## EQUITY, DIVERSITY, AND INCLUSION IN RESEARCH: <br> GENDER EQUITY IN RESEARCH TOOLKIT

## Acknowledgment of Traditional Lands

Royal Roads University acknowledges that the campus is on the traditional Lands of the Xwsepsum (Esquimalt) and Lekwungen (Songhees) ancestors and families. It is with gratitude that we live, work, and learn here where the past, present, and future of Indigenous and nonIndigenous students, faculty and staff come together.

In honour of the Xwsepsum (Esquimalt) and Lekwungen (Songhees) ancestors, Hay'sxw'qa si'em (hy-sh-kwa sea-em)! This means, "Thank you, respected or honourable one."

## Click here to listen to the Royal Roads University Traditional Welcome.

Dr. A.J. Lowik wishes to further acknowledge that they live and work on the traditional, unceded territories of the $x^{w} m ə \theta k^{w} ə y^{\prime} ə m$ (Musqueam), Skwxwú7mesh (Squamish), and səlilwəta王 (Tsleil-Waututh) peoples.


Harvested and carved by Tsawout artist Tom Lafortune with the assistance of Howard LaFortune Jr., the name of this 25 -foot-tall pole is "S'ael", a Sencoten word for harmony.

## Gender Equity in Research Toolkit

Table of Contents
Acknowledgment of Traditional Lands ..... 2
Aim of this toolkit ..... 4
Accessibility Statement ..... 5
Framing: Foundational Definitions ..... 9
Conducting Research ..... 11
Research Team Composition. ..... 11
Research Priorities and Agendas: Balancing Research Benefits and Harms ..... 12
Funding Considerations ..... 14
Dissemination and Knowledge Translation for Gender Equity ..... 15
Research Design ..... 18
Determining the Relevance of Gender ..... 18
On GBA+ ..... 20
A Note on Decolonizing Gender ..... 21
In Conclusion ..... 23
Work Cited and Additional Readings ..... 24
The Author ..... 27

## Aim of this toolkit

This Gender Equity in Research Toolkit is a brief and high-level overview for building gender equity into research design. It is a living document and will be updated as our knowledge and understanding of gender equity grows. If you would like to suggest improvements, or provide feedback on the toolkit, please refer to the "In Conclusion" section on page 22.

Following the framing sections, each section contains:

1. Context for your consideration, including embedded descriptive hyperlinks.
2. Question(s) to ask yourself throughout the process.

The toolkit concludes with a full list of work cited and suggested further reading.

## Accessibility Statement

This Toolkit includes the following accessibility practices:

- MS Word's built-in Headings
- Atkinson Hyperlegible Font - This font is open access for print and web use
- Table of Contents created using MS Word's built-in templates
- Numbered and bullet-point lists
- Accessibility Statement describing the design, format, and navigation options
- Navigation can be done using either a keyboard or mouse
- Footnotes are in 12-point font instead of the conventional 10-point to improve readability
- Modified American Psychological Association (APA) style emphasizes accessibility over compliance with style rules
- Each main word in the titles of articles and books cited in the References and Further Reading sections is capitalized
- Black or dark text on a white background

We recognize that access needs vary widely, and that no single document can be completely accessible to everyone. If you would like this toolkit in an alternative format, or if you have suggestions for including more options for navigation and readability, please contact researchedi@royalroads.ca.

Further Reading: The BCcampus Open Education Accessibility Toolkit incorporates core principles of accessible document design, and includes an Accessibility Statement that has served as a guide for this document.

## Framing: Background and Purpose

Inequities result from the unjust and unequal distribution of resources, rewards, and opportunities between different groups in society. Often, gender inequity is discussed as it relates solely to cisgender (cis) women as compared to cis men. ${ }^{1}$ However, due to intersections of sexism, misogyny and cisnormativity, cis women, transgender (trans) people of all genders, nonbinary people, among others, all experience gender-based inequities. ${ }^{2}$

Throughout this tool, the language of people of marginalized genders will be used to refer to those people who are marginalized, minoritized, subordinated, or otherwise disadvantaged based on their gender identities, modalities, and/or expressions. This term allows us to reflect on the systems of power that render some people marginalized and precarious based on their genders. This term also makes space for the evolution of language - where the specific names of different gender identities shift and change over time.

Achieving gender equity involves treating people of different genders fairly, according to their respective needs, including by acknowledging and addressing historical and ongoing social disadvantages and removing barriers that stop people of marginalized genders from reaching their full potential. ${ }^{3,4}$ It involves ensuring that all people, regardless of gender, can actively and meaningfully participate in all aspects of life, without being discriminated against, stereotyped, or devalued. It can include mainstreaming, which is a process where we bring something that has been seen as marginal - like gender, including people of marginalized genders - into the core of our processes and decision-making. ${ }^{5}$

Gender equity matters in research for two interconnected reasons:

## 1. Who is doing the research?

Evidence suggests that there continue to be gender disparities and inequities in research settings. Cis women continue to face significant barriers to advancement in their careers as researchers - they are underpaid as compared to cis men; hold fewer senior, leadership, and principal investigator positions; and are less likely to be authors of published papers than cis

[^0]men, where they publish in less prestigious journals and are cited less frequently. ${ }^{6,7,8,9}$ This gender gap is especially pronounced in certain fields (e.g., physics, astronomy, engineering, computer sciences), and is exasperated by other inequities - where cis women of colour, disabled cis women, and cis women who are parents experience more pronounced disparities.

Additionally, trans people of all genders, nonbinary people and others continue to face significant barriers to entry into research careers, due to challenges associated with educational attainment, job acquisition and advancement, as well as issues of safety at work. ${ }^{10,11}$ Trans and nonbinary people are often invisible in research and academic settings (where being visible comes with risks) or tokenized in research and academic settings (where they are hired precisely and solely because they are trans or nonbinary.). ${ }^{12}$ Trans and nonbinary people also face unique challenges in publishing, where previously published work may contain their former name, sometimes called a deadname,,$^{13}$ and where trans and nonbinary authors are frequently misgendered when their work is written about by others. ${ }^{14}$ Here too, these inequities are further exasperated for trans and nonbinary people of colour, disabled trans and nonbinary people, etc. ${ }^{15}$

Who is doing research matters, because all researchers bring their own personal biases, attitudes, and values into what they do. Addressing gender inequities in who is doing the research is not only an employment equity issue, but one that is linked to the quality of that research.

## 2. What research is being done, and how it's being done?

In the 1970s, cis women "of childbearing potential" were explicitly excluded from clinical trials in the United States of America, resulting in an overwhelming shortage of data on how certain drugs would affect cis women. This only changed after years of advocacy, when the National

[^1]Institutes of Health wrote an inclusion policy titled Women and Minorities as Subjects in Clinical Research in 1993. ${ }^{16}$ Further, many clinical trials require that people identify in reductive, cisnormative, dichotomous ways as a condition of their participation - clinical trial studies may expect that people will be either male/man or female/woman and may report the genders/sexes of participants in ways that render invisible any trans and nonbinary people who do participate. ${ }^{17,18}$ People of marginalized genders experience barriers to participating in research of all kinds, including where that research misuses and mismeasures concepts relating to gender, sex and/or sexuality.

Addressing gender inequities in what research is being done and how it's being done, results in more reliable, accurate, precise, and inclusive research; and where research data is used to improve society, better research can improve the quality of life for people of marginalized genders.

## Toolkit Aims

The toolkit has two primary aims:

1. To provide researchers with concrete examples of how to address gender inequities in research practice, by considering how research is conducted and by whom.
2. To provide researchers with concrete examples of why gender matters in how research is conducted.
[^2]
## Framing: Foundational Definitions

This section offers some core, foundational definitions. It also names some of the dominant norms and ideologies that are embedded in both how research is conducted and what research is being undertaken.

Cisnormativity - Cisnormativity is a dominant worldview that assumes that there are only two sexes (male and female), that there are only two genders (man and woman) and that binary sex and binary gender will - or least ought to - align in particular ways. Due to cisnormativity, sex and gender are treated as simple, straightforward binaries in research, and cisgender people are treated as normal, natural, and expected. In research, due to cisnormativity, trans and nonbinary people are often overlooked or excluded, and gender and sex concepts are used interchangeably.

Endosexnormativity - Endosexnormativity is a dominant worldview that assumes that all humans are naturally sexually dimorphic - that sex is a simple, straightforward binary, and that all human bodies fit neatly into the categories of male or female. Although this tool is focused on gender equity in research, gender equity is only achievable if we understand the complexity of sex - biologically, legally, and socially. Not only do intersex people exist (people who are found to have variations in their sex development such that they are not clearly categorizable as male or female), but sex is complicated even for endosex people (people who are thought to be either male or female and whose bodies are thought to adhere to binary sex expectations).

Gender - Gender is a broad concept that refers to the dynamic and complex social meaning that is ascribed to people. Importantly, there are a variety of facets of gender:

1. Gender identity - How someone identifies in relation to culturally available categories and terms (e.g., whether someone is a man, woman, nonbinary, etc.).
2. Gender modality - The extent to which there is alignment between the gender someone was assigned and how they currently identify (e.g., cisgender refers to someone who was assigned a particular gender and continues to identify as such; transgender refers to someone who was assigned a particular gender and does not identify with that gender).
3. Gender expression - How someone expresses or presents themselves and their gender, which can include behaviour as well as outward appearance. Importantly, some peoples' gender identities and expressions do not align in ways that we might expect - some men are feminine, some women are masculine, and not all nonbinary people are androgynous. Although gender expression is a way of communicating something about or publicly presenting your gender, gender expression (like identity and modality) is complicated, and someone's gender expression may not be indicative of their gender identity.
4. Gender norms - These are the social principles that govern the behaviour of people of different genders and restrict what is considered acceptable for them. Gender norms are often interconnected with gender stereotypes, which are generalized views or preconceptions about how people of different genders are or ought to be, as well as the tasks they should be skilled at, the roles they should fill, the personalities they will have, etc.

Sex - Sex is a concept that can refer to three distinct concepts: 1) the sex a person was assigned at or before birth, based typically on a visual inspection of the genitals, 2) a person's legal sex, which can be different from the sex they were assigned, or 3) a person's experiential sex, which is how they experience their sexed body. As with the term endosexnormativity above, gender equity is only achievable if we understand the complexity of sex - biologically, legally, and socially. In research, sex is often treated as a simple, straightforward binary, where knowing whether someone was assigned male or female is thought to tell us something important and unchanging about their anatomy or physiology - but this isn't always the case, as characteristics of sex can and do change.

## Conducting Research

Since an integral part of achieving gender equity in research involves considering who is doing the research, the first section of the tool looks at the 'behind the scenes' aspects of research research team composition and researcher positionality, balancing research benefits and harms, funding considerations and dissemination strategies including knowledge translation.

## Research Team Composition

It is important that research teams are comprised of people of different genders, regardless of what is being studied. Teams that are diverse in terms of gender identity, modality and expression can drive discovery and innovation, ${ }^{19}$ and produce papers that are more original, and highly cited than single-gender research teams. ${ }^{28}$ Further, more diverse research teams ask more diverse, varied, and novel research questions and recruit more diverse participants. ${ }^{19}$

Additionally, it is vital that people with lived and living experience are involved in research including in positions of power and authority - that pertains to them. This is the principle of "Nothing About Us, Without Us," first used by disability rights activists in the 1980s, which has been applied to the study of, as well as policy and practice work relating to, other marginalized and minoritized communities. ${ }^{21}$ This means hiring cis women, trans people of all genders, nonbinary people, and others, compensating them appropriately, and ensuring that their inclusion on your research team is not tokenistic.

## Questions to ask yourself:

a) Who are the members of my research team? Who is represented, and who is missing? Are the people of marginalized genders people who are privileged in other ways; for example, are they all white, straight, or nondisabled?
b) What positions are held by the people of marginalized genders on my research team? Are they in positions that involve them in decision-making? Are they represented among the senior members of the team? Do people of marginalized genders have access to mentors, professional development opportunities, and other resources?

[^3]c) How are people of marginalized genders being compensated for their time? For financial compensation, are they paid the same as other team members? Are they additionally given opportunities for career advancement (e.g., are they being named as authors, including as first authors, on journal articles? Are they leading presentations at conferences and with stakeholders?)
d) Why were the people of marginalized genders on my research team hired? Was it because they identify in a particular way? Are they empowered to share and build their research skills beyond sharing their lived experiences as cis women, trans people, and nonbinary people, etc.? If people of marginalized genders share that they feel undervalued, or that their concerns are being dismissed, how do senior members of the research team respond?
e) Am I being transparent in all research outputs about who the researchers are, how they identify, who is missing from the team, and how the researchers' positionalities are impacting the research? It is important for researchers to disclose details about their research team composition, especially when that research focuses on a social issue. For example, if a research project explores conflict resolution strategies among leaders working in social services organizations, knowing who was involved in collecting and analyzing the data is as important and ensuring that the leaders being researched are diverse in terms of gender identity.

Remember, ensuring that your research team meaningfully includes people of marginalized genders will help attend to gender-based inequities in research career acquisition and advancement, will facilitate recruitment of research participants who are themselves people of marginalized genders, and will improve the quality of your work.

## Research Priorities and Agendas: Balancing Research Benefits and Harms

It is important that researchers prioritize research where the benefits for people of marginalized genders outweigh any potential harms. There are several ways that researchers can produce research that does not perpetuate harms and inequities:
a) Focus on topics that have been under-researched and where there continue to be information gaps that need to be filled. Focus on topics that people of marginalized
genders have identified as priorities. ${ }^{22,23}$ Acknowledge and analyze how gender norms influence research priorities and impact who stands to benefit from research. ${ }^{24}$
b) Use a strengths-based approach to research rather than a deficit-based approach. This might involve focusing on resilience, facilitators of health, wellness, leadership, success, or generally on the positive aspects of one's life or experience. ${ }^{25}$ Deficit-based approaches may contribute to stereotypes, where people of marginalized genders are thereafter understood only in relation to the bad things that happen to them. For example, rather identifying the factors that limit the leadership potential of people of marginalized genders who work as school administrators, you could instead look at what enables these administrators to be successful leaders.
c) Ensure that people of all genders are recruited to participate in the research. Research will only perpetuate harms if it excludes cis women, trans people of all genders, nonbinary people, or others unjustifiably.

Questions to ask yourself:
a) Why am I interested in my chosen topic? Why am I asking a particular research question? What factors are informing my hypothesis? How have gender norms influenced my research interests and priorities?
b) What are the potential consequences of my research? Will it contribute something novel, fill an informational gap, or address a topic that has been identified as a priority for people of marginalized genders? Who stands to benefit from this research, who is being left out, and are there potential harms that may result from my research?
c) How am I working to ensure that cis women, trans people of all genders, nonbinary people and others are included in my research as participants?

Remember, regardless of what you are researching, if it involves people in any way, then people of marginalized genders are necessarily caught up in the issue, topic, or phenomenon. It

[^4]therefore stands to reason that people of marginalized genders can stand to benefit from, or be harmed by, all research. Research of all kinds also has the potential to help us understand and address - gender-based inequities.

## Funding Considerations

Gender inequities exist in funding.
This includes gender-based inequities in the research topics that are funded. For example, there are disparities in healthcare related funding. ${ }^{26}$ Research into 'women's health issues' is underfunded as compared to 'men's health issues' - recognizing that these gendered labels represent a cisnormative misnaming, since many of the diseases and conditions labeled as being women's or men's are a matter of anatomy, rather than gender identity. This means that under the umbrella of 'women's health,' for example, are diseases and conditions that impact people who have specific anatomy, including people who do not identify as women.
Nevertheless, certain kinds of health research receive a disproportionate amount of research funding, and a lack of funding can perpetuate inequities. ${ }^{27}$

Gender-inequities in research funding are also manifest in whose research is being funded. For example, research suggests that there is a gender-bias in how grant applications are assessed, with application reviewers appraising the 'quality of the researcher' as greater when the researcher is a cis man as compared to a cis woman. ${ }^{28}$ Despite overall increases in the percentage of cis women being successful in receiving research funding, cis women continue to be less successful than cis men. ${ }^{28}$ The Social Sciences and Humanities Research Council has launched a "Race, Gender and Diversity Initiative," a competition for research that works to remove barriers and disparities for cis women, queer and trans people, disabled people, Black, Indigenous and People of Colour, among others. As part of the initiative, leadership by these same underrepresented and disadvantaged groups is prioritized - an attempt to address some of the gender-, race- and ability-based inequities in research funding.

Questions to ask yourself:
a) Who is being named on my grant application? How are people of marginalized genders represented on the application?

[^5]b) How have I worked compensation for people of marginalized genders into my budget? Does the application include salary support or top-up for team members? Have I included a budget request for honorariums, which will be given to study participants? Am I compensating study participants equally or equitably? How will community partners, including organizations that serve people of marginalized genders, be compensated for their time and expertise?
c) If I am reviewing grant applications, can I identify any biases in how I am appraising applications, specifically the quality of researchers? For example, am I negatively evaluating researcher CVs if they include educational or employment gaps that are explained by parenting responsibilities? Or am I being more critical of applications where the researcher uses neutral pronouns (e.g., they/them pronouns) as compared to she/her or they/them pronouns? ${ }^{29}$
d) Does the way that I've outlined my research project reify cisnormativity and contribute to the erasure of certain people who are marginalized based on their genders? For example, do I suggest that my project will involve a gender-analysis of some finding, but where I've limited the discussion of that analysis to only include cis men and women?

Remember, successful grant applicants not only result in research projects being conducted but are integral to career advancement. Ensuring that people of marginalized genders are named on grant applications, are in senior and supervisory positions on those applications, and are adequately compensated using grant money, are strategies that you can use to address gender-based inequities in research.

## Dissemination and Knowledge Translation for Gender Equity

To put your research findings to work in addressing gender-based inequities, it is important that you think about how you will disseminate your research including how you and others will put your research into action.

When it comes to dissemination, we often think about peer-reviewed journal articles, conference presentations, and reports to our stakeholders. However, it is equally important that we disseminate our research findings in ways that they can be accessed, understood, and utilized by communities of concern. When our research is hidden by journal paywalls, or made available only to limited audiences, we risk leaving out of our dissemination strategies the very
${ }^{29}$ McGonagill, 2823.
people who can make use of our research! And disseminating research findings to the people and communities involved in our research does not simply mean sharing our peer-reviewed journal articles with them. Instead, we can write plain-language, accessible reports to share on our project, university, or research center's website and via our community partners to their users. We can also consider using a variety of other dissemination strategies. For example, we can create social media carousels, create videos for YouTube, appear on podcasts, write editorials for news media, produce infographics, or host plays, photo exhibits or other artsbased methods of sharing our results with different audiences.

A cornerstone of addressing gender inequities in research involves knowledge translation - this refers to a myriad of strategies that you can use to put your research into action, applying the knowledge into a variety of settings and circumstances. If your findings have implications for people of marginalized genders, among others, consider how you can use those findings.

Finally, it is important that you refer to everyone involved in your research accurately and appropriately during dissemination. This includes using the correct honorifics, pronouns, names and other language when talking about your research team members, consultants, community partners, key stakeholders and participants. For gender equity, professional titles matter - there is a gender bias in who gets named according to their titles. People of marginalized genders are less likely to be acknowledged as experts, including where their professional titles are omitted from their form of address ${ }^{30,31,32}$ - we are more likely to call a cis man with a doctorate, "Dr." than a doctorate-holding cis woman or trans person.

Questions to ask yourself:
a) How am I going to disseminate my research findings? Will my participants receive the research findings? Will the findings be shared with the public more broadly? Are there particular dissemination strategies that would be appropriate for different audiences?
b) What are my knowledge translation strategies and what are the practical uses of my research findings? Can my research findings be used to change laws, policies, or practices? Can they be used in the design of a particular intervention, tool or technology? What are the practical uses of my research findings? How are people of

[^6]marginalized genders going to be involved in knowledge translation?
c) Am I confident that I can refer to all people involved in my research project appropriately and accurately, in publications, reports and presentations? This includes pronouns, honorifics, names, etc.

Remember, since people of marginalized genders may experience barriers to equitable participation in the research process - both as research team members, and as participants dynamic and varied dissemination and knowledge translation strategies can help ensure that these people can nevertheless learn about, and benefit from your research.

## Research Design

Having considered how research is conducted and who is conducting it, this section will consider research design itself, including various considerations relating to methods and measurement. It will discuss how to determine which facets of gender are relevant to your research, as well as a discussion of SGBA+ (Sex and Gender-Based Analysis+). For more information about research design considerations, check out the Centre for Gender and Sexual Health Equity's "Gender and Sex in Methods and Measurement" Research Equity Toolkit. The CGSHE toolkit was written by the author of this Royal Roads tool, in collaboration with an expert advisory committee, and explores many of the research design challenges identified here in more depth.

## Determining the Relevance of Gender

No matter the topic of your research, gender matters.
Gender might matter only insofar as you will need to accurately describe and use the correct honorifics and pronouns for the people on your team, the people who you consult with, and the people who participate in your research in any way. You will therefore need to ensure that you are asking everyone involved in your research how they identify, and how they would like to be referred to, in publications, reports, presentations, etc.

Beyond referring to everyone appropriately and accurately, you may need to determine whether and to what extent gender matters to your research study itself. This involves:

1. Research - You can start by looking up your research topic or area of interest and adding the word 'gender' to your search, an seeing what comes up. There may be relevant gender-related factors, issues, barriers, challenges, etc. that you haven't yet considered and which you may want to incorporate into your project.
2. Choosing the Correct Aspect of Gender to Measure - You will need to make sure that you are looking at the most appropriate, and precise part(s) of gender. Remember, gender is a concept that can refer to identity, expression, modality, norms, stereotypes, etc. It could be that your research project prompts a careful consideration of how and why gender identity matters - for example, if you are interested in climate justice, you may be interested in how people of different genders, including people of marginalized genders, are disproportionately impacted by climate crises. Gender identity may be the most appropriate thing for you to measure in your project. Or, if you are interested in professional coaching, you may be interested in exploring how clients react and respond
to different coaches. In this instance, maybe both gender identity (how coaches and clients identity) and gender expression (how coaches and clients express their genders) matter. In this case, it may be the appropriate and warranted for you to measure both identity and expression in your project.
3. Measuring that Aspect of Gender Appropriately - There are lots of different ways to measure aspects of gender. The process of choosing the most appropriate way will depend on several factors, and a discussion of these factors and options is beyond the scope of this toolkit. Check out Tool \#4 of the CGSHE Gender and Sex in Methods and Measurement Research Equity Toolkit for an in-depth discussion of how to ask participants about, and measure gender.
4. Recruiting A Variety of People - If you've determined that one or more aspects of gender matter in your work, you will want to ensure that you are recruiting study participants who identify, express, or experience their gender accordingly. For example, building on the example above, a study looking at the impacts of gender identity and expression on professional coaching effectiveness would need to ensure that cis women and men, trans people of all genders, nonbinary people and others are included in the study. It would also be imperative to ensure these participants are masculine, feminine, androgynous, gender conforming, and gender nonconforming.

Questions to ask yourself:

1. How and why does gender (as identity, expression, modality, etc.) matter in my project?
2. Am I measuring the correct and most appropriate aspect of gender to get an answer to my research question, to test my hypothesis, or to run analyses of interest. For example, if I think that professional coaching clients might be more likely to heed the advice of coaches who are gender conforming, am I measuring gender expression, or am I inappropriately using gender identity as a stand-in for gender expression (e.g., am I assuming that all women are feminine, where 'woman' comes to stand in for 'feminine' in my analysis?)
3. Am I aware of, and using, the most appropriate method for collecting that information from the participants in my project? Am I assuming how people identity, or asking them
directly? What questions am I asking? Can I provide a rationale for why I'm asking?
4. Who am I recruiting to participate in my research? Who is being left out? How can I reach the people of marginalized genders who are being left out?

Remember, gender matters in research even when it may not seem to, at first blush. Part of gender equity work is mainstreaming - bringing something that you might have understood as irrelevant, or only a bit relevant, to the centre for your work. This might involve exploring, perhaps for the first time, how and why gender matters in your research.

On GBA+
Gender-Based Analysis Plus (sometimes called Sex- and Gender-Based Analysis Plus) is an analytical approach that allows researchers to look at how different factors (such as age, gender, race, disability) affect people, including their experiences of policies and programs. It is often used in health research, but is increasingly being used in other fields and disciplines. For example, the Government of Canada has a Natural Resources Canada Gender-Based Analysis Responsibility Centre. The Natural Sciences and Engineering Research Council has a guide for people applying for their grants, on how to include equity, diversity and inclusion, including an SGBA+ approach, into proposed research. The Department of Justice has made a commitment to ensure their activities are aligned with the government's gender-based analysis plus plan.

Gender-Based Analysis Plus approaches are intersectional - where gender is considered vital to our understanding, but where gender cannot be considered alone, but only in combination with other aspects of identity and experience. For example, to better understand strategies for improved international humanitarian assistance, you may need to consider how not only gender norms, but also power relations related to race, impact experiences and uptake of international aid efforts. ${ }^{33}$ An intersectional approach is required - which is represented by the + in the title of this approach.

Part of working towards gender equity in research involves acknowledging and addressing the intersections between gender-based inequities, and inequities that are the result of other systems of oppression and power.

[^7]
## A Note on Decolonizing Gender

This tool focuses on gender equity in research. Importantly, many of our taken-for-grant assumptions about gender - including the presumption that gender is binary - are colonial constructions embedded in white supremacy, and white, Western and/or Christian epistemological thought.

The Coloniality of Gender is a concept first introduced by Argentinian feminist philosopher Maria Lugones (1944-2020), to describe the ways in which colonization has always been about racial superiority, alongside gender and sexuality norms. Colonizers on Turtle Island were invested not just in spreading whiteness, but also in spreading specific ideals about sex, gender and sexuality where those ideals were entangled with Christian ways of understanding the world. Colonizers brought with them, and violently spread the concepts of, binary gender, heterosexuality, monogamy, etc. The Indian Act, for example, was and is about gender-based discrimination, where violence and discrimination against Indigenous peoples of different genders was legal. Despite having been amended in 1985 to remove elements of gender discrimination and to bring the Indian Act in line with the Canadian Charter of Rights and Freedoms, the coloniality of gender persists today, as does gender-based discrimination against Indigenous people.

The concept of Two-Spirit was created at an international gathering of Indigenous gay and lesbian people in Winnipeg in 1990. It is a modern, pan-Indigenous, umbrella term meant to capture Indigenous people's specific conceptualizations of gender, sexuality, identity, and/or community role, as distinct from Western concepts. Two-Spirit serves as an identity category for some, a community organizing strategy for others, or both. Two-Spirit is sometimes thought to imply Indigenous people who have "both male and female spirits," although this has been critiqued as a form of erasure by some Indigenous peoples and nations. Indeed, some Indigenous communities and languages understand 'spirit' as having more than two components or elements. The AHA Centre, which is a National, Indigenous-lead collaborative research centre at the Canadian Aboriginal AIDS Network, for example, has undertaken a Nine Genders research project. This project proposes a new way of organizing gender - beyond the binaries of male/female, woman/man, cis/trans, and in recognition of ancestral teachings about the complex and sacred ways that Indigenous peoples can be in community with each other. If you are interested in learning more about Two-Spirit, including how to ask and talk about TwoSpirit people in research, check out the CIHR Meet the Methods resource on this topic.

This toolkit has not explicitly listed Two-Spirit people as among the people of marginalized genders being discussed therein. This does not mean that Two-Spirit people are not marginalized based on gender. Instead, this choice was made in response to concerns that Two-Spirit is being problematically assumed to only apply to gender. We also do not want to suggest that Two-Spirit is 'just like' Western identity terms, which may be suggested by having it appear in a list with these terms. For some, Two-Spirit is a gender identity, and as such, TwoSpirit people do experience gender inequities. However, Two-Spirit is not only, always, or necessarily about gender - especially not in the ways that 'gender identity' is understood in the West. As such, Two-Spirit is discussed in this section alone.

Part of the important work of addressing gender-based inequities (in research and beyond) involves addressing the ways in which gender has been an integral part of historical and ongoing colonial violence. This includes violence against Indigenous people of all genders, ideological impositions related to gender, the (attempted) erasure of Indigenous ways of knowing and being as it relates to what we might now call gender and/or sexuality, and the ongoing white supremacy at the centre of research.

## In Conclusion

We hope that you have found this toolkit useful, and that it serves as a productive starting point in your journey of thinking about the importance of gender equity in research - both in terms of who is conducting research, and how that research is being conducted. This is a living document, so if something is missing or incorrect, please contact the Royal Roads University Office of Research and Innovation.

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## The Author

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Dr. Lowik has published in such journals as Women's Reproductive Health, Journal of the Association of Nurses in AIDS Care, International Journal of Transgender Health, Creative Nursing, Journal of Addiction Medicine, The Journal of GLBT Family Studies, Scholarly Research and Communication, Sexual and Reproductive Health Matters, LGBT Health, and the African Journal of Reproductive Health. They authored "Trans-Inclusive Abortion Services: A manual for providers operationalizing trans-inclusive policies and practices in an abortion setting," which is available in English, French and Spanish, and has been used to train abortion providers across Canada, in the USA and in Argentina. Dr. Lowik co-edited a collection with Demeter Press called The Liminal Chrysalis: Imagining Reproduction and Parenting Futures Beyond the Binary, and has a forthcoming book to be published with Lexington Books.

Dr. Lowik is a Board Member with the Abortion Rights Coalition of Canada, a member of the BC Period Poverty Task Force, and an Advisory member on several research and KT projects. Dr. Lowik is a renowned expert in trans-inclusion and gender equity, having worked with researchers, health care and social service organizations, lawyers and policymakers who are interested in trans-inclusive research and praxis, policy and practice, and legal reform.


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