, national, and international groups—including the Digital Research Alliance of Canada, CAUBO[[8]](#footnote-8), CARA[[9]](#footnote-9) and CARL[[10]](#footnote-10). See Appendix 3 for a synthesis of internal, external, and future envisioned policies and guidelines.

# Looking Ahead

It is well recognized that the current RDM strategy is only a first step in identifying institutional supports and services which enable research data management practices at the University of Windsor. To address the needs of the research community, there needs to be continuous evolution and investment.

Assessing the evolving RDM needs of the University will be an ongoing process to identify and address gaps in supports, as well as to identify new and emerging needs. The RDM processes and supports needed by the campus research community will be continually assessed to identify areas where improvements may be required and this feedback will support the implementation of a fulsome Research Data Management framework at the University of Windsor

The University of Windsor will continue to collaborate with its institutional stakeholders as well as provincial, national, and international entities supporting RDM, including the Digital Research Alliance of Canada. The Tri Agency will continue to play a key role in clarifying expectations and providing guidance and resources.

The institutional Research Data Management Strategy will need to be followed by concentrated effort, resource investment, and shared responsibility. Implementation of RDM policies, supports, and services at the University of Windsor will continue over many years. It is anticipated that the focus of the first two years will be ensuring an understanding of researcher needs and delivering strong early successes. The focus will then shift to building stronger infrastructure and solutions, with the goal of advancing and expanding campus expertise.

Appendices

Appendix 1

RDM-Related Definitions

Administrative data (including university institutional data)

* Information collected primarily for institutional administrative purposes, and not for the purpose of research. This includes profiles and curriculum vitae of researchers, the scope and impact of research projects, funding, citations, and research outcomes. This type of data is collected by government departments and other organizations for the purposes of registration, transaction and record keeping, usually during the delivery of a service[[11]](#footnote-11).

CARE Principles for Indigenous Data Governance

* Collective Benefit: Data ecosystems shall be designed and function in ways that enable Indigenous Peoples to derive benefit from the data
* Authority to Control: Indigenous Peoples’ rights and interests in Indigenous data must be recognised and their authority to control such data be empowered. Indigenous data governance enables Indigenous Peoples and governing bodies to determine how Indigenous Peoples, as well as Indigenous lands, territories, resources, knowledges, and geographical indicators, are represented and identified within data.
* Responsibility: Those working with Indigenous data have a responsibility to share how those data are used to support Indigenous Peoples’ self-determination and collective benefit. Accountability requires meaningful and openly available evidence of these efforts and the benefits accruing to Indigenous Peoples.
* Ethics: Indigenous Peoples’ rights and wellbeing should be the primary concern at all stages of the data life cycle and across the data ecosystem.

Data Management Plan (DMP)

* A document that may be prepared as a prelude to conducting research involving the collection or processing of data.
* The data management plan details how data will be managed over the lifetime of a given research project and preserved after the project is completed.
* Researchers may be required to submit data management plans as parts of applications for funding. The plan explains how the research team will collect, document, and preserve their data. A data management plan is simply a part of the research proposal package that demonstrates that the researcher has a sensible plan for managing their data.

Indigenous Data Sovereignty

* Indigenous data sovereignty refers to the right of Indigenous peoples to control data from and about their communities and lands, articulating both individual and collective rights

First Nations Principles of OCAP® (Ownership, Control, Access, Possession)

The First Nations principles of OCAP establish how First Nations’ data and information will be collected, protected, used, or shared.

* **Ownership** refers to the relationship of First Nations to their cultural knowledge, data, and information. This principle states that a community or group owns information collectively in the same way that an individual owns his or her personal information.
* **Control** affirms that First Nations, their communities, and representative bodies are within their rights to seek control over all aspects of research and information management processes that impact them. First Nations control of research can include all stages of a particular research project-from start to finish. The principle extends to the control of resources and review processes, the planning process, management of the information and so on.
* **Access** refers to the fact that First Nations must have access to information and data about themselves and their communities regardless of where it is held. The principle of access also refers to the right of First Nations’ communities and organizations to manage and make decisions regarding access to their collective information. This may be achieved, in practice, through standardized, formal protocols.
* **Possession** While ownership identifies the relationship between a people and their information in principle, possession or stewardship is more concrete: it refers to the physical control of data. Possession is the mechanism by which ownership can be asserted and protected.

Indigenous research

* ‘Indigenous research’ is "research in any field or discipline that is conducted by, grounded in or engaged with First Nations, Inuit, Métis or other Indigenous nations, communities, societies or individuals, and their wisdom, cultures, experiences or knowledge systems, as expressed in their dynamic forms, past and present. Indigenous research can embrace the intellectual, physical, emotional and/or spiritual dimensions of knowledge in creative and interconnected relationships with people, places, and the natural environment.”[[12]](#footnote-12)

Research Data

* Data created or generated as part of a research project. Research data takes many forms and may include numeric data, instrument readings, models, text, transcripts, images, video, and audio

Research Data Management (RDM)

* + An umbrella term that describes the activities researchers perform when they collect, manage, store and archive research data
	+ Good research data management means collecting, documenting, backing up and preserving data in a way that facilitates reproducible research, data security, and long-term usability of data

Appendix 2

Tentative Timeline RDM Strategy Review Process by Research and Leadership Communities

|  |  |
| --- | --- |
| **Reviewing Entity** | **Tentative Dates** |
| University RDM Steering Committee  | December 2022 |
| University RDM Advisory Group   | December 2022 |
| Consultation with Indigenous Scholars  | December 2022, ongoing |
| Online university-wide consultation form | January 23, 2023 |
| Executive Leadership Team | January 26, 2023 |
| Associate Dean, Research consultation (virtual) | February 14, 2023 |
| Deans Council  | February 15, 2023 |
| Submission and posting Institutional Strategy for RDM | March 1, 2023 |
| The Senate – for information   | March 2023 |
| Board of Governors – for information   | March 2023 |
| Tentative: Guest Speaker from Tri-Council | Spring 2023 |

Appendix 3

Internal, External and Future Envisioned Policies and Guidelines Relating to RDM

## Existing Internal Policies and Guidelines

* [Canada Research Chairs Equity, Diversity & Inclusion Action Plan (Section 3)](https://www.uwindsor.ca/research-innovation-services/sites/uwindsor.ca.research-innovation-services/files/crc-edi_action_plan_updated_september_27_2019_final.pdf)
* [Electronic Device Security Policy](https://lawlibrary.uwindsor.ca/Presto/content/Detail.aspx?ctID=OTdhY2QzODgtNjhlYi00ZWY0LTg2OTUtNmU5NjEzY2JkMWYx&rID=MTIz&qrs=RmFsc2U=&q=KFVuaXZlcnNpdHlfb2ZfV2luZHNvcl9DZW50cmFsX1BvbGljaWVzLkFsbFRleHQ6KGVuY3J5cHRpb24pKQ==&ph=VHJ1ZQ==&bckToL=VHJ1ZQ==&rrtc=VHJ1ZQ==)
* [Faculty Collective Agreement Article 60, Ethical Conduct of Research (60:05 Data)](https://www.wufa.ca/article-96/article-60-ethical-conduct-of-research)
* [Guidelines for Research Involving Humans](https://lawlibrary.uwindsor.ca/Presto/content/Detail.aspx?ctID=OTdhY2QzODgtNjhlYi00ZWY0LTg2OTUtNmU5NjEzY2JkMWYx&rID=MTE4&qrs=RmFsc2U=&q=KFVuaXZlcnNpdHlfb2ZfV2luZHNvcl9DZW50cmFsX1BvbGljaWVzLkFsbFRleHQ6KHJlY29yZHMgbWFuYWdlbWVudCkp&ph=VHJ1ZQ==&bckToL=VHJ1ZQ==&rrtc=VHJ1ZQ==)
* [IT Risk Management and Assessment Policy](https://lawlibrary.uwindsor.ca/Presto/content/Detail.aspx?ctID=OTdhY2QzODgtNjhlYi00ZWY0LTg2OTUtNmU5NjEzY2JkMWYx&rID=MTI2&qrs=RmFsc2U=&q=KFVuaXZlcnNpdHlfb2ZfV2luZHNvcl9DZW50cmFsX1BvbGljaWVzLkFsbFRleHQ6KHNlY3VyaXR5KSk=&ph=VHJ1ZQ==&bckToL=VHJ1ZQ==&rrtc=VHJ1ZQ==)
* [Open Access Policy](https://lawlibrary.uwindsor.ca/Presto/content/Detail.aspx?ctID=OTdhY2QzODgtNjhlYi00ZWY0LTg2OTUtNmU5NjEzY2JkMWYx&rID=NDg=&qrs=RmFsc2U=&q=KFVuaXZlcnNpdHlfb2ZfV2luZHNvcl9DZW50cmFsX1BvbGljaWVzLkFsbFRleHQ6KCJvcGVuIGFjY2VzcyIpKQ==&ph=VHJ1ZQ==&bckToL=VHJ1ZQ==&rrtc=VHJ1ZQ==)
* [Policy on Responsibilities of Principal Investigators](https://lawlibrary.uwindsor.ca/Presto/content/Detail.aspx?ctID=OTdhY2QzODgtNjhlYi00ZWY0LTg2OTUtNmU5NjEzY2JkMWYx&rID=MzAx&inr=VHJ1ZQ==&dc=YWRk&rrtc=VHJ1ZQ==&bckToL=)
* [Research Integrity and Responsible Conduct of Research Policy](https://lawlibrary.uwindsor.ca/Presto/content/Detail.aspx?ctID=OTdhY2QzODgtNjhlYi00ZWY0LTg2OTUtNmU5NjEzY2JkMWYx&rID=MTUy&qrs=RmFsc2U=&q=KFVuaXZlcnNpdHlfb2ZfV2luZHNvcl9DZW50cmFsX1BvbGljaWVzLkFwcHJvdmVyPSgiUmVzZWFyY2ggJiBJbm5vdmF0aW9uLCBWUCIpKQ==&qcf=OTdhY2QzODgtNjhlYi00ZWY0LTg2OTUtNmU5NjEzY2JkMWYx&ph=VHJ1ZQ==&bckToL=VHJ1ZQ==&rrtc=VHJ1ZQ==)

## Future Envisioned Internal Policies, Processes, and Guidelines

* Administrative/institutional records and data policy
* Data confidentiality
* Data deposit
* Data quality and standards
* Data security
* RDM workflow documentation

## External Policies and Guidelines

* [Bill C-15: An Act respecting the United Nations Declaration on the Rights of Indigenous Peoples](https://parl.ca/DocumentViewer/en/43-2/bill/C-15/first-reading), Government of Canada
* [CARE Principles for Indigenous Data Governance](https://www.gida-global.org/care), Global Indigenous Data Alliance
* CIHR Research Data Management [Learning Module](https://cihr-irsc.gc.ca/lms/e/app-rdm-mod1/), Government of Canada
* [National Inuit Strategy on Research](https://www.itk.ca/national-strategy-on-research-launched/), Inuit Tapiriit Kanatami
* [Principles of Ethical Métis Research](https://achh.ca/wp-content/uploads/2018/07/Guide_Ethics_NAHOMetisCentre.pdf), National Aboriginal Health Organization Métis Centre
* [SSHRC Research Data Archiving Policy](https://www.sshrc-crsh.gc.ca/about-au_sujet/policies-politiques/statements-enonces/edata-donnees_electroniques-eng.aspx), Government of Canada
* [The First Nations Principles of](https://fnigc.ca/ocap-training/) OCAP, First Nations Information Governance Centre
* [Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2)](https://ethics.gc.ca/eng/policy-politique_tcps2-eptc2_2018.html), Government of Canada
* [Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2) Chapter 9](https://ethics.gc.ca/eng/tcps2-eptc2_2018_chapter9-chapitre9.html), Government of Canada
* [Tri-Agency Framework: Responsible Conduct of Research](https://rcr.ethics.gc.ca/eng/framework-cadre.html), Government of Canada
* [Tri-Agency Research Data Management Policy](https://www.science.gc.ca/eic/site/063.nsf/eng/h_97610.html), Government of Canada
* [Tri-Agency Statement of Principles on Digital Data Management](https://www.ic.gc.ca/eic/site/063.nsf/eng/h_83F7624E.html), Government of Canada
1. The Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council (NSERC) and the Social Sciences and Humanities Research Council (SSHRC) [↑](#footnote-ref-1)
2. The RDM Steering committee was formed in 2017 and includes: the Office of Research and Innovation Services, Leddy Library, Information Technology Services, and the Research Ethics Board. The RDM Steering committee meets monthly and the committee’s primary purpose has been to develop the institutional RDM Strategy. [↑](#footnote-ref-2)
3. Tri Agency grants requiring DMPs are updated here: https://science.gc.ca/eic/site/063.nsf/eng/h\_547652FB.html [↑](#footnote-ref-3)
4. Since January 1, 2008, recipients of CIHR funding have had to comply with the limited data deposit requirements included in the Tri-Agency Open Access Policy on Publications. They must continue to comply with these requirements, which are specific to bioinformatics, atomic, and molecular coordinate data. [↑](#footnote-ref-4)
5. Comprehensive listing: <https://www.uwindsor.ca/vp-research/344/centres-and-collaborations> [↑](#footnote-ref-5)
6. The University Research Data Management Advisory Groupwas created in April 2021 and provides strategic advice to the University Research Data Management Steering Committee in its work to develop an institutional RDM strategy as required by the Canadian Tri-Council. The Advisory Group is composed of the research community representing a variety of academic disciplines of the university and research institutes, along with members of the campus RDM Steering Committee, Office of Research and Innovation Services, Leddy Library, Information Technology Services, and the Research Ethics Board. [↑](#footnote-ref-6)
7. Kirkness, V.J. & Barnhardt, R. (2001). First Nations and higher education: the four R's, respect, relevance, reciprocity, responsibility. In [Knowledge across cultures : a contribution to dialogue among civilizations.](https://sfu-primo.hosted.exlibrisgroup.com/permalink/f/usv8m3/01SFUL_ALMA21145784250003611) [↑](#footnote-ref-7)
8. Canadian Association of University Business Officers (CAUBO): https://www.caubo.ca/ [↑](#footnote-ref-8)
9. Canadian Association of Research Administrators (CARA): https://www.cara-acaar.ca/ [↑](#footnote-ref-9)
10. Canadian Association of Research Libraries (CARL): https://www.carl-abrc.ca/ [↑](#footnote-ref-10)
11. Digital Research Alliance of Canada. Glossary of Terms for Sensitive Data used for Research Purposes: https://zenodo.org/record/4060159#.YtV0eHbMK5c [↑](#footnote-ref-11)
12. Social Sciences and Humanities Research Council [Definition of Terms](https://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/definitions-eng.aspx#a11), Government of Canada 2021. [↑](#footnote-ref-12)