EQUITY, DIVERSITY AND INCLUSION RESOURCES FOR RESEARCHERS

DEFINITIONS[1,2]

What is Equity?

Equity is defined as the removal of systemic barriers and biases, which enables all individuals to have equal opportunity to access and benefit from a program, or a research team.

- To achieve this, all individuals who participate in the research ecosystem must develop a strong understanding of the systemic barriers faced by individuals from underrepresented groups (e.g., women, persons with disabilities, Indigenous Peoples, racialized minorities, individuals from the LGBTQ2+ community) and put in place impactful measures to address these barriers.

What is Diversity?

Diversity consists of the conditions, expressions and experiences of different groups identified by age, education, sexual orientation, gender expression and identity, parental status/responsibility, immigration status, Indigenous status, religion, disability, language, race, place of origin, ethnicity, culture, socio-economic status and other attributes.

- Recognizing and valuing diversity must be accompanied by concerted efforts to ensure inclusion of diverse populations, meaning that individuals are and feel valued, respected and equally supported.
- A diversity of perspectives and lived experiences is fundamental to achieving research and training excellence.

What is Inclusion?

Inclusion is defined as the practice of ensuring that all individuals are valued and respected for their contributions and are equally supported.

- Ensuring that all team members are integrated and supported is fundamental to achieving research and training excellence.

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[1] Sources: NSERC Guide for Applicants: Considering equity, diversity and inclusion in your application

[2] New Frontiers in Research Fund, Best Practices in Equity, Diversity and Inclusion in Research: https://www.sshrc-crsh.gc.ca/funding-financement/nfrf-fnfr/edi-eng.aspx

Underrepresented Groups

Underrepresented groups include, but are not limited to, the four designated groups (women, Indigenous peoples, members of visible minorities, and persons with disabilities). Applicants can consult the Government of Canada's Employment Equity site for definitions of each group. See also the Employment Equity Act. Consistent Applicants are encouraged to use a broader definition of underrepresented populations not limited to the four designated groups (e.g., sexual orientation, gender identity, parental status).

Gender

Gender refers to the socially constructed roles, behaviours, expressions and identities of girls, women, boys, men, and people with diverse gender identities. It influences how people perceive themselves and each other, how they act and interact, and the distribution of power and resources in society.

Sex

Sex refers to a set of biological attributes in humans and animals. It is primarily associated with physical and physiological features including chromosomes, gene expression, hormone levels and function, and reproductive/sexual anatomy. Sex is usually categorized as female or male but there is variation in the biological attributes that comprise sex and how those attributes are expressed.

Gender-based analysis plus (GBA+)

Gender-based analysis plus (GBA+) is an analytical process used to assess the potential impacts of policies, programs, services, and other initiatives on diverse groups of women, men and people with diverse gender identities, taking into account multiple identity factors. The "plus" in the name highlights that GBA+ goes beyond gender and includes the examination of a range of intersecting identity factors (such as age, education, sexual orientation, parental status/responsibility, immigration status, Indigenous status, religion, disability, language, race, place of origin, ethnicity, culture and socioeconomic status).

Intersectionality

Intersectionality recognizes that inequities are never the result of single, distinct factors. Rather, they are the outcome of intersections of different social locations, power relations and experiences.

Sex and gender-based analysis plus (SGBA+)

Sex and gender-based analysis plus (SGBA+) is an approach that systematically examines sex-based (biological) and gender-based (socio-cultural) differences between men, women, boys, girls and people with diverse gender identities. If you only look at sex or only look at gender, you can miss part of the story. People often see differences between men, women and people with diverse gender identities and either assume these are biological or socio-cultural when they might be the opposite or a combination of both. As in GBA+, the "plus" highlights that the analysis goes beyond sex and gender and includes the examination of a range of intersecting identity factors (noted in the GBA+ definition above). Sex and gender (and multiple intersecting identity factors) can influence all stages of research or development processes, from considerations for establishing priorities and building theory to formulating questions, designing methodologies, and interpreting data. Many pitfalls can be avoided—and new ideas or opportunities identified—by designing SGBA+ into research from the start. Integrating SGBA+ alongside

other methodologies that serve to mitigate bias creates a higher standard of rigour in science and engineering research, policy and practice.

Systemic Barriers

Systemic barriers are defined as policies or practices that result in some individuals from underrepresented groups receiving unequal access to or being excluded from participation in employment, services or programs. These barriers are systemic in nature, meaning they result from institutional-level practices, policies, traditions and/or values that may be "unintended" or "unseen" to those who do not experience them, but that have serious and long-lasting impacts on the lives of those affected (e.g., on their career trajectories and/or mental and physical health).

Unconscious bias

Unconscious bias is an implicit attitude, stereotype, motivation, or assumption that can occur without one's knowledge, control, or intention. Unconscious bias is a result of one's life experiences and affects all types of people. Everyone carries implicit or unconscious biases. Examples of unconscious bias include gender bias, cultural bias, race/ethnicity bias, age bias, language and institutional bias. Decisions made based on unconscious bias can compound over time to significantly impact the lives and opportunities of others who are affected by the decisions one makes.

GRANT APPLICATIONS—WHERE IS IT REQUIRED AND HOW DOES IT STRENGTHEN THE PROPOSAL?

EDI in research must go beyond the required sections on a grant application. It should be a universal consideration because it not only creates opportunity it also helps build robust and diverse research. EDI in research promotes transparency and fairness, builds trust in teams, and fosters innovation and creativity. Well-developed EDI practices provide opportunities for all people in your research team to be included, recognized and to have a voice.

Federal, provincial and other types of granting agencies continue to add EDI application requirements for their programs as they roll out. For many funding programs, inclusion of EDI plans for both your research team and the research environment, are now proposal requirements and part of the evaluation criteria. As well, EDI considerations are often a requirement when discussing your research methodology and experimental design (as applicable). Sponsors that now require EDI integration in the proposal include: New Frontiers in Research Fund (NFRF), Canadian Institutes of Health Research (CIHR), Natural Science and Engineering Research Council of Canada (NSERC), Social Sciences and Humanities Research Council of Canada (SSHRC), federal agencies, Ontario Ministry programs (e.g., Early Researcher Award), and others (various sectors including not for profit, foundations, and private opportunities). *See example EDI section from New Frontiers in Research Fund, Exploration opportunity (2019).*

Refer to the program description and application instructions for the program you are applying to for specific EDI requirements and considerations in relation to both the research team and research design. Review and selection committee members are provided with resources and guidance on evaluating the integration of EDI considerations in these applications. In cases where an application may *not require* an EDI section/plan, it is highly recommended to include these elements, as applicable, in the relevant

areas of your proposal. Inclusion of EDI best practices and plans for your team and research will strengthen your proposal and present a clear picture of your vision and goals.

The following are the primary areas where required EDI plans and practices are most likely to be integrated in the proposal:

1. **EDI in the Research Team**: Inclusion of your EDI principles, plans and recruitment best practices should be clearly described for your research team including leadership and highly qualified personnel (HQP). This includes co-investigators, collaborators, students and trainees (HQP), staff, and others in your team.

   - ✓ HQP: EDI considerations should be discussed in the sections related to *previous* and *current* contributions to training and mentoring HQP, such as overall philosophies/vision, team environment, recruitment practices, access to information, skill-building, and professional development opportunities. Consider including EDI plans and processes for any *proposed* HQP training and mentoring plans and processes as relevant to your team and projects. You may highlight techniques or practices that worked well as exemplary models.

   - ✓ Team Leadership: Include discussion of EDI vision and practices as applicable, for the sections on the relevant expertise of your team's leadership, including Principal Investigator, co-applicants, and collaborators.

2. **EDI Considerations in the Research Design and Plans—SGBA and GBA+:** It is recommended that you include discussion of SGBA and GBA+ in the research design where your research has potential sex, gender, intersectionality, or diversity dimensions. Often, the inclusion of these detailed discussions are a *requirement* within the proposal (if they apply to your research). Discussion and details of SGBA and/or GBA+ factors most in your research methodologies, instrument development or selection, data collection and analyses, program evaluation methods, and other areas as needed. Inclusion of SGBA, for example, is a requirement for most CIHR grant opportunities, and will be factored into the evaluation criteria and overall assessment of your application.

3. **Knowledge Mobilization/Dissemination Activities:** Integrate your knowledge mobilization plans and goals for engagement with diverse groups, stakeholders and knowledge users. You can include details of your plans, previous strategies, and achievements at any stage in the research process, from design to dissemination and application (not just the knowledge mobilization sections).

4. **Peer Reviewer Selection:** Where possible, aim to recruit and include peer reviewers from underrepresented groups, different career stages (early, mid and senior), and diverse backgrounds.

5. **Letters of Recommendation or Refereed Letters:** When writing and soliciting recommendation letters consider using EDI best practices and limit unconscious bias. See [Canada Research Chairs Guidelines and Best Practices for Reference Letters Writers](#) for guidance.

EXAMPLES OF EDI CONSIDERATIONS FOR YOUR RESEARCH TEAM

- **Culture:** Cultivate a culture that fosters a positive approach to EDI. Impart the value of regular discussions of resources and new developments related to EDI in research teams. Find ways to display your commitment to EDI (accessible and public commitment statements, for example).
- **Create a Plan**: Outline measures and safeguards to ensure that EDI principles are implemented in the composition and management of the research group and training activities. This might be done through regular communications such as team meetings, manuals, reference material, policies, and other mechanisms. All communications and materials should be transparent and accessible to all members of the group.
- **Meetings and Communications**: Consider adopting one or more of these four key actions[3] as standard protocols for meetings and other communications, to integrate diverse perspectives and foster a culture of respect: Invite team members to share their perspectives in their own ways; foster inclusive team discussions by taking a break; gain agreement on solutions through member-checking; and work towards consensus on shared goals and decision-making criteria.
- **Meaningful Engagement**: Research projects should meaningfully engage members of underrepresented groups within the research team through the engagement of students, postdoctoral fellows, faculty and partners.
- **Equal Opportunities**: Make a conscious effort to ensure research and scholarly opportunities are available to all members of your research team. For example, discuss publishing and networking opportunities (e.g., attending conferences and other networking events) to all members of the team, including new students and staff.
- **Training:** EDI training should be encouraged and made readily available to all members of the team. Training, education and workshops may include: Equity and human rights in the workplace, anti-racism, decolonization and cultural safety, unconscious bias, EDI in research design and methodologies and practices, to name a few. These trainings and workshops are often provided regularly by the university.
- **Create a Team/Lab Manual**: Aim to develop a handbook or lab manual and include your internal EDI practices and policies, as well as university practices, policies and resources; Integrate EDI material into your existing lab manuals, plans, or process documentation. Be sure to update your manual and resources regularly.
- **Mentorship Training**: Have team members who supervise research staff or students develop core competencies and/or receive training from Equity & Human Rights Office (or other units on campus). EDI-centred training can apply to faculty team members as well as senior HQP supervising other trainees (postdoctoral fellows or associates).
- **Build Skills:** Provide foundational, technical, and soft skills for all team members that can translate into diverse professional opportunities in a variety of sectors and disciplinary fields.

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[3] https://blog.shrm.org/blog/4-actions-to-integrate-diverse-perspectives

- **Professional Development**: Develop an individualized training plan and approach for each HQP, where possible. HQP who are training in specialized techniques can be complemented by other professional development and networking opportunities offered by the university, the Faculty or Department, professional associations, online resources, and funding sponsors (e.g., Mitacs and Tri-Councils). In addition to competencies outlined above, the development of skills such as critical thinking, independent project development, project management, policy/data analysis, communication, and/or knowledge mobilization are transferable to academic, industrial, and other career paths.

RECRUITMENT OF TEAM MEMBERS

When recruiting research team personnel consider what best practices you will put in place to ensure that the recruitment of team members (faculty, postdoctoral fellows, graduate students, staff and others) is open and transparent to minimize barriers and mitigate against unconscious bias. In developing your best practices, consider the following:

- ✓ **Publicizing positions:** Positions can be posted publicly for a minimum period of at least two (2) weeks to thirty (30) days. This time period allows for transparency and access to information about the position. It ensures that your advertisement adequately reaches a wide audience. Positions can be posted on websites (lab, department or other areas), shared through social media (e.g., LinkedIn), professional networks and listservs, and posted on national and international job boards, especially those targeting under-represented groups.
- ✓ **Language in job posting:** As a starting point, it is recommended that you use the templates provided by Western's Human Resources or your Faculty/Department (see also Western HR's Researcher Toolbox, requires login). The Canada Research Chairs (CRC) program suggests the following: 1) Use gender-neutral language; 2) post only the qualifications and skills necessary for the job; 3) ensure the job advertisement/posting includes a statement encouraging applications from underrepresented groups; and 4) encourage candidates to speak with other members of the lab and/or department who can share their experiences regarding the work environment.
- ✓ **Interview process:** Consider diversity as a factor in establishing participation in the interview/selection processes, those who are mindful of human rights values or who are familiar with the challenges faced by underrepresented groups. Be sure to provide any accommodations that may be appropriate during the interview.
- ✓ **Refer to university pay resources:** Refer to Human Resources and SGPS sites and administrative contacts for wage grids for student employees, minimum stipends for postdoctoral fellows, and salary/wage rates for other research staff.
- ✓ **Training**: Encourage training modules on minimizing implicit bias in recruitment for those involved in staff and student recruitment.

EDI RESOURCES

TRAINING AND GUIDES

- Unconscious Bias in Peer Review Training module (hosted on the Canada Research Chairs site)
- Gender-Based Analysis Plus (GBA+) training course (Status of Women Canada site)
- Sex and Gender in Health Research online training modules - SGBA (CIHR site)
- Peer-reviewed Gendered Innovations project: Develops practical methods of sex and gender analysis for scientists and engineers and provides case studies as concrete illustrations of how sex and gender analysis leads to innovation.
- First Nations Principles of OCAP®: A fee-based online course on the First Nations principles of Ownership, Control, Access and Possession.

Western University Training & Resources:

- Diversity Resources Main Page
- Equity & Human Rights Services (includes training, workshops and online learning resources)
- Human Resources
- Human Resources Forms and Documents (some require login)
- Western Research EDI Resources
- Western Indigenous Initiatives (includes link to Land Acknowledgement)

FUNDING SPONSOR RESOURCES

Canada Research Chairs

- Canada Research Chairs Equity, Diversity and Inclusion Requirements and Practices
- Canada Research Chairs Equity, Diversity and Inclusion: A Best Practices Guide for Recruitment, Hiring and Retention
- 2016 Open Letter to University Presidents from the Canada Research Chairs Program

Canadian Institutes for Health Research (CIHR)

- EDI in the Research System (includes links to resources and training)
- How to Integrate Sex and Gender into Research
- Online Training Modules: Integrating Sex and Gender in Biomedical Research (certificate upon completion)

Natural Sciences and Engineering Research Council of Canada (NSERC)

- NSERC Guide for Applicants: Considering equity, diversity and inclusion in your application
- NSERC Framework on EDI
- Understanding Workplace Diversity for Managers (in partnership with Westcoast Women in Engineering, Science and Technology)
- Made-In-Canada Athena Swan Consultation

New Frontiers in Research Fund

- Best Practices in Equity, Diversity, and Inclusion in Research

Social Sciences & Humanities Research Council of Canada (SSHRC)

- Interactive EDI Dashboard (data based on voluntary self-identification data collection in support of EDI)
- SSHRC Indigenous Research Resources
- Inter-Agency Collaboration Resources

ADDITIONAL RESOURCES

- Western University Canada Research Chairs EDI Action Plan
- Tri-Agency EDI Action Plan 2018-25
- Canada Research Coordinating Committee (CRCC)
- Dimensions: The Dimensions program supports transformation of post-secondary institutions to increase EDI and help drive deeper cultural change within the research ecosystem.
- Canada School of Public Service Learning Tools (videos include topics on EDI, GBA+, and Accessibility)
- Canadian Centre for Diversity and Inclusion (CCDI) (includes resources and toolkits such as Getting Started - Diversity and Identity)
- Self-Identification Data Collection in Support of EDI

INDIGENOUS RESEARCH RESOURCES

- Assembly of First Nations. (n.d.) *First Nations Ethics Guide on Research and Aboriginal Traditional Knowledge*.
- First Nations Principles of OCAP®
- TCPS 2 (2018) – Chapter 9: Research Involving the First Nations, Inuit and Métis Peoples of Canada
- SSHRC Indigenous Research Resources
- CIHR Guidelines for Health Research Involving Indigenous Peoples
- For researchers: Doing Indigenous research in a good way (compiled by Memorial University)
- Truth and Reconciliation Commission of Canada Calls to Action

- [Truth and Reconciliation Personal Action Plan](#) – An example Truth and Reconciliation Personal Action Plan that provides resources and references to support working with Indigenous communities.
- [Two-eyed Seeing resources](#) Institute for Integrative Science and Health

INDEPENDENT RESOURCES

- [Cheruvelil, K.S. et al. (2014). Creating and maintaining high-performing collaborative research teams: The importance of diversity and interpersonal skills.](#) *Front Ecol Environ*, 12(1), 31-38. doi:10.1890/130001

- [Henry, F., James, C. E., Li, P. S., Kobayashi, A. L., Smith, M., Ramos, H., & Enakshi, D. (2017). *The equity myth: Racialization and indigeneity at Canadian universities*.](#)

- [The Diversity Dividend: Canada's Global Advantage (2017).](#) B. Momani & J. Stirk. Centre for International Governance Innovation.

- [Gendered Innovations—Stanford University](#)

- TSNE Mission Works [Diversity](#) and [Inclusion Initiatives](#) Resources (US-based not-for-profit organization resources that can be used to develop and build your EDI research team practices).