



# College and Community Innovation Program: EDI in Applied Research

EDI workshops 2022-2023

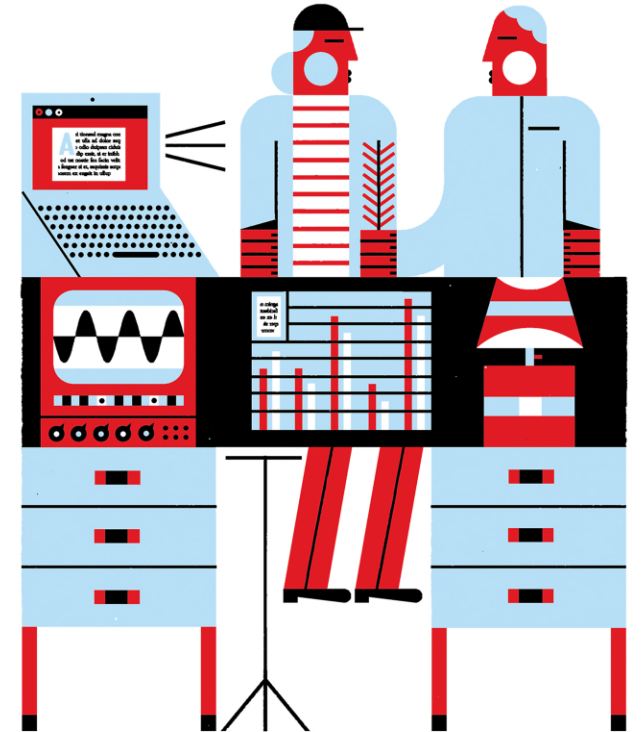
## How to use this presentation

This presentation is designed to offer supplemental information on equity, diversity, and inclusion (EDI) in research. It is intended for use in addition to:

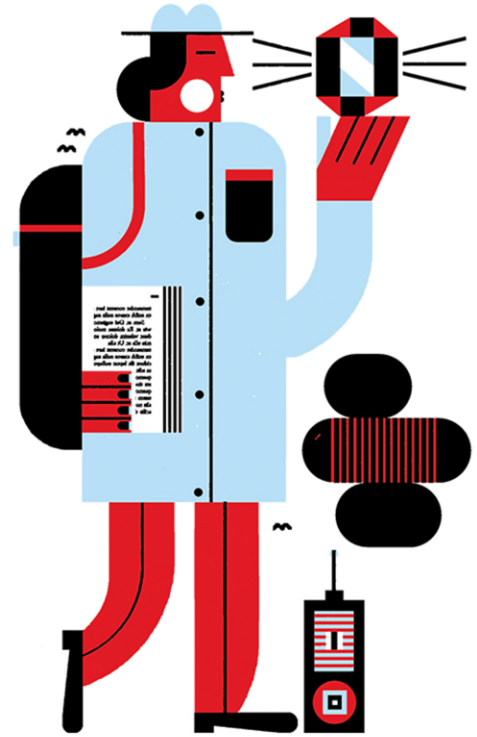
- [Guide to addressing equity, diversity and inclusion in College and Community Innovation program grant applications](#)
- [NSERC's guide on integrating equity, diversity and inclusion considerations in research](#)
- Additional reference sources noted throughout the presentation

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# 1. Foundations of EDI: Definitions and concepts



## Foundations of EDI

These definitions and concepts represent only some of those used in the field of EDI. There are many more, and many terms and acronyms that change and emerge as we learn more about equity-denied groups and as more voices make themselves heard. It is important to seek out ongoing learning about EDI in your field, institution and community.

The following definitions are from the Government of Canada's [Guide on Equity, Diversity and Inclusion Terminology](#), unless otherwise indicated.

## Foundations of EDI

# Accessibility and access needs

**Accessibility** is the quality of an environment that enables a person to access it with ease.

**Access needs** are aspects of the physical environment, cultural structure, or services required in order for everyone to be able to participate fully in the research process.

## Anti-racism

The conscious opposition to racist theories, attitudes and actions. Anti-racism is not just about being against the idea of racism. It is also about taking active steps to fight against it.



## Foundations of EDI

# Barriers

Anything — including anything physical, architectural, technological or attitudinal, anything that is based on information or communications or anything that is the result of a policy or a practice — that hinders the full and equal participation in society of persons with an impairment, including a physical, mental, intellectual, cognitive, learning, communication or sensory impairment or a functional limitation.

## Foundations of EDI

# Bias

A preconceived judgment that is held by a person and that influences their perception of or their behaviour towards another person or group of people. Everyone has biases. Several factors contribute to the development of these preconceptions, including culture, education, life experience, comments heard, the media and the influence of institutions.

## Foundations of EDI

# Diversity

The variety of identities found within an organization, group or society. Diversity is expressed through factors such as culture, ethnicity, race, religion, sex, gender, sexual orientation, age, language, education, ability, family status, socioeconomic status, etc.

## Foundations of EDI

# Equity

The principle of considering people's unique experiences and differing situations, and ensuring they have access to the resources and opportunities that are necessary for them to attain just outcomes. Equity aims to eliminate disparities and disproportions that are rooted in historical and contemporary injustices and oppression.

## Foundations of EDI

# Equity-denied groups

A group of people who, because of systemic discrimination, face barriers that prevent them from having the same access to the resources and opportunities that are available to other members of society, and that are necessary for them to attain just outcomes.

Note: You may also see these groups referred to as equity-deserving groups, equity-seeking groups or underrepresented groups, depending on context.

## **Ethnicity**

The shared cultural, linguistic or religious characteristics of a group of people having a common history, heritage or ancestry.

## Foundations of EDI

# Gender

The behavioural, cultural and psychological traits associated with an array of gender identities, (e.g., non-binary, female, male, etc.) in a given society.

Gender is not the same as sex. While sex refers to a set of anatomical and physiological characteristics, gender refers to a social construct, and goes beyond the traditionally understood binary concept that there are only two genders (male, female) and that a person's sex assigned at birth aligns with their gender identity.

## **Inclusion**

The practice of using proactive measures to create an environment where people feel welcomed, respected and valued, and to foster a sense of belonging and engagement.



## Foundations of EDI

# Intersectionality

Coined by American lawyer and law professor Kimberlé Crenshaw in the late 1980s to explain how race intersects with gender to produce unique barriers, **intersectionality** is an analytical framework for understanding how aspects of a person's identity (for example, sex, gender, age, ethnicity, class, religion, sexual orientation, ability) combine to create particular forms of discrimination and privilege.

## Foundations of EDI

# Race

Focuses on identifiable physical characteristics, such as skin colour, hair texture and facial features and refers to a group of people who are arbitrarily categorized according to common physical characteristics, regardless of language, culture or nationality.

While this term has long been used to establish differences between groups of people, often according to a hierarchy, there is no scientific basis for the concept of race. Race should not be confused with ethnicity.

## Foundations of EDI

# 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. There is variation in the biological attributes that comprise sex and how those attributes are expressed.

**Sex assigned at birth** may be understood to mean the sex recorded, for example, on a person's birth certificate. Assigning sex at birth is not common to all cultures.

### [Definition of sex from CIHR](#)

## Foundations of EDI

# Systemic barriers

Attitudes, policies, practices or systems that result in individuals from certain population groups receiving unequal access to, or being excluded from, participation in employment, services or programs due to discrimination.

Systemic barriers result from individual, societal or institutional practices, policies, traditions and/or values that may be unseen to those who do not experience them. They can have serious and long-lasting harmful impacts on individuals, such as on their physical and mental health, emotional well-being, life expectancy, physical safety, job and financial security, and career progression.

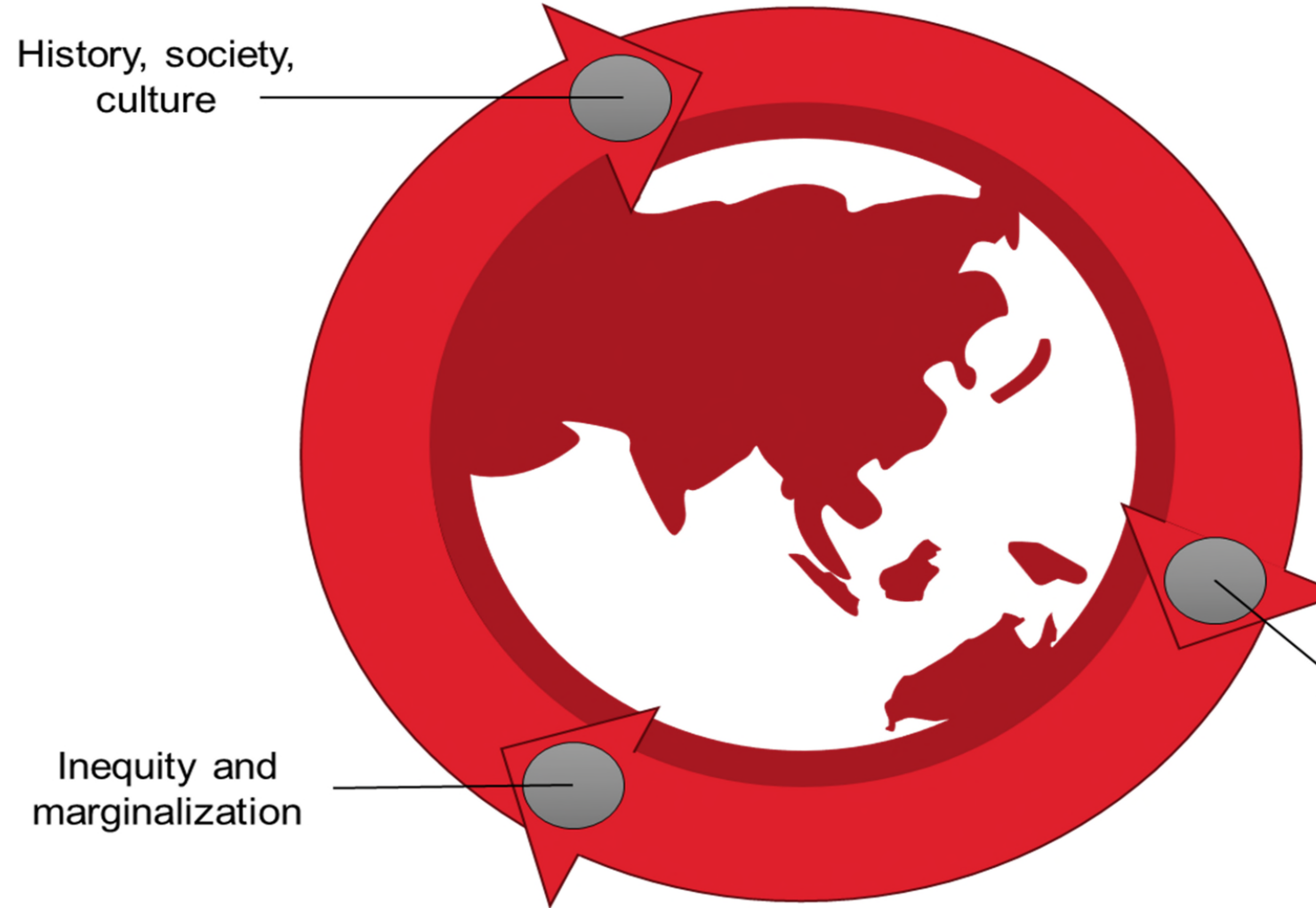
## Foundations of EDI

# Unconscious bias

Unconscious (also called implicit) bias is a bias that a person has without realizing it. It refers to thoughts and feelings that occur outside of our awareness. These are learned stereotypes that are unintentional and deeply engrained. Unconscious biases can influence behaviours and can lead to different treatment of a group of people – i.e., favouritism or discrimination.

## Concept: Bias and barriers in research

Our research environments are influenced by the biases that our history, society and culture create and by the inequities and marginalization that result. Biased, inequitable research creates more marginalization and biases, ultimately creating systemic barriers.



## Foundations of EDI

# Concept: Mitigating bias

- 1. Stereotype replacement.** Think about a stereotype that you hold. Consciously replace it with accurate information
- 2. Positive counter-stereotype imaging.** Picture someone who typically fills a traditional stereotyped role. Challenge your own assumptions and consider the systemic barriers and biases that may lead to a field being less diverse.

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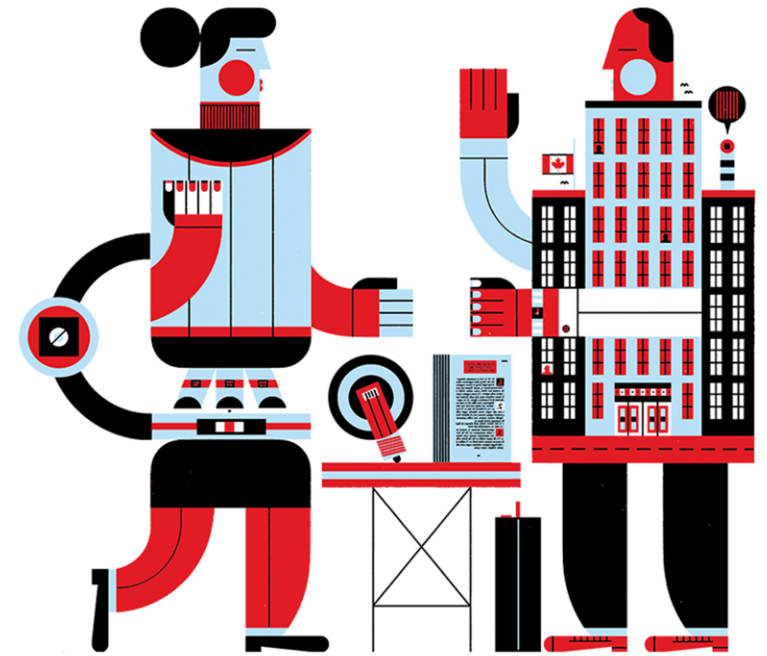
## Foundations of EDI

### Concept: Mitigating bias (continued)

- 3. Perspective taking.** Take the perspective of someone who faces different systemic barriers in research and post-secondary education.
- 4. Individuation.** Use specific information about an individual to prevent group stereotypes from leading to assumptions.
- 5. Discussion.** Raise potential biases during discussions and communicate concerns openly and honestly.



# 2. EDI in the research process



Source: [NSERC guide on integrating equity, diversity and inclusion considerations in research](#)

## EDI in the research process

# Including EDI in the research process

- You are invited to consider your work through a critical EDI lens, from the initial framing of research questions to the dissemination of findings
- The goal is to encourage greater reflection on how your research could be strengthened by integrating EDI considerations
- Applying an EDI lens means systematically examining how diversity factors (e.g., sex, gender, race, ethnicity, age, disability, sexual orientation, geographic location) and the ways in which they intersect may affect the research process

## EDI in the research process

# What is EDI in the research process?

An EDI lens can be applied to different aspects of the research process, including the framing of research questions, the design of the study, the methodology and data collection, analysis and interpretation, dissemination of results, and knowledge mobilization.



## EDI in the research process

# Examples of incorporating EDI into the research process

Consider how you would complete the following sentences:

- The knowledge created by this research will affect diverse populations through ...
- This technology will be made accessible by ...
- The way we create this knowledge/tool/ product has changed in the following ways to be more inclusive ...
- The methods in this application value international research on the topic by ...
- This project will have broad applicability because ...

## EDI in the research process

# Examples of EDI in the research process

(continued)

- The budget for this project includes honoraria for Indigenous Elders and consultation fees for people with lived experience of diversity that is not represented in our project
- The facilities offer the following features to facilitate accessibility ...
- The equipment is accessible for people with disabilities in the following ways...
- The equipment is not accessible for people with disabilities due to ....
  - To mitigate this limitation, we will ...
- Translation, transcription, communication access real-time translation service (CART) service for research participants and dissemination will be provided to facilitate accessibility...

# 3. EDI in the research process: Ask yourself...



Ask yourself...

## Overview

This section suggests questions for reflection at different stages of the research process. This list is by no means exhaustive but is intended to serve as a starting point for further learning and conversation among research teams.

Source: [NSERC guide on integrating equity, diversity and inclusion considerations in research](#)

Ask yourself...

## Overarching questions

- Who are the end users of the study? Have you considered the diversity of these populations?
- What are the EDI challenges in your field(s) or area(s) of work (e.g., systemic barriers, underrepresented or disadvantaged groups)?
- Which populations might experience unintended impacts (positive or negative) as a result of the planned research?
- What are the access needs of your research team and of any participants involved in the research, and how will these affect how you design the methodology?
- How will you address new access needs that emerge over the course of the research?



Ask yourself...

## Developing the research question

- Does your literature review address relevant EDI considerations?
- How will your research questions and subsequent findings apply to the needs or experiences of various groups? Who will benefit from the findings and/or products developed? Have you considered which populations may experience significant unintended impacts (positive or negative) as a result of the planned research?
- What populations do your research question include and/or exclude?

Ask yourself...

## Frameworks, methodologies, and methods

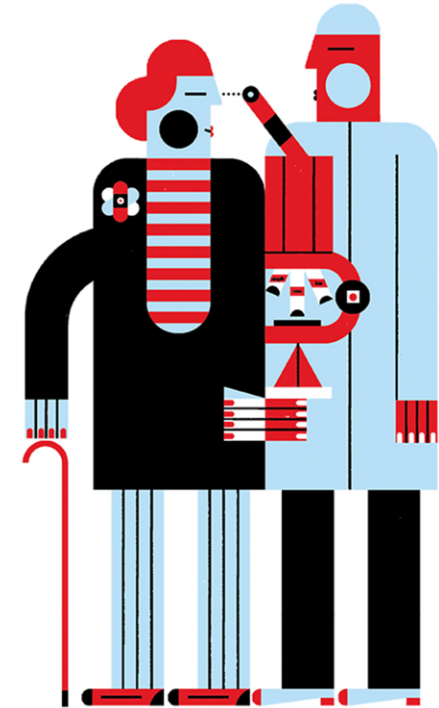
- Which diversity factor(s) could be embedded to strengthen the study? Why would you consider or not consider these factors and their intersections?
- What is your position relative to the context of the research problem or the subjects themselves? What biases related to identity, privileges and power imbalances could affect the study? How will they be mitigated?
- How will you ensure that the research participants reflect the diversity categories included in the research design?
- How will you monitor, mitigate and record bias?
- Are you applying the findings of your research to the population as a whole when your method and design were, in fact, limited to certain groups?

Ask yourself...

## Knowledge mobilization

- What means of dissemination will be most effective in reaching those who will use and/or could benefit from the findings?
- How will inclusivity be integrated during dissemination? Will accessible formats be used?
- Does the dissemination plan consider the language of use (i.e., English, French or other appropriate languages) depending on the groups identified?
- Does the dissemination material take into account gender-sensitive and inclusive communication approaches (e.g., gender-neutral language, unbiased content)?
- Are the dissemination strategies the product of collaborative efforts with diverse inputs, or have they been envisioned in a narrower focus?

# 4. EDI in the research environment



Source: [Guide to addressing equity, diversity and inclusion in College and Community Innovation program grant applications](#)

## EDI in the research environment

# Overview

This section looks at what practical initiatives could be considered to increase EDI in the research environment.

The **research environment** is the environment (in-person, virtual, lab, field, etc.) where the research is conducted, including organizational systems, people, and culture. In the context of grant applications, this includes the **research team** and the **training plan**.

The examples provided may not apply to all types of research, nor should the list here be considered exhaustive. Seek out options and initiatives that will be appropriate to addressing the barriers faced by equity-denied groups in your field, institution, region, and community.

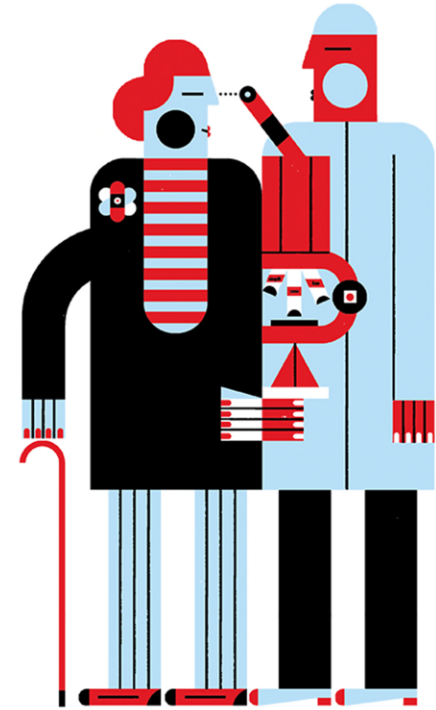
## EDI in the research environment

### Where to start

When drafting applications, ensure that you address the *what*, *how* and *why* of EDI in your application.

- **What** barriers exist in my institution, region, field of research, etc.? **What** practice am I proposing to reduce those barriers to improve inclusion?
- **How** will these practices be carried out (in detail and specific to my research environment)? Include a timeline if appropriate.
- **Why** is the initiative that I am proposing appropriate to my research?

# 4. Part 1 - EDI in the research team



EDI in the research team

## Overview

The following slides include non-exhaustive lists of examples of EDI in the categories of recruitment, selection and inclusive environment. You are not required to include a practice from each list. If incorporating any of these practices into your research, think carefully about how you can make them specific to your environment and provide details in the grant application about how you will carry out the practice.



## EDI in the research team

### **Consider and know the answers to these questions before you begin your proposal:**

1. Is diversity in the research team important to you?
  - If so, why?
  - What are the benefits of having a diverse research team?
  - What are the pitfalls of homogenous research teams?
  
2. Do you have a diverse research team?
  - If yes, was this intentional?
  - If not, why not? Do you see this as a problem/issue?

Note: You do not need to answer these questions in your grant application. They are meant to inform your self-reflection. Please do not ask your team members to self-identify.

## EDI in the research team

**Consider and know the answers to these questions before you begin your proposal:**  
(continued)

3. Are certain groups underrepresented in your field of research?
  - What are the gaps in representation, and why do you think they exist?
4. How will you address EDI through the composition of your research team?
5. Do any team members have EDI expertise to contribute to the research?

EDI in the research team

## Equitable recruitment practices

Establishing equitable recruiting practices ensures that a diversity of researchers will apply. For example:

- Job postings with generous deadlines give researchers more time to apply
- Social media and community organizations can be used to promote postings
- Using inclusive, non-gendered language can encourage people from equity-denied groups to apply

## EDI in the research team

# Equitable selection practices

Establishing equitable selection practices can help ensure that you hire a diversity of researchers. For example, you can:

- Provide unconscious bias training for interviewers and set up strategies for uncovering unconscious bias during interviews
- Have a clear, equitable, and well-defined definition of what “merit” will mean in your recruitment
- Select objective criteria that mitigate for subjective “fit”
- Include a question for applicants about their commitments to and support of EDI

## EDI in the research team

# Equitable and inclusive practices

Establishing equitable and inclusive practices to integrate your research personnel will help you attract and retain researchers from a diversity of backgrounds. For example, you can:

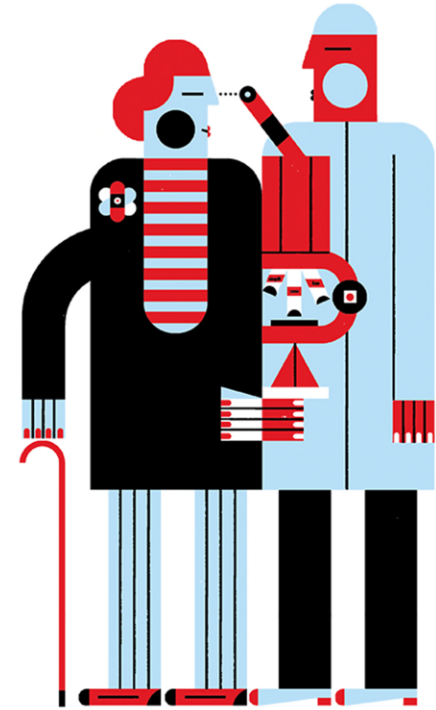
- Provide flexibility for accommodations
- Plan for emerging access needs before they are necessary
- Include pronouns in introductions
- Acknowledge traditional lands
- Recognize all religious holidays
- Ensure all social events are accessible (e.g., time of day, physical space, etc.)

## EDI in the research team

### **Equitable and inclusive practices** (continued)

- Discuss parental and caregiving responsibilities to determine how team members with these responsibilities can be accommodated and feel supported
- Support and encourage parental and sick leave
- Provide EDI education and training related to both the research and the institution
- Normalize discussions of EDI-related topics
- Establish communication tools and rules
- If publishing, offer equitable authorship
- Provide equitable professional development opportunities

# 4. Part 2 - EDI in training



## EDI in training

# How might you create an **equitable and inclusive** training program?

- Meet one-on-one with each trainee regularly, considering their unique circumstances to provide equitable opportunities
- Provide equitable professional development opportunities, CV building and networking opportunities for trainees
- Set clear and transparent expectations for the supervisor-trainee relationship
- Establish milestones and goals that are fair, reasonable, and realistic



## EDI in training

# How might you equitably recruit and select trainees?

Refer to the list provided in the previous section (on [research teams](#)) for recruitment and selection but consider how to apply this to trainees specifically. For example:

- Keep job postings up longer to offer more time for trainees to apply
- Target trainee-specific social media and community organizations to promote postings
- Develop a clear, equitable, and well-defined definition of what “merit” will mean in your recruitment

## EDI in the research environment

### Examples of what EDI looks like

- We are aware of ... gaps in the lived experience of this research team. When hiring, we will strive to hire equity-deserving individuals by ...
- Training in ... will be provided to our hiring panels
- We will provide the following professional development opportunities equitably ...
  - This equitable provision will be monitored by...
- The following training will form part of our onboarding ...
- The partner's commitment to EDI aligns with our institutional policy/strategy/action plan because ...

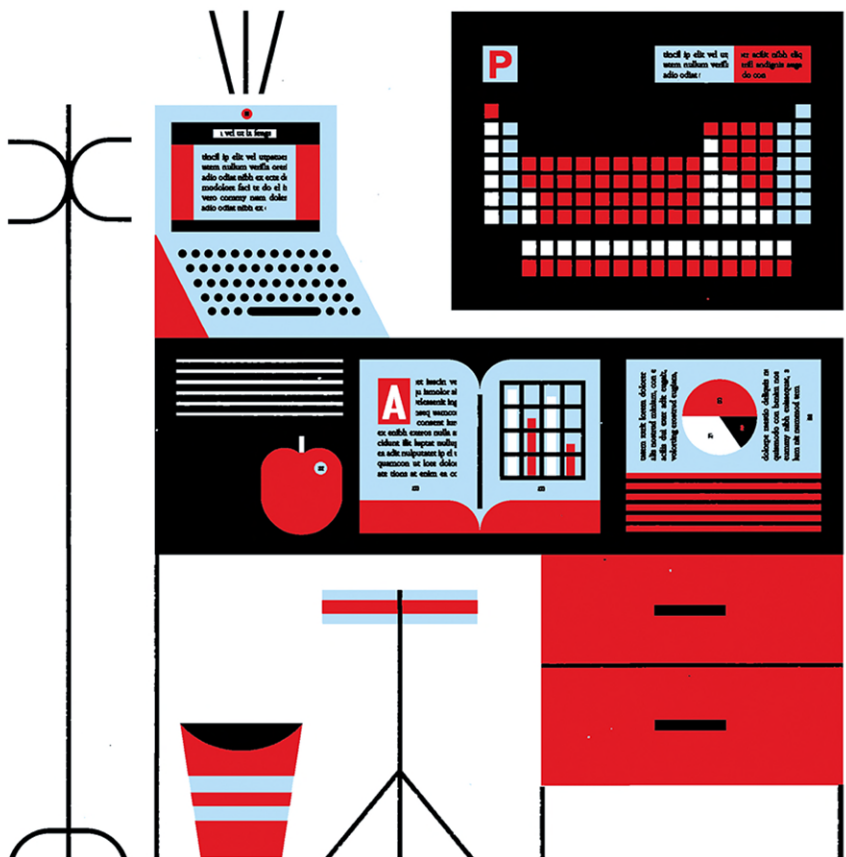
## EDI in the research environment

### Examples – EDI looks like:

- We will provide training on the following topics:
  - Gender equity
  - Anti-racism and anti-antisemitism in the research and post-secondary ecosystems
  - Unconscious bias and how to mitigate it
  - Microaggressions and bystander intervention
  - 2SLGBTQIA+ inclusion and safety
  - Indigenous research methodologies
  - Cross-cultural training
- We will ensure that opportunities are made equitable through the following process ...
- We will implement the following mentorship plan throughout the course of this project...

## Resources

- Definitions: [Guide on Equity, Diversity and Inclusion Terminology](#)
- College and Community Innovation (CCI) program-specific instructions: [Guide to addressing equity, diversity and inclusion in College and Community Innovation program grant applications](#)
- NSERC guide (broader scope than CCI guide): [NSERC guide on integrating equity, diversity and inclusion considerations in research](#)
- Useful list of questions and practices from the New Frontiers in Research Fund: [Best Practices in Equity, Diversity and Inclusion in Research](#)
- [CCI guide for research involving Indigenous Peoples or communities](#)
- Video: [Bias in peer review training](#)



# Questions?

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