Policy No. & Title: A201: SCHOLARSHIP, RESEARCH, AND CREATIVE ACTIVITY

Policy Sponsor: Dean, Centre for Research & Innovation

Effective: 2023 01 04
Next Review: 2028 01 04

Approvals: 2005-06-01/AC-04-09; 2009-11-04/AC-09-03; 2015-05-27/President; 2023-01-04

### 1. PURPOSE

The purpose of this policy is to establish the criteria within which College employees, students, and associated individuals may engage in Scholarship, Research, and Creative Activity at Fanshawe College and support research guidelines set by the Postsecondary Education Quality Assessment Board for academic research and guidelines set by the Tri-Agency Council and other funding bodies for funded research.

## 2. **DEFINITIONS**

*Scholarship:* The pursuit, creation and dissemination of knowledge. Includes four types as proposed by Ernest Boyer:

- 1. Scholarship of Discovery includes original research that advances knowledge
- 2. Scholarship of Integration includes synthesis of information across multiple disciplines, across topics within disciplines or across time
- 3. Scholarship of Application involves application of disciplinary expertise with results that can be shared externally
- 4. Scholarship of Teaching and Learning examines pedagogy, teaching practices (including their implementation in the classroom and their impacts upon student learning), technological enhancements to teaching, and all aspects of student learning and engagement in higher education.

*Research:* The systematic investigation into and study of materials, sources, and people in order to establish facts and reach new conclusions.

Applied Research: Applied Research includes any original investigation, undertaken to acquire new knowledge, or to apply existing knowledge in a novel way, directed primarily towards a specific practical aim or objective. Ideas are developed into operational form to produce new prototype products, devices, processes, systems, and services or to substantially improve those already produced or installed. New knowledge acquired from applied research often has specific commercial objectives.

*Basic Research:* Also known as Fundamental or Academic Research, this is typically curiosity-driven and, while possible, is usually not intended to yield immediate commercial benefits. Basic research is more often motivated by a desire to expand knowledge and, unlike Applied Research, may not necessarily result in an invention or a solution to a practical problem.

*Creative Activity:* In the context of this policy, this refers to the process of research leading to creative products and the active participation in one's discipline or in interdisciplinary work.



## 3. POLICY

The College supports Scholarship, Research, and Creative Activity in order to enhance and enrich its primary mission to provide pathways to success, an exceptional learning experience, and a global outlook to meet student and employer needs. Through innovative programming, diverse research activities, and entrepreneurial opportunities, Fanshawe is responsive to provincial research which attests that fostering the success of staff and students will, in turn, bring societal and economic benefit to the province (Intellectual Property in Ontario's Ecosystem). These Scholarship, Research, and Creative Activities are managed and directed by this Policy in order to both ensure quality and integrity and mitigate any associated risks.

## 3.1. <u>Scope</u>

This policy applies to all internally or externally funded and non-funded research activity associated with Fanshawe College that is conducted and/or supported by faculty, students, administrative employees, and support staff employees.

## 3.2. Principles

- 3.2.1. The College endeavours to enhance its integrated culture of research.
- 3.2.2. The College acknowledges risks associated with Scholarly, Research, and Creative Activity and mitigates these risks through processes and procedures that adopt the ethical and legal best practices and requirements.
- 3.2.3. The College acknowledges the outcomes of Scholarship, Research, and Creative Activity and manages the dissemination and preservation of these results with integrity and confidentiality.

## 3.3. Administration

- 3.3.1. The Policy Sponsor establishes and maintains standards and procedures applicable to employees and others who engage in Scholarship, Research, and Creative Activity and that achieve the objectives of this policy to the satisfaction of the College and applicable external funding agencies.
- 3.3.2. Associated addenda to this policy may be amended by authority of the Policy Sponsor.
- 3.3.3. Nothing in this Policy is intended to prevent a complainant from using the grievance procedure available in the collective agreement, if applicable.

### 4. REFERENCES

A205: Intellectual Property

Postsecondary Education Quality Assessment Board

Tri-Agency Council

### 5. ADDENDA

Standard 1: ACADEMIC FREEDOM
Standard 2: RESEARCH INTEGRITY

Standard 3: RESEARCH INVOLVING HUMAN SUBJECTS OR ANIMALS

Standard 4: FUNDED RESEARCH

Standard 5: RESEARCH DATA MANAGEMENT

Procedure A: RESEARCH INTEGRITY COMPLAINTS

-0-0-0-

Policy No. & Title: A201: SCHOLARSHIP, RESEARCH, AND CREATIVE ACTIVITY

Addendum: Standard 1: ACADEMIC FREEDOM

Policy Sponsor: Dean, Centre for Research & Innovation

Effective: 2023 01 04

#### PURPOSE

This document defines the rights, obligations and limitations related to Academic Freedom when applied to Scholarly, Research and Creative Activity conducted by Fanshawe College faculty members in the course of their academic appointment, and those researchers and persons who are similarly authorized in writing by the College for the purposes of research and investigative endeavours. The rights and benefits described only apply within the context of this Policy.

## 2. **DEFINITIONS**

Academic Freedom: In the context of this policy, the right to enquire about, investigate without restriction, pursue controversial issues and speak freely about scholarship issues without fear of impairment to position or other reprisal.

### 3. STANDARDS AND GUIDELINES

- 3.1. Scholarship is an integral element and essential function at Fanshawe College. Faculty members are encouraged to engage in research and scholarship in order to generate new knowledge, to evaluate, apply and extend knowledge and to express new ideas.
- 3.2. Academic Freedom generally refers to the ability of a faculty member to engage freely and openly in scholarly, research, and creative activities. It includes the right to question and challenge traditional norms, and the freedom to define research questions, to pursue answers to those questions by way of unrestricted but proper investigative techniques and to disseminate the knowledge gained to students, academic colleagues and society as a whole. Academic Freedom does not require neutrality on the part of the individual; rather, the expectation for Academic Freedom is to make intellectual scholarship, discourse and critique possible without reprisal or repression by the institution, the government or any other person or entity.
- 3.3. Academic Freedom is not absolute. Individual members of institutions are limited by the degree of autonomy available to the institution, and are subject to legal parameters, professional requirements and peer review. The autonomy of an Ontario college is limited by statute, the College's charter, policies established by the Government of Ontario, ethical review boards and oversight committees.
- 3.4. Academic Freedom, as appropriate to an individual's college appointment, implies protection of the individual by the College from pressure intended to censure or restrict such individual from otherwise pursuing Scholarly and Applied Research interests and communicating the results thereof to students, academic colleagues and the community at large. In this context, individuals are entitled to freedom in research and inquiry and in the publication or dissemination of the results, subject to the adequate performance of their other academic duties.
- 3.5. Academic Freedom also has corresponding obligations, which include a high degree of respect for evidence; integrity in the research in accordance with the conventions of the discipline; impartial reasoning; and honesty in reporting both the underlying assumptions and the results of the inquiry.
- 3.6. Within its means, Fanshawe College seeks to provide the opportunities, infrastructure, facilities and Academic Freedom necessary to support and maintain a high level of scholarship.



- 3.7. Research and scholarship are conducted ethically and in ways that fully respect human rights as defined in law. Individuals are expected to use their right for Academic Freedom responsibly, with respect for the rights of others and in a manner that is appropriate to and consistent with the individual's College appointment.
- 3.8. College faculty members and researchers are members of an educational institution whose special position in the community imposes unique obligations. As a group, they must be cognizant of their position as institutional representatives. When such persons exercise their rights for Academic Freedom in research or through individual rights as independent citizens, they should be free from institutional censorship or discipline, but must nonetheless recognize that the public may judge not their personal credibility but also their professions and affiliated institution by statements, publications or public pronouncements. Hence, faculty and researchers shall be accurate; shall exercise appropriate respect for the opinions of others; and shall clearly indicate whether they are presenting personal rather than institutional views, as the former opinions clearly fall outside the purview of rights associated with Academic Freedom.
- 3.9. Academic Freedom in research does not confer legal immunity from either civil action or from criminal prosecution, whether from a claim in damages by a Third Party or by seeking of indemnification and recovery by the College. Nor does it prevent peer evaluation as conducted or approved by the College or by other academic, research or professional bodies in the researcher's field, whether within or outside the College.
- 3.10. All members of the Fanshawe College community who are engaged in research activity in the course of their academic appointment or who are otherwise authorized in writing by the College for purposes of research and investigative endeavours as governed by this policy are individually accountable to comply with this policy. The College takes appropriate action for breach of this policy.

### 4. RELATED DOCUMENTS

P207: Employee Code of Conduct Academic Collective Agreement

-0-0-0-



Policy No. & Title: A201: SCHOLARSHIP, RESEARCH, AND CREATIVE ACTIVITY

Addendum: Standard 2: RESEARCH INTEGRITY

Issued by: Dean, Centre for Research & Innovation

Effective: 2023-01-04

#### 1. PURPOSE

The purpose of this document is to encourage the highest standards of integrity and of professional and ethical conduct from all individuals involved in Research, Scholarly and Creative Activity at the College, and to provide a means to address concerns that may arise relating to responsibility and accountability in such activities.

### 2. SCOPE

These provisions apply to employees of the College, students enrolled in the College who are partaking in research, or anyone else engaged in research in or for the College in any capacity whatsoever. They apply equally to all projects, both those led by the College and those led by other institutions in which College employees or students are participants.

### 3. **DEFINITIONS**

Misconduct in Research: The intentional violation of professional standards in the performance of research, scholarly and creative activities. This may be fabrication or falsification of research data, theft of ideas or intellectual property, failure to acknowledge the contribution of others, unauthorized use of unpublished works, abuse of supervisory power, financial misconduct, material failure to comply with relevant provincial or federal regulations or college policies, failure to comply with safety guidelines, and failure to reveal any material conflict of interest.

## 4. STANDARDS AND GUIDELINES

Fanshawe College expects that its staff and students maintain the highest ethical and scientific standards of academic integrity in the conduct of research in accordance with the standards established in this policy. Researchers are responsible for conducting their research in strict observance of ethical standards. Honest error, conflicting data or differences in interpretation or assessment of data, or of experimental design are recognized as being intrinsic to the process of research. However, academic dishonesty, fraud or misconduct of any sort is not authorized by the College and may be cause for disciplinary action.

## 4.1. Research and Data Management (RDM)

Researchers are expected to manage and store the data that is generated as a result of research throughout the entire research life cycle. Efforts must be made to ensure accuracy and retrievability in anticipation of requests for access from other researchers, both in and outside of the Institution, as appropriate.

- 4.1.1. The Principal Investigator and all Co-Investigator(s) have access to all original data and products of the research at all times, subject to any limitations imposed by the terms of grants, contracts or other arrangements for the conduct of research.
- 4.1.2. Efforts must be made to ensure data security and the provision of access to authorized researchers only (e.g. to research assistants and research partners).
- 4.1.3. Disclosure of research data and results is not to be made without the knowledge and authorization of the Principal Investigator, unless there is an Agreement or Policy stipulating otherwise.

- 4.1.4. In no instance is primary data destroyed while investigators, colleagues or readers of published results may raise questions answerable only by reference to the data.
- 4.1.5. Entitlement to ownership, copyright, reproduction, publication and moral rights of primary data, software and other research results and products varies according to the circumstances under which research is conducted and is subject to A205: Intellectual Property. Ownership is clarified among collaborators, supervisors, students, funders and the College before the research is undertaken.
- 4.1.6. Issues of confidentiality in research are appropriately addressed by the department or organizational unit involved. Where research involves human subjects, Standard 3: Research Involving Human Subjects or Animals applies.
- 4.1.7. In situations where the College and/or an Industry Partner owns the Intellectual Property of a research project, the Principal Investigator must plan for the safekeeping of records, data, and products of research upon leaving the College. A Principal Investigator should consult with the Centre for Research & Innovation to ensure that they have met contractual, legal or statutory requirements. Refer to Guideline A of the policy A205: Intellectual Property for detailed information regarding ownership.

## 4.2. Authorship

- 4.2.1. In order to ensure the publication of accurate reports, two requirements are mandatory:
  - 4.2.1.1. The active participation of each author in verifying and taking responsibility for the part of the manuscript that they have contributed to; and
  - 4.2.1.2. The designation of one author who is responsible for the validity of the entire manuscript.
- 4.2.2. The principal criterion for authorship is that the author(s) have made a significant intellectual and/or practical contribution. The concept of "honorary authorship" is unacceptable. Students are given appropriate recognition for authorship or collection of data in any publication.
- 4.2.3. Funding contributions do not constitute authorship.
- 4.2.4. All considerations of authorship must comply with policy A205: Intellectual Property.

## 4.3. Responsible Conduct for Research

Researchers and scholars are responsible for applying the following ethical practices:

- 4.3.1. Recognizing the substantive contributions of collaborators and students; using unpublished work of other researchers and scholars only with permission and with due acknowledgement; and using archival material in accordance with the rules of the archival source;
- 4.3.2. Obtaining the permission of the author before using new information, concepts or data originally obtained through access to confidential manuscripts or applications for funds for Research or training that may have been seen as a result of processes such as peer review;
- 4.3.3. Using scholarly and scientific rigor and integrity in obtaining, recording and analyzing data, and in reporting and publishing results;
- 4.3.4. Ensuring the authorship of published work includes all those who have materially contributed to, and share responsibility for, the contents of the publication, and only those people;
- 4.3.5. Revealing to sponsors, universities, journals or funding agencies, any material conflict of interest, financial or other, that might influence their decisions on whether the individual should be asked to review manuscripts or applications, test products or be permitted to undertake work sponsored from outside sources;

- 4.3.6. Utilizing finances of funded work appropriately (i.e. for designated purpose), as per college policies and/or requirements of a funding body; and
- 4.3.7. In the case of research involving human subject or animals, adhering to the Tri-Council Policy Statement "Ethical Conduct for Research Involving Humans" and obtaining Research Ethics Board approval referenced below.

## 4.4. Responsibilities of Research Project Leads/Principal Investigators

Individuals who operate as Research Project Leads and/or Principal Investigators are expected:

- 4.4.1. To ensure that research is conducted to the highest ethical standard and with scholarly and academic integrity;
- 4.4.2. To provide their collaborators, students, staff and assistants with all reasonable information necessary to prevent misconduct as defined in this policy;
- 4.4.3. To monitor the work of students, research assistants, and others, and oversee the designing of research methodology and the processes of acquiring, recording, examining, interpreting and storing data. Simply editing the results of a research project does not constitute supervision;
- 4.4.4. To hold regular collegial discussions among all research personnel in a research unit to contribute to the scholarly efforts of group members and to provide informal review; and
- 4.4.5. To verify the authenticity of all data or other factual information generated in the research.
- 4.4.6. To ensure that any material requested for monitoring and reporting by CR is provided in a timely manner.
- 4.4.7. To develop a plan for the management, storage and sharing of research data. Refer to Standard 5: Research Data Management for more information.

## 4.5. College Responsibilities

The College promotes the understanding of research ethics and integrity issues through distribution of the research policies and workshops for the College community. Specifically, the College:

- 4.5.1. Promotes and supports integrity in research, including the provision of appropriate infrastructure and supports; and
- 4.5.2. Investigates possible instances of misconduct in research and, where necessary, imposes appropriate sanctions in accordance College policies, and informs the appropriate Council(s) of conclusions reached and actions taken.
- 4.5.3. The Dean, Centre for Research & Innovation:
  - 4.5.3.1. Initiates activity to promote this policy and educate researchers on its application; and
  - 4.5.3.2. Acting on behalf of the Senior Vice-President, Academic, develops and maintains procedures for the investigation and resolution of alleged breach of this policy. Such procedures meet the current requirements of the Canada's research granting agencies, are attached to this policy and posted in the College Policy Manual as Procedure A: Research Integrity Complaints.

#### 4.5.4. Conflict of Interest

College Policy P207: Employee Code of Conduct outlines situations where conflict of interest may arise. Members of the College community engaged in Research, Scholarly, and Creative Activity are expected to understand and abide by that policy, and to disclose and seek appropriate guidance before embarking on activities that may create a potential conflict of interest for them.

## 5. RELATED DOCUMENTS:

5.1.1. <u>Tri-Council Policy Statement</u>

A205: Intellectual Property

P207: Employee Code of Conduct

-0-0-0-

Policy No. & Title: A201: SCHOLARSHIP, RESEARCH, AND CREATIVE ACTIVITY

Addendum: Standard 3: RESEARCH INVOLVING HUMAN SUBJECTS OR

**ANIMALS** 

Issued by: Dean, Centre for Research & Innovation

Effective: 2023-01-04

### 1. PURPOSE

The purpose of this standard is to establish ethical practices applicable to Research, Scholarly, and Creative Activity that involves human subjects or animals.

This document defines the rights, obligations and limitations related to Fanshawe faculty and students who conduct research projects involving human subjects or animals as part of a funded research project and/or coursework.

It also distinguishes between routine research activities for skill development that do not require Research Ethics Board (REB) approval, and student research projects that do require REB approval.

### 2. **DEFINITIONS**

Minimal Risk: For the purpose of this document, a "minimal risk" situation is one in which the probability and magnitude of possible harms implied by participation in the research is no greater than those encountered by the participant in those aspects of his or her everyday life that relate to the research.

Informed Consent: Permission granted in the knowledge of the possible benefits, consequences, and/or risks. At Fanshawe, Informed Consent must be freely given (i.e. without fear of reprisal for not granting consent), and is required of human subjects participating in a research project according to all accepted ethics guidelines.

## 3. STANDARDS AND GUIDELINES

This standard applies to College employees, students, contractors and persons from outside the College who are seeking to, or conducting Fanshawe College research involving human subjects or animals.

Researchers conducting Fanshawe College research involving human subjects are required to comply with the Tri-Council Policy Statement "Ethical Conduct for Research Involving Humans (TCPS2)," which is intended to achieve the Research standards required by the major granting agencies and regulatory bodies.

Researchers conducting Fanshawe College Research involving animal subjects are required to comply with the strict guidelines established under applicable federal and provincial laws, the Canadian Council on Animal Care (CCAC), and rules prescribed by agencies and organizations funding the research.

#### 3.1. Faculty Research

Faculty who wish to engage in research involving human subjects or animals must follow Research Ethics Board protocol. REB approval may be required for Funded Research and/or curriculum-Research. Review the Research Ethics Review Guidelines for Applicants (below) and connect with the REB for additional information.

## 3.2. Student Research

Students may be involved in course-based research projects involving human subjects. Norms regarding research involving human subjects require that research participants have an opportunity to provide their Informed Consent, and that the research project must be reviewed and approved by a Research Ethics Board. It is the responsibility of the supervising faculty member and student researchers to adhere to research norms, including seeking REB approval when necessary.

## Research Tactics and Techniques

Research tactics and techniques vary in scope and may be applied to *both* research projects and learning activities. Students may:

- Conduct interviews, administer standard tests, or distribute questionnaires to develop interview or questionnaire design skills.
- Research and write 'mini' research projects where students pose research questions, gather data from human participants, and analyze data for presentation or publication.
- Participate in other research activities considered research within the discipline or professional norms of the course or career program.

## Research Projects that Require REB Approval

Research projects involving human subjects differ from case studies and/or professional skill building activities. Information gathering and use of research tactics and techniques are classified as a research project requiring REB approval when:

- Student research expands existing theories and conceptual knowledge;
- Students compare new techniques, practices, programs with standard approaches to determine which is more effective;
- The results or findings are intended for dissemination through publication in a scholarly journal or academic conference presentation or other public forums;
- Primary data are collected and organized for analysis and distribution in a public forum (excluding the collection of Key Performance Indicator data by the Ministry); or,
- There is greater than minimal risk.

## Learning Activities that do NOT Require REB Approval

Learning activities are used to develop professional skills or when students apply knowledge in a clinical or workplace learning environment. Using research tactics or techniques is classified as a routine learning activity when:

- The intent is the development of professional skills and/or applying existing knowledge to practice clinical or workplace learning environment;
- The intent is to use information to provide diagnosis, identification of appropriate interventions, or advice to a client;
- The intent is to develop skills which are considered standard practice within a profession;
- The information gathering processes as part of the normal relationship between the student and the participants.

## <u>Faculty Responsibilities for Student Research</u>

• Faculty members must determine if the course work is a research activity that does not require REB approval or a research project that does require REB approval.



- Questions or clarifications concerning this standard-and/or definitions of a research project must be directed to the Fanshawe College REB Chair or designate.
- The faculty member must ensure that acceptable research ethics, standards, and practices are taught to students who engage in research-based course assignments and research projects.
- If REB approval is required, the faculty member must ensure that students submit and obtain REB approval in writing prior to the onset of research projects involving human subjects.
- The faculty member and students completing course research projects are jointly responsible for safeguarding research participants according to research norms. No more than minimal risk is acceptable for student research projects. Any research project involving greater than minimal risk must be submitted for REB approval.
- It is recommended that student learning activities model the requirements of research projects. For instance, external audiences or sample groups may be presented with consent forms.

#### 4. RELATED DOCUMENTS

<u>Tri-Council Policy Statement - Ethical Conduct for Research Involving Humans (TCPS2)</u>

**Research Ethics Review Guidelines for Applicants** 

**REB: Informed Consent** 

-0-0-0-

Policy No. & Title: A201: SCHOLARSHIP, RESEARCH, AND CREATIVE ACTIVITY

Addendum: Standard 4: FUNDED RESEARCH

Issued by: Dean, Centre for Research

Effective: 2023-01-04

#### 1. PURPOSE

The purpose of this document is to outline the standards and procedures applicable to College employees and others who engage in Funded Research and Scholarly activities. Typically, these activities are funded by grants and sponsorships separate from the primary Ministry operating grants. In order to ensure compliance, researchers are encouraged to connect with the Centre for Research & Innovation.

#### 2. **DEFINITIONS**

Funded Research: Also known as Sponsored Research, this is research funded from external sources or special internal allocations that are separate from departmental operating funds.

*Independent Research:* Research undertaken by an individual without institutional affiliation, funding, or management or support.

*Individual Research:* Research which is often administered by the College (the Centre for Research & Innovation) but the primary accountability lies with the individual (e.g. Fanshawe employee serves as Principal Investigator).

*Institutional Research:* Research that is focused on internal evaluation and program quality improvements where the primary accountability lies directly with the College and the Ministry.

Funding Proposal: An application or proposal to a potential research funder, requesting financial support for a research project, facility or equipment.

Research Funder: A party providing funding for the research project, facility or equipment, including granting agencies, foundations, private donors, government departments, corporations, municipalities, and the college itself.

Funding Agreement: A formal agreement such as research grants and research contracts, which define the rights and obligations of the funder and the recipient of the funding.

*In-kind Contribution:* A non-cash contribution which may include use of physical space, equipment or other educational resources, personnel, overhead expenses, project supervision, financial management or audit services, donated equipment, discounts on purchased goods and services having monetary value.

## 3. STANDARDS

- 3.1. Faculty, support staff and administrative employees may conduct Individual Research, or participate in Institutional Research, with the approval of their manager. In the case of funded research, the approval of the Dean, Centre for Research & Innovation is also required.
- 3.2. Institutional Research may be undertaken when and where appropriate and when deemed of value to the institution.
- 3.3. Funded Research applications related to Research and Scholarly activity follow the process specified by the Centre for Research & Innovation, and are approved by the researcher's Manager (e.g. Associate Dean) and by the Dean, Centre for Research & Innovation, prior to submitting the funding proposal for internal authorization. Funding proposals to be administered by Fanshawe College are authorized by the President or a designate prior to submission to the Funder, and name the College as the lead institution.



- 3.4. Individual Researchers are accountable to be knowledgeable of and to comply with the terms and conditions of grants and contracts, especially regarding eligible expenses.
- 3.5. Administration of research funds is a joint effort between the College and the Principal Investigator and there is shared accountability for appropriate use of and accounting for the funds or contributions received and completion of progress and financial reports. Prompt notification by Principal Investigator of project issues or concerns is essential for CR assistance or intervention. Gross misconduct such as failure on the part of Principal Investigator to provide required materials and reports to CR and conduct assigned tasks according to the terms of an agreement could result in contract default. The College may be required to refund all or part of the grant monies and could be subject to further liability or legal action. At the discretion of the Dean of CRI, and/or the Senior Vice-President Academic, and/or the Vice-President Finance and Administration, intentional misconduct and/or gross negligence on the part of a researcher (e.g., Principal Investigator, Research Associate, Research Assistant) could result in removal from a research project and disciplinary or legal action or both.

## 4. RELATED DOCUMENTS

A205: Intellectual Property

-0-0-0-

Policy No. & Title: A201: SCHOLARSHIP, RESEARCH, AND CREATIVE ACTIVITY

Addendum: Standard 5: RESEARCH DATA MANAGEMENT

Issued by: Dean, Centre for Research & Innovation

Effective: 2023-01-04

#### 1. PURPOSE

The purpose of this document is to outline the standards and procedures for data retention, retrieval, and sharing. A sound data management strategy helps to improve project efficiencies and mitigates risks including loss, corruption, or unintentional disclosure of data. Efforts must be made to ensure accuracy and retrievability of data in anticipation of requests for access from other researchers, both in and outside of the institution. The current RDM landscape is such that many journals and funders require researchers to develop a Data Management Plan and/or data deposit into a repository.

By depositing data, Fanshawe researchers contribute to open research and enabling other researchers to potentially reuse the data, replicate a study, identify errors, and/or build on the research.

#### 2. **DEFINITIONS**

Access: The continued, available for use, ongoing usability of a digital resource, retaining all qualities of authenticity, accuracy and functionality deemed to be essential for the purposes the digital material was created and/or acquired for. Users who have access can retrieve, manipulate, copy, and store copies on a wide range of hard drives and external devices.

Applied Science: The application of existing scientific and professional knowledge to develop practical applications in a scientific field (e.g., actuarial science, agriculture, biology, chemistry, forestry, meteorology, physics, planetary and earth sciences), scientific regulation, or patent.

Archiving: A curation activity that ensures that data are properly selected, stored, and can be accessed, and for which logical and physical integrity are maintained over time, including security and authenticity.

Authentication: The process of confirming the identity of an individual and specifying access rights/privileges to specific resources.

Authorized User: An individual whose identity and/or privilege to specific restricted information has been granted (see above).

Confidentiality: The duties and practices of people and organizations to ensure that individual's personal information only flows from one entity to another according to legislated or otherwise broadly accepted norms and policies.

*Data*: Data are facts, measurements, recordings, records, or observations about the world collected by researchers and others, with a minimum of contextual interpretation. Data may be in any format or medium taking the form of writings, notes, numbers, symbols, text, images, films, video, sound recordings, pictorial reproductions, drawings, designs or other graphical representations, procedural manuals, forms, diagrams, workflow charts, equipment descriptions, data files, data processing algorithms, or statistical records.

Data Anonymization: A process by which personal data is irreversibly altered in such a way that a data subject can no longer be identified directly or indirectly, either by the data controller alone or in collaboration with any other party.

*Data Curation:* The active management of research data throughout a project to produce datasets that are FAIR (Findable, Accessible, Interoperable, Retrievable).

Data Deposit: To release/submit datasets into a Repository.

Data Encryption: A process which translates data into another form, or code, so that only people with access to a secret key (encryption key) or password is able to read it, for the purpose of protecting digital data confidentiality.

*Non-identifiable Data:* Data that could not lead to the identification of a specific individual, to distinguishing one person from another, or to personally identifiable information. These may be data that have been de-identified, or that could not lead to personally identifiable information in the first place.

*Open Data:* Structured data that are accessible, machine-readable, usable, intelligible, and freely-shared. Open data can be used freely, re-used, built on, and redistributed by anyone - subject only, at most, to the requirement to attribute and share-alike.

Persistent Identifier: A persistent identifier is a long-lasting reference to a digital object that gives information about that object regardless of what happens to it.

*Principal Investigator:* The Principal Investigator (P.I.) is a researcher who has a research leadership role and is the point of contact for a project or partnership that applies the scientific method, historical method, or other research methodology for the advancement of knowledge resulting in independent, objective, high quality, traceable, and reproducible results.

Raw Data: Data that have not been processed for meaningful use. Although raw data have the potential to become "information," they require selective extraction, organization, and sometimes analysis and formatting for presentation. As a result of processing, raw data sometimes end up in a database, which enables the data to become accessible for further processing and analysis.

*Repository:* Repositories preserve, manage, and provide access to many types of digital materials in a variety of formats. A repository may be generalist or discipline specific.

Reproducible Research: Published results can be replicated using the documented data, code, and methods employed by the author or provider without the need for any additional information or needing to communicate with the author or provider.

Research Data: Primary sources to support technical or scientific enquiry, Research, Scholarship, or Creative activity, and that are used as evidence in the research process and/or are commonly accepted in the research community as necessary to validate research findings and results. All other digital and non-digital content have the potential of becoming research data. Research data may be experimental data, observational data, operational data, third party data, public sector data, monitoring data, processed data, or repurposed data.

Research Data Management: Refers to the processes applied throughout the lifecycle of a research project to guide the collection, documentation, storage, sharing, and preservation of research data.

Sensitive Data: Classified, usually private, information that must be protected and is inaccessible to outside parties unless specifically granted permission. An ethical or legal reason may warrant the need to have tougher restrictions on people who can access a person's or an organizations sensitive data, especially when it pertains to individual privacy and property rights.

### 3. STANDARDS

#### 3.1. Data Management Plan (DMP)

Principle Investigators must develop a plan towards managing research data, ideally before the data collection process. Funding agencies are increasingly expecting that grant proposals include a robust DMP. A DMP is also a criterion of Fanshawe's internal funding program (Research and Innovation Grant). The College provides free access to an online tool called the DMP Assistant.

- 3.1.1. Identify data stewardship roles and responsibilities of project members during and after the project.
- 3.1.2. Estimate and describe any required resources and potential costs for data management and long-term access to the data.



- 3.1.3. Determine if there are any legal, ethical, and intellectual property issues when managing the data. Refer to Standards 2, 3, 4 and Fanshawe's Intellectual Property Policy for more information.
- 3.1.4. Comply with applicable privacy legislation and laws, including funding and institutional requirements.
- 3.1.5. Describe how the data will be securely managed while the project is in progress and after project completion. This may include encryption of sensitive data in accordance with any ethical obligations.

### 3.2. Data Documentation

In order to deposit data in a Repository or share data with others, researchers are expected to provide supplemental information such as citation information, an explanation of survey methodology, sampling information, question context and coding, how and why derived variables were created, and more.

- 3.2.1. Consider how the data will be shared and re-used (e.g. raw data, processed data). This includes possible end-user licenses and ways others may learn about the research data.
- 3.2.2. Create documentation throughout the research project, ideally using metadata and standard classification schemes. Ideally, data should be independently understandable.
- 3.2.3. Apply the FAIR Principles. This means that scientific data in particular should be Findable, Accessible, Interoperable and Retrievable (Review the FAIR Principles for more information).
- 3.2.4. Where appropriate, the College will utilize CARE (Collective Benefit, Authority to Control, Responsibility, Ethics) and OCAP (First Nations principles of ownership, control, access, and possession) for research involving Indigenous Data Governance.
- 3.2.5. Design an organization system which will organize the research files at various stages of the project. Consider: Directory Structure, File Naming, and Versioning.

## 3.3. Data Preservation

Choosing to preserve data in a secure, reliable environment enables researchers to comply with publisher and funder requirements as well as other legal, ethical, and legislative requirements. It also mitigates future risk of lost or damaged files and provides discoverability through the use of descriptive metadata.

3.3.1. Identify potential repositories for data deposit. This may be an open repository (if appropriate) or domain-specific (requiring Authentication). There are also generalist and discipline-specific repositories. R3data.org is a searchable database of repositories, international in scope. The federated research data repository (FRDR) enables researchers to find datasets originating from researchers affiliated with Canadian institutions.

## 4. REFERENCES

Government of Canada, <u>Tri-Agency Research Data Management Policy</u>
GO FAIR, <u>FAIR Principles</u>
CARE
OCAP

## 5. RELATED DOCUMENTS

<u>Tri-Agency Statement of Principles on Digital Data Management</u>

Tri-Agency Research Data Management Policy

Policy No. & Title: A201: SCHOLARSHIP, RESEARCH, AND CREATIVE ACTIVITY

Addendum: Procedure A: RESEARCH INTEGRITY COMPLAINTS

Issued by: Dean, Centre for Research & Innovation

Effective: 2023-01-04

#### 1. PURPOSE

The purpose of this procedure is to provide for the investigation and disposition of alleged breach of this policy, including without limitation, allegations relating to:

- Misconduct in scholarly research;
- Misconduct in data collection, gathering and retention;
- Misconduct in authorship;
- Misconduct in the exercise of the responsibilities of investigators and supervisors; or
- Conflict of interest in research.

This procedure is administered by the Dean, Centre for Research & Innovation ("the Dean") acting on behalf of the Senior Vice-President, Academic.

## 2. COMPLAINT PROCEDURE

#### 2.1. The Parties

The parties to a Complaint are:

- The Complainant: An individual who alleges that there has been a breach of the policy, and
- The Respondent: An individual who is named in a complaint made pursuant to the policy as a
  person responsible for the alleged breach of the policy.

## 2.2. Time Limits

Complaints must be filed within six months of the last incidents giving rise to the complaint. In extenuating circumstances, a complaint filed beyond the six-month limitation may be considered. All other time limits prescribed in this procedure may be extended with the agreement in writing of the parties or by the Dean where reasonable circumstances exist for extending the time limits. In these circumstances, the parties will be advised of the reasons and notified of the duration of the extension.

### 2.3. Assistance for the Parties

Individuals involved in the complaint process at any stage, while not required, may seek assistance or support from, or be accompanied by, another person of their choice (for example a trusted friend, a union representative, a member of the executive of the Student Administrative Council or the College Ombuds).

When a support person will be attending any step of the process with a party to a complaint, that party must advise the Dean, in writing, at least three days in advance of any meeting, of the identity of the support person. The role of the support person is to act as a resource and provide support and advice to the party. The support person is not be permitted to speak or advocate on behalf of the party. In the event that a party chooses to retain legal counsel, or another paid advisor, as their support person, the party is solely responsible for the cost incurred. A support person is prohibited from acting in the capacity of a lawyer while attending a complaint meeting.

Where appropriate, the Dean provides complainants, respondents and others affected by the investigation with information regarding counseling services available through the College or through outside agencies.

## 2.4. Interim Measures

In certain situations, such as where the safety of an individual or the community may be at risk, it may be necessary to take immediate measures to address the circumstances. Such interim measures may include involving the College's campus security or the police, relocating the respondent or placing them on a non-disciplinary suspension pending the outcome of the investigation. The implementation of interim measures may mean that the certain aspects of this procedure, including confidentiality, are set aside.

### 2.5. Confidentiality

- 2.5.1. Confidentiality with respect to complaints is maintained to the greatest extent possible, having regard to the circumstances giving rise to the complaint and subject to the College's obligation to conduct a thorough investigation.
- 2.5.2. A complainant is not entitled to complete confidentiality or anonymity. In accordance with their responsibilities under this procedure, where an employee becomes aware of allegations of harassment or discrimination, they must take immediate action. The respondent is informed of the identity of the complainant and the particulars relating to the allegation in order to permit the respondent to make a full and meaningful response to the complaint.
- 2.5.3. Parties and witnesses keep information discussed during the complaint process confidential (aside from discussing the information with their personal advisor and close family members or partner). Unwarranted breach of confidentiality may result in disciplinary action or sanction.
- 2.5.4. Confidentiality with respect to the findings of an investigation are maintained, except to the extent necessary to implement or defend the corrective or disciplinary action taken, or as required by law.
- 2.5.5. Where corrective or disciplinary action is taken against either the complainant or the respondent, the other party is advised that action has been taken, but is not provided with the particulars of that action.
- 2.5.6. The College maintains documentation regarding corrective or disciplinary action taken.
- 2.5.7. Subject to the provisions of the Freedom of Information and Protection of Privacy Act, documentation and records pertaining to a complaint are held in strict confidence in files maintained by the Dean.

## 2.6. Stages of the Complaint Process

The following process applies to complaints made pursuant to the policy. Where the complainant so desires a complaint may be withdrawn at any time during the process described below. Depending on the circumstances, in order to comply with its legal obligations to provide an environment that is free from discrimination and harassment, the College may continue to act on an issue arising in a complaint even when it has been formally withdrawn.

## 2.6.1. Stage One - Individual Action - OPTIONAL

Anyone who believes that there has been a breach of the policy may seek assistance from the Dean at any time. The Dean shall keep such inquiries confidential. The Dean may suggest that the complainant discuss the matter with the respondent, but the complainant is not obliged to do so. The identity of the complainant is not disclosed without the agreement of the complainant.

### 2.6.2. Stage Two – Informal Resolution

If the complainant does not wish to approach the respondent, or if after speaking with the respondent the issue is not resolved, the complainant contacts the Dean.

- 2.6.2.1. A signed written complaint is made to the Dean before further action is initiated. Such a complaint is based on reasonable evidence and contains sufficient detail to enable the Dean and the respondent to understand the matter to be investigated. The identity of the complainant is not disclosed without the agreement of the complainant.
- 2.6.2.2. Anonymous allegations are not considered unless the Dean determines that there is sufficient, compelling evidence to initiate a preliminary investigation.
- 2.6.2.3. Upon receipt of a complaint, the Dean conducts an investigation into the allegation. Within ten College business days of receiving the complaint the Dean discusses the nature of the complaint, and the circumstances surrounding it, with the respondent.
- 2.6.2.4. In the event the Dean determines that the complaint is without foundation, the Dean may dismiss the complaint and immediately advise the complainant accordingly providing written justification for the decision.
- 2.6.2.5. Where, based on the information provided, an informal resolution is appropriate, the Dean may attempt such a resolution. This may take the form of the Dean meeting with the parties to act an as informal mediator, arranging for another individual to assist in the resolution of the complaint or suggesting other such actions as may be appropriate in the circumstances. If the complainant and respondent agree, such a mechanism is pursued.
- 2.6.2.6. The complaint is considered resolved through an informal process when the complainant and respondent confirm that it has been resolved to their satisfaction.
- 2.6.3. Stage Three Formal Written Complaint and Investigation

Failing informal resolution of the complaint, the complainant may submit a written and signed formal complaint to the Dean. On receipt of a written complaint, the Dean shall:

- 2.6.3.1. Within ten business days of receipt of the complaint, meet with the complainant to clarify the details of the complaint, if necessary.
- 2.6.3.2. Within ten business days of that meeting, the Dean advises the complainant if the complaint will be pursued under this procedure and if not, the reasons for not pursuing the complaint or suggesting a more appropriate forum.
- 2.6.3.3. Within ten business days of the Dean advising the complainant that the formal written complaint will be pursued under the policy, the Dean informs the respondent in writing of the complaint, provides to the respondent a copy of the complaint and the policy and this procedure, and advises the respondent to provide a written response to the allegations within ten business days.
- 2.6.3.4. Within ten business days of the Dean receiving the respondent's response, the Dean meets with the respondent if necessary, to clarify the details of the response.
- 2.6.3.5. Within 10 business days of the Dean having received all submissions and clarifications, the Dean identifies the steps to be taken to resolve the matter.
- 2.6.3.6. If the Dean deems formal mediation appropriate, it is offered to the complainant and the respondent. If the complainant and respondent both consent, the Dean arranges for a mediator. If a mediated settlement is reached, the terms of the settlement are reduced to writing and signed by the complainant, respondent and the mediator. If the settlement requires any action on the part of the College, the settlement requires the agreement of the President or designate. Discussions between the parties at mediation are carried out with a view to affecting a settlement and therefore are treated as privileged to the full extent permitted by law.

- 2.6.3.7. If mediation is not pursued or is unsuccessful, the Dean appoints an investigator and notifies the parties of the identity of the investigator.
- 2.6.3.8. The parties may make any objections to the appointed investigator to the Dean within two business days of notification of appointment. Only objections based on substantive issues such as conflict of interest or bias against a party will be considered.
- 2.6.3.9. The investigator commences the investigation within 10 business days of the date of the appointment. The Investigator:
  - Interviews the complainant and the respondent and obtains signed statements;
  - Interviews the witnesses suggested by the parties and obtains signed statements;
  - Interviews other witnesses who may provide relevant information for the investigation and obtains signed statements;
  - · Gathers written, electronic or other evidence; and

Within 45 business days from appointment, submits to the Dean a written investigation report containing a concise summary of findings.

If required, the investigator may request an extension of this time frame. The Dean advises the parties if additional time to complete the investigation and the report has been granted.

2.6.4. Stage Four – Investigation Report, Summary of Findings and Disposition

## 2.6.4.1. Disposition Meeting

Within 10 business days of receiving the investigator's report, the Dean forwards a copy of the investigation report to the President or designate and the Executive Director, Human Resources, and arranges a meeting with the President or designate, the Executive Director, Human Resources and anyone else that the Dean determines will add value to the process. The purpose of the meeting is to determine what action, if any, the College will take to bring closure to the complaint.

#### 2.6.4.2. Written Notification

Within five business days following the meeting, the Senior Vice-President, Academic or designate provides the complainant and the respondent with a written summary of the investigator's finding. Each party is advised what action, if any, that relates directly to that party, the College will be taking to bring closure to the complaint. If a party is sanctioned, the fact of sanction is communicated, but not the detail.

## 2.6.4.3. Redress and Sanctions

Where a complaint has been substantiated or where it has been determined that the complainant filed a complaint that was vexatious or made in bad faith, appropriate corrective or disciplinary action is taken by the College. Such action may include but is not limited to: an apology, counselling, education, training, suspension, leave without pay, demotion, transfer, termination of employment or expulsion.

## 2.6.4.4. Investigation Reports and Records

In cases where an allegation is upheld, the Dean arranges for secure storage of investigative reports and records. Such documentation may be accessed only on the authority of the President or Senior Vice-President, Academic. Ten years following the disposition of the case, the Dean arranges for such reports and records to be destroyed.



In cases where an allegation is determined by the Dean to be unfounded, as necessary the Dean initiates steps aimed at restoring the reputation of those unjustly accused, and ensures that case documentation provided to investigators or mediators is destroyed.

-0-0-0-