SUBJECT: Applied Research Integrity

CATEGORY: Research and Scholarly Activity

NO. 1101

PREAMBLE

Researchers at SIAST enjoy important freedoms such as freedom of inquiry and the right to disseminate the results thereof, freedom to challenge conventional thought, and freedom from institutional censorship. However, researchers and institutions also recognize that with freedom comes responsibility, including the responsibility to ensure that research is subject to high scientific and ethical standards. The purpose of this policy is to address responsibility and accountability and advance a high standard of integrity in research and scholarship at SIAST.

POLICY

SIAST expects the highest ethical and scientific standards of academic integrity. Employees of SIAST and students enrolled in a SIAST course or program partaking in applied research, or anyone engaged in applied research at SIAST in any capacity whatsoever, shall maintain a high standard of research integrity.

Principal investigators or supervisors shall ensure that all participants involved in applied research projects will follow the highest possible ethical standards and conduct research with scholarly and academic integrity.

PROCEDURES

Academic freedom
The research commitment to the advancement of knowledge also implies honest and thoughtful inquiry, rigorous analysis and accountability for the use of professional standards. Peer review of research proposals, the findings and their interpretation contribute to accountability, both to colleagues and to the society. The whole process must always be open to critical assessment and debate.

Responsibilities of principal investigators and supervisors
The responsibilities of principal investigators and supervisors at SIAST are to:

- Ensure that all research is conducted to the highest possible ethical standard with scholarly and academic integrity (see Policy 1102: Ethics of Research Involving Human Participants)
• Provide research collaborators, students, staff and research assistants with all reasonable information necessary to prevent misconduct as defined in this policy.

• 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.

• Initiate and participate in regular collegial discussions among all research personnel in a research unit in order to contribute to the scholarly efforts of group members and to provide informal review.

• Verify the authenticity of all data or other factual information generated in his/her research.

Research integrity in data collection and retention
The retention of accurately recorded and retrievable results is of the utmost importance for the progress of scholarly inquiry. A researcher must have access to his/her original results in order to respond to questions regarding his/her research. Errors may be mistaken for misconduct when the primary experimental results are unavailable.

Primary data (i.e. questionnaires) should normally remain in the department at all times and should be preserved as long as there is a reasonable need to refer to them. Results should be retrievable for five years following publication. In no instance should primary data be destroyed while investigators, colleagues or readers of published results may raise questions answerable only by reference to the primary data, except in the case where there is a bona fide requirement for confidentiality.

Entitlement to ownership, reproduction and publication of primary data, software and other products of research will vary according to the grants, contracts or other arrangements under which research is conducted. A common understanding of ownership should be reached among collaborators, supervisors, students and SIAST before the research is undertaken. Nothing in this document on the matter of copyright supersedes the terms and conditions of the current SIAST collective agreement.

Issues of confidentiality that may arise must be appropriately addressed by the division, department or research unit involved.

Subject to any limitations imposed by the terms of grants, contracts or other arrangements for the conduct of research, the principal investigator and all co-investigators must have free access to all original data and products of the research at all times.

When a principal investigator leaves SIAST, the associated funding for the project will remain with SIAST and the investigator will provide needed data/information to his/her supervisor and the supervisor will make arrangements for the safekeeping of the records, data and products of the research. For students and employees, the data will remain SIAST property unless other arrangements have been stipulated in the contract.

Research integrity in authorship
In order to ensure the publication of accurate scholarly reports, two requirements must be met:

• The active participation of each author in verifying and taking responsibility of the part of the manuscript that they have contributed;
• The designation of one author who is responsible for the validity of the entire manuscript.

The principal criterion for authorship should be that the author(s) has/have made a significant intellectual and practical contribution. All authors have to consent that their names appear on the publication.

As a guideline, co-authorship should be recognized only where the individuals have participated in a significant way in at least two of the following aspects of the applied research or scholarship:
- conception of idea and design or experiment;
- actual execution of experiment or hands-on lab work;
- analysis and interpretation of data; and/or
- actual writing of the manuscript. (CAGS, 1999).

Students must be given appropriate recognition for authorship or collection of data in any publication.

Guidelines that may be used include:

Canadian Association for Graduate Studies: A Guide to intellectual property for graduate students and postdoctoral scholars.

Conflict of interest
It is essential to recognize situations of existing, potential or apparent conflict of interest promptly.

A conflict of interest arises in the following circumstances:

• When the personal or business interests of the researcher, his/her associates or relations compromise the independence and impartiality necessary to perform his/her duties.

• When, without prior agreement, use is made of SIAST resources, including secretarial, office and administrative services, technical services, laboratories, assistants, premises, logo, insignia, for the personal gain or benefit of faculty or for the gain or benefit of others related to or associated with the faculty.

• When the work of students is directed with a view to benefiting the personal or business purposes of the researcher, his/her associates or relations, to the detriment of the student’s progress of scholarly academic endeavors.

• When a researcher uses confidential information that is gathered in the course of his/her duties for personal or business gain or for the gain of his/her associates or relations.

• When a researcher influences or seeks to influence a decision made by SIAST or an outside agency for personal or business benefit.

• When a researcher accepts, without written authorization of SIAST, a research grant or contract from any outside non-SIAST organization from which they receive or may subsequently receive direct or indirect benefits as an executive officer or shareholder.
Examples of misconduct in scholarly research
Misconduct in research can take many forms. Provided are some examples. The list is not exhaustive.

- Fabrication, falsification of research data.
- Plagiarism, misappropriation of intellectual property, violation of intellectual property laws, or misappropriation of another’s work.
- Failure to acknowledge or recognize the contribution of others, including: co-researchers, students, research assistants.
- Use of the unpublished works of others without permission.
- Use of material in violation of the Copyright Act.
- Abuse of supervisory power affecting collaborators, assistants, students and others associated with the research or any behavior contrary to the SIAST harassment and discrimination policy.
- Financial misconduct: failure to account for or misapplication or misuse of funds acquired for support of research, including, but not limited to:
  - failure to comply with the terms and conditions of grants and contracts
  - use of SIAST resources, facilities and equipment without approval
- Failure to comply with relevant federal or provincial statutes or regulations for the protection of researchers, human participants, or the health and safety of the public, or for the welfare of laboratory animals.
- Failure to reveal any material conflict of interest to sponsors or to those who commission work or when asked to undertake reviews of grant applications or manuscripts for publication.

Procedures for investigation and resolution of complaints in respect of alleged breaches of research integrity policy

Potential Breach of Integrity

Anyone who believes there has been a breach of the research integrity policy may seek informal assistance regarding the filing of the complaint from the director, applied research. The complaint and the discussions related to the complaint will be kept confidential by the director and will be so classified.

Obligation to Report Misconduct

All faculty, researchers, students and research assistants have an obligation to report to the director, applied research any circumstances which they believe involve a breach of the applied research integrity policy at SIAST. A written complaint will be filed with the Office of Applied Research and Innovation. If
complaints are received in another office (for example, program head’s or dean’s office) they will be channeled to the director, applied research. The director, applied research will notify the Provost and vice president, academic that a complaint was filed and will forward a copy of the written complaint.

**Filing a Complaint**

A formal complaint of misconduct must be made in writing, dated and signed. The complaint will contain sufficient details to enable the respondent to understand the matter to be investigated and should identify the person(s) who allegedly committed the misconduct and the person(s) who made the allegations if it is necessary to evaluate the complaint. A complaint should be filed as soon as the misconduct has been observed or becomes known.

Anonymous allegations will not normally be considered. However, if evidence is submitted anonymously, the director, applied research and associate vice president, educational services will meet to determine whether or not sufficient grounds exist to warrant an investigation.

SIAST will ensure that anyone making an allegation of misconduct in good faith and without malicious intent will be protected from reprisals of harassment throughout the investigation process and following the final decision. The director will take steps needed to reasonably protect against retribution or coercion of complainants.

**Preliminary Evaluation of the Complaint**

The director, applied research will evaluate the complaint for its accuracy, completeness and relevance to this policy. The director, applied research will prepare a summary of the complaint and forward it to the person who allegedly committed the misconduct between five (5) and ten (10) days after the complaint has been received. At the discretion of the director, applied research, the identity of the complainant may be withheld. The director, applied research will review all information related to the matter and may meet with the complainant and the person allegedly accused of misconduct in order to determine if there is enough solid ground to warrant further investigation. If the director, applied research establishes that there is not enough evidence to warrant the investigation the complaint will be dismissed and the complainant and the respondent will be notified of the decision. The decision will be final, unless there is more evidence brought forward indicating the misconduct.

**Informal resolution**

If, in the opinion of the director, applied research, in consultation with the Provost and vice president, academic, the misconduct is of minor nature (e.g. omission of someone’s contribution) an attempt shall be made to informally find a satisfactory resolution of a formal complaint. The complaint will be considered resolved when the respondent rectifies the problem and the complainant confirms that the problem has been resolved to his/her satisfaction. If such an informal resolution cannot be reached or the misconduct is of serious nature (e.g. financial misconduct) a formal investigation will occur.
Formal Investigation

If there is enough evidence that misconduct occurred, a formal investigation will be launched within fifteen (15) business days after the receipt of the complaint. The provost and vice president, academic will be notified of the formal investigation. If there is enough evidence that the misconduct involves a misuse of funds the provost and vice president, academic at his/her discretion, may instruct the SIAST accounting office to withhold funds flowing to the person who allegedly committed the misconduct pending the results of the formal investigation.

The misconduct will be investigated by an investigation committee set up by the senior vice president, academic. The investigation committee will normally consist of the following:

- Provost and vice president, academic who will chair the investigation committee; and
- two other members selected by the chair of the investigation committee, who are not in conflict or perceived to be in conflict, with the subject of the allegation, and who have demonstrated relevant academic experience in research and scholarship. A person external to SIAST may be appointed to the investigation committee if necessary.

The chair of the investigation committee will have the authority to obtain and retain all documentation relevant to the investigation. The investigation committee will review all documentation relevant to the allegation including, but not limited to, abstracts, papers, any correspondence documents (including emails), and any financial data. The process of collecting data may include interviews, review of files, review of correspondence and obtaining any documents from relevant sources. All interviews will be documented.

Based on the evidence collected, the chair of the investigation committee will inform the complainant and the person who allegedly committed the misconduct of a hearing that will deal with the misconduct. The notice will contain the date and location of the hearing, reason for the hearing, a list of attendees, and an outline of the procedures that will be followed. The letter shall be marked confidential and a copy will be sent to the SIAST Human Resources office.

Every effort will be made to conduct the investigation and the hearing in a thorough and fair manner. All parties will have access to evidence and collected materials. Both the complainant and the person who allegedly committed the misconduct shall have an opportunity to respond to the allegation, both orally and in writing. The chair of the investigation committee will arrange for the minutes of the hearing to be taken.

Within sixty (60) business days of commencement of the investigation, the investigation committee will render a decision and submit a written report to the provost and vice president, academic with a copy to the complainant and the person who allegedly committed the misconduct. The report will include the complaint, any written responses, any pertinent documentation and records, an outline of the process followed the structure of the investigation committee, the findings and the decision of the investigation committee. If the complaint is deemed to be founded, the associate vice president, educational services will provide the division dean with a copy of the report and discuss sanctions. The decision of the investigation committee is binding on the institution.
No Misconduct Found

In the case of unfounded allegations, efforts will be made by SIAST to protect or restore the reputation of those unjustly accused. Complainants who have been found to have made allegations of misconduct which are unfounded, reckless or in bad faith may be subject to sanctions.

Sanctions

Sanctions will vary with the severity of the offence and disciplinary procedures may include, but are not limited to verbal reprimand, written reprimand to the permanent personnel file, suspension without pay, or termination for SIAST employees. In the case of students, sanctions may include verbal reprimand, written reprimand to the student file, probation, suspension or expulsion.

Sanctions will be determined by the division dean in consultation with the Provost and vice president, academic.

Appeal

Either party who does not agree with the decision of a preliminary investigation or formal investigation can submit a written appeal to the provost and vice president, academic within ten (10) business days of the receiving the report. The appellant and the provost and vice president, academic will review the case. The decision of the provost and vice president, academic will be final. An employee who believes the decision was reached improperly or disagrees with sanctions can follow the collective agreement process, or, in the case of students, can file an appeal through the Student Appeal policy 1210.

Reporting

Within ten (10) business days after the conclusion of the investigation a report will be sent to both the complainant and the person who allegedly committed the misconduct.

If the investigation was requested by an agency (e.g. NSERC, CIHR or SSHRC), a copy of the report will be sent to that agency, whether or not it was concluded that the misconduct occurred, within 30 days of the conclusion of the investigation.

If the investigation was initiated by SIAST and misconduct was found to have occurred in the research funded by the agency, SIAST will provide the agency with a copy of the report, within 30 days of the conclusion of the investigation.

Record Keeping

In the case that it is found that the misconduct occurred, all the documentation pertaining to the case will be kept for as long as necessary, but at least for five (5) years. The documentation related to the case will be stamped confidential and kept in the office of the director, applied research.

In the case that it was found that the misconduct has not occurred, the documentation regarding the case will be kept for one (1) year after which the records will be destroyed.
Dissemination of the Policy on Integrity in Research
The SIAST policy on integrity will be posted on the SIAST website so that every SIAST employee can consult it at anytime.

Each new employee will be made aware of applicable SIAST policies as a part of the employee orientation.

The Office of Applied Research and Innovation will take appropriate measures to familiarize the researchers at SIAST with the policy on integrity in research through professional development sessions.

RELATED POLICIES/DOCUMENTS
Policy 117 Use of Copyrighted Materials
Policy 102 Academic Freedom
Policy 109 Intellectual Property
Policy 1210 Student Appeal
Policy 1102-G Ethics of Research Involving Human Participants
Policy 601-G Harassment and Discrimination
Policy 703 Code of Conduct
Policy 704 Conflict of Interest
SIAST Academic Bargaining Unit Collective Agreement

APPLICABLE LEGISLATION OR REGULATIONS
The Canadian Copyright Act

AMENDMENT HISTORY
1. Original issue date: October 18, 2005
2. Revision dates: November 5, 2008
3. Revision dates: May 6, 2014
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