

OFFICE OF RESEARCH SERVICES

Internal Peer Review Guide (Pilot)

Introduction

This document is informed by peer review best practices recommended by the Tri-Agency (e.g., <u>Peer</u> <u>Review Guide - Pilot of the Tri-Agency Interdisciplinary Peer Review Committee; CIHR Project Grant – Peer</u> <u>Review Manual; SSHRC Manual for Merit Review Committee Members</u>). The aim of this document is to serve as a resource for reviewers adjudicating applications for internal competitions.

Principles of Peer Review

The integrity of the peer review process relies on well-established principles and policies that ensure fair and effective evaluation and support the program objectives. The principles guiding the peer review process are:

- Confidentiality: Confidentiality is information about a person that will not be disclosed directly or indirectly to anyone else without that person's prior expressed consent. All matters discussed during merit review committee meetings are confidential, and cannot be shared outside the meeting space, including with colleagues or on social media. The information provided by applicants in their applications is made available to assessors for reviewing purposes only. Committee members are not to approach or communicate in any way with the applicants, or anyone outside of the committee, regarding any information related to the review of a specific application, or offer opinions on the applicant's chances of success. In turn, applicants are not to contact committee members regarding the status of their applications (for example, ratings).
- Tri-Agency guidance regarding use of generative AI in grant reviews: In the evaluation of grant applications, reviewers should be aware that inputting application information into generative AI tools outside of a protected granting agency domain could result in breaches of privacy and in the loss of custody of intellectual property. This would place a reviewer in breach of the Membership Agreement that they sign as part of serving on the selection committee. Examples include transmission of application text to online tools such as ChatGPT and DeepL, which may store and reuse the data for future enhancement of the tool. Reviewers must proceed with caution when considering the use of these and similar tools and when in doubt, should confer with agency staff.
- Absence of conflict of interest: The Office of the Vice-President, Research and Innovation (VPRI) makes every effort to ensure that its decisions are fair and objective by identifying and addressing any conflicts of interest between an applicant and a peer review committee member. Conflict of interest exists when there is a conflict between the duties and responsibilities of a person involved in the selection process with regard to the said process, especially the duty to act in the interests of the University, and their own personal, professional, financial, business or public interests. Conflict of interest may be deemed to exist when the person involved in the selection process is having or had or is expected to have in the immediate future, a professional relationship with the candidate involving academic collaboration, supervision, teaching or training. All committee members are subject to the same conflict of interest guidelines. ORS is responsible for resolving areas of uncertainty. All committee members must complete the Conflict of Interest Declaration form as well

as agree to abide by the University's Conflict of Interest in Research Policy by signing the Membership Agreement prior to viewing any application information.

- **Fairness:** Success of the peer review system is critically dependent upon the willingness and ability of all reviewers to:
 - Exercise rigorous judgement;
 - Be impartial and reasonable;
 - Understand and consider, in a balanced way the particular context of each application;
 - Provide a constructive, quality review which helps the applicant by pointing out strengths and weaknesses that contributed to the application rating.
- **Transparency**: VPRI ensures transparency in the peer review process through several different mechanisms. All applications are independently evaluated by reviewers who provide an overall assessment of the application. This assessment is performed using the application requirements and review criteria established for each of the internal competitions and openly published in the funding opportunity details, at the launch of the competition. In addition, Office of Research Services (ORS) staff capture the committee discussion during the peer review deliberations. All reviews and notes, as applicable, are shared with applicants. Finally, on its website, ORS publishes the Selection Committee Membership Lists and lists all successful applications.

Equity, Diversity and Inclusion Considerations

Integrating equity, diversity and inclusion (EDI) principles in the peer review process is crucial to promoting quality and fairness. One way to achieve this is to ensure that reviewers complete the EDI trainings relevant to the peer review process. To this end, prior to reviewing applications, all members of the selection committee are required to:

- Complete the Tri-Agency online training module on bias in peer review (or equivalent);
- Familiarize themselves with <u>San Francisco Declaration on Research Assessment (DORA)</u> by reviewing the summary of principles and best practices for peer review included in *Appendix A*;
- Become familiar with the Tri-Agency <u>Best Practices in EDI in research practice and design;</u>
- For Indigenous research, as applicable to the applications received, consult <u>SSHRC's Guidelines for</u> the Merit Review of Indigenous Research for information on Indigenous ways of knowing, Indigenous research methodologies, and/or community-engaged research.

Other Considerations: Gender-neutral and gender-inclusive language in reviews

Reviewers are encouraged to adopt gender-neutral and gender-inclusive language in their reviews. In reviews, both written and spoken, gender-neutral and gender-inclusive language is more accurate and more respectful when discussing the science and the applicant.

When discussing the science, remember that gender is non-binary. When research is meant to include all people, avoid binary statements like "men and women." Instead, consider phrases like "men, women, and gender-diverse people" or "people of all genders." In addition, be mindful of word choice. Below are a few examples of words that could be replaced with more gender-neutral and gender-inclusive terms:

- "Female/male anatomy" with specific anatomical language (e.g., ovaries, uterus, testes)
- "Mankind" with "humankind" or "people"
- "Man-made" with "machine-made", "synthetic" or "artificial"

When referring to the applicant use gender neutral pronouns or phrases. For example, use "they" or "the applicant," rather than "he" or "she". Remain mindful of word choice, as some words could be replaced with more gender-neutral and gender-inclusive terms:

- "Chairman" with "Chair" or "Chairperson"
- "Maternity/paternity leave" with "parental leave"

Selection Committee

Most internal competitions follow a selection committee-based peer review process. This process involves the evaluation of applications by a group of reviewers, who have the required experience and expertise to assess the quality and potential impact of the proposed research and research related activities, within the context of the program's objectives. Committee members will be selected by the VPRI, ensuring that there are no conflicts of interest. If conflicts of interest are identified, they will be managed by ORS based on the conflict of interest procedure for the internal peer review process outlined in *Appendix B*. The VPRI will identify a Chair, from its members, to lead and facilitate the adjudication process. During the adjudication meeting, ORS staff and an EDI Advisor (optional) will be present to support the adjudication process. Below are the responsibilities of all individuals involved in the adjudication process:

The Chair does not rate applications nor vote during the committee meeting but should be familiar with all applications. The Chair is responsible for:

- Completing the required EDI training; Conflict of Interest Declaration form; and agreeing to abide by the University's Conflict of Interest in Research Policy by signing the Membership Agreement;
- Attending the orientation session and the adjudication meeting;
- Working with ORS staff to manage conflicts of interest of committee members;
- Providing opening remarks to the committee and include a statement emphasizing the University's commitment to the principles of EDI and explaining the meeting process to the committee;
- Managing the committee's time efficiently, together with the ORS staff, so that applications can be adequately discussed;
- Ensuring peer review is conducted in accordance with the <u>San Francisco Declaration on Research</u> <u>Assessment (DORA)</u>, based strictly on the evaluation criteria and the information included in the application;
- Encouraging the involvement of the entire committee in evaluating/discussing each application based on the evaluation criteria and ensuring that a consensus rating is reached by the reviewers.

Reviewers are responsible for:

- Completing the required EDI training; Conflict of Interest Declaration form; and agreeing to abide by the University's Conflict of Interest in Research Policy by signing the Membership Agreement;
- Attending the orientation session and the adjudication meeting;
- Reviewing all of the required materials submitted by each qualified applicant, but not considering any extraneous information (e.g., personal knowledge or a web/social media search of the applicant).
- Evaluating each of the applications assigned to them by providing a critical, fair and consistent assessment of the applications, as well as providing constructive feedback based on the program's objectives and evaluation criteria described in the funding opportunity by:
 - Recording assessments of applicants using the scoring sheet, consistently applying the evaluation criteria to all applicants; keeping notes on each candidate and the reasons for their assessment, rather than relying on memory;
 - Considering career interruptions for family leave, medical needs, or other reasons, as well as special circumstances that involve slow-downs in research productivity;
 - Assessing contributions based on the conventions of the discipline, as described by the applicant and in in accordance with the <u>San Francisco Declaration on Research Assessment</u> (DORA);
- Providing their initial ratings to ORS prior to the committee meeting, using the scoring sheet provided;
- Presenting to the committee their review of the applications (scores and justification);
- Participating in the committee discussions to achieve consensus.

ORS staff are responsible for:

- Holding the orientation session and the adjudication meeting;
- Providing guidance and advice to selection committee members on program guidelines and university policies (including conflict of interest);
- Confirming that all members have completed the required training (unconscious bias training module, or equivalent training; reviewed the DORA guidelines and the NFRF best practices in EDI) and that members do not have any conflicts of interest that would prevent them from assessing candidates in an objective manner;
- Compiling scores and ranking applications prior to the adjudication meeting to help guide the group discussions;
- During the committee meeting, recording scores and funding recommendations (which will be summarized and shared with the applicants as an anonymized summary of feedback) and keeping notes on procedural aspects of the committee's functions;
- Seeking and recording committee members' feedback about the effectiveness and functioning of the committee as a whole and the meeting process;
- Preparing the results package and any available feedback for applicants.

Evaluation Criteria and Adjudication Process

The selection committee will use the evaluation criteria specific to each internal competition. Committee members are encouraged to use the full spectrum of the evaluation scale in assigning scores as this helps establish rank. When assigning a score, reviewers are encouraged to consider the context of each applicant, as informed by their specific circumstances (e.g., eligible leaves) as well as the <u>DORA guidelines</u>. Committee members are encouraged to contact the ORS staff responsible for the program at any point during the process if they need additional information.

The adjudication process is conducted in four stages:

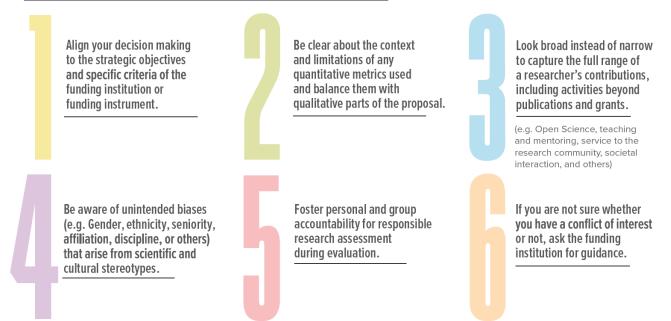
•	The orientation session will be held after the committee is formed and all committee
Orientation	members had signed the membership agreement and conflict of interest declaration
Session	form. The purpose of the orientation session is to prepare the selection committee for
	the adjudication process by reviewing the evaluation criteria and their interpretation;
	making decisions re: the adjudication process (e.g., use of a cut-off score; discussing
	all applications); reviewing the training required; clarifying roles, discussing conflict of
	interest; answering questions from the committee, etc.
Stage 2:	Each member of the selection committee, with the exception of the Chair, will
Evaluation of	independently evaluate all applications based on the evaluation criteria for the
Applications	specific internal program, using the scoring sheet provided by ORS. Reviewers will
	also provide constructive feedback to applicants to improve the quality of the
	proposed research. Reviewers will send the complete scoring sheet to ORS by the
	specified deadline. ORS staff will compile all scores prior to the adjudication meeting.
Stage 3:	The committee will discuss applications based on the process established by the
Adjudication	committee during the orientation session. This discussion will be led by the Chair who
Meeting	will encourage the involvement of the entire committee in evaluating/discussing each
_	application based on the evaluation criteria for each competition. At the end of the
	meeting, the selection committee will make funding recommendations to the VPRI.
Stage 4:	Using the selection committee's ranking and review comments, the VPRI will make
Funding	the final decision about which applications to fund and the amount of funding
Decisions by	awarded to each, given the available funding and in consideration of EDI principles.
VPRI	The VPRI may consult with the EDI advisor. Notification of results will be sent to all
	applicants once decisions have been finalized. All decisions are final.

Appendix A: DORA Guidance on Peer Review Process

Ontario Tech University is a signatory of the <u>San Francisco Declaration on Research Assessment (DORA)</u>, a global initiative which reaffirms commitment to excellence in research evaluation and the importance of knowledge mobilization. Committee members are asked to review and consider in their reviews the **DORA** guidance summarized below in order to debias the adjudication process. Specifically, committee members are asked to:

• review and reflect on the six DORA principles for balanced, broad and responsible evaluation:

Six practical tips for fostering a more holistic evaluation process



- broaden the definition of scholarly "impact" against two dimensions-1) the scale of contributions' influence (i.e., resulting in significant reach, scope, or stature) and 2) new types of audiences (i.e., reaching audiences outside of disciplinary or academic peers) to help institutions recognize and reward a wider variety of academic achievements and outcomes. Examples include: leadership roles in disciplinary societies or editorial boards; transformative methodological advances; teaching; mentoring, advising and career guidance; journal articles and conference publications; datasets, software or products; policy advisory roles; contributions to institutional policy such as EDI; team research or interdisciplinary collaborations; peer review and conferences roles; open science /data and open access; preprints; asynchronous education; real-world societal impact (e.g., cultural, patient, community, environmental or economic); industry collaborations and commercialization; popular press books and publications; social media or altimetric profile); creative outputs (to be evaluated according to established disciplinary standards, as well as creative and/or artistic merit), such as exhibitions, performances, publications, presentations, and film, video and audio recordings; other contributions to research and advancing knowledge to non-academic audiences (e.g., general public, policy-makers, private sector, not-for-profit organizations, etc.); non-refereed contributions, such as book reviews, published reviews of the applicant/co-applicant's work, research reports, policy papers, public lectures, etc.
- not to use journal-based metrics, such as Journal Impact Factors (JIF), as a surrogate measure of the quality and impact of individual research publications. JIFs are intended to reflect overall journal measures, and *do not* provide reliable or scientifically sound information about individual articles or researchers.
- keep in mind that "invisible work" like service is typically not valued in research, promotion and tenure, yet disproportionately falls on women and other scholars historically excluded from research.

- spend sufficient time reviewing each application and minimize distractions or interruptions while reading applications—implicit biases tend to be most pronounced when we are rushed or distracted. As much as possible, reviewers will spend approximately the same amount of time considering each application.
- explicitly step through their thought processes and assumptions in order to surface and counteract "confirmation bias," or the tendency to prioritize data that reinforces existing preconceptions.
- consider strategies to reduce advantages of circumstance; e.g., using relative measures—such as
 progress from a starting point rather than judging absolute accomplishments—can gauge applicant
 quality more fairly.
- use their sense of personal accountability make it explicit that it's everyone's responsibility to "stop the line" in the face of suspected bias at the beginning of every decision-making situation.
- be aware of unintended cognitive and system biases that could results in inequitable review practices. For instance:
 - confirmation bias: People tend to dismiss evidence that doesn't fit their initial judgments or preconceptions; e.g., cherry-picking information from a CV to confirm the view one already has. Why it's problematic: Our initial conceptions are often based on subjective experiences and limited data. Failing to gather and consider counter-evidence makes us more likely to fall into old ways of thinking.
 - Campbell's law: Once metrics are accepted as a way to gauge value, they start to lose meaning as objective measures; e.g., reward systems that rely on easily measurable qualities—like citations and publishing in high-JIF publications—can lead people to "game" the system. Why it's problematic: When quantitative measures have an outsize impact on how people are rewarded, it can increase the temptation to focus on a narrow set of activities and reduce investment in other meaningful, but less rewarded, achievements.
 - anchoring: The first piece of data we see or hear tends to set the bar against which we judge subsequent pieces of information; e.g., negatively comparing post-COVID-19 research productivity to pre-COVID-19; using one's own personal life as a gauge to judge others' experiences. Why it's problematic: Initial anchor data defines the "normal" against which all other data is compared, which can skew our reference points by emphasizing relative comparisons between options rather than their actual value.

Appendix B: Conflict of Interest in Peer Review Process

APPLICABILITY

The requirements set out below apply to every person involved in the process of selecting candidates for internal programs established by the University.

DEFINITIONS

"Interests of the University" is the course of action that is consistent with the mission and goals of the internal programs, the values of the University, the obligations of the University with respect to the Selection Process (defined below), and the applicable policies of the University.

"Grant" is the award bestowed on the selected candidates under the internal program.

"Conflict of Interest (Col)" exists when there is a conflict between the duties and responsibilities of a person involved in the Selection Process (defined below) with regard to the said Process, especially the duty to act in the Interests of the University, and their own personal, professional, financial, business or public interests.

Col may be deemed to exist when the person involved in the Selection Process is having or had or is expected to have in the immediate future, a professional relationship with the candidate involving academic collaboration, supervision, teaching or training.

Col may be real, Perceived Col or Potential Col.

Potential Conflict of Interest (Potential Col) is said to exist when it is reasonably foreseeable that an actual Col may arise during the Selection Process.

Perceived Conflict of Interest (Perceived Col) is said to exist when a well-informed objective observer may reasonably be able to question the independence, impartiality and objectiveness of the actions and decisions of a person involved in the Selection Process with respect to such process.

Col may exist in the following situations.

The person involved in the Selection Process:

- would receive personal benefit as a result of a particular candidate being awarded the Grant.
- is a relative or close friend or has a personal relationship with a candidate.
- has a direct or indirect financial interest in a particular candidate being awarded the Grant.
- is in a position to gain or lose financially or materially from a particular candidate being awarded the Grant.
- has currently or had in the past long-standing scientific or personal differences with a candidate.
- has been a supervisor or trainee of the candidate.
- acts in a manner that benefits (directly or indirectly) an individual associated with such person or an entity in which such person has a substantial interest.
- unable to provide an impartial review of the candidate.

"Selection Process" is the process whereby candidates are selected for award of Grant under the internal program established by the University

DECLARING THE COI

Col Declaration Form

Every person involved in the Selection Process must:

- (i) declare a Col as and when it arises during the Selection Process.
- (ii) declare and sign at the beginning of the Selection Process, the Committee Membership Agreement and the Internal Program Col Declaration Form.

If such a person is unable to decide if a situation gives rise to a Col and feels for any reason that they are unable to provide an impartial review of a candidature, they are encouraged to discuss the situation with the Chair of the Selection Process committee or the representative of the Office of Research Services supporting the Selection Process.

Failure to Declare

Any person involved in the Selection Process who fails to declare a Col shall be subject to disciplinary proceedings as per the Faculty Association Collective Agreement or the relevant policies, whichever is applicable.

RESOLVING THE COL

ORS will resolve areas of uncertainty and determine whether a Col exists with respect to a person involved in Selection Process. If a Col exists (including Perceived or Potential Col), such person will recuse themselves and not participate in the discussion and voting on the concerned candidate with regard to whom Col exists.

If the Committee Chair declares a Col, the ORS will resolve uncertainty, if any, and determine if a Col exists. The Committee Chair will recuse themselves and not participate in the discussion and voting on the concerned candidate where such a Col exists. The Selection Process committee will elect a person from within such committee to chair the proceedings when the Committee Chair recuses themselves.