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Policy Title: Integrity in Scholarship and Research

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Policy Administrator	Associate Provost. Research
Approving Body	Senate
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	2012-12-04; Senate Motion #2012/13 – 013
	2007-02; Revised
	1995-10 Established

Purpose:

The objectives of this policy are in accordance with the Tri-Agency Framework: Responsible Conduct of Research:

- To promote and protect the quality, accuracy, and reliability of research and scholarly activities conducted at the University; and
- To establish a process for addressing allegations of research misconduct.

Scope of this Policy:

All members of the University engaged in research and scholarly activities

Policy Statement:

All members of the University engaged in research and scholarly activities shall strive to follow the best practices, honestly, accountably, openly, and fairly in the search for and in the dissemination of knowledge. In addition, researchers shall follow the requirements of applicable institutional policies and professional or disciplinary standards and shall comply with applicable laws and regulations. The University holds all researchers responsible for conducting their research in strict observance of ethical standards and for:

- 1. 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.
- 2. Keeping complete and accurate records of data, methodologies, and findings, including graphs, and images, in accordance with the applicable funding agreement, institutional policies and/or laws, regulations, and professional or disciplinary standards in a manner that will allow verification or replication of the work by others.

- 3. Referencing and, where applicable, obtaining permission for the use of all published and unpublished work, including data, source material, methodologies, findings, graphs, and images.
- 4. 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.
- 5. Acknowledging, in addition to authors, all contributors and contributions to research, including writers, funders, and sponsors.
- 6. Providing true, complete, and accurate information in funding applications and related documents and representing themselves, their research, and their accomplishments in a manner consistent with the norms of the relevant field.
- 7. Appropriately managing any real, potential, or perceived conflict of interest, in accordance with the University's Conflict of Interest in Research policy, as well as revealing in writing to the University (through the Associate Provost of Research and Graduate Studies) any material financial interest in a company that contracts with the University to undertake research, particularly research involving the company's products.
- 8. Seeking and obtaining approval by the University's Research Ethics Board before engaging in any research involving human subjects and then complying fully with the approved research protocols in the performance of the research.
- 9. Seeking and obtaining approval by the University's Animal Care Committee before engaging in any research involving animals and then complying fully with the approved research protocols in the performance of the research.
- 10. Seeking and obtaining approval by the University's Biosafety Committee before engaging in any research involving biohazards and then complying fully with the approved research protocols in the performance of the research, according to the Health Canada Laboratory Biosafety Guidelines.
- 11. Complying with external grant regulations as they relate to the operation and financial terms of research grants and/or contracts awarded to the researcher.
- 12. Revealing in writing to sponsors, TWU (through the Associate Provost of Research and Graduate Studies), other universities, journals, or funding agencies, any material conflict of interest, financial or other, that might influence their decision on whether the individual should

be asked to review manuscripts or applications, to test products or to be permitted to undertake work sponsored from outside sources.

13. Complying with the Intellectual Property Policy, and licensing agreements of the University and the relevant funding agency as they pertain to the commercialization of research.

Misconduct in research or scholarship may be committed with varying degrees of intent. It is recognized that the line separating careless and negligence from intentional dishonesty may be very narrow. Any lapse of scholarly integrity is objectionable and, depending on its severity, is subject to a range of disciplinary measures up to and including dismissal or expulsion. Allegations of misconduct shall be dealt within, in an impartial, equitable, fair, and timely manner, with due regard to the privacy and confidentiality rights of all parties involved. All parties shall be advised of the procedures available to them and persons against whom allegations of misconduct have been made shall be advised of the allegations against them and shall be accorded the opportunity to provide a response.

Definitions:

Misconduct in research refers to, but is not limited to, any breach of the present policy and includes:

- **Fabrication**: Making up data, source material, methodologies, or findings, including graphs and images.
- Falsification: Manipulating, changing, or omitting data, source material, methodologies, or findings, including graphs and images, without acknowledgement, resulting in inaccurate findings or conclusions.
- **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, institutional policy and/or laws, regulations and professional or disciplinary standards.
- **Plagiarism**: Presenting and using another's published or unpublished work, including theories, concepts, data, source material, methodologies, or findings, including graphs and images, as one's own, without appropriate reference to the original source and, if required, without permission.
- **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 for republication.
- **Invalid authorship**: Inaccurate attribution of authorship, including attribution of authorship to persons other than those who have contributed substantially to the intellectual content, or agreeing to be listed as author to a publication for which one made little or no material contribution.
- Inadequate acknowledgement: Failure to appropriately recognize contributions of others in a manner consistent with their respective contributions and with authorship policies of relevant publications.

- Mismanagement of Conflict of Interest: Failure to appropriately manage any real, potential, or perceived conflict of interest, in accordance with the University's policy on conflict of interest.
- **Mismanagement of Research Funds**: Misappropriating grants and awards funds or providing inaccurate or false information on documentation for expenditures from research funds.

Complainant is the person making an allegation of misconduct in research; the complainant may or may not be directly affected by the alleged misconduct and may be a University administrator. **Respondent** is the person accused by the complainant of misconduct in research.

GLOSSARY

This glossary is intended to assist readers in their understanding of the *Tri-Agency Framework:* Responsible Conduct of Research, also referred to as "the Framework". Terms are defined in accordance with the purposes and objectives of the Framework.

Accountability: Being responsible for one's actions.*

Agencies: Canada's three federal granting agencies: the Canadian Institutes of Health Research (CIHR); the Natural Sciences and Engineering Research Council (NSERC); and the Social Sciences and Humanities Research Council (SSHRC).

Agency policies: The set of rules, directives, and guidelines published by an individual Agency or jointly by the Agencies.

Allegation: A declaration, statement, or assertion communicated in writing to an Institution or Agency to the effect that there has been, or continues to be, a breach of one or more Agency policies, the validity of which has not been established.

Applicant (including co-applicant): An individual who has submitted an application, individually or as part of a group or team, for funding from the Agencies.

Author (including co-author): The writer, or contributing writer, of a research publication or document.

Complainant: An individual or representative from an organization who has notified an Institution or Agency of a potential breach of an Agency policy.

Conflict of Interest: A conflict of interest may arise when activities or situations place an individual in a real, potential, or perceived conflict between the duties or responsibilities related to research, and personal, institutional, 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. †

Eligible institution: An Institution that (a) meets the eligibility requirements to receive funding set out in guidelines issued by the Agency, and (b) has signed the *Memorandum of Understanding on the Roles and Responsibilities in the Management of Federal Grants and Awards.*

Fairness: Being impartial and using sound judgment free of prejudice or favouritism. *

Funding agreement: A written agreement that sets out the terms and conditions that an Agency and a researcher agree to for a particular grant or award. It defines the researcher's responsibilities, what constitutes a breach of the agreement, and the consequences of a breach.

Honesty: Being straightforward, and free of fraud and deception. *

Inquiry: The process of reviewing an allegation to determine whether the allegation is responsible, the particular policy or policies that may have been breached, and whether an investigation is warranted based on the information provided in the allegation.

Investigation: A systematic process, conducted by an Institution's investigation committee, of examining an allegation, collecting, and examining the evidence related to the allegation, and making a decision as to whether a breach of a policy(ies) has occurred.

Institution: The universities, hospitals, colleges, research institutes, centres, and other organizations eligible to receive and mange Agency grant funds on behalf of the grant holders and the Agencies.

Institutional policy: The set of rules, directives, and guidelines published by an individual Institution that meet the requirements of *Tri-Agency Framework: Responsible Conduct of Research*.

Memorandum of Understanding (MOU): The agreement between the Agencies and Institutions eligible to receive and manage research funding from the Agencies.

Non-eligible institution: An Institution other than an eligible institution.

Openness: Being transparent in process and practice, as characterized by visibility or by accessibility of information.*

Research: An undertaking intended to extend knowledge through a disciplined inquiry or systematic investigation.

Researcher: Anyone who conducts research activities.

Respondent: An individual who is identified in an allegation as having possibly breached Agency and/or institutional policy.

Responsible allegation: A substantially novel allegation made in good faith, confidentially and without malice, that is based on facts which have not been the subject of a previous allegation, and which falls within one or more breaches set out in Section 3 of this Policy.

Serious breach: In determining whether a breach is serious, the Agency will consider the extent to which the breach jeopardizes the safety of the public or brings the conduct of research into disrepute. This determination will be based on an assessment of the nature of the breach, the level of experience of the researcher, whether there is a pattern of breaches by the researcher, and other factors as appropriate. Examples of serious breaches may include:

- Recruiting human participants into a study with significant risks or harms without Research Ethics Board approval, or not following approved protocols;
- Using animals in a study with significant risks or harms without Animal Care Committee approval, or not following approved protocols;
- Deliberate misuse of research grant funds for personal benefit not related to research;
- Knowingly publishing research results based on fabricated data;
- Obtaining grant/award funds from the Agencies by misrepresenting one's credentials, qualifications, and/or research contributions in an application.

Procedures: See associated Procedures for R 1-05 Integrity in Scholarship and Research

Child Policies: R 1-02 Animal Care; R 1-03 Biosafety and Biosecurity; R 1-10 Open Access

Other Related Policies: A 2-18 Policy on Academic Misconduct and Fraud; R 1-04 Conflict of Interest in Research; R 1-06 Intellectual Property; R 1-11 Visiting Scholars

^{*} CCA (2010). Honesty, Accountability and Trust: Fostering Research Integrity in Canada. Ottawa: Council of Canadian Academies.

[†] Based on definition TCPS 2: Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans.