Breakthrough answers to timeless questions

Des réponses innovantes à de grandes questions
Equity, Diversity and Inclusion at NSERC

Presented by:
Andrea Benoit, Deputy Director, Mathematical, Environmental and Physical Sciences
Outline

Equity, Diversity and Inclusion

➢ Tri-agency Statement on EDI

➢ Granting agency commitments and approaches

➢ NSERC actions
  • Integrating EDI in DG applications
  • Example of self-ID data analysis for Chemistry
  • Resources
Tri-agency Statement on Equity, Diversity and Inclusion

“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.”

Tri-agency Statement on Equity, Diversity and Inclusion

..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

Increasing equitable and inclusive participation in the research system, including on research teams
Multiple factors contribute to low % of women, people with disabilities, visible minorities, Indigenous Peoples and LGBTQ2+ people in various fields of research, including:

- Unconscious and implicit biases
- Hostile work environments, stereotype threats
- Biased indicators of excellence
- Few role models
- Assumed linearity norm of research career paths
- Under-valued service and outreach contributions
- Socio-economic inequality

Strengthening Research Excellence through Equity, Diversity and Inclusion.

Dimensions
Equity, diversity and inclusion Canada

Encompasses a charter and a recognition program (in pilot stage)

Includes, but is not limited to, five underrepresented groups across all disciplines

Voluntary, no funding attached

Over 100 Canadian institutions have endorsed the charter

17 institutions participating in the pilot with the goal of applying for a Dimensions recognition award

Building a wide community of practice
RGS Program Updates

Equity, Diversity and Inclusion (EDI) Institutional Capacity-Building Grant

- Second and final **EDI Capacity Building** grant competition was a success
  - 12 awards announced March 12th with nearly $4.8M in funding for the next 2 years

- Created in 2018 - $10 million over 5 years

**Objectives**
- To foster EDI in the Canadian post-secondary research enterprise
- Funds will allow institutions to undertake activities to advance their own EDI objectives

<table>
<thead>
<tr>
<th>Value</th>
<th>Up to $200,000 per year, for up to two years, non-renewable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eligible institutions</strong></td>
<td>• Canadian universities with Canada Research Chairs (CRC) program quota of 1 to 10</td>
</tr>
<tr>
<td></td>
<td>• Canadian colleges that received between a total of $100K and $4M in tri-agency funding</td>
</tr>
<tr>
<td><strong>Selection Criteria</strong></td>
<td>Motivation</td>
</tr>
<tr>
<td><strong>Evaluation</strong></td>
<td>Reviewed by a Committee constituted of researchers, administrators with expertise in EDI.</td>
</tr>
</tbody>
</table>
analytical process used to assess how diverse groups of women, men and non-binary people may experience policies, programs and initiatives.

NSERC support during leave

Primary caregivers (Pilot – Discovery Grants program)

- Researchers who become primary caregivers following the birth or adoption of a child and who are eligible for maternity or parental leave but decline the leave, may be eligible to receive a one-year grant extension with funds

Family and medical leaves

- Grant holders who plan to take family-related leave or medical leave may be eligible for a grant extension with funds for up to two years.

Paid maternity / parental leave for students and postdoctoral fellows paid from grants

- Students and Postdoctoral fellows who are supported by NSERC grants and are eligible may receive up to 12 months of paid maternity / parental leave.
- The leave supplement will be paid by NSERC.
New Guidelines: delays due to COVID-19

- NSERC recognizes that the COVID-19 pandemic is affecting researchers’ and students’ capacity to conduct their regular research and training activities

- NSERC has developed general guidelines for the consideration of COVID-19-related impacts on research aiming to provide direction on how to describe these impacts in an application

- Implemented in the most recent Discovery Grant Competition
Supporting **equitable access to funding opportunities** for all researchers and trainees
EDI in NSERC applications

Integrated into all stages of the application and review process
EDI in DG Selection Criteria
Future Research Training

Describe qualitatively any challenges or barriers encountered in ensuring an inclusive research and training environment.

Describe the planned approach to promoting participation from a diverse group of HQP, taking into account equity and inclusion in recruitment practices, mentorship approaches, and initiatives aimed at ensuring an inclusive research and training environment and trainee growth.

Discovery Grants Application Instructions, 2019.
Similar requirements are in many NSERC programs.
EDI in DG Selection Criteria
Past Research Training

Describe 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 (*if applicable*).

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

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Discovery Grants Application Instructions, 2019.

*Similar requirements are in many NSERC programs.*
EDI in Selection Criteria
Research Training

**Specific actions** include a broad variety of practices which when implemented support equity and inclusion.

- specific actions can occur at any stage of training
- there is no priority or value placed on different stages
- applicants are not expected to participate at every stage
## Discovery Grants - Merit Indicator Grid

### DISCOVERY GRANTS MERIT INDICATORS

The Merit Indicators should be used in conjunction with the Peer Review Manual, which outlines how reviewers arrive at a rating.

<table>
<thead>
<tr>
<th>EXCEPTIONAL</th>
<th>OUTSTANDING</th>
<th>VERY STRONG</th>
<th>STRONG</th>
<th>MODERATE</th>
<th>INSUFFICIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledged as a leader in terms of research excellence, accomplishments, and service. Contributions to the application are of the highest level of quality.</td>
<td>Research excellence, accomplishments, and service are superior to others. Contributions to the application are above average.</td>
<td>Research excellence, accomplishments, and service are superior to others. Contributions to the application are high quality.</td>
<td>Research excellence, accomplishments, and service are significant. Contributions to the application are of reasonable quality.</td>
<td>Research excellence, accomplishments, and service are below an acceptable level. Contributions to the application are of insufficient quality.</td>
<td></td>
</tr>
<tr>
<td>Impact and importance of the work is clearly evident and groundbreaking.</td>
<td>The methodology is clearly defined and appropriate.</td>
<td>Long-term goals are clearly defined and short-term objectives are well-planned.</td>
<td>Long-term goals are defined and short-term objectives are planned.</td>
<td>Long-term goals and short-term objectives are defined.</td>
<td>Objectives are not clearly described and/or likely not attainable.</td>
</tr>
</tbody>
</table>

### Merit of the Proposal

- **Past training is at the highest level in terms of the research training environment provided and HGP contributions to research.**
- **Past training is superior to other applicants in terms of the research training environment provided and HGP contributions to research.**
- **Past training is superior to other applicants in terms of the research training environment provided and HGP contributions to research.**
- **Past training is superior to other applicants in terms of the research training environment provided and HGP contributions to research.**
- **Past training is below an acceptable level in terms of the research training environment provided and HGP contributions to research.**

### Training Philosophy and Research Training Plan

- **Most HGP move on to impactful positions that require skills gained through the training received.**
- **Most HGP move on to impactful positions that require skills gained through the training received.**
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- **Most HGP move on to impactful positions that require skills gained through the training received.**

### Professional Environment

- **Challenges related to equity, diversity and inclusion specific to the institution and field of research are clearly described.**
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### Specific Actions to Support the Recruitment of a Diverse Group of HGP and an Inclusive Research Training Environment

- **Specific actions to support the recruitment of a diverse group of HGP and an inclusive research training environment are defined.**
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EDI in DG Selection Criteria
Research Excellence

• **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*).

...*impact does not refer to quantitative indicators* such as the impact factor of journals or h-index, but on the influence that results have had on other researchers, on the specific field, the discipline as a whole, or on other disciplines....

*Impact can be seen as, but is not limited to,* advancing knowledge, developing technology, addressing socio-economic or environmental needs, or contributing to increased diversity and gender equity in research....

_DG Peer Review Manual_
Promoting the integration of EDI-related considerations in research design and practices
EDI in Selection Criteria
Research Design

Example of its importance

• Absence of pregnant crash test dummies: motor vehicle crashes are leading cause of fetal death related to maternal trauma

Source: Gendered Innovations  http://genderedinnovations.stanford.edu/
EDI in DG Selection Criteria
Research Design

• Merit of the Proposal
  • Applicants are expected to describe consideration of sex, gender and diversity in the research design (if applicable to the field of research).

The inclusion of sex (biological), gender (socio-cultural) and diversity considerations in research design makes research more ethically sound, rigorous and useful. Describe the rationale for including sex, gender and diversity considerations, and how these aspects will be addressed in the research design, if applicable.

For more information, refer to the Guide for Applicants: Considering equity, diversity and inclusion in your application (questions 5 to 7).

Discovery Grants Application Instructions, 2019.
Similar requirements are in many NSERC programs.
Collecting the **data** and **conducting the analyses** needed to include EDI considerations in decision-making
Tri-agency Self-Identification Questionnaires

Tri-agency questions (2018 Questionnaire):
- Age
- Gender
- Indigenous Identity
- Person with a disability
- Visible Minority

Updated Questionnaire (to be implemented: summer 2021)
- Age
- Gender (updated to include more gender options)
- Sexual orientation (new question)
- Indigenous Identity
- Person with a disability (updated to also ask about type(s) of disability)
- Visible minorities (updated to include “white” as a response option)
- Languages (new question)
Analysis of DG and Chemistry Data
Participation and Success Rates for Competition Year (CY) 2016-2020

Table 1 shows the Applicant career stage distribution by gender/sex CY 2016-2020:

Table 1a: For all 12 Evaluation Groups (EGs)

<table>
<thead>
<tr>
<th></th>
<th>Woman / Female</th>
<th>Man / Male</th>
<th>Other Categories</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECR</td>
<td>31%</td>
<td>19%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>ER-NHG</td>
<td>26%</td>
<td>28%</td>
<td>30%</td>
<td>28%</td>
</tr>
<tr>
<td>ERR</td>
<td>43%</td>
<td>53%</td>
<td>50%</td>
<td>51%</td>
</tr>
</tbody>
</table>

Table 1b: For Chemistry EG (1504)

<table>
<thead>
<tr>
<th></th>
<th>Woman / Female</th>
<th>Man / Male</th>
<th>Other Categories</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECR</td>
<td>25%</td>
<td>14%</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>ER-NHG</td>
<td>22%</td>
<td>20%</td>
<td>31%</td>
<td>22%</td>
</tr>
<tr>
<td>ERR</td>
<td>53%</td>
<td>66%</td>
<td>53%</td>
<td>62%</td>
</tr>
</tbody>
</table>

Table 2 shows the Success rates (SR) distribution by gender/sex and career stage CY 2016-2020:

Table 2a: For all 12 Evaluation Groups (EGs)

<table>
<thead>
<tr>
<th></th>
<th>Woman / Female</th>
<th>Man / Male</th>
<th>Other Categories</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECR</td>
<td>60%</td>
<td>64%</td>
<td>69%</td>
<td>64%</td>
</tr>
<tr>
<td>ER-NHG</td>
<td>43%</td>
<td>37%</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>ERR</td>
<td>84%</td>
<td>83%</td>
<td>81%</td>
<td>83%</td>
</tr>
</tbody>
</table>

Table 2b: For Chemistry EG (1504)

<table>
<thead>
<tr>
<th></th>
<th>Woman / Female</th>
<th>Man / Male</th>
<th>Other Categories</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECR</td>
<td>62%</td>
<td>57%</td>
<td>75%</td>
<td>61%</td>
</tr>
<tr>
<td>ER-NHG</td>
<td>47%</td>
<td>29%</td>
<td>41%</td>
<td>35%</td>
</tr>
<tr>
<td>ERR</td>
<td>90%</td>
<td>91%</td>
<td>86%</td>
<td>90%</td>
</tr>
</tbody>
</table>
EDI RESOURCES
Bias in Peer Review

NSERC’s EDI webpage:
https://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/

Guide for Applicants: Considering equity, diversity and inclusion in your application

Best Practices in Equity, Diversity and Inclusion in Research

A Guide for the New Frontiers in Research Fund

Questions to consider and best practices for:

- Team composition and recruitment processes
- Training and development opportunities
- Inclusion
- Design of the research project

Equity, Diversity and Inclusion: A Best Practices Guide for Recruitment, Hiring and Retention

A Guide for the Canada Research Chairs program

Best practices can also apply to recruitment of trainees and creation of an inclusive training environment.

WWEST’s

Gender Diversity in STEM
A briefing on women in science and engineering

The Equity Myth
Racialization and Indigeneity at Canadian Universities

Frances Henry, Enakshi Dua, Carl E. James, Audrey Kobayashi, Peter Li, Howard Ramos, and Malinda S. Smith

Toward a New Normal
Equity, Diversity and Inclusion as Integral to Research and Innovation Excellence: Models for Success
Outcomes from Gender Summit 11 North America
Montreal
November 6–8, 2017

nserc-crsng.gc.ca
Setting new directions

to support Indigenous research
and research training in Canada

2019-2022

Government of Canada
Gouvernement du Canada
Thank you!

Merci!

Andrea.Benoit@nserc-crsng.gc.ca
Sophie.Debrus@nserc-crsng.gc.ca - Chemistry Program Officer
Michelle.Payne@nserc-crsng.gc.ca – Chemistry Team Leader