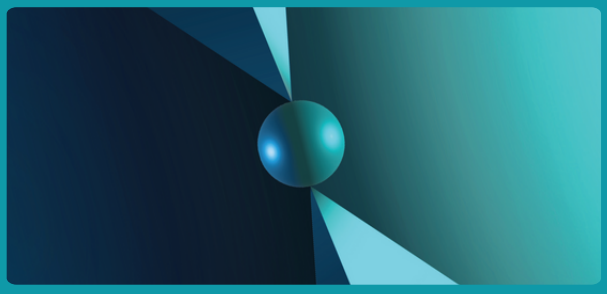
Balancing Research Security and Open Science

The Expert Panel on Sensitive Research of Concern



Canada's support of open science presents important opportunities for world-class innovation, but leaves some research vulnerable to exploitation. **Safeguarding sensitive research is critical to preserving the well-being and safety of people in Canada and throughout the world.**

A SPECTRUM OF SENSITIVITY

Not all research is sensitive, and not all sensitive research poses imminent risks. **"Sensitive research of concern"** is research that may be misappropriated or misused immediately or in the future, and should be subject to additional safeguards.

Not sensitive ⟷ **Sensitive research** ⟷ **Sensitive research of concern**

Sensitivity may change during the lifespan of a project. Measures for identifying and safeguarding sensitive research of concern may take place during each phase of the research process.

WHAT CONDITIONS MIGHT AFFECT RESEARCH SENSITIVITY?

- Foreign involvement
- Research on humans
- Research concerning Indigenous Peoples
- Potential harmful applications

- Technological readiness
- Geography
- Large datasets and personal data
- Institutional strengths
- Risks to researcher safety

TOWARDS A MODERN RESEARCH MINDSET

With sufficient supports, Canada can promote **a modern research mindset**, in which participants protect and preserve the research system; understand the global context of their work; consider ethical, privacy, and security dimensions; prioritize research integrity throughout a project's lifecycle; and reassess their own research sensitivity as it evolves.

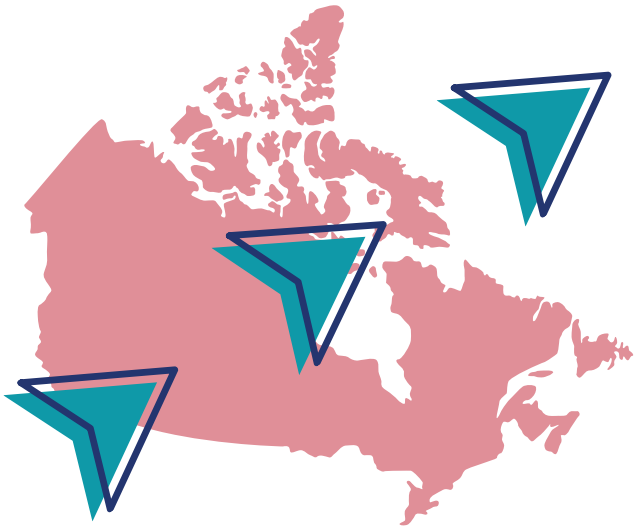
IDENTIFYING SENSITIVE RESEARCH

Those engaged in and overseeing research activities need to know **how to identify sensitive research** and determine **when it becomes of concern**. Taken together, **lists**, **risk assessments**, and **specialized external expertise** enable a thorough, context-specific identification of sensitive research.

SAFEGUARDING SENSITIVE RESEARCH OF CONCERN

Once identified, various measures can help **secure sensitive research of concern throughout its lifecycle** and **mitigate identified risks**.

- Security screenings of researchers and proposals
- Due diligence of partnerships
- Pre-publication reviews
- Physical and cybersecurity



ENABLING FACTORS

Members of Canada's research ecosystem have different incentives and capacities. To collectively strengthen research security and advance open science, research actors require support systems for...

- **Knowledge-sharing**
- **Financial resourcing**
- **Capacity-building and training**
- **Enforcement of compliance**

A SHARED RESPONSIBILITY

Research sensitivity must be continuously reassessed throughout a project's lifecycle. The responsibility for identifying and safeguarding sensitive research doesn't fall to a single individual; researchers, institutions, and governments are all implicated.