

Research Security Guidelines for Ontario Research Funding Programs

Table of Contents

Purpose of the Research Security Guidelines for Ontario Research Funding Programs (RS Guidelines).....	2
Definitions	2
Process Overview	3
1. Pre-Application Stage.....	4
2. Application Stage	4
a) Application Attestation Form	4
b) Mitigating Economic and Geopolitical Risks Checklist	5
3. Adjudication Stage	5
4. Contracting Stage.....	6
RS Guidelines: Frequently Asked Questions (FAQs).....	7

Purpose of the Research Security Guidelines for Ontario Research Funding Programs (RS Guidelines)

The Government of Ontario is taking active steps to ensure that the benefit of research being carried out in Ontario universities, colleges, academic hospitals, and research institutes under the Ministry of Colleges and Universities (Ministry) research funding programs is safeguarded to protect the province's long-term economic security and interests against risks that could result in the loss or misuse of publicly funded knowledge.

The Ministry's RS Guidelines outline the processes related to research security for all applications to Ministry research funding programs. Applicants who are the lead institutions applying for Ministry research funding programs are required to follow Ontario's research security process and meet the relevant requirements specified in the guidelines. The Ministry's research funding programs include:

- Ontario Research Fund-Research Excellence (ORF-RE)
- Ontario Research Fund-Genomics (ORF-Genomics)
- Ontario Research Fund-Large Infrastructure Fund (ORF-LIF)
- Ontario Research Fund-Small Infrastructure Fund (ORF-SIF)
- Ontario Research Fund-College Fund (ORF-CF)
- Ontario Research Fund-Biosciences Research Infrastructure Fund (ORF-BRIF)
- Early Researcher Awards (ERA)

Definitions

- **Applicant:** The lead institution applying for a Ministry research funding program for a proposed project.
- **Conflicts of Interest (Col):** May occur when Funding Beneficiaries have undeclared appointments, roles, and any material relationship with a foreign entity.
- **Conflicts of Commitment (CoC):** May occur when a principal investigator's (PI's) time becomes committed to two different activities or to the same activity that is funded by two different sources.
- **Collaboration:** Scientific collaboration including but not limited to collaborations involving co-authorship, co-publication, co-hosting of international conferences, joint research, or joint funding recipients. This may also include more formal relationships such as a memorandum of understanding, partnership, joint venture, joint funding, joint degree/exchange program, graduate student supervision, visiting scholar, or participation in a foreign funded talent program.
- **Funding Beneficiaries:** Any individual identified in the Ministry research funding program application who would be a partial beneficiary of the funding, primarily: PI, other researchers on the research team (co-investigators), industry and commercial partners, visiting scholars, students and staff who may also potentially become Highly Qualified Personnels (HQPs).
- **High-Risk:** A Collaboration or relationship involving funding or In-Kind Support may be assessed as 'high-risk' when an Applicant, PI or any co-investigator(s) is linked to hostile state actors' military, intelligence and national security apparatus, state-owned or influenced national research organizations, state-owned laboratories and enterprises. An entity and/or individual may also be assessed as 'high risk' when they are sanctioned by the Canadian government.
- **In-Kind Support:** Non-cash contributions in the form of a good or a service donation received by the PI or any co-investigator(s). Examples may include, but are not limited to; lab equipment, consultation, travelling tickets, and hotel accommodations.
- **Non-disclosure:** When Collaborations, relationships involving funding or In-Kind Support, Conflicts of Interest and/or Conflicts of Commitment are not disclosed in the application as required and the due diligence uncovered material evidence to support the existence of any of the foregoing.
- **Named Researchers:** Researchers who participate in a research project and whose names and

roles are stated in the Ministry research funding program application. They include a PI and co-investigators in the project. They do not include project members that may participate in the project, but are not named in the application (e.g., technicians, post-docs, etc.)

- **Relevant Period:** for the purposes of research security evaluation including the Application Attestation Form, the relevant period encompasses two (2) years prior to the date the Named Researcher signs the Application Attestation Form through to the anticipated completion date of the proposed project.

Process Overview

The Ministry, in partnership with the Ministry of the Solicitor General (SOLGEN), has developed a distinct Government of Ontario research security (RS) process¹. This process, outlined below, and the related forms (**Application Attestation Form**, **Economic and Geopolitical Risk Checklist**, and **Risk Mitigation Form**) aim to assist the Applicant and individual researchers in identifying, assessing, and mitigating potential research security risks associated with their projects at the four different stages: 1) pre-application, 2) application, 3) adjudication, and 4) contracting.

Adjudication Protocol



Levels of Adjudication

Peer Panel Review	<ul style="list-style-type: none"> • Proposals are reviewed against program criteria, including scientific excellence. • Panels make consensus funding recommendations to the Ontario Research Fund Advisory Board (ORFAB).
Research Security Review	<ul style="list-style-type: none"> • Recommended proposals undergo risk-based due diligence by SOLGEN. • Applicants with projects identified as high-risk are provided a debrief and an opportunity to mitigate the risks with the aim to render the project fundable.
Ontario Research Fund Advisory Board (ORFAB) Review	<ul style="list-style-type: none"> • ORFAB reviews the recommendations from the Peer Panels and SOLGEN. • Makes final funding recommendations to the Minister of Colleges and Universities, which, in addition to the above, are also based on strategic value and impact to the province of Ontario.
Minister of Colleges and Universities	<ul style="list-style-type: none"> • Approves projects for funding at their sole discretion. • Decisions are communicated to Applicants.

¹ **Important:** while sharing general principles of and relying on select tools provided by the federal government, the Ontario Government's RS process differs from those used in Tri-council programs.

1. Pre-Application Stage

Before submitting a research funding application to the Ministry, the Applicant as well as the principal investigator (PI) should assess their application for potential economic and/or geopolitical risks. Additionally, they should consider potentially controversial or negative optics that may result from any existing or planned Collaboration or receipt of funding or In-Kind Support with project partners, including private sector partners, that may ultimately impact the reputation of Ontario.

Applicants and researchers are required to familiarize themselves with the **Research Security Guidelines for Ontario Research Funding Programs** as well as with the RS materials developed by the federal government. They are also encouraged, where available, to use their institutional RS resources.

Federal Government's resources - accessible on Government of Canada's website (<https://science.gc.ca> "Safeguarding Your Research") – include the following:

- [Guidelines and Tools to Implement Research Security](#)
 - [National Security guidelines for Research Partnerships](#)
 - [Sensitive Technology Research Areas](#)
 - [Named Research Organizations](#)
 - [Research Security Centre](#)
 - [Assessing Your Risk Profile](#)
 - [Guidance on Conducting Open source Due Diligence](#)
 - [Mitigating Your Research Security Risks](#)
 - [Export Controls](#)
 - [Guidance for Research Organizations, Funders, and Universities](#)
 - [Case Studies - Scenarios](#)
 - [Cyber Security](#)
 - [Emerging Technology Trend Cards](#)

[Sensitive Technology Research Areas](#) and [Named Research Organizations](#) are of particular importance, given that the Government of Ontario's RS forms including SOLGEN's assessment protocols relies on both lists. However, it is important to note that the Government of Ontario's use of these resources does *not* indicate that Ontario's and the federal government's RS assessment and processes are the same, nor that SOLGEN's RS assessment is limited to the above lists.

The Government of Ontario's and the federal government's Tri-council RS requirements and processes are separate and distinct. Similarly, SOLGEN may evaluate risks against a number of additional open sources, such as lists provided by the Australian Strategic Policy Institute and the U.S. Department of Defense, among others.

2. Application Stage

a) Application Attestation Form

All Named Researchers in an application, including the PI, are required to complete an **Application Attestation Form**. While all project team members who are not listed in the application by name (e.g., graduate students, technicians, etc.) and those who are not formally affiliated with an Ontario-based Applicant are *not* required to complete the form, please note that all Named Researchers will be reviewed by SOLGEN and may result in a project being identified as high risk. *All* project members are expected to be familiar with and adhere to general RS principles and protocols, as outlined in this guide, and in the [National Security Guidelines for Research Partnerships](#).

If any of the Named Researchers are, or will be in Collaboration with, or in receipt of funding and/or In-Kind Support from any entity listed in the federal government's [Named Research Organizations](#) (dated January 2024 as may be updated from time to time) whether related to the proposed project or any other project, during the Relevant Period, they are required to provide clarifying details regarding their

association in Option B of the **Application Attestation Form**. In turn, the PI, when populating the risk mitigation section of the **Mitigating Economic and Geopolitical Risk Checklist (Checklist)**, shall incorporate mitigation measures for all such associations detailed by the Named Researchers in their respective **Application Attestation Forms** and they will agree to go through a risk mitigation process.

Should SOLGEN's assessment find these details insufficient in mitigating the identified risk(s), the Named Researchers must also satisfactorily complete the Ministry's subsequent risk mitigation process including a **Risk Mitigation Form** to be considered for funding.

A Collaboration may include a number of activities and the Relevant Period covers two (2) years prior the date a Named Researcher signs the **Application Attestation Form** through to the anticipated completion date of the proposed project. Further, the Relevant Period for any Collaboration is not limited to being directly related to the application itself. In other words, researchers are required to disclose all Collaborations and affiliations including receipt of funding or In-Kind Support with [Named Research Organizations](#), whether these are related to the proposed project or any other project during this Relevant Period. They are also encouraged to disclose collaborations with any other entities they deem could potentially pose an RS risk (e.g., entities included on lists provided by the Australian Strategic Policy Institute and the U.S. Department of Defense).

The Applicant is responsible for collecting all completed and signed **Application Attestation Forms** from all Named Researchers in the application, including the PI, and putting the signed forms into a zipped file. The Applicant must then submit the zipped file as part of its application package to the Ministry.

Failure to submit a completed and signed **Application Attestation Forms** for all Named Researchers will result in an incomplete application which cannot proceed with the Ministry's adjudication process.

b) Mitigating Economic and Geopolitical Risks Checklist

The PI is required to conduct an RS risks assessment of their project, identify potential economic and geopolitical risks, and address these risks through completing the **Checklist**.

Before the PI completes the **Checklist**, the PI must complete and sign their own **Application Attestation Form** (see the above **Application Attestation Form** section) and review the completed and signed **Application Attestation Forms** from all other Named Researchers. If any Named Researcher, including the PI, has selected "Option B" and provided details of their relevant associations in the **Application Attestation Form**, the PI must address the related risks and set out mitigation measures in the risk mitigation section of the **Checklist**.

The Applicant must review the **Checklist** completed by the PI and sign it (to be signed by the Vice-President of Research or any other officer of the Applicant with the authority to bind the Applicant) before submitting the **Checklist** as part of its application package to the Ministry.

Failure to submit a completed and signed **Checklist** will result in an incomplete application which cannot proceed with the Ministry's adjudication process.

3. Adjudication Stage

a). Research Security Assessment

Following the peer review process, SOLGEN will assess the project's risk profile based on disclosed Collaboration(s) and/or relationship(s) such as foreign funding or In-Kind Support, amongst other factors. As mentioned before, SOLGEN's evaluation considers factors beyond the federal government's RS policy related to organizations listed in the [Named Research Organizations](#). Other considerations that may impact the Government of Ontario's RS due diligence process include, but are not limited to:

- Assessment against other relevant open source resources, such as lists provided by the Australian Strategic Policy Institute and the U.S. Department of Defense, etc., and
- Potential Non-Disclosure of Collaborations, Conflict of Interests and Conflicts of Commitments.

The Ministry and SOLGEN reserve the right to seek additional information from the Applicant for the purposes of the adjudication stage related to RS.

Important: Results of the SOLGEN's RS due diligence review will be shared with ORFAB members and the Minister of Colleges and Universities as part of the adjudication process, thus may impact funding decisions.

b). Risk Mitigation Process

To ensure optimal investment in meritorious research and scientific excellence, the Ministry, in partnership with SOLGEN, will conduct a risk mitigation process to allow high risk applications, which have otherwise been recommended for funding by the ORF/ERA external peer panels or by the federal agencies (in the case of ORF-Research Infrastructure or ORF-Genomics projects) to provide acceptable risk mitigation plans prior to proceeding to the next adjudication step.

The risk mitigation process includes the following key steps:

- Step 1: The Ministry and SOLGEN provide feedback on risk factor(s) to the Applicant. Following the in-person briefing, the Ministry sends the Applicant a **Risk Mitigation Form** for completion.
- Step 2: The Applicant, with assistance from the PI and relevant Named Researchers, develops a risk mitigation plan to address the risk factors, including risk reduction strategies, which have been or will be implemented through concrete actions within the specified timelines. The Applicant submits the **Risk Mitigation Form** to the Ministry for approval.
- Step 3: SOLGEN reviews and determines whether the proposed risk mitigation plan is acceptable, and the Ministry notifies the Applicant in writing whether the Ministry has approved the Risk Mitigation Form.

Projects that SOLGEN and the Ministry have determined are acceptable risk mitigation plans and have been approved in writing by the Ministry can proceed with the next step of ORFAB review and subject to ORFAB recommendations, seeking the Minister's decision on funding approval. Developing a comprehensive mitigation plan at the application stage for e.g., in the Checklist significantly reduces the adjudication timelines such as related to the Risk Mitigation Form, which is particularly important for Ministry research funding programs that involve co-funding.

Funding Decision

If funding for a project has been approved by the Minister of Colleges and Universities, it will proceed to the contracting stage:

4. Contracting Stage

The Minister's decision to approve a project for funding is conditional upon the Applicant entering into a Ministry Transfer Payment Agreement (TPA) with the province of Ontario to carry out the project in accordance with the terms and conditions set out under Ministry TPA.

The respective Ministry TPAs for research funding programs now include specific terms and conditions regarding RS related matters.

The Ministry TPAs will include additional terms and conditions for high-risk projects, for example, Ministry approved risk mitigation plan obligations, as well as special provisions, such as a Ministry rights related to RS related audits.

RS Guidelines: Frequently Asked Questions (FAQs)

GENERAL

Q1: How are the new Ontario RS requirements and processes different than what the Government of Ontario has been doing to date?

A: In collaboration with the Ministry of the Solicitor General (SOLGEN), the Ministry first implemented RS assessments in 2019 for the ORF-Research Excellence program. Currently, security assessment protocols have been included in adjudication of *all* Ministry's competitive programs. Recognizing that many collaborations and relationships, which now may be deemed a risk, date from a different geopolitical context, in 2023 we also commenced a risk mitigation processes to ensure that even high-risk projects have an opportunity to be funded, providing there is a strong risk mitigation plan to safeguard resulting research from loss or misuse. Previously, high risk projects were not approved for funding.

New RS requirements and processes set out in the RS Guidelines are intended to provide Applicants with opportunities for full disclosure and mitigation of RS risks associated with their projects at both the outset (i.e., at the application stage) as well as during the adjudication stage with the ultimate aim to fund all meritorious research projects, including the high risk ones subject to certain conditions. These include:

- Mandatory completion of the **Application Attestation Form**, and the **Mitigating Economic and Geopolitical Risks Form** at the application stage for all funding submissions. This provides Applicants the opportunity to address self-assessed RS risk ahead of the formal adjudication process.
- Completion of the **Risk Mitigation Form**, at the adjudication stage, only for projects that have been assessed as both 'fundable' and 'high-risk' by peer review panels and SOLGEN respectively. The plan allows Applicants to further clarify context for and measures to mitigate an identified risk. If the Risk Mitigation Form is approved by the Ministry in writing, and upon ORFAB review, the project is recommended for funding, and the Minister decides to fund the project, the Ministry approved risk mitigation plan obligations shall form part of the terms and conditions of the transfer payment agreement to be entered into between the province of Ontario and the Applicant.

These new requirements represent formalization of lessons learned over the last 5 years, and an optimal way to ensure that the integrity of research funded by the Ministry is protected through a fair, transparent, and equitable process. The Ministry is grateful for both patience and generous assistance from research community in developing and implementing these new RS measures.

Q2: How is the Government of Ontario's RS process different than that of the federal government?

A: The Government of Ontario's approach, as set out in the RS Guidelines, shares all key principles underpinning the federal government's RS policies, including [National Security Guidelines for Research Partnerships](#). To ensure the alignment in the wider research sector, our processes and forms rely on select tools provided by the federal government, such as lists of NROs ([Named Research Organizations](#)) and sensitive research areas ([Sensitive Technology Research Areas](#)). These lists are used as primary tools in our RS evaluation.

However, Ontario's and the federal government's Tri-council RS processes differ in following ways:

- The Ontario government requires attestation from *all* Named Researchers in *all* applications to *all* Ministry programs, irrelevant of whether the research is classified as sensitive or not, and whether researchers are associated with NROs or not.
- The Ontario government allows Applicants with high risk proposals to propose a risk mitigation plan, which, if approved, may ultimately render that project fundable.
- Ontario's RS evaluation is based on additional resources, as explained in the RS Guidelines and Q4 below.

Q3: What are the criteria used by Ontario government to assess risk of engagement with foreign entities?

A: As both geopolitical and research landscapes are fast changing environments and given that often the very nature of risk is unpredictable, the criteria for assessing such matters is not firmly set. However, some general factors that are considered by SOLGEN, which conducts RS risk assessment for the Ministry's competitive programs, include the following:

- Does a project belong to a sensitive and/or dual-use research area, which could potentially advance capacity of foreign entities or states to negatively impact national security and/or economic interests in Ontario?
- Does a project advance development of significant digital or physical infrastructure (e.g., data sets, storage, etc.), which, if influenced or breached, could result in loss of sensitive information (e.g., patient or personal data) or disruption of critical systems?
- What is the nature of past affiliations with foreign Collaborators? Did it involve shared IP or was it a more casual affiliation (i.e., being unknowingly co-published in books or journals curated by a third party)?
- Why were certain Collaborations and Conflicts of Interest or Conflicts of Commitment omitted from the **Application Attestation Form** or the **Checklist**? Notwithstanding that it is difficult to prove intent, consideration as to whether the omission was intentional or not may play a part in overall evaluation.

In line with Ministry's EDI principles, it is also important to note that SOLGEN's assessment continues to be country agnostic as RS threats may come from both hostile and like-minded countries. Therefore, it is an imperative to list all Collaborations and evaluations that may reasonably be of concern.

Q4: What are the tools used by Ontario government to assess risk of engagement with foreign entities?

A: As outlined in the RS Guidelines, SOLGEN's evaluation considers factors beyond the federal policy and associations with organizations listed in the [Named Research Organizations](#). Other resources that may be used in the RS due diligence process include, but are not limited to the tools provided by the Australian Strategic Policy Institute, the U.S. Department of Defense, etc.

It is important to note that all SOLGEN analysis is rooted in open source methodologies, with the caveat that the office has sufficient linguistic capacity to search Internet outside of English speaking websites.

APPLICATION ATTESTATION FORM

Q5: What is the scope of research collaborations and relationships required for disclosure in the *Application Attestation Form*?

A: The scope includes active research Collaborations and/or affiliations/relationships such as receipt of funding or In-Kind Support for two years prior to submission of the proposal through to the anticipated completion of the proposed project with any entities listed on the federal government's [Named Research Organizations](#). This should include description of the nature of and activities arising from such

Collaborations. Examples include but are not limited to Collaborating on a project, co-publishing, co-presenting at conferences with researcher(s) and/or partner(s) affiliated with any such Named Research Organization. Other examples include serving on a scientific or a governing board of a state owned or private sector entity that may reasonably pose threat to the national security and/or research integrity of the proposed project.

The Ministry recommends that, if in doubt regarding the scope of disclosure, researchers seek advice from their institutional RS offices or advisors, where available. If this is not feasible, we recommend that researchers err on the side of caution and list all collaborations/affiliations that may reasonably be of concern.

Q6: Is the principal investigator (PI) responsible for either non-intentional omissions or intentional misrepresentations of other researchers named in their *Application Attestation Form*?

A: The PI is required to conduct a general RS risks assessment of their project to the best of their knowledge and based on the disclosures made by any Named Researchers in their signed Application Attestation Forms, complete the Checklist that the Applicant must then review and sign. The PI is also responsible for making sure that the members of their research team are aware of and have access to Ontario's RS tools and resources. Each signatory of the **Application Attestation Form** is responsible *only* for their own attestation and the PI has the additional responsibilities to complete the Checklist.

While omissions and misrepresentations, particularly if compounded, may ultimately impact the funding decision, the Ministry will ensure the best effort to mitigate any RS issue that arises at the adjudication stage. In this case, such mitigation may involve a number of solutions, from allowing the researcher who has omitted information to update it and/or provide a mitigation plan, if necessary, to allowing the Applicant to remove or replace that researcher. Once a risk mitigation plan has been approved by the Ministry in writing, it will be relied upon to inform any recommendations for funding and/or a funding decision by the Minister of Colleges and Universities.

Q7: Do Named Researchers outside of Ontario have to complete the *Application Attestation Form*?

A: Yes, all Named Researchers, including those from outside Ontario are required to complete and submit an **Application Attestation Form**.

Q8. Does a researcher who is named in more than one MCU competitive program applications have to submit multiple *Application Attestation Forms*, i.e. one for each project?

A: Yes, as each application requires completed **Application Attestation Forms** signed by all Named Researchers listed in the application.

RISK MITIGATION FORM

Q9: What is the adjudication process for completing a *Risk Mitigation Form* should a project be deemed high-risk?

A: The Ministry will contact the Applicant should a project be deemed high risk. The Ministry, alongside SOLGEN, will provide a debrief of all the risks identified. The Applicant will work with the identified Named Researchers to complete a risk mitigation plan. SOLGEN will review the proposed risk mitigation plan

and, if deemed acceptable by SOLGEN and the Ministry, the Ministry will provide its written approval of the **Risk Mitigation Form** and the proposed project will continue through the adjudication process.

Q10: Who is required to sign the *Risk Mitigation Form*?

A: Following funding approval, the Applicant and the province of Ontario will enter into a Ministry transfer payment agreement.

For high-risk projects that are awarded funding, the Ministry approved **Risk Mitigation Form** shall be included under the terms and conditions of the agreement. The form is to be signed by the Vice-President of Research (or equivalent) on behalf of the Applicant, the PI, and any applicable Named Researcher(s) identified in the **Risk Mitigation Form**, and submitted to the Ministry under the agreement, as a condition of first disbursement of funding.

The signatories of the **Risk Mitigation Form**, for the purposes of the transfer payment agreement, will be identified at the adjudication stage and included in the **Risk Mitigation Form** that the Ministry will have approved in writing prior to the decision on funding.

Q11: What process does the Applicant, the principal investigator (PI) and any applicable Named Researcher(s) need to undergo if there is a change to the original *Risk Mitigation Form* submitted to the ministry?

A: If, at any time following Ministry approval of the Risk Mitigation Form, the Applicant (or the PI or any applicable Named Researcher) identifies a change to the **Risk Mitigation Form**, including changes to any actions or timing, the Applicant, working with the PI and any Named Researcher as applicable, must promptly notify the Ministry and provide details of the requested change. The Ministry and SOLGEN will review the proposed changes and, if accepted, the Ministry will provide approval in writing to the Applicant, subject to any conditions of such approval the Ministry may require, acting in its sole discretion. No changes to the Risk Mitigation Form can be implemented until Ministry approval in writing is obtained.