

Research Integrity Policy

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Approval Authority General Faculties Council	
Implementation Authority Vice-President (Research)	
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1 Purpose

The purpose of this policy is to:

- a) promote integrity in Research;
- b) ensure compliance with applicable law;
- c) ensure that Research is conducted in accordance with the University’s expectations for ethical conduct; and
- d) promote an awareness of Research ethics within the University community.

2 Scope

This policy applies to Research that:

- a) is conducted by University Employees, Postdoctoral Scholars, or Students;
- b) is undertaken under the auspices of, or in Affiliation with, the University; or
- c) uses University equipment, facilities, space, resources, Employees, Postdoctoral Scholars, or Students.

3 Definitions

In this policy:

- a) “Affiliation” means a close connection or formal relationship as defined and interpreted by Tri-Council.
- b) “Affiliate” means an organization that has a close connection to or formal relationship with the University as defined and interpreted by Tri-Council.
- c) “Animal” means any living non-human vertebrate and any living invertebrate of the class of cephalopoda, including free-living and reproducing larval forms used for Research, teaching, breeding, or testing purposes.
- d) “Animal Care Committee” means the University Animal Care Committee, the Health Sciences Animal Care Committee, the Life and Environmental Sciences Animal Care Committee or the Veterinary Sciences Animal Care Committee.

- e) “Conflict of Interest” means activities or situations that may place an individual in a real, potential or perceived conflict between their duties or responsibilities related to Research, and personal, University or other interests. These interests include, but are not limited to, business, commercial or financial interests pertaining to the individual, their family members, friends, or their former, current or prospective professional associates. This definition of Conflict of Interest is as defined and interpreted by Tri-Council.
- f) “Employee” means an individual who is engaged to work for the University under an employment contract.
- g) “Human” means human beings or tissue as defined by the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans.
- h) “Research” means an undertaking intended to extend knowledge through disciplined inquiry or systematic investigation. The conduct of Research includes applying for and managing funds, collecting and analyzing data, and disseminating results.
- i) “Researcher” means an individual, who undertakes Research under the auspices of or in Affiliation with the University regardless of the source of funding.
- j) “Research Ethics Board” means the Conjoint Faculties Research Ethics Board (CFREB) and/or the Conjoint Health Research Ethics Board (CHREB).
- k) “Postdoctoral Scholar” means an individual who has completed a doctoral degree and is carrying out Research at the University under the direction or mentorship of a supervising academic staff member.
- l) “Student” means an individual registered in a University course or program of study.
- m) “Tri-Council” means the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council of Canada (NSERC) and the Social Sciences and Humanities Research Council of Canada (SSHRC).
- n) “University” means the University of Calgary.

4 Policy Statement

- 4.1** All Research at the University will be conducted in accordance with the Tri-Council Policy Statements, including the *Tri-Agency Framework: Responsible Conduct of Research* (as revised from time to time) as well as applicable law, ethical and professional standards, guidelines, policies and contractual obligations relevant to the Research.
- 4.2** Deans, Department Heads or the Director of the academic unit will ensure that their Researchers:
- a) understand their responsibilities under this policy;
 - b) receive appropriate training through Research Services in the skills necessary for the ethical conduct of Research; and
 - c) are aware of and comply with applicable law, ethical and professional standards, guidelines and policies and contractual obligations relevant to the Research.
- 4.3** Individuals who undertake Research will be thoroughly familiar with and will comply with applicable law, ethical and professional standards, guidelines, policies and contractual obligations.

Responsible Conduct of Research

4.4 Researchers will strive to follow the best Research practices honestly, accountably, openly and fairly in the search for and in the dissemination of knowledge. In addition, Researchers will comply with applicable law, ethical and professional standards, guidelines, policies and contractual obligations.

At a minimum, Researchers are responsible for the following:

- a) using a high level of rigour in proposing and performing Research; in recording, analyzing, and interpreting data; and in reporting and publishing data and findings;
- b) keeping complete and accurate records of data, methods and findings, including graphs and images, in accordance with the applicable funding agreement, University policies and/or laws, regulations, and professional or disciplinary standards in a manner that will allow verification or replication of the work by others;
- c) referencing and, where applicable, obtaining permission for the use of all published and unpublished work, including data, source material, methods, findings, graphs and images;
- d) including as authors, with their consent, all those and only those who have materially or conceptually contributed to, and share responsibility for, the contents of the publication or document, in a manner consistent with their respective contributions, and authorship policies of relevant publications;
- e) acknowledging, in addition to authors, all contributors and contributions to Research, including writers, funders and sponsors; and
- f) reporting and managing any real, potential or perceived Conflict of Interest in accordance with any applicable policies and procedures.

Research Involving Humans

4.5 Research involving Humans will be conducted in accordance with the *Tri- Council Policy Statement: Ethical Conduct for Research Involving Humans*, as revised from time to time.

4.6 Research proposals involving Humans will be reviewed by a Research Ethics Board when required by Tri-Council guidelines. In some cases, a Research proposal may need to be reviewed by more than one Research Ethics Board.

4.7 The University may authorize a Research Ethics Board to accept ethics reviews undertaken by an external research ethics board where such authorization is based on an official, cross-institutional agreement.

4.8 Research protocols involving Humans will not be undertaken if the protocol has not received formal ethics approval by the appropriate Research Ethics Board. This prohibition includes:

- a) publication, advertising, and written and oral presentation;
- b) the use of services, facilities, and space at the University and at an Affiliated organization; and
- c) spending funds.

Note: Accounts may be opened and funds may be spent for administrative purposes only.

- 4.9** A Researcher may request reconsideration of an interim decision made by a Research Ethics Board.
- 4.10** A Researcher who is a principal investigator may appeal a decision made by a Research Ethics Board to the Research Ethics Appeal Board.
- 4.11** The Research Ethics Appeal Board will maintain procedures governing the conduct of appeal hearings.

Research Involving Animals

- 4.12** Research involving the use of Animals and tissues derived from Animals will be conducted in accordance with the University's ethical standards for Animal research and will adhere to:
 - a) the Canadian Council on Animal Care (CCAC) guidelines, policies and standards;
 - b) the Canadian Association of Laboratory Animal Medicine (CALAM)
 - c) Standards of Veterinary Care; and
 - d) the Alberta Veterinary Association (AVMA) professional codes and standards; as revised from time to time.
- 4.13** Animals and tissues derived from Animals are only to be used for Research purposes when there is a reasonable expectation of obtaining knowledge that will benefit people or Animals.
- 4.14** For Research involving Animals and tissues derived from Animals the University will also consider compliance with the requirements of other organizations on a project-by-project basis provided that these do not diminish or lessen the standards of care and conduct that would otherwise apply.
- 4.15** The appropriate Animal Care Committee will review the ethics of proposed teaching, Research or testing involving Animals and tissues derived from Animals.
- 4.16** The appropriate Animal Care Committee will determine if the proposed protocols comply with applicable law. If the Animal Care Committee finds that they are compliant, the protocols will be approved by the Animal Care Committee.
- 4.17** Findings of the Animal Care Committee may be appealed to the Vice-President (Research).
- 4.18** Research protocols involving Animals and tissues derived from Animals will not be undertaken if the protocols have not received formal ethical approval by the appropriate Animal Care Committee. This prohibition includes:
 - a) publication, advertising, and written and oral presentation;
 - b) the use of services, facilities, and space at the University and at an Affiliate organization; and
 - c) spending funds.

Note: Accounts may be opened and funds may be spent for administrative purposes only.

- 4.19** The University will acquire and maintain only the number and type of Animals that can be accommodated in existing facilities in accordance with applicable law.
- 4.20** Approval of a protocol, authorization of a Research grant, or receipt of a contract does not guarantee that the University will be able to acquire, house, and care for the Research or laboratory Animals specified under the terms of the project if, at the time the work is to proceed, the capacity of the University's facilities is otherwise fully utilized or space is unavailable.

Breach of Research Integrity
Conduct of Research

- 4.21** A breach of Research integrity includes, but is not limited to, the following:
- a) Fabrication: Making up data, source material, methods or findings, including graphs and images.
 - b) Falsification: Manipulating, changing, or omitting data, source material, methods or findings, including graphs and images, without acknowledgement and which results in inaccurate findings or conclusions.
 - c) Destruction of Research records: The destruction of one's own or another's Research data or records to specifically avoid the detection of wrongdoing or in contravention of the applicable funding agreement, University policy and/or laws, regulations and professional or disciplinary standards.
 - d) Plagiarism: Presenting and using another's published or unpublished work, including theories, concepts, data, source material, methods or findings, including graphs and images, as one's own, without appropriate referencing and, if required, permission.
 - e) Redundant publications: The re-publication of one's own previously published work or part thereof, or data, in the same or another language, without adequate acknowledgment of the source, or justification.
 - f) Invalid authorship: Inaccurate attribution of authorship, including attribution of authorship to persons other than those who have contributed sufficiently to take responsibility for the intellectual content, or agreeing to be listed as author to a publication for which one made little or no material contribution.
 - g) Inadequate acknowledgement: Failure to appropriately recognize contributions of others in a manner consistent with their respective contributions and authorship policies of relevant publications.
 - h) Failure to declare Conflict of Interest: Failure to declare any real, potential or perceived Conflict of Interest in accordance with any applicable Conflict of Interest policies and procedures.
 - i) Mismanagement of Conflict of Interest: Failure to appropriately manage any real, potential or perceived Conflict of Interest in accordance with any applicable Conflict of Interest policies and procedures.

Funding Applications

- 4.22** It is a breach of Research integrity to make a misrepresentation in a funding application or related document, including:
- a) providing incomplete, inaccurate or false information in a grant or award application or related document, such as a letter of support or a progress report;

- b) applying for and/or holding an award when deemed ineligible by NSERC, SSHRC, CIHR or any other Research or Research funding organization world-wide for reasons of breach of responsible conduct of Research policies such as ethics, integrity or financial management policies; or
- c) the listing of co-applicants, collaborators or partners without their agreement.

Management of Funds

4.23 With respect to Research funds, it is a breach of Research integrity to:

- a) provide incomplete, inaccurate or false information in a grant, award, or other funding application or related document;
- b) use sponsored Research funds for purposes inconsistent with the policies of the funding agency;
- c) misappropriate sponsored Research funds;
- d) contravene the financial policies of the funding agency; or
- e) provide incomplete, inaccurate or false information on documentation for expenditures from sponsored Research accounts.

Policies and Ethics Approvals

4.24 It is a breach of Research integrity to fail to meet funding agency policy requirements or to fail to comply with relevant policies, laws or regulations.

4.25 For certain types of Research activities, including Research involving Humans, Animals, or biohazards, it is a breach of Research integrity to fail to obtain the appropriate approvals, permits or certifications before conducting these Research activities.

Violations

4.26 Violations of this policy will be managed in accordance with the procedure established and maintained by the Vice-President (Research), specifically under the Procedure for Investigating a Breach of Research Integrity.

4.27 Individuals found to have violated this policy may lose the privilege of conducting Research and may also be subject to penalties or discipline under University policies and procedures, applicable collective agreements and applicable law.

Records

4.28 Research data and records will be kept in accordance with the University's established record retention rules.

5 Responsibilities

5.1 Researchers will:

- a) become familiar with the requirements of this policy and the procedure for Investigating a Breach of Research Integrity;
- b) comply with this policy and applicable law, ethical and professional standards, guidelines and contractual obligations for their Research projects;
- c) ensure that all Research they are involved with complies with this policy, applicable law, ethical and professional standards, guidelines and contractual obligations; and
- d) complete the Annual Financial and Compliance and Eligibility Certificate form.

- 5.2** Deans, Department Heads and Directors of academic units will:
- a) become familiar with the requirements of this policy and the Procedure for Investigating a Breach of Research Integrity;
 - b) ensure that Researchers in their faculty, department or unit understand their responsibilities under this policy;
 - c) ensure Researchers in their faculty, department or unit receive appropriate training through Research Services in the skills necessary for the ethical conduct of Research; and
 - d) ensure Researchers in their faculty, department or unit are aware of applicable law, ethical and professional standards, guidelines and contractual obligations for their Research.
- 5.3** Research Services will:
- a) provide appropriate support and training for Researchers relating to the ethical conduct of Research; and
 - b) provide guidance to Researchers on applicable law, ethical and professional standards, guidelines and contractual obligations for their Research.
- 5.4** CFREB will:
- a) review any Research proposal involving Humans submitted or otherwise referred to it to ensure that it meets acceptable ethical standards; and
 - b) approve a protocol with or without modifications or reject a protocol.
- 5.5** CHREB will:
- a) review any Research proposal from Researchers Affiliated with the faculties of Kinesiology, Medicine and Nursing;
 - b) review any Research proposal involving Humans submitted or otherwise referred to it to ensure that it meets acceptable ethical standards; and
 - c) approve a protocol with or without modifications or reject a protocol.
- 5.6** Each Animal Care Committee will:
- a) review any Research proposal involving Animals or tissue derived from Animals or otherwise referred to it to ensure that it meets acceptable ethical standards; and
 - b) approve a protocol with or without modifications or reject a protocol.

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| 6 | Related Policies | <u>Code of Conduct</u> |
| 7 | Related Procedures | <u>Investigating a Breach of Research Integrity, Procedure for</u> |
| 8 | Related Guidelines/Forms | <u>Annual Financial Compliance and Eligibility Certificate</u> |
| 9 | Related Information | University of Calgary
<u>Conjoint Faculties Research Ethics Board (CFREB)</u>
<u>Conjoint Health Research Ethics Board (CHREB)</u>
<u>Ethics and compliance</u>
<u>Research Ethics Appeal Board</u>
<u>Animal Health Unit</u> |

Other

- [Health Research Ethics Board of Alberta \(HREBA\)](#)
- [Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans \(TCPS 2\)](#)
- [Canadian Council on Animal Care \(CCAC\), Standards](#)
- [Canadian Association for Laboratory Animal Medicine, Standards of Veterinary Care](#)
- [Alberta Veterinary Medical Association \(ABVMA\), Legislation](#)
- [A pRoject Ethics Community Consensus Initiative \(ARECCI\)](#)
- [Health Information Act: Guidelines and Practices Manual](#)

10 History

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| December 12, 2014 | Approved and Effective. This policy replaces the Animal Care and Use Policy (2008); the Human Subject Research Ethics Policy (2008); the Integrity in Scholarly Activity Policy (1995) and the Northern Research Ethics Policy (1977). |
| October 31, 2018 | Editorial Revision. Updated “Student” definition. |
| January 1, 2020 | Editorial Revision. Updated format and links. |