

Canada's Immuno-engineering and Biomanufacturing Hub (CIEBH) EDI Research Strategy

INTRODUCTION

This statement sets out the principles and objectives upon which the Canada's Immuno-Engineering and Biomanufacturing Hub's ("CIEBH") strategy to incorporate principles of equity, diversity, and inclusion ("EDI") in all aspects of the research conducted through the HUB. This document has been prepared to assist researchers who plan to submit proposals that will support biomedical research, talent development, and the associated infrastructure for the development and manufacturing of medical treatments in Canada.

Successful proposals must meet all CIEBH HUB criteria which, in addition to scientific excellence, innovation and sustainability, include a requirement that the proposal embeds principles of EDI in all aspects of the research.

Research proposals must demonstrate a strong commitment to EDI by identifying relevant systemic barriers to the recruitment and full participation of individuals from historically marginalized groups and by incorporating specific measures to eliminate or mitigate these barriers. This commitment must be demonstrated in the research applications and in the implementation of the project, if funded.

BACKGROUND CONTEXT

CIEBH's vision is to make Canada a global epicentre for the development of next-generation immune-based therapeutics that can be rapidly produced domestically, using the latest innovations in biomanufacturing, in response to future pandemics and other health threats.

To bolster Canada's pandemic preparedness and mitigate the risks of a global health emergency, CIEBH is harnessing the collective research and training capabilities of our 50+ multidisciplinary, multisectoral partners to increase Canadian capacity to quickly translate discovery science into patient-ready treatments, preventing treating and curing illness and disease.

UBC, Dalhousie, University of Waterloo, BCIT, University of Victoria, SFU and others in partnership with public, private, not for profit, and government partners is a designated CIEBH HUB, committed to engaging in research that demonstrates scientific excellence and incorporates principles of equity, diversity, inclusion, and anti-racism. As a national research hub that holds the privilege and power to influence access to significant research funding, training, and development opportunities, implementing concrete measures to promote these principles is essential.

EDI IS INTEGRAL TO RESEARCH EXCELLENCE

The goal of the CIEBH HUB is to create, translate, and implement knowledge at scale across all research areas to increase global impact and promote improved individual and population health. To achieve this goal all aspects of the research process must be designed to generate relevant findings that promote health equity for the diverse communities we serve. Research processes must be conducted in a manner that reduces barriers for historically, persistently, and

systemically marginalized groups. Research innovators will consider research from the perspective of different populations through a diverse and inclusive lens including sex and gender, age, ability, race and ethnicity.

OUR CIEBH EDI RESEARCH STRATEGY

The CIEBH research EDI strategy, which supports the CIEBH vision and strategic objectives, is founded on research that demonstrates that equity, diversity, and inclusion drive excellence in creation and discovery and on our commitment to proactively address the many persistent systemic barriers to promote health equity, enable equitable access to our program of research and training, and to ensure a diverse and inclusive biomanufacturing and life sciences workforce for the future.

Our strategy is based on the following principles:

1. Research must aim to Improve equity and access to therapeutics and diagnostics in order to realize more equitable health and social outcomes.
2. An EDI lens on research projects is essential to engage in research that will improve our understanding of ourselves and the world around us, and that will produce knowledge that can be harnessed in the service of society.
3. Research and innovation need diversity. Diversity in experiences and perspectives promotes creativity, productivity, engagement, innovation and more significant research. Research that authentically and deliberately incorporates EDI increases the spectrum of ideas and insights needed to produce breakthrough discoveries and better outcomes.
4. Research in academic institutions must seek to mitigate the systemic and individual consequences of historical and persistent colonial barriers on health equity. Research that contributes to the HUB strategy must address the inequitable impact of immune-based health threats on historically and persistently marginalized groups.

CIEBH EDI RESEARCH OBJECTIVES

1. Research will embed EDI and anti-racism/anti-oppression principles and approaches in all aspects of research including formulation of research questions, selection of the research team, methods, theoretical frameworks, literature reviews, analyses and interpretations, and knowledge mobilization activities. This will help to maximize research scope in conception and breadth and will to benefit not only promote better research but will also address systemic barriers to health equity.
2. Research teams will work in an inclusive environment that will support talent development of a diverse group of researchers, including early career researchers, and will support training to build a talent pipeline that will meet industry needs.
3. Research will value diversity by considering the perspectives of different populations through, *inter alia*, the lens of sex and gender, age, ability, and ethnicity and will intentionally place the patient and public at its center recognizing the complexity, vitality and relevance of the lived experience and histories of different groups and individuals.
4. Research will proactively counter bias and various barriers for historically marginalized groups that result in reduced representation of historically marginalized groups in

medical research by designing research projects and protocols that integrate intersectionality, gender-based analysis, and an anti-racism approach.

5. Research involving Indigenous people and communities will recognize the rights of Indigenous people and the fact that Indigenous-led research and fulsome partnerships that are mutual, reciprocal and respectful are central to responding to Truth and Reconciliation Calls to Action.
6. Research will collect and analyze disaggregated data as a critical tool toward identifying, understanding, and ultimately dismantling persistent systemic barriers and improving equitable representation of all communities.

CIEBH EDI CRITERIA

EDI excellence is a foundational principle in the CBRF-BRIF program objectives, application and review processes. Researchers are expected to demonstrate leadership in transforming their discipline to be equitable, diverse, inclusive and anti-racist.¹

The adjudication of Stage 2 research proposals <https://www.sshrc-crsh.gc.ca/funding-financement/cbrf-frbc/stage2-etape2/competition-concours/overview-eng.aspx> will be based on four broad criteria:

- Research
- Talent Development
- Infrastructure
- Strategic Review

EDI is embedded throughout each criterion for proposals for Stage 2 adjudication. Research and Talent Development criteria require specific consideration of “*the extent to which commitment to EDI and Early Career Researchers is demonstrated in the proposal*”. SSHRC definitions have been adapted from [Best Practices in Equity, Diversity and Inclusion in Research—A guide for applicants to New Frontiers in Research Fund competitions](#).

EDI in research design and practice²

- EDI in research practice (EDI-RP) involves promoting diversity in team composition and trainee recruitment; fostering an equitable, inclusive and accessible research work environment for team members and trainees; and highlighting diversity and equity in mentoring, training and access to development opportunities.
- EDI in research design (EDI-RD) involves designing research so that it takes EDI into account through approaches such as [intersectionality](#), [gender-based analysis plus](#) (GBA+) anti-racist approaches, and disaggregated data collection and analysis that

¹ For more information, see [Best Practices in Equity, Diversity and Inclusion in Research \(New Frontiers in Research Fund\)](#); [NSERC guide on integrating equity, diversity and inclusion considerations in research](#); [Women and Gender Equality Canada information on gender-based analysis plus \(GBA Plus\)](#); and the [sex and gender-based analysis \(SGBA\) section of CIHR’s website](#).

Proposals that include Indigenous research are encouraged to consult [SSHRC’s Indigenous Research](#) resources; [CIHR’s Defining Indigenous Health Research](#) and the [Tri-Council Policy Statement 2 \(2018\) – Chapter 9: Research Involving the First Nations, Inuit and Métis Peoples of Canada](#)

² https://www.sshrc-crsh.gc.ca/funding-financement/apply-demande/guides/partnership_edi_guide-partenariats_guide_edi-eng.aspx

includes consideration of diversity and identity factors such as, but not limited to, age, culture, disability, education, ethnicity, gender expression and gender identity, immigration and newcomer status, Indigenous identity, language, neurodiversity, parental status/responsibility, place of origin, religion, race, sexual orientation, and socio-economic status.

Applicants must demonstrate a strong understanding of historical and systemic barriers faced by individuals from underrepresented or disadvantaged groups (e.g., women, persons with disabilities, Indigenous Peoples, racialized individuals, the 2SLGBTQIA+ community) and put in place meaningful, concrete measures to address these barriers. In addition to systemic barriers applicants must implement strategies in recruitment, training, and performance review that actively mitigate [microaggressions](#), conscious and [unconscious bias](#), inequitable support, and lack of recognition for historically marginalized groups. Applicants must implement processes to ensure that all trainees and team members, including those from historically marginalized groups, can fully contribute to the research and knowledge mobilization activities of the team.

Examples of guiding questions to consider while designing your research

In addition to the SSHRC guidelines for embedding EDI in research practice and design we recommend you also review the [CIEBH EDI Tip Sheet](#), prepared by CIEBH. We hope this will help you ensure that your proposal meets CIEBH and the national TIPS' expectations with respect to promoting EDI excellence in research.