



## Findings from CIHR Environmental Scan on Accessibility and Systemic Ableism in Research Funding Systems (2021 – 2022)

In its [Strategic Plan \(2021-2031\)](#), the CIHR commits to co-creating an accessibility action plan with persons with [lived disability experience](#) to address barriers to accessibility and experiences of [ableism](#) in its funding policies and services. This objective is in alignment with the [Accessible Canada Act](#) (ACA, 2019).

From May 2021 to July 2022, the CIHR conducted an environmental scan to identify key issues, challenges, and barriers of accessibility and ableism in the research funding system in general. Findings of this scan formed the preliminary basis for CIHR's further consultations with the [External Advisory Committee on Accessibility and Systemic Ableism](#). They also contributed to framing other consultation activities such as the [virtual discussion sessions](#) with [persons with disabilities](#) and the [CIHR surveys](#) with persons with disabilities and their [allies](#).

The scan is based on a review of 49 resources, including peer-reviewed academic articles, book chapters, organizational reports, commentaries, newspapers, personal blogs, social media posts, and reviews of practices of funding agencies and university policies (Appendix C). The inclusion of non-academic literature is purposeful. It is a recognition that penetrating academic systems, navigating barriers, and surviving difficult peer review processes is a [privilege](#) that many researchers with disabilities do not have. Highlights of key findings are summarized below.

### Systemic Ableism in Academia

[Ableism](#) is a form of discrimination and “refers to attitudes in society that devalue and limit the potential of persons with disabilities”. Ableism within institutions and in policies, processes, and practices is called [systemic ableism](#). When the needs of people with disabilities are not considered in policies, processes, and practices, it means that people with disabilities are excluded from participating in the same way as non-disabled people.

[Systemic ableism](#) leads to the exclusion of persons with disabilities from equitable participation in academia. Research shows that persons with disabilities are disproportionately underrepresented in academia largely due to a dominant ableist culture and work environment (3; 5; and 48). Often, persons with disabilities experience [discrimination](#) and stigma from colleagues and lack accommodations in institutions of learning (9; 18; 29; 45; and 48). They experience inaccessible campuses and laboratories, and pressure to work full-time (16; 18-19; 21; and 34-37). Students with disabilities are often discouraged and dissuaded by their mentors and supervisors from pursuing science, technology, engineering, and mathematics (STEM) based fields (13; 25; and 27-28).

Ableist environments may cause researchers with disabilities to internalize ableist academic culture and environments as a personal flaw (5). This reality can result in



researchers with disabilities experiencing a sense of being ‘unproductive’, ‘not good enough’ ‘less valuable’, ‘guilty’ and feeling the need to prove selves as capable and/or worthy of being a researcher (44). Researchers with disabilities may also experience a lack of motivation to pursue senior roles or promotions due to feeling that upward change in a career would allow for fewer accommodations (29).

## Systemic Barriers in Research Funding

Studies show that researchers with disabilities have disproportionately lower chances of success in research grant funding applications (4-5; 13; 28; and 39). Key barriers are largely found in four stages of the application process.

**Stage 1. Pre-Application:** Persons with disabilities begin to experience barriers to a successful academic career in the postsecondary education environment.

**Barriers:** Students and trainees with disabilities experience early-career barriers such as diminished support systems at and after secondary school. For example, students entering lab-based courses may not be aware of available supports in their university, or the supports may not be available. Students lack access to assistive technologies and awareness of successful role models (34-37 and 39).

Further, research shows that those who disclose disability status are treated inequitably, lack institutional support and accommodations, and are discouraged from pursuing academic careers, especially in STEM (13; 25; and 27-28). Persons with disabilities also bear the unpaid burden (also known as the [disability tax](#)) of evidencing needs and proof of disability, including seeking and arranging accommodations to conduct research and engage in academic work (4; 9; 18; 21; 29; 42; and 44).

Persons with disabilities may distrust health research funding organizations that fund projects that are perceived as ableist or eugenicist, such as those working to locate biomarkers of disability within fetal screening, with the goal of society-wide elimination (9). Such projects are built on the [medical model](#) of disability and are seen as discriminatory and ableist in their aims (9). Conversely, the [social model](#) of disability emphasizes societal barriers to the equitable participation of persons with disabilities, shifting the emphasis from the perception that disability is a biological limitation.

**Stage 2. Application Process:** Research shows that application platforms and processes are predominantly designed with the assumption that systems that work for non-disabled persons work as well for persons with disabilities (4). As a result, many funding agencies’ application platforms are inaccessible to persons with disabilities, especially to those relying on screen reading.

**Barriers:** Barriers include complexity of application systems, absence of alternative text for images, sign language translation of content, font-size adjuster, audio recordings of content, among others. Funding agencies do not always provide funding opportunity advertisements in alternative formats like PDFs and plain language documents (4 and 9).



Further, evidence shows that persons with disabilities experience barriers and challenges communicating with funders for follow up questions or support (4). For example, funders often rely on the use of phones or email for contact, creating a barrier for some groups of persons with disabilities. Researchers who are Deaf, Hard-of-Hearing, and the Neurodiverse are unlikely to be able to communicate inquiries they might have by phone while those who identify as Blind may not be able to communicate via email (4). Additionally, complex questions may be difficult to explain in an email and finding a direct line with the best person to address one's concerns may also prove difficult. Also, funders do not always provide clarity on the types of adjustments that might be available within the application process. Publishing guidelines which highlight the sorts of adjustments that would be possible is best practice for encouraging applications from disabled researchers (4 and 9).

Because researchers with disabilities may need extra time to organize access to equipment, software and/or assistants, and to use time-consuming accessible processes for application writing, inflexible deadlines could be a barrier (4). Research recommends that funding agencies be explicit that extensions are possible, and when possible, prioritize opportunities for submissions on a rolling basis over deadlines (4 and 9).

**Stage 3. Assessment of Applications:** According to research, funding agencies use ableist assessment tools that privilege non-disabled researchers and disadvantage persons with disabilities (1; 4; 9; 21; 42; 44; and 46).

**Barriers:** The emphasis on single authorship (42), first- and last-author publications (49), principal investigator status (4 and 42), and numbers of publications in high-impact journals (4 and 42), all neglect the realities of the lived experiences of persons with disabilities. Because persons with disabilities may require or value collaborative work, and need time to organize accommodations for research, travel, equipment, among others, they might not attain these baselines in the same timeframe as their non-disabled counterparts.

Peer reviewers may hold [un/conscious bias](#) towards applications in which applicants self-identify as people with disabilities, including the belief that researchers with disabilities have diminished research capabilities (9; 19; and 39). When applications contain a request for funding towards accessible equipment and other accommodations, peer reviewers may not view supporting accommodations as a necessary use of funds (4). Research shows that peer reviewers' biases are also evidenced by their biases towards medical approaches to disability, and their lack of understanding of how disability impacts research (42).

**Stage 4 Grant and award policy.** Policies governing the granting and awarding of research funding pose many barriers for persons with disabilities.

**Barriers:** Funding agencies' grant and award policies habitually exclude accommodations for persons with disabilities (4; 9; 22; and 29). As a result, researchers



with disabilities use awarded grant money to pay for accommodations that support research activities. This barrier puts pressure onto affected parties to achieve an equal research output to that of non-disabled researchers, but with less funds (4; 9; and 22). Other barriers include the inability to take medical leave based on a disability and a lack of part-time work arrangements (4; 9; and 29). When medical leave is categorized as a person's temporary illness and disability as a permanent affiliation to disability identity, it negates the fact that disability can also be episodic. Since many researchers with disabilities depend on access to medical and disability leave to sustain their research, such categorizations serve as a barrier to their academic and research careers.

The overall impact of systemic ableism in the research funding system has caused gaps in knowledge that is needed to address, improve, and strengthen health care systems. To ameliorate the situation, research funding councils must take on a larger leadership role within national research ecosystems to promote responsibility for supporting accommodations, and the challenging of systemic ableism. For the CIHR, this environmental scan is a part of wider work to identify, remove, and prevent barriers and ableism in the health research funding system. To achieve this, the CIHR is working closely with researchers with lived disability experience.



## Appendix A: Table of Findings from CIHR Environmental Scan on Accessibility and Systemic Ableism in Research Funding Systems (2021-22)

<p><b>Stage 1: Pre-Application</b></p> <p><b>Barriers</b></p> <p><b><i>Ableism in academia</i></b></p> <ul style="list-style-type: none"> <li>• Researchers experience bias and discrimination in postsecondary and research systems when they disclose disability.</li> <li>• Practices considered norms privilege non-disabled persons: e.g., emphasis on full-time enrolment in a study program or work as eligibility criteria for funding; inflexible deadlines.</li> <li>• Campuses and laboratories are generally inaccessible, creating multiple barriers for participation.</li> <li>• General lack of institutional and collegial support, accommodations, and instances of bullying.</li> </ul> <p><b><i>Disability tax</i></b></p> <ul style="list-style-type: none"> <li>• Carrying the unpaid burden of evidencing needs and proof of disability and seeking and arranging accommodations to conduct research and engage in academic work.</li> </ul> <p><b><i>Distrust of health research funders</i></b></p> <ul style="list-style-type: none"> <li>• Lack of trust in research funding institutions and their biases for research designs and with ableist practices such as favoring medical approaches over social approaches.</li> </ul>
<p><b>Stage 2: Application Process</b></p> <p><b>Barriers</b></p> <p><b><i>Application platforms</i></b></p> <ul style="list-style-type: none"> <li>• Research platforms lacking alternative text for images, moderate font contrast with background, font size adjuster, audio recordings for content, video subtitles, or sign language translation for content.</li> </ul> <p><b><i>Funding opportunity advertisements</i></b></p> <ul style="list-style-type: none"> <li>• Funding opportunity advertisements in video rarely contain subtitles or transcripts.</li> <li>• Hyperlinks are inaccessible, images without alternative text, no subtitle in infographics and videos for screen readers.</li> </ul> <p><b><i>Document formats</i></b></p> <ul style="list-style-type: none"> <li>• Inaccessible documents, graphs, and figures ; absence of image descriptions, and Sign Language translation of content.</li> </ul> <p><b><i>Information gaps from funders</i></b></p> <ul style="list-style-type: none"> <li>• Lack of information about available adjustments and accommodations within the application and granting process.</li> </ul>



**Communication**

- Restrictive and discriminatory contact means, such as telephone, that are inaccessible to Deaf, hard-of-Hearing, and Neurodivergent researchers.

**Disability Disclosure**

- While disability disclosure helps to plan for accommodations that benefit the researcher, it may also raise fears for discrimination.
- Disclosure has been used to disfavor researchers by systems that maintain ableist expectations of productivity.
- Some funding organizations require detailed disclosure of disability status to access leave, accommodations, or part-time work. The same level of detail is not required for non-disabled researchers when filing for medical leave.

**Funding application formatting**

- Inconsistent application format across funding opportunities within an agency prevents researchers with disabilities from using previously developed answers, creating more work. Researchers using speech-to-text software and/or assistants to compose documents need more time to fill out inconsistent templates.

**Deadlines**

- Short deadlines are inequitable and unachievable for researchers with disabilities who need to mobilize accommodation resources before beginning application processes.

**Accommodation transparency**

- Information about available accommodations, and for how long, should be publicly available.

**Stage 3: Assessment of Applications**

**Barriers**

**Track record inequalities**

- Ableist expectations and measurements for research excellence, including, single authorship, first – and last author publications, number of publications in high-impact journals, principal investigator status, number of invited talks and networking abilities, among others.

**Reviewer bias**

- Conscious and unconscious bias by peer reviewers who regard persons with disabilities as less capable or lack understanding of how disability impacts one’s research career.
- Perception that requested accommodations are not worthwhile use of funds.
- Biases against methodological designs, especially those involving persons with disabilities.

**Stage 4: Grant and Award Policy**

**Barriers**



### ***Supplementary accommodation funding***

- Policies do not provide for funds to finance accommodations, leading persons with disabilities to split grant funds between core research and accommodations.

### ***Who funds accommodations?***

- Policies don't always clarify who should fund accommodations, and this confuses researchers with disabilities.

### ***Medical and disability leave***

- Policies that do not provide disability or medical leave disadvantage persons with disabilities who might need breaks during the funding cycle.
- Interpretations of what qualifies as medical leave and what qualifies as medical leave could exclude persons with episodic disability experiences.

### ***Part-time work***

- Flexibility for part-time work allows persons with disability to manage research while attending to health conditions.
- It also allows students with disabilities who cannot take equivalent course loads as their non-disabled colleagues be eligible for funding opportunities.



## Appendix B: Glossary of Terms

**Ableism:** Prejudiced thoughts and discriminatory actions based on differences in physical, mental and/or emotional ability; usually that of able-bodied/minded persons against people with illness, disabilities, or less developed skills (Source: [Glossary of Terms: Race, Equity and Social Justice | icma.org](#)).

**Disability:** disability means any impairment, including a physical, mental, intellectual, cognitive, learning, communication, or sensory impairment — or a functional limitation whether permanent, temporary or episodic in nature, or evident or not, that, in interaction with a barrier, hinders a person's full and equal participation in society (Source: [Accessible Canada Act 2019](#)).

**Discrimination:** Unfavorable or unfair treatment towards an individual or group based on their race, ethnicity, color, national origin or ancestry, religion, socioeconomic status, education, sex, marital status, parental status, veteran's status, political affiliation, language, age, gender, physical or mental abilities, sexual orientation or gender identity (Source: [Glossary of Diversity, Equity, and Inclusion Terms](#)).

**Lived Disability Experience:** The lived body disruption engendered by loss of [functionality], includes a change in the character of surrounding spaces, an alteration in one's taken-for-granted awareness of (and interaction with) objects, the disruption of corporeal identity, a disturbance in one's relations with others, and a change in the character of temporal experience (Source: S. Kay Toombs - <https://www.jstor.org/stable/20011069>).

**Lived Experience:** People's experiences, [and] how people live through and respond to those experiences. The term comes from qualitative research methods, where knowledge is sought through engaging with people's accounts of their experiences. In social policy, lived experience is increasingly used to frame user involvement in service improvement. It is a mechanism for participatory democracy, giving marginalised groups genuine opportunities to contribute to policy making through the expertise of their lived experience (Source: [Australian Institute of Family Studies](#)).

**Medical model of disability:** Definition of disability is related to biology and not the social or geographical environments. Disability is regarded as a defect or sickness. This model places the source of the problem within the person (intrinsic to the individual) = solutions found by focusing on the person. The medical model often refers to a disabled person as a victim: This can be very patronizing and offensive (Source: [Public Service Alliance of Canada](#)).

**Neurodiversity:** Refers to the variation in the human brain regarding sociability, learning, attention, mood and other mental functions (Source: [Glossary of Diversity, Equity, and Inclusion Terms](#)).



**People/person with disability:** Refers to individuals with a disability. This term utilizes Person-First Language, which posits that a person isn't a disability, condition, or diagnosis but rather, a person has a disability, condition or diagnosis. Replaces the terms, Handicap, The Handicapped, The Disabled, Wheelchair-bound, Cripple, which do not reflect the individuality, equality or dignity of people with disabilities (Source: [Glossary of Diversity, Equity, and Inclusion Terms](#)).

**Social model of disability:** The Social Model views disability as a consequence of environmental, social and attitudinal barriers that prevent people with an impairment from a maximum participation in society. This model centers on social barriers that keep persons with a disability from participating actively in all political and social institutions. This model places the source of the problem on society = solutions must focus on social change and not solely on the individual with the disability. This model focuses not only on physical or environmental but also other barriers of a social nature such as prejudice, stereotyping. "Barriers experienced by people with disabilities in society are not necessarily caused by our disabilities, but rather the result of living in a society that is designed by and for non-disabled people" (Source: [Public Service Alliance of Canada](#)).

**Systemic Ableism:** Includes the physical barriers, policies, laws, regulations, and practices that exclude people with disabilities from full participation and equal opportunity. This can be seen through lack of accessibility or accommodations in schools and in the workplace, when buildings aren't accessible (i.e. no ramps or elevators, no interpreters available), or through ableism in healthcare, such as limited or no insurance coverage for people with 'pre-existing conditions,' or [triage policies](#) that allow doctors to deny care based on factors including a patient's medical history and disabilities (.Source: [Diversibility](#))

**Unconscious bias:** The subliminal tendency to favor certain people or groups of people based upon learned stereotypes. It can be interchangeable with the term "implicit bias". It refers to social stereotypes about certain groups of people that individuals form outside their own conscious awareness. Everyone holds unconscious beliefs about various social and identity groups, and these biases stem from one's tendency to organize social worlds by categorizing (Source: [Glossary of Diversity, Equity, and Inclusion Terms](#)).



## Appendix C: References

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