

Policy Manual

Policy #	AC203
Approved by:	Gina Antonacci
Approval Date:	March 21, 2022
Policy Holder Signature:	maxmaeei
Policy Holder:	Senior Vice President
	Academic
Administrative Contact:	Dean Research &
	Innovation, Associate Vice-
	President Academic
Replaces Policy Dated:	December 2017
Review Date:	March 21, 2027

Integrity in Research and Scholarship

Purpose/Rationale:

The Humber College Institute of Technology & Advanced Learning (hereafter referred to as "Humber" or "the College") is committed to fostering the highest standards of integrity in research and scholarship.

The purpose of this policy is to:

- i) To ensure responsible conduct of anyone engaging in research and scholarship by promoting a culture of honesty, accountability and trust;
- ii) Outline guiding principles for investigating allegations of conduct breaches; and,
- iii) Ensure there is clarity on how resources and funding are to be used responsibly and in compliance with relevant policies and procedures.

Scope:

High standards of conduct in research and scholarship are accomplished by the people who carry them out. The College's responsibility is to support researchers and scholars in many ways including by defining and advocating clear standards to ensure integrity in research and scholarship.

As mandated by government policy, all funding obtained, including but not limited to Tri-Council Agencies, Canadian Foundation for Innovation and/or Ontario Centres of Innovation, are granted to the College, not to individuals. Should researchers/scholars leave the College, others will be assigned to take over the corresponding duties.

This policy applies to all staff, students, and all other research personnel associated with Humber, regardless of employment status.

All members of the College community are expected to follow this policy, the responsibilities and corresponding policies, and the policies contained in the



<u>*Tri-Agency Framework: Responsible Conduct of Research*</u> which the College endorses and takes as its guide.

Summary of Policy contents

- Purpose
- Scope
- Definitions
- Policy
 - Tri-Agency Research Integrity Policy Principles
 - Responsibilities of Researchers
 - Conflict of Interest
 - Quality Assurance
 - Development of Research Funding Applications
 - Planning stage
 - Data Gathering, Storage and Retention
 - Authorship
 - Equipment and Facilities
 - Publishing and Knowledge Dissemination
 - Conflict Over Authorship
 - Compliance to External Regulation
- Policy Breaches
- Institutional Responsibilities
 - Providing Access and Orientation to policies and procedures
 - Investigating Allegations
 - Accountability and Reporting of Breaches
 - Record Keeping
- References
- Related Procedures

Definitions:

<u>Allegation</u>: A declaration, statement, or assertion communicated in writing to the Office of Research & Innovation (ORI) declaring that there has been, or continues to be, a breach of one or more institutional policies; the validity of which has not been established.

<u>Applicant or co-applicant</u>: An individual who has submitted an application, individually or as part of a group or team, to carry out research or scholarly activities. The application could be to request funds from an internal or external funding agency, and/or as part of a research contract or, to the Humber Research Ethics Board (REB),

<u>Author or co-author</u>. The writer or contributing writer, of a publication or document that is submitted either internally or externally for purposes of disseminating of scholarly activities including research findings.



<u>Conflict of interest</u>: A conflict of interest can arise when activities or situations place a person or the College in a real, potential or perceived conflict between their duties or responsibilities and their personal, institutional or other interests. Conflict of interest may also occur when individuals' judgments and actions or the College's actions are, or could be, affected by personal, institutional or other interests.

<u>Complainant</u>: The person filing or making a policy breach allegation.

<u>Investigation</u>: 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.

<u>Members of the Humber community</u>: All staff and students, and all other research personnel associated with Humber, regardless of employment status. As it regards students, the term includes, but is not limited to full-time, part-time, and visiting students. As it regards staff, the term covers all three classifications of staff (administration, academic staff/teachers, and support) and any employment or affiliation status that may be found at Humber, which includes, but is not limited to, full-time, part-time, and contract. As it specifically relates to academic staff, the status covered by the term also includes, but is not limited to, sessional and visiting teachers.

<u>Representative</u>: A person chosen by the respondent or complainant, who may be an employee or member of an employee or student group to which the respondent or complainant belongs.

<u>Research</u>: Any internally or externally funded initiative which the College and the academic community in general, consider to be research including:

- Finding solutions to practical problems through the application of knowledge;
- Experimental discovery;
- Activities leading to the publication of books, monographs, and contributions to edited books;
- Unpublished research, including work in progress;
- Consulting and contract work under the auspices of the College, and other professional activities involving research.

<u>Researcher</u>: Anyone who conducts or is involved with research activities, including without limitation, academic staff, administrative or support staff, persons with adjunct appointments, visiting instructors, visiting professional associates and research associates.

<u>Research Ethics Board (REB)</u>: The Humber Research Ethics Board (REB) is an arm's length body, which oversees ethical screening and conducts a full review of research projects involving human participants (for full terms of reference refer to policy and procedure on the Ethical Conduct of Research Involving Humans). The REB endorses,



and takes as its guide, the *Tri-Council Policy Statement: Ethnical Conduct for Research involving Humans, December 2010 (TCPS).*

<u>*Respondent:*</u> The person who has been alleged to have committed a breach of policy.

<u>Scholarly Activities</u>: Any internally or externally funded initiatives which the College and the academic community in general, consider to be scholarly activities including, but not limited to:

- Preparation of papers for submission to be refereed and non-refereed journals, and those delivered at professional meetings;
- Participation in panels;
- Editorial and referring duties;
- Dissemination of course writing and course design including creation of technological materials; and
- Consulting and contract work under the auspices of the College, and other professional activities involving scholarly activities.

<u>*Tri-Council:*</u> Is comprised of the three major funding agencies in Canada: the Canadian Institute for Health Research (CIHR), Natural Sciences and Engineering Research Council (NSERC) and, Social Sciences and Humanities Research Council (SSHRC).

Policy:

1. General

- 1.1. All members of the college community must comply with the *Tri-Agency Research Integrity Policy*, which promotes research integrity through:
 - *Rigour*. Scholarly and scientific rigour in proposing and performing research; in recording, analyzing, and interpreting data; and in reporting and publishing data and findings.
 - *Record keeping*: Keeping complete and accurate records of data, methodologies and findings, including graphs and images, in accordance with the applicable funding agreement, institutional policies, laws, regulations, and professional or disciplinary standards in a manner that will allow verification or replication of the work by others.
 - Accurate referencing: Referencing and, where applicable, obtaining permission for the use of all published and unpublished work, including theories, concepts, data, source material, methodologies, findings, graphs and images.
 - *Authorship*: Including as authors, with their consent, all those and only those who have made a substantial contribution to, and who accept responsibility for, the contents of the publication or document. The substantial contribution may be conceptual or material.
 - Acknowledgement: Acknowledging appropriately all those and only those who have contributed to research, including funders and sponsors.



- *Conflict of interest management*: Appropriately identifying and addressing any real, potential or perceived conflict of interest, in accordance with the institution's policy on conflict of interest in research.
- 1.2. Humber College does not engage in research involving biohazardous materials, nor research on animals. The College will notify the Tri-Agency if the College plans to engage in research in these areas. Humber College will comply with the *Health Canada Laboratory Biosafety Guidelines* and the *Canadian Council on Animal Care Guidelines*.
- 1.3. Administration: The Office of Research and Innovation (ORI) will be responsible for the administration and tracking of all funded and unfunded applied research and scholarly activities, via its human resources, research database and other systems. This administrative support for research contracts and funds will be covered by the administrative expense line item on projects unless otherwise agreed upon. (See policy and procedure on Research contracts, grants and fund administration.)

2. Responsibilities of Researchers

- 2.1. General
 - 2.1.1. *Conflict of Interest*: All persons covered under the scope of this policy, or who become involved in any way in the investigation of an allegation, shall immediately disclose any real or potential conflict of interest.
 - 2.1.2. *Quality Assurance*: Individuals are personally responsible for the intellectual and ethical quality of their work and must ensure that their scholarly activity meets College standards.
 - 2.1.3. All researchers and scholars have an obligation to report, to the Senior Vice-President Academic any circumstance that they believe involves a breach of the *Integrity in Research Policy* of Humber College.
- 2.2. Development of Research Funding Applications or Project Plans
 - 2.2.1. Promoting a culture of academic and scholarly integrity begins at the development stage of an activity. In the planning stages of a proposal or grant application, researchers and scholars are required to:
 - Obtain the written consent of their Associate Dean, Dean and/or Manager prior to undertaking any project or program and will supply such written consent to the Office of Research and Innovation (ORI).
 - Consult with ORI before applying for external funding and/or consulting and contract work under the auspices of the College, and other professional activities involving research and scholarly activities;
 - Comply with relevant Humber policies;



- For research involving humans, obtain Research Ethics Board (REB) approval prior to beginning any data collection;
- Ensure they and their team members have the appropriate licensing, training and expertise for their role in the project;
- Develop a methodology that is scientifically rigorous and is likely to yield valid, reliable results;
- Have a knowledge dissemination plan to ensure findings, whether positive or negative, are shared with relevant professionals, colleagues, decision makers and other stakeholders in the field;
- Principal Applicants or Investigators must ensure that all individuals listed on a research project have agreed to be included;
- Provide complete and accurate information in a grant or award application, or related document, such as a letter of support;
- Provide ORI with a copy of the research proposal and the budget for review before submission; and
- Upon completion of the project, provide ORI with a report in a format approved by ORI.

2.3. Data Gathering, Storage and Retention.

Research and scholarly activities require using scholarly and scientific rigour and integrity in obtaining, recording and analyzing data, and in reporting and publishing results. The management of accurately recorded and retrievable results is essential to any research project.

According to the college's policy on IT Security, data users are responsible for:

- taking appropriate measure to prevent loss, damage, abuse, or unauthorized access to information assets under their control;
- respecting the classification of information as established by College "Data Stewards";
- complying with all the policy requirements defined in the security privacy and data governance policies and supporting procedures, rules and guidelines;
- technology asset(s) assigned to them (they must be able to determine the function and location of technology assets under their custodianship and must ensure that assets transferred from the custodianship are clearly assigned to the next custodian).

The following criteria apply for research data collected:

- 2.3.1. Members of the Humber community must keep secure, 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;
- 2.3.2. Data must not be used for anything other than what was approved by the



original granting agency, sponsor and/or the Research Ethics Board;

- 2.3.3. If a member of the team who is collecting data, leaves Humber during the project period, Humber will maintain all original data files for the remainder of the project period;
- 2.3.4. Provision of material products, such as software prepared during research, substances, or equipment, to third parties for non-commercial research purposes within or outside the research units requires the approval of the Principal Investigator and the Office of Research & Innovation;
- 2.3.5. If data contains identifiable information, it must be collected, stored and destroyed in compliance with FIPPA (Freedom of Information and Protection of Privacy Act) or PHIPA, as required for personal medical information (Personal Health Information and Protection Act) as well as any other privacy legislation that may be applicable dependent on the jurisdiction; and,
- 2.3.6. Members of the college community are responsible for ensuring secure and confidential storage. In accordance with the College's Record of Retention Schedule, the duration of the storage will be from completion of the publication of the results (completion) plus seven years.
- 2.4. Authorship

The attribution of authorship in all research and scholarly publications must accurately reflect the intellectual contributions of all members of the team.

- 2.4.1. *Eligibility*: The co-authors of a publication are all those persons who have made significant intellectual contributions to the results. An administrative relationship to the investigation does not, by itself, qualify a person for co-authorship. Authorship decisions should not be affected by whether participants were paid for their contributions, or by their employment status. The author who submits a manuscript or report for publication is responsible for including all appropriate co-authors, for sending each co-author a draft copy of the manuscript for comment, and for obtaining consent on co-authorship, including the order of names.
- 2.4.2. Purely formal association with a research project, such as the directorship of a laboratory or an administrative position in a Faculty, does not constitute authorship, but may be recognized in an acknowledgement. General supervision of a group, technical help, data collection, or critical reviews of manuscripts or reports prior to publication are not sufficient for authorship, but may be acknowledged in a separate paragraph. There will be no honorary co-authorship; authorship must be based entirely on significant intellectual, professional or immediate supervisory contribution. Other contributions should be indicated in a footnote or in an acknowledgements section.
- 2.4.3. *Student Contributors:* In student/teacher collaborations as co-authors of a joint publication, both should make a significant scholarly contribution that



represents an original contribution to the area of study and/or is creative and intellectual in nature. Contributions of both the teacher and the student should be integral to the completion of the paper or report. A student should be granted due prominence on the list of co-authors for any multipleauthored article or report that is based primarily on the student's own work, according to the commonly accepted practice in the field recognizing the substantive contributions of co-investigators be they academic staff collaborators, external partners and/or students;

- 2.4.4. Using unpublished work of other researchers and scholars may only be done with permission and with due acknowledgement.
- 2.4.5. Archival material must be used in accordance with the rules of the archival source.
- 2.5. Research Equipment and Facilities
 - 2.5.1. All research equipment purchased through research grants, including but not limited to Tri-Agencies, the Canadian Foundation for Innovation and the Ontario Centres of Excellence, will be managed centrally through ORI. Through ORI, the College will assume and retain ownership of the equipment, unless:
 - The funding Agency agrees otherwise in writing;
 - o Doing so would be contrary to a legislated requirement;
 - Ownership is to be transferred to another institution, in which case the institution shall obtain a written undertaking from the other institution agreeing to abide by the terms under which the funds for equipment were granted;
 - The equipment is sold, in which case the Institution shall make reasonable efforts to use any funds obtained from the sale of the equipment for research-related purposes.
 - 2.5.2. ORI may house and maintain and, if appropriate, insure the equipment, and take reasonable measure to protect it during its useful life.
 - 2.5.3. ORI will maintain a central database of research equipment and allow other researchers to also make use of it to the extent reasonably possible and appropriate for the equipment.
 - 2.5.4. If the equipment is to be loaned to another institution, Humber College shall retain ownership of the equipment and shall remain responsible for the obligations set out to the funder of the equipment.



- 2.6. Publishing and Knowledge Dissemination
 - 2.6.1. *Knowledge Dissemination*: It is expected that knowledge generated at Humber will be disseminated. In terms of research, this includes results that do not support the investigators' other research and/or does not support the original hypothesis. Plans should be defined before data collection begins and should be adhered to, to the greatest extent possible. Should investigators not be able to adhere to the original plan, significant modifications must be approved by ORI.
 - 2.6.2. *Permissions*: Researchers and scholars must obtain the permission of an 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 obtained as a result of processes such as peer review.
 - 2.6.3. Conflict of Interest: All team members are required to reveal to sponsors, academic institutions, 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
- 2.7. Conflict over Authorship

There may be cases where there is disagreement between authors and/or team members regarding a publication. Conflict over authorship could occur if any of the following situations arises:

- Authors disagree on the interpretation of the results; and/or,
- A team member believes they have made a contribution deserving of co-authorship, but the Principal Applicant is not including them in the publication; and/or,
- Co-authors disagree on the order of the author list in a submitted publication.

In the event of a disagreement that does not involve a breach of any Humber policies, other relevant internal policies or relevant external policies (e.g. of the funding agency and/or research sponsor), the Dean of ORI will initiate mediation. If unsuccessful, the final decision will be that of the Senior Vice-President Academic. A co-author, if not satisfied with the decision, will have the right to file a policy breach, which is referred to a Policy Breach Investigation Committee (see procedure).



2.8. Compliance to External Regulation

- 2.8.1. If a project is funded by one of the Tri-Agency institutions, researchers from the Humber community including employees and students are required to ensure they are up-to-date with the *Tri-Agency Framework: Responsible Conduct of Research* guidelines in order to comply with them.
- 2.8.2. As appropriate for the project, members of the college community must also be in compliance with relevant external regulations and legislation, included but not limited to:
 - <u>2nd edition of Tri-Council Policy Statement: Ethical Conduct of Research</u> <u>Involving Humans (TCPS 2)</u>
 - Personal Information Protection and Electronic Documents Act (PIPEDA)
 - <u>Personal Health Information Protection Act (PHIPA)</u> where medical or health information is collected
 - <u>Canadian Council on Animal Care Policies and Guidelines</u>
 - Agency policies related to the Canadian Environmental Assessment Act
 - Licenses for research in the field
 - <u>Laboratory Biosafety Guidelines</u>
 - Controlled Goods Program
 - Canadian Nuclear Safety Commission (CNSC) Regulations
 - Canada's Food and Drugs Act

The procedure outlines ways in which ORI will provide support to orient researchers and scholars to these and other related policies.

3. Policy Breaches

- 3.1. Actions that violate or are inconsistent with the principles outlined in this policy and its aligned procedure will be considered breaches of policy and will result in sanctions ranging from warning or reprimand to expulsion or dismissal, as appropriate to the circumstances. Such actions may include, but are not limited to, any or all of the following dishonest behaviours:
 - Destruction of research records: The destruction of one's own or another's research data or records with the purpose of avoiding detection of wrongdoing or in contravention of the applicable funding agreement, institutional policy and/or laws, regulations and professional or disciplinary standards.
 - *Falsifying or fabricating data*. This includes: making up data, source materials, methodologies or findings, including graphs and images
 - Making up data, source materials, methodologies or findings including graphs and images;
 - Manipulating, changing, or omitting data, source material, methodologies or findings, including graphs, and images, without acknowledgement and which results in inaccurate findings or conclusions;
 - *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 referencing and/or without permission, if required i.e. copying large body of copyrighted material without acknowledging the author and the source;

- *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.
- Willfully misrepresenting and/or misinterpreting (for any reason) findings resulting from the conduct of research and scholarly activities;
- *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.
- Inadequate acknowledgement: Failure to appropriately recognize contributions of others in a manner consistent with their respective contributions and authorship policies of relevant publications. e.g., student or co-worker contribution of an idea that leads to a concrete improvement of results, time spent collecting and analyzing data or written contributions to articles/papers, failure to honour the confidentiality that the researcher promised or was contracted to as a way to gain valuable information from a party internal or external to Humber;
- Failure to adhere to terms and conditions of contracts with a third party that is sponsoring the research (in most cases external to Humber);
- Failure to report to ORI an involvement in research involving human participants, bio-hazardous materials or animals, and to obtain approvals as necessary;
- Failure to disclose, appropriately manage any real, potential or perceived conflict of interest;
- Failure to Comply: Failure to comply with relevant provincial or federal regulations for the protection of human participants.
- Failure to provide copies of research grants to ORI.
- 3.2. Students who are alleged to have committed a policy breach in academic research solely in their capacity as students and in respect only to work related to the completion of course or program requirements, will be governed by the College and Faculty's procedures for dealing with academic misconduct.
- 3.3. The following will not normally be considered breaches of policy:
 - Honest errors or mistakes;
 - Differences in opinion or different interpretations of scientific discoveries.



3.4. Information concerning a policy breach will be communicated to applicable stakeholders of the research project or scholarly activity, including but not limited to, sponsoring agencies or industry partners, partnering academic institutions, local, provincial or federal grant agencies, peer-reviewed journals or other publications if the research has been published, in accordance with their requirements.

4. Institutional Responsibilities

Humber recognizes that promoting a culture of research and scholarship integrity requires a commitment from the institution. As such, Humber commits to providing access to policies in a variety of ways:

- Promoting ethics and integrity issues through the distribution of policies and organization of learning opportunities for members of the college;
- Creating and maintaining processes through which breaches of responsible research and scholarship conduct may be reported/investigated;
- Investigating allegations of scholarly misconduct in a timely and impartial manner;
- Creating and maintaining processes for breaches to be reported and corrected, and for offenders to be disciplined.
- 4.1. To foster responsible research and scholarship conduct Humber will undertake initiatives such as: the promotion of standards and examination of issues through dissemination of this policy and other relevant written material; organizing learning opportunities on the topic and; recognizing staff and students who uphold and encourage the standards set forth in this policy.
- 4.2. Investigating Policy Breach Allegations:

Allegations of a policy breach may arise from anonymous or identified sources within or outside the institution. Individuals are expected to report, confidentially in good faith, and in a timely fashion any information pertaining to possible breaches. The information should be sent directly to the office of the Senior Vice-President Academic.

Allegations may be well founded, honestly erroneous or mischievous. Whatever their source, motivation or accuracy, such allegations have the potential to cause great harm to the persons accused, to the accuser, to the institution, and to research and scholarship in general. Therefore, Humber will take prompt action and treat allegations seriously and in a manner that is impartial and accountable to the members of its community and the broader academic community. Investigations into breaches will be guided by the principle of fairness and applicable to all parties. The respondent and complainant will have adequate opportunity to know any evidence presented by any party and to respond to that evidence, if he or she so chooses.

4.3. Accountability and Reporting of Confirmed Policy Breaches



- 4.3.1. Once a policy breach has been investigated and refuted or confirmed, the investigation committee, assigned by the Senior Vice-President Academic, will prepare a report and actions will be determined.
- 4.3.2. Humber will take the necessary measures to ensure the protection of Agency or sponsor funding, where evidence supports that a policy breach occurred. This may include temporary suspension of the project, and restricted access to funding, until the matter has been resolved.
- 4.3.3. When research involves humans, researchers and scholars are required to comply with the *Tri-Council Policy Statement Section 2.1, which* establishes principles to guide the design, ethical conduct and ethics review process of research involving humans. (Also, see Humber policy and procedure the Ethical Review of Research and Teaching Involving Humans.)
- 4.4. Recourse
 - 4.4.1. If the person sanctioned by a decision believes the decision was reached improperly or disagrees with that decision, an appeal or grievance, as appropriate, may be filed, according to the terms of the appeal or grievance mechanism applicable to that person. See procedure.
 - 4.4.2. Upon completion of appeal proceedings, the decision rendered will be final and binding on all parties.
- 4.5. Record Keeping

All documents involved in the investigation will be kept in a confidential file in the office of the Senior Vice-President Academic, for a minimum of seven years following the finding of policy breach or dismissal of the allegation. All information and records relating to an action taken under this policy will be handled by Humber in compliance with provincial and federal privacy legislation.

References:

Canada's Food and Drugs Act, 1985

Canadian Council on Animal Care Policies and Guidelines

Canadian Environmental Assessment Act, 1992

Canadian Nuclear Safety Commission (CNSC) Regulations

Controlled Goods Program

Humber Conflict of Interest in Applied Research & Innovation: Standard Operating Procedure III. 2016



Humber Ethical Review of Research and Teaching Involving Humans Policy

Humber Intellectual Property Policy

Humber IT Security Policy

Humber Research Contracts, Grants and Fund Administration Policy

Humber Research and Teaching Involving Animals Policy

Humber Research and Teaching Involving Biohazards Policy

Integrity in Research Indigenous Policy

Laboratory Biosafety Guidelines, 3rd Edition, 2004

Personal Information Protection and Electronic Documents Act, 2000

Personal Health Information Protection Act,2004 (PHIPA)

Tri-Council Policy Statement Ethical Conduct for Research Involving Humans

Tri-Agency Framework: Responsible Conduct of Research

Appendices:

n/a

Related Procedure(s):

Integrity in Research and Scholarship Procedure