

2025 Concordia Meeting on Advancing Responsible Research Assessment to Support Open Science Practices

On March 18, 2025, invited representatives from Canadian universities, funders, research platforms and not-for-profit organizations gathered at Concordia University for a workshop on advancing responsible research assessment to support open science practices. Three presentations focused on Responsible Research Assessment (RRA) and how reforms are required to current assessment practices to support Open Science practices across the Canadian Research Ecosystem. Participants developed a Call to Action, which will be circulated and further developed via a session at the 2025 Canadian Science Policy Conference. What follows is a summary of the consensus on key points, a Call to Action that identifies five key areas for development, and a background section gives more detail on the points that constitute the Call to Action.

Participants held consensus on these key points:

1. Research is for everyone. Research is most impactful when ‘as open as possible, and as closed as necessary’. Publicly funded research should be made publicly available.
2. There is a need to reform research assessment practices to move away from over-reliance on traditional research metrics and recognize a broader range of research contributions.
3. Open Science is important for better science, collaboration, transparency, and return on investment, and a key element in supporting Open Science as a default practice is the need to revise how research assessment is practiced.
4. Successful research assessment reform crucially requires collaboration and coordination among researchers, institutions, funders, and policymakers.
5. Responsible research assessment must incorporate qualitative evaluation and the responsible use of quantitative indicators.
6. We must urgently address systemic issues within the research ecosystem, including funding models and infrastructure.

Call to Action

Responsible Research Assessment requires a new conceptual framework and new methods supported by that framework to identify and substantiate a different set of indicators. Action is required as follows:

National Strategy, Policy, and Governance: Establish a dedicated national coordinating body and unified strategy to embed Open Science practices, including responsible research assessment, and Indigenous data sovereignty into the fabric of our ecosystem.

Funding and Infrastructure: Infrastructure requires people alongside equipment and computing power. Leverage Canadian expertise to develop a roadmap for sustainable investment in Canadian research infrastructure that supports digital sovereignty and promotes robust collaboration.

Training and Capacity Building: Equip researchers and students with the tools, knowledge, and incentives to thrive in an open research ecosystem.

Evaluation and Metrics: Require institutional policies for responsible research assessment that redefine research excellence to replace narrow metrics and with inclusive indicators that value diverse outputs and real-world impact

Collaboration and Communication: Responsible research assessment is a collective responsibility. Build a culture of collaboration drawing on disciplinary communities and the range of actors in the Canadian research ecosystem.

Background

The points from the Call to Action are a distillation of the following more granular points, collated into categories following the workshop.

Workshop participants agreed that research is for everyone, research is most impactful when open and that publicly funded research should be publicly available whenever possible, considering the need to protect sensitive data and uphold Indigenous data sovereignty. There is a need to reform research assessment practices to move away from the over-reliance on journal-based metrics towards recognizing a broader range of research contributions, including recognizing and rewarding Open Science practices. Collective efforts among researchers, institutions, funders, and policymakers is crucial for successful research assessment reform. Finally, we need to address systemic issues within the research ecosystem, including funding models and infrastructure.

Workshop participants identified a series of actions for advancing responsible research assessment in order to support 1) more accurate assessment rewards, incentives for researchers, and 2) the advanced and widespread adoption of Open Science.

National Strategy, Policy and Governance:

- Create a national coordinating body or council to drive, support and monitor the progression of Open Science implementation across Canada
- Establish a national strategy and policies for responsible research assessment and Open Science.
- Engage with Indigenous representatives to incorporate Indigenous data sovereignty and the CARE principles or appropriate local or regional data governance frameworks where they exist.
- Implement a national coordinated PID strategy that includes PIDs for research outputs, actors, projects and organisations.

Funding and Infrastructure:

- Invest in Canadian-owned, open, and sustainable research infrastructure that supports Open Science and maintains Canada's digital sovereignty.
- Develop funding models that support open by design (e.g. funding for data/code curation, deposit, sharing and reuse, etc). Shift funding away from profit-driven publishing models to non-profit alternatives.
- Fund projects that support collaboration.

Training and Capacity Building:

- Fund training for researchers and students on Open Science practices.
- Incorporate Open Science training into post-secondary education curriculum
- Create a national online course on research data management and open science practices.

Evaluation and Metrics:

- Require institutions to develop a Responsible Research Assessment strategy or policy.
- Develop and adopt diverse and responsible research assessment metrics that avoid short-cut indicators like journal impact factors.
- Recognize and reward a broader range of research outputs and contributions such as practice based research, community based research, Open Educational Resources, data, code, models.
- Embed PIDs in research practices, infrastructure, and reporting/evaluation.
- Develop methods to track downstream societal impact.

Collaboration and Communication:

- Use existing internationally recognised fora to guide national conversations on RRA (eg DORA and CoARA)
- Funders, higher ed institutions and researchers coordinate a strategy for implementing assessment of research in (new) responsible ways.
- Establish communities of practice to ensure RRA is responsive to disciplinary needs.
- Create a systems map of actors to visualize the research ecosystem and assign roles and responsibilities