

Incorporating Equity, Diversity, and Inclusion (EDI) into NSERC Discovery Grants

Kris Poduska, recent NSERC Discovery Grant Evaluation Group Member & Section Chair (Physics)
(and huge thanks to Christopher Rowley, recent NSERC Discovery Grant Evaluation Group Member (Chemistry))

August 16, 2021

Equity, Diversity, and Inclusion (EDI) Requirements in NSERC Discovery Grants

- Excellence of the Researcher
 - Applicants are asked to describe past contributions to the promotion of equity, diversity and inclusion in the research enterprise (if applicable).
- Merit of the Proposal
 - Applicants are expected to describe consideration of sex, gender and diversity in the research design
- Training of highly qualified personnel (HQP)
 - **Applicants are required to describe EDI considerations in their future approaches to recruitment, training and mentoring.**
 - Applicants are asked to describe specific actions implemented in support of EDI in their past training of HQP (if applicable).

EDI has the biggest effect on “Training of HQP” rating.

From the NSERC Discovery Grant Peer Review Manual

“If applicable, considerations of equity, diversity and inclusion in the training environment, can include, but is not limited to: discussion of challenges or barriers encountered in ensuring an inclusive research and training environment; a qualitative description of specific actions implemented to support equity and inclusion in recruitment practices, mentorship approaches, and initiatives aimed at ensuring an inclusive research and training environment and trainee growth. “

The Most Important Things in This Presentation

- Your NSERC Discovery Grant **must** address EDI issues.
- You **must** do this by:
 - identifying the challenges to greater EDI in the context of the discipline, institution, and group, and
 - describing specific actions that will be taken to address these challenges.
- Tip #1: Focus on issues directly relevant to your research program.
- Tip #2: Don't focus on issues you can't do anything about.

Before you write, consider your audience.

- NSERC recruits researchers to serve as panel members in an “evaluation group.”
 - Membership balanced by region, size of institution, gender.
 - 90% are Canadian professors holding discovery grants.
 - Members review ~40–50 applications every December-February.
 - Meet in real-time for 3–4 days in February to rate applications.
- Each application is reviewed for exactly 15 minutes.
 - Entire application – including EDI sections – are reviewed by the same panel members.
 - EDI section discussed for each proposal, but only for 30–60 seconds.
- Every component of proposal must be clear and direct.
 - Aim for “easy reading.”
 - Members may not be deeply familiar with EDI terminology and theory; use NSERC’s terms

Writing guidelines for integrating EDI considerations

- You may not have space to explain unorthodox or complicated ideas effectively.
 - Spread meaningful EDI mentions in places where you have more space (Additional Info on Contributions, Budget, Knowledge Transfer section in CCV)
- Common EDI issues addressed by applicants include:
 - Underrepresentation of black and racialized students
 - Underrepresentation of women and gender minorities
 - Underrepresentation of indigenous students
 - Access for disabled students
 - Mental health / work-life balance
 - Harassment prevention
 - Student parents

Effective EDI statements need **context** and **action**.

Context – Clearly described

Specific Actions – Clearly defined

The low levels of inclusion of women and gender minorities in the field of physics is an historic EDI challenge. My experience is that it is students will only consider graduate studies in a field if they are engaged and encouraged in the subject early in their undergraduate program. To address this, I will hold annual laboratory tours for our local chapter of Women and Science and Engineering and encourage interested students to hold NSERC USRAs in our group.

Actions Should be Structural.

- Proposed actions should describe a formal policy, procedure, or practice.
- It should not be dependent on your intent or state of mind.

Issue identified, but action is vague, subjective, not structural

Bias in selecting graduate applicants is a serious EDI issue. I am aware of this when reviewing student applications and will attempt to avoid allowing unconscious bias to affect my decision making when I am selecting graduate students.

Issue identified, lots of specific actions designed to avoid bias

Bias in selecting graduate applicants is a serious EDI issue. To combat this issue when interviewing prospective graduate students, I make a written list of the skills needed for a project and include all applicants from underrepresented groups who meet these requirements in my interview shortlist. I interview all applicants with the same set of prepared questions, which have been reviewed by our university equity officer to avoid bias.

Topics Everyone Can Address

Groups of people

- Women and gender minorities
- Black and racialized
- Disabled
- Indigenous
- Parents

Challenges

- Recruiting
- Retaining
- Accommodations
- Work conditions

Actions

- Change procedures to remove barriers
- Actively recruit and support
- Provide opportunities (e.g., mentorship)

Discuss What's Relevant to Your Group

Student Parents

- University childcare resources
- Institutional policies of leave
- Limit work hours, weekends, field work, travel...

Disabilities

- Accommodations to lab space
- Institutional policies of leave
- Limit work hours, weekends, field work, travel...

Missteps: Defiance

I will continue hiring the most qualified students who are passionate about experimental physics.	
Identifies challenge?	No
Action to address challenge?	No

Place for Demographics

- **You are not expected to report on the demographics of your group**
- High diversity in trainees do not automatically correspond a good ranking; your proposal is still ranked by identification of challenges and proposed actions
- **Optional:** Demographics can be used to quantify challenges or indicate efficacy of methods
 - careful - collecting this information is complicated and it's not a real advantage

My group has an excellent record of diversity. 75% of my graduate students have been visible minorities and 65% have been women.

Gender identities aren't yours to disclose. Discussion of challenges and actions missing.

NSERC Discovery Grant Review Manual

Important: trainee demographic data is not requested, nor required to assess impacts related to equity, diversity and inclusion in the research and training environment.

Valid Uses of Demographics:

identifying challenge or providing evidence of efficacy of existing policy

... This recruiting strategy has been successful attracting indigeneous students to our group. In the last 6 years, 3 of 11 of my undergraduate research assistants and 2 of 7 of my graduate students identify as indigeneous.

Instant Improvements

- Group code of conduct addressing harassment, discrimination, resolution
- Lead annual group meeting reiterating policies
- CRC Unconscious bias training module for you and group
 - <https://www.chairs-chaires.gc.ca/program-programme/equity-equite/bias/module-eng.aspx>
- Proposing actions:
 - How could you recruit students to achieve greater diversity in your group?
 - broader pool, encouraging applications, targeted programs
 - How could you change the group working conditions to support retention?
 - addressing isolation, work environment, accommodations, work-life balance
 - How could you help your students have successful careers in your field?
 - access to mentorship, career opportunities

Tone

Well Received

- Positive
- Constructive
- Open-minded
- Thoughtful
- Practical
- Considerate
- Attentive
- Reasonable
- Fair

Poorly Received

- Defensive
- Defiant / Contrarian
- Angry
- Dismissive
- Self-righteous
- Dramatic
- Tone-deaf
- Impractical
- Out of touch with reality

Supervisors who seem invested and concerned about the success of their students do better on their HQP ranking.

Do you seem concerned about your female students experiencing harassment or marginalization? Are you doing everything you can to make sure your students from underrepresented groups have successful careers?

You should know what all your former students are doing. If they are parental leave, you should seem happy about that.

It's hard to judge how your tone will be perceived. Get feedback from other colleagues.

Once your grant is submitted, your job isn't done.

- Work with colleagues to establish a departmental EDI policy.
 - e.g., non-discrimination in admissions, respectful workplace/harassment policies

University of Alberta Department of Chemistry EDI policy:
https://www.ualberta.ca/chemistry/news-and-events/news/2020/august/edi_post.html

You are probably doing a lot of this stuff already! All members of your department can reference the policy if it's written down and is a structural action.

- Monitor announcements by MUN and NSERC regarding EDI policies.
- Keep EDI in mind; grants are much easier to write if you've been active on these issues.

Resources: issues, data, and proposed solutions

- Google “[your field] underrepresentation”
 - American Physical Society report and actions for increasing African-Americans in physics: www.aip.org/diversity-initiatives/team-up-task-force
 - American Physical Society report and actions: <https://www.aps.org/programs/lgbt/upload/LGBTClimateinPhysicsReport.pdf>
- Quantitative Reports and Prescriptive Strategies across disciplines:
 - AAUW: The STEM Gap: Women and Girls in Science, Technology, Engineering and Math <https://www.aauw.org/resources/research/the-stem-gap/>
 - *PISA in Focus* [Why Don't More Girls Choose to Pursue a Science Career?](#)
 - University of Georgia: [Recruit and Retain Diverse Students](#)
 - AIP Workshop: “How to Achieve Diverse, Equitable, and Inclusive Professional Meetings.”
 - **View “Picture a Scientist” : Netflix, or stream via the MUN Library**

Tri-Agency Statement on Equity, Diversity and Inclusion

The Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council, and the Social Sciences and Humanities Research Council are committed to excellence in research and research training. Achieving a more equitable, diverse and inclusive Canadian research enterprise is essential to creating the excellent, innovative and impactful research necessary to advance knowledge and understanding, and to respond to local, national and global challenges.

With these goals in mind, the agencies are committed to:

- Supporting equitable access to funding opportunities for all researchers and trainees
- Promoting the integration of equity, diversity and inclusion-related considerations in research design and practices
- Increasing equitable and inclusive participation in the research system, including on research teams
- Collecting the data and conducting the analyses needed to include equity, diversity and inclusion considerations in decision-making

Through these means the agencies will work with those involved in the research system to develop the inclusive culture needed for research excellence and to achieve outcomes that are rigorous, relevant and accessible to diverse populations.