

Canada Research Chair Equitable Research Productivity Assessments

Final Report and Recommendations

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THE UNIVERSITY OF BRITISH COLUMBIA

Executive Summary

Academia, comprised of institutions established for a particular definition of the elite mind and athletic body, is steeped in ableism and active discrimination against people with disabilities (disablism). Efforts to challenge the systemic ableism and disablism in the academy across Canada are stymied by ableist rhetoric of what constitutes research productivity and excellence. This filters out disabled people across the hierarchy of higher education, resulting in poor representation and preserving the stigma surrounding disability. This report examines the issues arising in hiring, retaining, and supporting scholars with disabilities in Canada Research Chairs (CRCs), exploring the following questions:

1. What barriers and inequities in the assessment of research productivity and scholarly activity of candidates with disabilities prevent them from being nominated as CRCs?
2. How might we change that assessment to remove those barriers and inequities?
3. Why is the preferential hiring process not effective for disabled scholars?

Dismantling these systemic barriers to change how research productivity is measured in the 21st century will take great transformative effort. Through thoughtful input of disabled and non-disabled scholars and administrators, this research found eight areas requiring action and attention to move toward this transformation: institutional ableism, recruitment, selection committees, metrics, interviews, renewal/retention/promotion, higher education, and the CRC Program. Summarized recommendations appear below.

Institutional Ableism: Create more disability visibility in academia through educating people about disability, creating proactive accessibility via universal design and flexibility in leaves of absence, having HR specialists for the accommodations process, supporting disabled communities and justice movements on campus, and valuing disabled lives, their experience, and the advocacy work that they do to create inclusive spaces.

Recruitment: Advertise in ways that are more inclusive of disabled scholars, including advertising broadly for people within a specific field, rather than creating narrow and specific job descriptions; publishing clear information about how access and accommodations are provided at the institution; clearly identifying how to contact a designated HR accommodations specialist to provide expert and detailed support to applicants with specific questions.

Selection Committees: Ensure committee members are developing the capacity to understand and mitigate bias and ableism in selection processes, including: establishing the weighting of the selection/evaluation criteria, including the alternative metrics provided in this report; accepting legitimacy of approved leaves; including disabled voices and perspectives on committees.

Metrics: Incorporate more and different excellence indicators in evaluations including: experiential knowledge, dissemination of knowledge and other forms of publication, research

sustainability and mentorship, collaboration and cross-disciplinary research, and building and maintaining relationships within communities.

Interviewing: Conduct more inclusive interviews by providing materials in advance, having multiple options for interviewing (including virtual), reducing the number of engagements per day, and allowing for more breaks. Provide detailed information about access and accommodations.

Renewal, Promotion, and Retention: Develop a more hospitable working environment by allowing flexibility, having access and accommodations needs in place prior to position start date, providing support for disabled CRC chairholders, recognizing service work, and ensuring that assessment metrics are being communicated across every level of the process.

Higher Education: Create transformative system level change, including establishing centralized accommodation funds, developing clear plans for greater visibility of disability and reduced stigma around disclosure; maintaining flexible working environments; listening to disabled voices on campus; including disabled perspectives in internal review committees for CRCs and for promotion and tenure.

CRC Program: Acknowledge and repair harm to disabled scholars, including developing policy and regulations addressing ableism, ensuring chair funding is for research purposes only, requiring that renewal processes take into consideration more equitable metrics, and including disabled voices and perspectives. Additional funding could institute an early research award to help create a pipeline for disabled scholars who are not in tenure track positions and could also evaluate the impact of implementing these CRC Program equity initiatives.

The CRC Program has a vital role in promoting changes in scholarly assessment by using their leverage as a national program. This program can also spread awareness and advocate for the valued contributions and inclusion of disabled scholars within academia across Canada by encouraging expanded and more equitable metrics of research productivity as a new norm, developing more accessible granting processes in the Tri-Council Agencies, and working with disabled scholars to revise and improve disability definitions for applicants. However, changing the ableism that has been fundamental to academia will require efforts from across its systems.

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Introduction

In response to the persistent under-representation of marginalized groups in the Canada Research Chairs program, institutional targets were set in the [2019 Addendum to the 2006 Canadian Human Rights Settlement Agreement](#). These targets incrementally raise the representation of “women, visible minorities (members of groups that are racially categorized), persons with disabilities, and Indigenous peoples (the “Four Designated Groups” or “FDG”) to reflect representation within the Canadian population”¹. LGBTQ+ representation and retention within the CRC program will be monitored and best practices for increasing representation instituted as well.

This clarity of intent has resulted in the special program for restricted and preferential nominations of Canada Research Chairs (CRCs) at the University of British Columbia (UBC), approved by the BC Human Rights Tribunal in 2019, and amended in 2020. Under the restricted program, applicants for chairs must self-identify as one of the FDGs. The preferential program also provides for preferential nominations of disabled people/persons with disabilities. Both programs are time-limited and upon meeting the CRC representation requirements for all FDGs, restrictions will be lifted. Despite the preferential nominations program, the nomination and success of applicants with disabilities relative to the number of applicants is much lower than other equity groups at UBC.

This research report explores the following research questions related to the hiring, retention, and support of CRCs who self-identify with disabilities: 1) What barriers and inequities in the assessment of research productivity and scholarly activity of candidates with disabilities prevent them from being nominated as CRCs; and 2) How might we change that assessment to remove those barriers and inequities? A related question, also explored during this research and which informs this report, is: Why is the preferential hiring process not effective for disabled scholars?

1.1 Terminology

Disability terminology is widely contested within both the non-disabled community and the disabled community.² Many individuals use identity-first language (e.g., disabled person) because disability is intrinsic to their identity, culture, and community. Others

¹ 2019, Canadian Human Rights Commission, [2019 Addendum to the 2006 Canadian Human Rights Settlement Agreement](https://www.chairs-chaires.gc.ca/program-programme/equity-equite/2019_addendum-eng.aspx), downloaded from https://www.chairs-chaires.gc.ca/program-programme/equity-equite/2019_addendum-eng.aspx

² Callahan, M. 2018. ‘Autistic person’ or ‘person with autism’: is there a right way to identify people? News at Northeastern, <https://news.northeastern.edu/2018/07/12/unpacking-the-debate-over-person-first-vs-identity-first-language-in-the-autism-community/>

may prefer person-first language, which emphasizes a separation between the person and the disability, highlighting the person (e.g., person with disabilities). The definition of disability also creates complications: there are many people who would be considered by definition to be disabled, but do not identify as such, including some D/deaf people,³ autistic people, and people with chronic illness. However, language and identification are also contested within these communities. Terminology is both political and personal, and it frequently changes to meet community and community members' needs. For the purposes of this report, we have primarily used identity-first language: disabled people, disabled scholars, and disabled academics, except where quoting from or referring to other documents.

Background

2.1 General Statistics

Disabled people are underrepresented in academic institutions, despite their high numbers in the general population. The proportion of the Canadian population that is disabled (aged 15 and older) in the 2017 Canadian Survey on Disability (CSD) is approximately 22%,⁴ making them the largest minority group. However, this approximation is much lower than federal Census estimates, wherein 35.3% of Canadians are estimated to have disabilities.⁵ The Census and the Canadian Survey on Disability (CSD) have been moving away from posing questions using a framework based on a non-inclusive and medical model of disability since 2001.⁶

There is not a specific definition⁷ of disability used by the Canadian government; however, wording in the Census regarding disability has become more inclusive and more similar to the disabled community's definition.⁸ Additionally, there have been modifications in the types of questions asked, encompassing fluctuating and consistent physical, mental, and sensory impairments. This is the first step in a cultural shift in Canada regarding disability, embracing the social definition rather than the medical definition of disability, which is required to create inclusive and equitable spaces.

³ The term D/deaf is used to describe people who are Deaf (identify with Deaf culture and community) and deaf (the audiological term).

⁴ Stats Canada, 2018, Canadian Survey on Disability Reports: <https://www150.statcan.gc.ca/n1/pub/89-654-x/89-654-x2018002-eng.htm>

⁵ ibid

⁶ ibid

⁷ Government of Canada, <https://www.canada.ca/en/employment-social-development/programs/disability/arc/reference-guide.html>

⁸ Morris, S., Fawcett, G., Brisebois, L., and J. Hughes. 2018. Canadian Survey on Disability Reports: A demographic, employment and income profile of Canadians with disabilities aged 15 years and over, 2017. <https://www150.statcan.gc.ca/n1/pub/89-654-x/89-654-x2018002-eng.htm>

There have been several changes over the years, with each new revision encompassing more nuance and disability inclusivity. Currently, the Census and the CSD ask about activities of daily living to assess possible disabilities in people ages 15 years and older, which is how the 35.3% estimated proportion of Canadians with disabilities was determined. The increase in the proportion of the population included in the disability categories when not explicitly naming disability may reflect the stigma associated with disability and being disabled.⁹ Therefore, previous iterations of the Census and CSD would not have fully grasped the proportion of Canadians who are disabled but resisting this label.

The additional shift in terminology and questions resulted in a 61% increase of persons identifying with disability in the 2017 CSD compared to the 2012 CSD.¹⁰ This occurred even considering the wide stigmatization of disability and accompanying risks when accessing employment, housing, health care, transportation, etc., which results in many not identifying as having a disability or those with invisible disabilities not disclosing their status on forms. However, Canada's aging population also plays a role in increasing numbers, as disability tends to increase with age.

Census data reveal that disability is also more prevalent among those who self-identify as female and those of lower economic status. A higher proportion ($p < .05$) of disabled people are female; 24% of the female population compared to 20% of the male population (it is unclear whether these labels refer to sex or gender assigned at birth; others were not described).¹¹ For those with disabilities, the unemployment rate is significantly higher, 41% compared to 20% for non-disabled people.¹² Of employed individuals with disabilities (ages 25-64), 37% require accommodations in the workplace,¹³ but 21% of these individuals report that none of their needs are met.¹⁴

Nearly 25% of unemployed disabled visible minorities believe their disability disadvantages them in employment. Of unemployed disabled visible minorities, there is a 14.5% difference in employment potential for visible minorities compared to non-visible minorities (defined by Statistics Canada as White and Indigenous people¹⁵), if

⁹ This could indicate that 22% of the population that is disabled identifies as such, but the remaining 13.3% do not.

¹⁰ Furrie, A. 2018. Canadian Survey on Disability Reports: The evolution of disability data in Canada: Keeping in step with a more inclusive Canada. <https://www150.statcan.gc.ca/n1/pub/89-654-x/89-654-x2018003-eng.htm>

¹¹ Morris, S., et al. Ibid.

¹² Ibid

¹³ Morris, S. 2019. Canadian Survey on Disability Reports: Workplace accommodations for employees with disabilities in Canada, 2017. <https://www150.statcan.gc.ca/n1/pub/89-654-x/89-654-x2019001-eng.htm>

¹⁴ Ibid

¹⁵ Statistics Canada. 2017. <https://www.statcan.gc.ca/eng/concepts/definitions/previous/preminority>

they could find an equitable workplace. This is a clear example of racial discrimination layered on top of marginalization due to disability.¹⁶

2.2 Academic Environments

“We’re missing 25% of our population’s perspective on virtually everything in the world.”

Canada Research Chair Dr. Danielle Peers

Academic institutions have been built on an ideology of excellence and ability; meaning social and cultural ideologies play a critical role in the development of higher learning spaces. Historically, many academic institutions were paired with asylum institutions, where academics could survey, research, and experiment upon disabled individuals:

“North American academics have delineated and disciplined the border between able and disabled. These line-drawers were able to solidify their own positions as they closed the doors upon others. The disabled, in this history, were more than left out: disabled people have been experimented upon, sterilized, imprisoned, and killed... the university was the place for the most able, the mental institution or asylum or school for the “feeble-minded” the space for the “least.”¹⁷

While many academic disciplines rely on disabled people as research subjects, disabled people are under-represented in academia as researchers, and this under-representation increases from under-graduate through to tenure track positions. Much of the following data regarding disability demographics comes from the United States. The dearth of Canadian demographic data creates an additional barrier to understanding and making equitable improvements for people with disabilities in academia, relative to other equity-deserving groups.

The following statistics represent current published information broadly available regarding rates of disability in higher education and illustrates that decreasing representation at higher levels: 19.4% of US undergraduate students,¹⁸ 6.2% of Canadian graduate students¹⁹ and 12% of US graduate students,²⁰ 10% of international

¹⁶ The Daily. 2020. A profile of Canadians with a mobility disability and groups designated as visible minorities with a disability. Statistics Canada: <https://www150.statcan.gc.ca/n1/daily-quotidien/201203/dq201203a-eng.htm>

¹⁷ Dolmage, J.T. 2017. *Academic Ableism*. University of Michigan Press.

¹⁸ National Center for Education Statistics, 2016, <https://nces.ed.gov/fastfacts/display.asp?id=60>

¹⁹ Canadian Graduate and Professional Student Survey, 2019, https://seureservercdn.net/45.40.150.136/bba.0c2.myftpupload.com/wp-content/uploads/2020/08/NATIONAL_CGPSS_2019_ALL.pdf

²⁰ National Center for Education statistics, National postsecondary student aid study, 2016, <https://nces.ed.gov/datalab/powerstats/codebook.aspx?dataset=122&type=subject>

science postdoctoral fellows,²¹ and 10.2% of US tenured full professors in sciences.²² While 94% of Canadian high school students with learning disabilities get assistance, only 17% of college students with learning disabilities do²³, showing the decline in support and access in higher education. In Canada, 14.3% of disabled people aged 15 and older are members of a visible minority.²⁴ Among disabled visible minorities, 33.9% have a bachelor's degree or higher compared to 17.3% among non-visible minorities (defined by Statistics Canada as White and Indigenous people).²⁵

In academic workplaces, disabled persons, Indigenous persons, and sexual minority groups have a higher probability of violence and discrimination, and within these groups, women faculty were 1.5 times more likely to report harassment.²⁶ Overlapping and compounding discrimination and inequity is evident in these statistics.

Additionally, disabled scholars are often confined to precarious work positions, rather than research faculty positions, further reducing the pool of disabled tenure track professors. Lack of accommodations in higher education, coupled with many necessary medical treatments not covered by Canadian health insurance, means that as young scholars move from their family homes and into the workforce, they are unable to cover their living costs while in work that does not include extended health benefits.^{27,28} This means that the expected transition period from high school to full employment, which often requires years of living on severely curtailed income, further disadvantages and potentially exacerbates disabilities for disabled people in financially precarious positions of academia: undergraduate, graduate, post-doctoral, and contract faculty.²⁹ In effect, to reach faculty positions as a disabled person, it may require individuals to hold out, perhaps forgoing treatments, until they are in a stable posting with extended health benefits.

²¹ Woolston, C. 2020. Postdocs under pressure: 'can I even do this anymore?' *Nature*, <https://www.nature.com/articles/d41586-020-03235-y>

²² National Center for Science and Engineering Statistics, 2019, table: 9-30 <https://nces.nsf.gov/pubs/nsf21321/data-tables>

²³ Dolmage, J.T. 2017. *Academic Ableism*. University of Michigan Press.

²⁴ Statistics Canada Infographics. 2020. The visible minority population with a disability in Canada: employment and education. <https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2020086-eng.htm>

²⁵ The Daily. 2020-12-03. A profile of Canadians with a mobility disability and groups designated as visible minorities with a disability. <https://www150.statcan.gc.ca/n1/daily-quotidien/201203/dq201203a-eng.htm>

²⁶ Hango, D. 2021. Harassment and discrimination among faculty and researchers in Canada's postsecondary institutions. *Insights on Canadian Society, Statistics Canada*. <https://www150.statcan.gc.ca/n1/pub/75-006-x/2021001/article/00006-eng.htm>

²⁷ Loepky, J. 2021. The 'crip tax': everything has a cost, but for people with disabilities that's quite literally the case. CBC, <https://www.cbc.ca/news/canada/saskatchewan/crip-tax-opinion-1.5856848>

²⁸ Andre, J. 2016. These are the hidden costs of living with a disability. Huffington Post, https://www.huffingtonpost.ca/jacki-andre/the-hidden-costs-of-havin_b_11647994.html

²⁹ Adjunct, A.K. 2008. The revolving ramp: disability and the new adjunct economy. *Disability Studies Quarterly*, 28(3).

Academic careers entail specific academic professional milestones, measured against “the tenure clock”, for promotions and tenure. A certain number of published papers, conferences, and successful grant applications, for example, are often the benchmark for entry into any academic career, with the hiring process and potential to be considered for tenure tied to these measures. Milestones are cumulative and often depend on one another, so any delays in this academic schedule puts scholars at further disadvantage.

Pace of production is a critical component of academic research that may require accommodations for disabled scholars.³⁰ This is also the most difficult to manage because productivity is often quantified by the number and annual rate of publications. Productivity assessments also consider grants and awards received; however, grant applications can be inaccessible and timelines can be a barrier, and extensions to grant deadlines can be perceived as an inability to complete the work rather than a necessary accommodation. For disabled scholars, these milestones are often achieved later, and over time this accumulates to affect the assessment of productivity.

2.3 Tri-Council Agencies

Tri-Council grants have low representation of disabled scholars in their applicant pool: there were 1.8% disabled NSERC Discovery grant applicants with 1.4% awarded,³¹ 4.1% of applicants for the SSHRC Insight Development grant were disabled and 3.8% were awarded,³² and 3.2% of CIHR grant applicants identified as disabled but 2% were successful.³³ In the CRC program, a total of 5.5% of chairholders identify as disabled and therefore, of the \$300 million that the CRC program spends annually, only \$16.5 million is awarded to support academics who self-identify as disabled. Considering that 10% of full professors self-identify as disabled,³⁴ disproportionately fewer applicants and grants awarded indicates that they are receiving insufficient funding to foster sustainability and excellence in their research careers and are potentially being ‘defunded’ out of the academy.

Currently, the CRC program’s target for 2029 is that 7.5% of chairholders will self-identify as disabled, with a review in 2025. This target is based on the 8.9% of the 2016

³⁰ Mahipaul, S., and E. Katzman. 2020. What does it mean to be ‘productive’? A conversation between disability allies. <https://medium.com/national-center-for-institutional-diversity/what-does-it-mean-to-be-productive-a-conversation-between-disability-allies-e1bf32976ca2>

³¹ NSERC, 2020, Table 17: https://www.nserc-crsng.gc.ca/doc/DGP2020_e.pdf

³² SSHRC, 2020, https://www.sshrc-crsh.gc.ca/about-au_sujet/publications/drr/2019-2020/gba_plus-ac_s_plus-eng.aspx

³³ CIHR, 2019, <https://cihr-irsc.gc.ca/e/52552.html>

³⁴ National Center for Science and Engineering Statistics, 2019, table: 9-30 <https://nces.nsf.gov/pubs/nsf21321/data-tables>

Canadian available workforce that identifies as disabled as part of the Employment Equity Occupational Group unit of University Professors and Lecturers.³⁵

Methodologies

In January and February of 2021, we interviewed eight key informants. Discussion topics and questions (see Appendix Table 1) were informed by an extensive literature review. These interviewees were faculty members from UBC and the University of Toronto, as well as other Canadian scholars, and were both disabled and non-disabled individuals. The purpose of these interviews was to help address the first research question: What barriers and inequities in the research productivity assessment of candidates with disabilities prevent them from being nominated as CRCs?

The outcomes of the interviews, as well as the literature review presented here, helped ground the questions and agenda that were used for four focus group discussions. Two groups were composed exclusively of disabled scholars, one was with non-disabled faculty and administrators, and the last was a mixed group. There was a total of 21 participants, with individuals from the Tri-Council Agencies, UBC, Brock University, Dalhousie University, McMaster University, Ontario College of Art and Design University, Ryerson University, St. Francis Xavier University, University of Alberta, University of Manitoba, University of Victoria, University of Western Ontario, University of Winnipeg, York University, and self-employed/sessional/unemployed disabled scholars. Each focus group was 90-120 minutes in length and comprised a series of questions to guide participants in an exploration of the process of recruiting, assessing, hiring, and promoting disabled academics for the CRC program (see Appendix 1, Table 2 for focus group questions).

Following the focus groups, interviewees' perspectives (obtained from notes and direct transcripts) were coded, analyzed, and synthesized into findings. These findings were presented at a 3-hour online workshop held on June 30, 2021 with 22 participants and 6 facilitators/notetakers, including some of the original participants from the focus groups. The workshop began with a presentation of these findings and then discussion with the option of providing more feedback and suggestions for recommendations. Participants were disabled and non-disabled faculty, disabled scholars from across Canada, and representatives of NSERC and CIHR.

³⁵ Government of Canada, 2016, <https://www.canada.ca/en/employment-social-development/services/labour-standards/reports/employment-equity-data-report-2016.html#aC> Appendix C & D for more information.

Participants in the interviews and the subsequent workshop (see Appendix 2, List of Participants) have been exceptionally generous with their time, experiences, and analysis, as demonstrated by the quotes found throughout this report (anonymous or attributed by permission) from the interviews. Respectfully representing diverse perspectives while working to achieve the aims of the research on specific actions related to the CRC program can create tensions. Highlighting findings most relevant and related to the current CRC program may mean not sharing various lived experiences related to the larger system of academia, and this can feel like people's voices were not heard. Reporting on efforts to create inclusion also necessitates discussing systemic inertia where changes may not have been integrated. To mitigate that exclusive focus that silences some voices, this report presents findings and recommendations for two contexts: higher education in Canada and the federal CRC program.

A final draft of the report was shared with all participants in the research interviews, focus groups, or workshop. The insightful suggestions that were received have been incorporated into this report, with appreciation to those participants for their careful reading of the draft.

Findings

The key themes that emerged from the focus groups included experiences and barriers related to: institutional ableism, recruitment, selection, metrics, interviews, renewal/retention and promotion, and higher education and the CRC program. Quotes throughout this section are from participants of the focus groups during March and April 2021.

4.1 Institutional Ableism: the need for universal access and design

4.1.1 Disability Tax

Disabled people are required to complete additional daily tasks regarding disability and inaccessibility on campus that take time away from their research and productivity. Disabled scholars must navigate accommodations processes through the filter of their own needs in an opaque and confusing system that is built for standardized bodies and abilities on campus. Individuals tasked with providing accommodations through decentralized systems may have variable levels of training about the accommodations available and different interpretations of what is reasonable. These accommodations and access to support are often defined by arbitrary and exclusionary rules and regulations, particularly since the accommodations are deemed “within reason” by non-disabled people. For example, leaves of absence for disabled scholars are routinely

stigmatized, in contrast to other types of leaves that have been hard-fought and have become less stigmatized over time, such as parental leave.

Disabled people invest time and energy navigating daily drivers of discrimination and inaccessible spaces, such as campus architecture, research spaces, human interaction, transportation, etc. This investment indicates a lack of understanding and recognition of disabled bodyminds³⁶ in campus spaces, partly resulting from a lack of input in design, creating a vicious cycle that continues to limit disabled voices and presence on campus. Unconscious ableism and disablism³⁷ and the lack of knowledge regarding disability discourse, as well as the fear of disability, drive this cycle. The discomfort of enabled people, or non-disabled people, with disabled people, produces an unconscious fear of disability and may heighten fears of becoming disabled themselves,³⁸ which inhibits the conversations required and prevents society from moving forward.³⁹

The medicalization of accommodation harms disabled people because it makes it much more difficult to obtain support, especially for those without diagnoses. This stems from a deep mistrust and suspicion of people claiming disability⁴⁰, and ignores the evidence of the exceedingly small percentage of people who seek accommodations and leaves of absence compared to the proportion that are disabled. In addition, medicalization of accommodations disproportionately affects other equity groups, as limited access to systems of healthcare and diagnosis affects women, LGBTQ+, BIPOC, and lower socio-economic individuals differentially.^{41,42}

Disability leaves are medicalized and must be justified in a way that medical appointments for other leaves and situations are not: “no one asks where the ultrasound is”; but disabled scholars must often specify hospital and appointment dates and locations. Justification for disability leave must be made repeatedly and with profound detail. Providing this justification is part of the costly and unsubsidized work of being

³⁶ A term used by disability scholars to underline the ways that bodies and minds are interdependent and cannot be separated: Schalk, Samantha Dawn (2018). *Bodyminds Reimagined: (Dis)ability, Race, and Gender in Black Women's Speculative Fiction*. Durham: Duke University Press. pp. 269, 5. ISBN 9780822370734.

³⁷ Ableism is defined as the societal expectations of non-disabled normality, whereas disablism is direct discrimination against disabled people -- Bê, A. 2019. Ableism and disablism in higher education: the case of two students living with chronic illnesses. *Alter*, 13(3): 179-19. <https://doi.org/10.1016/j.alter.2019.03.004>

³⁸ Breen, J. & Forwell, S. (2021). The difference model of disability: A focus on employment.

In N. Ferreira, I. Potgieter, & M. Coetzee (Eds.), *Agile coping in the digital era: Emerging issues for research and practice*. (pp. 275-298). Cham, Switzerland: Springer Nature.

³⁹ Williams, K. 2018. *Fear is why you're ableist*. The Leveller, <https://leveller.ca/2018/10/fear-is-why-youre-ableist/>

⁴⁰ Smith, D.R. 2007. Who says you're disabled? The role of medical evidence in the ADA definition of disability. *Tulane Law Review*, 82(1).

⁴¹ Mirza, S.A., Rooney, C. 2018. *Discrimination prevents LGBTQ people from accessing health care*. Center for American Progress, <https://www.americanprogress.org/issues/lgbtq-rights/news/2018/01/18/445130/discrimination-prevents-lgbtq-people-accessing-health-care/>

⁴² Waldron, I.R.G. 2010. The impact of inequality on health in Canada: a multi-dimensional framework. *Diversity in Health Care*, 7: 261-270.

disabled, taking up time and energy that could otherwise be focused on academic responsibilities.

“The changes we're talking about here require an understanding of equality differently - an able-bodied mindset that requires verification and proof of a need for accommodation will require a switch in systems and a change in all these systems. It shouldn't be a requirement to revalidate...that's a perspective of those who don't understand.”

4.1.2 Disability as an afterthought

Institutions act to minimize costs rather than maximize disabled researchers' contributions through reactive and minimal accommodations rather than proactive accessibility. While some universities, such as [McGill University](#), [University of Victoria](#), and [University of Toronto](#) have created a centralized accommodation fund for faculty and staff with disabilities, others are set up to offset costs for departments for assisted technologies and equipment, such as at [University of Alberta](#) and [UBC](#). A centralized accommodation fund is easier to navigate: it involves fewer and more specialized personnel as advisors, a streamlined process for getting accommodations set up, and ensures that accommodations are not restricted to assistive technologies and equipment if more is needed. Department and unit personnel are still essential to making everyday interactions and accommodations work, but the responsibility and expertise to decide what is “reasonable”, and ensure it is in place, rests with those who are specialists.

While universities as employers have a duty to accommodate based on their respective provincial human rights code/act, there is a lack of institutional and individual accountability for both understanding and accommodating disability, allowing ignorance and exclusion to proliferate. Furthermore, accessibility as an aspect of equity and justice is generally not considered, except to the extent it has been legislated. While there may be a duty to accommodate, there is not a duty to understand what accommodations mean. This is reflected in the 21% of disabled individuals who reported in the 2017 CSD they did not have any of their needs met.⁴³

“In many cases the focus on EDI work has been incremental, starting with gender, moving to other equity deserving groups - in some ways disability has been the last group to be incorporated into EDI work [and] thinking about systemic barriers. It has often been case-by-case / ad hoc around

⁴³ Morris, S. 2019. Canadian Survey on Disability Reports: Workplace accommodations for employees with disabilities in Canada, 2017. <https://www150.statcan.gc.ca/n1/pub/89-654-x/89-654-x2019001-eng.htm>

accommodations rather than policies and supports in place. We have been reactive rather than proactive.”

The accommodations process is currently failing disabled faculty members, given that accommodations are difficult to find and receive, the extensive justification process, and the “within reason” requirements. This emphasizes the need for increased access, rather than “bandage” accommodations, in a centralized manner, such as universal design.

People with marginalized identities in addition to disability face overlapping and compounded discrimination and inequities. For example, disabled people who are also women and/or non-binary face two layers of discrimination: all the ways that women and/or non-binary people are held back, and all the ways that disabled people are held back. If disabled people are also Indigenous and/or racialized, they face layers of discrimination. With all three identities, opportunities, support, and access to justice are further curtailed.

Many disabled scholars have been funneled into and/or had little choice but to accept precarious academic employment. Due to increased time to degree completion, leaves of absence, or alterations in career milestones, disabled scholars are often only offered sessional or adjunct positions. These positions make conducting research extremely difficult and are carried out at the scholar’s expense because the employer does not see it as an expectation of their role. Contract teaching is precarious and in general has become more commonplace as a necessary part of academe’s infrastructure.^{44,45,46} In response to the Canadian Association of University Teachers (CAUT) study in 2015⁴⁷ showing the precarity and prevalence of contract work (which increased by 79% from 2005-2015 across Canada), UBC has increased the number of tenure positions both in research and teaching faculty, while decreasing the number of sessional instructors⁴⁸. There is no clear pipeline to assist precariously employed scholars to move to research and tenure track positions. This is another avenue that contributes to a loss of diversity in the professoriate, in addition to the previously mentioned filtering that occurs during undergraduate and graduate degrees and postdoctoral studies. As a result, those in contractual teaching positions are effectively excluded from research and tenure track

⁴⁴ Rose, D. 2020. A snapshot of precarious academic work in Canada. *New Proposals: Journal of Marxism and Interdisciplinary Inquiry*, 11(1): 7-17.

⁴⁵ Foster, K., & L.B., Bauer. 2018. *Out of the Shadows: Experiences of Contract Academic Staff*. Canadian Association of University Teachers.

⁴⁶ Adjunct, A.K. 2008. The revolving ramp: disability and the new adjunct economy. *Disability Studies Quarterly*, 28(3).

⁴⁷ Foster, K, and L.B. Bauer. 2018. Out of the Shadows: EXPERIENCES OF CONTRACT ACADEMIC STAFF. www.caut.ca/sites/default/files/cas_report.pdf

⁴⁸ UBC’s Planning & Institutional Research Office, 2020, https://reports.im.it.ubc.ca/t/PAIR/views/FacultyandStaff-Website_16231934357380/TenureStreamandNonTenure?%3AisGuestRedirectFromVizportal=y&%3Aembed=y

positions. Therefore, even if they could do excellent research as a CRC, they are ineligible to apply.

4.2 Recruitment

Systemic ableism in universities filters out disabled people from applying for positions: the language used and information provided in advertisements, accessibility of accommodations and information about supports for disability, university and departmental cultures that have a reputation for being unaccommodating, and expensive or obscure paths to disabled scholar networks all contribute to a likelihood that disabled applicants will not be successful.

Firstly, faculty advertisements (particularly those for CRC positions) may have narrow position descriptions, seemingly with an individual researcher in mind. This targets specific researchers and excludes application submissions from a more diverse pool. These specific advertisements effectively eliminate the competition and disrupt some of the core fundamentals of higher education and “thinking outside the box” philosophy required to push innovation and scholarship. These types of advertisements are the opposite of what the CRC program seeks from chairholders.

Secondly, while advertisements are now required to mention accessibility and accommodations, very little detail is provided. There is often standardized language at the bottom of the advertisement inviting candidates to “let us know if you need accommodations” with contact details. The contact is often the chair of the search committee, creating a power dynamic that can make it more hostile for a disabled scholar to reach out and consider applying.

In order to judge the feasibility of effectively participating in an interview process, let alone working in a given environment, there needs to be more open communication about the types of access that are already in place, as well as accommodations that can be made to further assist applicants. The majority of the work to find accommodation information is through the labour of the individual applicant, and on disabled people in general at all levels of academia.

Information on accessibility, accommodations, etc., provides the context for future experiences and allows the applicant to assess their potential to succeed as a researcher within that setting and community. Before applying, disabled scholars assess a university, faculty, and/or department to determine whether it is a place they will be accepted and thrive. These scholars are far less likely to apply to a department or a university where accessibility measures are not clearly stated and it is difficult to

navigate the accommodations process. To discern the inclusivity of departments and universities is not an easy task. Part of this knowledge comes from word-of-mouth through disability networks (formal and informal); and part comes from personal research that may indicate a hostile work environment, for example, few disabled people working there or a lack of appreciation in the workplace. Therefore, to increase diversity, universities need to make a conscious cultural shift in the way they approach disability.

“I happened to have a conversation with three of the [CRC] candidates, [the committee] refused to talk about accommodations during the hiring process, they said “No, you can talk to HR afterwards”, but people aren’t going to leave a position to come to someplace where they’re not guaranteed the accommodations they need.”

4.3 Selection Committees

Selection committees generally consist of non-disabled faculty, who are ill-equipped and uneducated in disability discourse. This is reflected in the persistent stigma around disability, the lack of disabled voices with a seat at the table, and the desire from committee members for applicants to disclose personal information. This situation is not only directly harmful to the disabled candidate, but it also signals to the candidate how ableist the working environment of the department might be and whether they can trust future colleagues to respect boundaries, privacy, and confidentiality.

Unconscious and conscious stigma around disability is widespread. Society creates norms about what bodies and minds should be like and anything that deviates from these norms is considered either exceptional or wrong. Stigma is so ingrained in our culture that even disabled people feel internalised ableism. Part of this stigma stems from a fear of becoming disabled as the non-disabled population knows how easily they too can become disabled. However, one should then ask oneself, “Why am I so scared of becoming disabled?” There are some responses that may come readily, however a deeper underlying fear that one may not recognize is the fear of being left out, unable to access resources, losing friends, and being treated differently. These fears are rooted in ableism and are perpetuated by non-disabled people, making these situations real for disabled people. Fundamental change needs to occur at the university in order to combat this type of internal and external ableist rhetoric, it cannot simply be an unconscious bias test or bias training requirement for committee members, particularly as most bias training in universities does not include disability.

In academia the stigma attached to disability and accommodations results in silence about disability from disabled scholars, so that even when there are individuals with disabilities in a department or faculty, hiring committees don't necessarily call on them to participate because they don't know they exist. Voices then are excluded from the decision-making table where hiring of disabled faculty is being considered. A shift here would require disabled scholars being willing to be known as disabled, which may not be possible in the ableist academy, particularly for early career researchers where disclosing could result in discrimination.

Selection committee members often also believe they need more detail about a candidate's disability. While this information can help support an individual's full participation in interviews and within departments, the intent behind it is often unclear. A large part of that desire may come from an ableist perspective of choosing which disabilities are deemed more acceptable than others. Additionally, it may be part of a financial assessment of which disabilities require more accommodation support and thus require added expense for the department or university.

“What degree of context beyond knowing someone has a disability is necessary for them to realistically assess a CV?”

These types of questions seeking more details may also be fishing for answers about whether a disabled candidate will be able “to do the job”. If disabled candidates are asked whether they can do the job, then that is a different story; if not, then it is important to critically question the reasons a selection committee needs to know the details.

“Disability is not on the radar and unrecognized, and the interpretation is that someone with a disability is not functioning at the level of someone who doesn't identify with a disability.”

If a selection committee is concerned that they do not have the proper resources to support the research and scholarship of a disabled scholar, then pressure should be placed on the senior university administration to ensure direct support to the scholar, while supporting universal design and changing the perception of disability.

4.4 Assessment Metrics

Assessing scholarly activity and research productivity tends to be conducted by applying to the applications traditional metrics that purport to be unbiased and fair, but require closer examination.

4.4.1 Standard metrics

Standard metrics for assessing scholarly activity and research productivity are very narrow, and based on a particular archetype of an academic that no longer fits the evolving realities or expectations of academia and society. Applying a metric that is designed with an ableist lens will always disadvantage someone with disabilities. Standard metrics of quality (journal impact factors, rate and number of first author publications, prestige of university, etc.) do not consider the diversity of research contributions, potential, and environments of scholars with disabilities. We recognize that standard metrics are variable across disciplines, but those presented below are commonly referenced by research subjects as representative.

A. High Impact Journals

There are many reasons scholars may not have published in high impact journals,⁴⁹ including a very specialized area of study, attempts to maximize outreach potential, and wanting to support their academic community. The San Francisco Declaration on Research Assessment (DORA), which currently has ~18,000 individual and ~2300 organization signatories in favour of moving away from journal impact factor as a standard measure of excellence, offers different reasons for why this metric is inaccurate and provides other alternatives. Highly specialized areas of study may be seen by journal editors as too niche or obscure to be of interest to broader journal audiences. Diversifying the canon to include research by and for particular communities is not necessarily seen as the mission of some large high impact factor journals. In addition, application processes for submission may have substantial barriers built-in, including such simple things as arbitrary and inflexible timelines, and forms not being accessible through screen readers.

Researchers in the field of the philosophy of disability or the economics of disability, may be more likely to publish in a journal on disability that will reach the disability community than in a well-known philosophy or economics journal.

⁴⁹ San Francisco Declaration on Research Assessment. <https://sfedora.org/read/>

Society journals, or those seen as “niche”, have lower impact factors than the large non-society affiliated journals, devaluing the scholarly activity that contributes to dissemination of knowledge among those who are most likely to benefit from that knowledge.

Disabled scholars may also be making a conscious choice to support their academic community by elevating these society journals in their community, in response to an increasingly profit-driven model of disseminating research that prioritizes commodification of knowledge over the academic mission of furthering understanding of the world for societal benefit. Commercial publishers make up some of the highest impact factor journals, but they generally have prohibitive publishing costs, which are then not funnelled back into the discipline. In contrast, society and not-for-profit journals use the publication fees (which are lower), to support scholarships, mentoring, and advocacy.^{50,51}

B. Publications (Rate, First Authorship)

In addition to journal impact factor, metrics associated with publications are the number of publications in a given timeframe, and how many of those are first authored papers. The rate of publication, as a criterion or metric, privileges some kinds of research over others, and creates a narrower field of research possible, particularly for Canada Research Chair nominations. Without an understanding of the length of time optimal productivity or quality results can take in particular areas of research, and/or the relationships and groundwork that are required to establish credibility as a researcher, the rate of publication is a metric lacking nuance.

First authorship may often reflect the power relationships within a research group rather than the person who produced and authored the research paper: this can disadvantage disabled, BIPOC, young and/or female researchers, and is compounded if the primary researcher has more than one of these identities. Disabled scholars may have fewer sole author papers, and more multi-person publications, as collaborative or community-engaged research provide more flexibility, relevance, and sustainability, while incorporating more perspectives into the research. Conversely, disabled researchers may have fewer research collaborations, depending on their ability to make contacts (i.e., through reduced

⁵⁰ Schloss, P.D., Johnston, M., and A. Casadevall. Support science by publishing in scientific society journals. *ASM Journals: mBio*, 8(5). Doi: <https://doi.org/10.1128/mBio.01633-17>

⁵¹ Crotty, D. 2018. *Why society and not-for-profit journals are worth preserving: better economic and continuing value for the community*. Scholarly Kitchen, <https://scholarlykitchen.sspnet.org/2018/12/06/why-society-and-not-for-profit-journals-are-worth-preserving-better-economic-and-continuing-value-for-the-community/>

conference attendance). As a metric of research productivity, authorship requires more than a default to first or sole authorship as being a sign of quality.

C. Number and Amount of Grants

Disabled researchers may have interruptions to their careers which slow their progress in achieving academic milestones. Since grants and awards can be cumulative (e.g., Canada Research Chair awards are more likely to garner funding) and begin during undergraduate degrees, this can result in disabled scholars being less competitive for grants. Research on this demonstrates that those from equity-deserving groups receive smaller amounts,⁵² even when they have requested more, and the marginalization that occurs with this metric is also cumulative. Additionally, disabled researchers may not apply for as many grants as their non-disabled counterparts. Grant writing is an energy drain and this can be difficult for certain disabilities (for example chronic pain, fatigue, or attention deficit disabilities). Therefore, the number of grants awarded may not fully or accurately reflect research excellence. For instance, if an individual applies for 12 grants and receives 3, compared to someone who applies for 5 grants and receives 2, the success rate (25% vs. 40%) of applications to awards reflects very differently on these two individuals.

D. Conference Presentations and Papers

The number of conferences attended and papers presented is often associated with higher research productivity. Prior to the COVID-19 pandemic, conferences often required travel. Depending on the disability, travel and long conference days can be extremely difficult. In addition, conference organizers may not have implemented the strategies necessary to ensure full participation (e.g., accessible venues, American Sign Language or Quebec Sign Language interpretation, quiet breakout spaces, etc.). Because of these barriers, many disabled scholars will have attended fewer conferences and given fewer presentations. The pandemic has forced conference organizers to develop virtual alternatives, which can lead to developing new hybrid conference models that are more accessible to many disabled researchers and other researchers with circumstances that make travel difficult.

⁵² This study, as with so many that focus on EDI, did not investigate the impacts on disabled researchers. However, it does explicitly explore gendered differences among other equity groups: Witterman, H. et al. 2019. Are gender gaps due to evaluations of the applicant or the science? A natural experiment at a national funding agency. *The Lancet*, [Volume 393, ISSUE 10171](#), P531-540

E. Prestige of Degree-Granting Universities

Privileging applicants from prestigious universities perpetuates inequities faced by those who require supportive and accommodating living situations, affordable education, and/or have caregiving/receiving needs. It enshrines the privileges of location and/or support through high school, application, financing, ability to travel, etc.

4.4.2. Alternative Metrics

While there is not a single set of metrics that will work for everyone, particularly for the diversity of disabled scholars, increasing the breadth of the metrics used can make assessments more equitable. Experiential knowledge and dissemination of knowledge are hugely important in academia, and yet are not key indicators of academic rigour. Mentoring of up-and-coming scholars, building relationships with community members, and outreach are all integral to academia.

A. Experiential knowledge

Understanding the nuance of experiences and being able to discern where these affect data and analysis has been repeatedly proven to be essential to interrupting erroneous assumptions and the erasure of various populations, yet lived experience is not considered as a primary metric for strengthening research across the academy. Once again, this metric will benefit many marginalized scholars, as well as those other scholars who are unaware of their biases.

B. Dissemination of knowledge

Outreach is an important way of disseminating research. It can include knowledge translation, and result in communicating new knowledge through less formal channels that reach people in the community rather than restricting it to people in the academy. Outreach is also important for creating bridges between the general public and academia, preventing the dichotomy of ivory tower/real world that has been built since academia's foundations, currently contributing to the decline in acceptance and trust of experts.^{53,54}

C. Research Sustainability & Collaborations

Researchers have a duty to ensure that research capacity in the academy renews itself and is increasingly effective at dealing with complexity. Mentoring

⁵³ Willyard, C., Scudellari, M., and L. Nordling. 2018. *How three research groups are tearing down the ivory tower*. Nature News Feature. <https://www.nature.com/articles/d41586-018-06858-4>

⁵⁴ Sears, M.A. 2019. *Hey, academics. Get out of the ivory tower. We need your expertise*. Maclean's Magazine, <https://www.macleans.ca/opinion/hey-academics-get-out-of-the-ivory-tower-we-need-your-expertise/>

and continuing the development of research capacity, including relationships within communities is essential. The very ground-breaking research that faculty members are hired to generate is often carried out by mentees, particularly in STEM fields. Mentoring may look quite different in different disciplines and for different researchers.

Effective mentoring ensures both the sustainability of research, and the ability of new researchers to understand and participate in research collaborations effectively. Disabled scholars may be mentoring a larger number of graduate students and post doctorates who are wondering how to navigate academia with disabilities themselves, or are seeking more comprehensive perspectives in building their own research communities and collaborations (this could be evaluated through mentee references).⁵⁵

Collaboration, within and across disciplines, departments, and institutions is increasingly providing evidence of more innovative and higher quality research that is better suited to the complexity of current issues; however, collaboration requires particular skills and perspectives, as well as time, to create this value and this should also be considered in assessing productivity.

Building and maintaining relationships within communities where research occurs requires enormous effort and time, particularly in comparison to scholars who do not interact with communities. This type of research may happen at a slower pace, resulting in those pace milestones occurring later. These important components of academia should be considered in the metrics applied in the assessment of candidates.

There's no one-size-fits-all set of metrics that will do the hard work of equitable productivity assessments. Expanding 'standard' metrics ensures that research is reflective of, and relevant to, the broader community. It also enlivens a commitment to institutional social responsibility. These expanded metrics include valuing collaborations, contributions to the academy, mentoring and teaching of future researchers, and relationships with community to ensure knowledge validation and mobilization. While this will benefit all scholars and scholarship, continued and nuanced attention is required to ensure that the scholarship of disabled researchers is properly assessed.

⁵⁵ Sprunger, J.G. 2017. *The benefits of engaging in collaborative research relationships*. Observer Magazine, Association for Psychological Science.

The above suggestions for additional and more equitable metrics for quality research do not discount the divisiveness of the conversation that has been reported/found to result when changing these metrics is proposed, and yet that is a necessary conversation required within every discipline. No formula will suffice to make metrics equitable; they need to be deconstructed to examine how they privilege and/or marginalize different groups, and what can mitigate those effects to create more inclusive research communities that can include more disabled scholars. While the current standard metrics require working conditions that are not sustainable for most scholars, changing the standards for everyone will not obviate the need to address the unique barriers for disabled scholars.

4.5 Interviews and Selection

4.5.1 Interviews

Traditional faculty interviewing practices are not inclusive or accessible, often requiring travel, a substantial number of meetings with few breaks, and a general failure to provide appropriate and supportive accommodations. Additionally, disabled applicants must navigate the complexity of disablism.

Prior to the COVID-19 pandemic, the primary part of an interview involved travel. Travel is not always as simple as getting onto a plane, finding a hotel, and eating out. For disabled people, travel can come with many obstacles, including but not limited to: sensory overload, pain from plane rides and sleeping accommodations that are not set up for them, illness from the lack of a kitchen to prepare meals, being away from primary care, exhaustion as a result of these situations, and flare ups that can last long after the interview is over. Therefore, in-person interviews can have an impact on work and daily life for days/weeks following such an event.

In addition to the direct effects of travel, in-person interviews generally consist of back-to-back meetings, seminars, one-on-one interviews, and lunches/dinners over multiple days. This packed itinerary can further exacerbate all of the aforementioned pain and overwhelm, and exhaust disabled candidates. This type of interview strategy relies heavily on personality and whether individuals will mingle well in the departmental culture (which could very well be ableist). Alternative interview formats and processes (as during COVID 19), and ready access to accommodations information, can make interviews more accessible.

Compared to their non-disabled counterparts, disabled scholars enter into an interview with an additional set of pressures and considerations regarding their performance. Candidates may often do additional work to gauge how ignorant or biased the reviewers or committee members might be, to assess the risks of disclosing a disability, to make

committee members feel more comfortable with their disability, and often go into graphic details to explain support needs.

“[disclosure of accommodation requirements] it’s a pretty major barrier that if we disclose the requirement of accommodation that we’re likely not to be hired, because it’s often the small department that accommodations are offloaded onto... It’s a major problem that we need to disclose to be competitive but we can’t disclose or we’re likely to not [be] hired.”

“I tried to go to an interview without disclosing my disability and it was a nightmare...I knew they didn’t want me. It was a surprise and that’s what they were focusing on.”

During interviews, candidates are often asked about gaps in their CVs that can include leaves of absence. This investigation of leaves invites bias and discrimination by selection committee members. Candidates may opt to provide information to describe their leaves but this reinforces that some leaves (e.g., parental leave) are easily explained while others (e.g., disability leave or intermittent sick leave) may require disclosure of more detailed personal information. As a result, some committee members may identify certain leaves as reasonable at the expense of other types of leave.

“[While many grants and applications have sections to discuss leaves]...it exists to deal with issues of parental leave, and in particular maternity leave...there’s no sort of evidence that people who will be reading the grant won’t consider any disability-related leave as proof that you can’t actually complete the project, or that you’ll be a liability to the work.... I know enough about the ableism of my colleagues and the people around me to assume there’ll be actually no training of the people reading this...sort of feel like we’re set up to fail”.

Additionally, it creates a hierarchy of disability, where certain types of disability and/or medical leaves are more acceptable, for instance a leave for surgery and recovery versus admissions for psychiatric care.

4.5.2 Selection

Prior to and during the selection of a disabled scholar for a faculty or CRC position many disabled candidates may be set up for failure because of a lack of proper communication. This can occur as a result of improper dialogue and education within the department regarding disability and/or not having the same inclusive and equitable metrics being reflected in the review process.

Collegial consultation with faculty members who are not part of the selection committee can overturn the attempts of the search committee to apply more inclusive selection criteria. It is therefore important to have open communication and education about access, inclusivity, and accommodations, as well as how ableism and disablism affect the department.

There is a lack of knowledge about disability, unconscious ableism, disablism, disability discourse, and disabled lives within the general community. As mentioned in previous sections, non-disabled people fear disability and this limits the conversation and the possibilities of hiring disabled scholars. Changes to workload, such as an accommodation that reduces the number of courses taught, could create intra-departmental tension without proper education. This is why ‘parachute’ hires, appointments that are made at the faculty level and then placed into departments to increase diversity without collegial recruitment, may backfire. There needs to be an intentional process by the committee and department to make their community more inclusive prior to hiring a disabled scholar, or the disabled scholar will likely be placed into a hostile working environment (with the knock-on effect of impacting the very productivity that is valued in academic metrics).

Following the selection of an individual by the committee, the applicant must then go to external review as part of their nomination for a CRC. If external reviewers are not also using the same equitable metrics and/or understanding the disability discourse that informs these more equitable metrics, it is unlikely that this candidate will have their nomination approved.

4.6 Renewal, Promotion, and Retention

The retention and promotion of disabled scholars can be challenging because of the standard metrics of productivity previously described that do not have the necessary flexibility for the complexity of disability; this is then exacerbated by delays created by a lack of proper supports and accommodations in place from the beginning of the appointment.

The traditional work-life balance of academia is ableist and disabling, creating further barriers to disabled scholars being competitive for renewal and promotion. The “publish or perish” mentality and 70+ hour work week have been demonstrated to be unhealthy and disabling for a non-disabled scholar, and may not be possible for many disabled scholars. Even if more equitable metrics are used in the initial assessment of a disabled candidate, it is unclear whether these would continue to be in effect throughout the career of a disabled scholar.

A fear that someone won't have their CRC renewed could cause units and departments to hesitate in nominating a disabled scholar, as searches, etc., require an investment of time and resources and the chair may remain vacant and unfunded for a certain period. Inconsistent assessment protocols could mean that even when a first term Tier 1 or Tier 2 award is successfully completed, if new productivity metrics are not incorporated into both institutional and federal CRC renewal processes, assessments will revert to ableist and routine measures of productivity, and the chairholder could potentially lose the second term of their chair.

Additionally, disability is not binary: it is diverse and this must be reflected in assessments for promotion and renewal or disabled scholars are set up yet again for failure. Many disabled researchers will have unpredictable interruptions and require changes in accommodations over time, which may be reflected in their CVs.

“There is an assumption that disability implies permanent static impairments with a binary between disabled and non-disabled. It isn't a binary and policies and procedures need to reflect this.”

Furthermore, accommodations that a researcher requires need to be set up in advance of their arrival or else this is false equity. No matter what type of accommodation it is, there should be proper dialogue with the department and the service, whether it is interpreters, technicians, instalment of automatic doors, etc., to ensure everything is in order by the time the new hire arrives.

“Recently [we] hired a deaf scholar who didn't get their interpreter accommodation for six months after their hire...”

From an assessment perspective for this particular example, how and where does one explain an inability to communicate with colleagues and students and, as a result, a decline in productivity? The same decline can result if one is unable to access a building or laboratory. If a scholar is denied access or timely accommodations, they are also denied equal participation.

To retain disabled scholars, there must be equity, community, and inclusivity within departments and faculties. Communities of support are essential for all researchers, but particularly for researchers from marginalized groups. Building up a community by having access, encouraging more disabled scholars to apply, and by having a network of disabled researchers within the university to share lived-experience is an important factor in the retention and success of disabled faculty.

4.7 Higher Education and the CRC Program

Over the past four years, the CRC Program has intentionally required Canadian universities to focus on equity, diversity, and inclusion. CRC's leverage supports institutions to incorporate more diversity in research excellence. Nonetheless, FDG members remain under-represented in the program. This is especially true for disabled scholars who are excluded from the academy because of concerns about costs to accommodate, the academy's ableist history, the filtering out of disabled people, and concerns about institutional prestige.

Uninformed assumptions about the cost of accommodations prevents many departments from hiring disabled scholars, emphasizing the need for a centralized accommodation fund at an institutional level. Whenever a disabled scholar is interviewed, nominated, or promoted, the cost to accommodate will inevitably come up. It should not be the responsibility of the disabled scholar to pay for their access needs, nor should it be the department's, as this places departments against each other, resulting in the exclusion of disabled scholars from certain spaces.

Bias and discrimination that recreate and maintain inequities occur at various levels within our nested systems. The discrimination and 'othering' of disabled people is intimately entwined in the history of higher education and academic institutions. This troubled history is foundational to the operation of higher education systems, and institutions need to address this and their continued 'othering' of disabled people. Institutions must ensure better systemic practices and accessible EDI efforts, along with fundamental education and training within departments and faculties, to create spaces of inclusion and not harm for disabled scholars. This will be vital as the CRC program and universities strive to diversify the academy; this historical exclusion must not be left to disabled scholars to fix.

Efforts to diversify faculty and to hire disabled faculty must start early. The highest proportion of disabled people in higher education is at the undergraduate level, with a progressive decline through to the rank of full professor. This occurs even though the proportion of the population that is disabled increases with age. There need to be better processes in place to prevent disabled students from slipping through the cracks, or else we are picking and choosing what types of disabilities make it through the ableist filtering system (particularly those that do not require accommodations if their access needs are already met by the university).

Changes in metrics, acceptance, and inclusion, will not help disabled scholars on an institution-by-institution or department-by-department basis, it requires a change to the

system of higher education. Without a push across institutions to create more inclusive metrics to assess scholarship, disabled scholars and other scholars who have been excluded because of their identities may continue to be seen as burdens or as a threat to the prestige of the university (for example, by seeing those more progressive institutions who are using more inclusive metrics as somehow “lowering standards”, rather than as changing them to fit 21st century values and requirements). Traditional metrics not only harm disabled people directly, but also harm academic scholarship by removing an important perspective from our research, and harm progressive universities that are committed to hiring and supporting disabled scholars. Thus, institutions across the board will need to challenge the preconceived notions of productivity in order to gain better, more well-rounded scholarship.

The current shift to increase diversity must not be simply a quota or a target. Without transforming the CRC Program’s values and offering support, we risk harming the equity deserving groups that the CRC Program seeks to include. Some participants reported a perception that the CRC Secretariat in Ottawa is not inclusive when assessing applicants from FDGs (e.g., leaves of absence being scrutinized and seemingly penalized and then when the selection committee inquired and argued against those assessments, the CRC Secretariat did not respond).

The CRC Program has a history of ableism and discrimination, and as an academic funding program perpetuates the same traditional and ableist research excellence ideals and standards as described throughout this report. The CRC Program was developed to recruit excellent researchers from abroad, as well as to retain research excellence within Canada. Rather than widening the potential pool of excellent researchers, these traditional standards have resulted in awards that are a reflection of what is seen in the academy at large: the prizes go to predominantly white and predominantly male members of the academy.

Recommendations

5.1 Institutional ableism

1. Create proactive accessibility. Forego medicalization of accommodations and post-hoc performative accommodations and continue the implementation of universal design principles. Some accommodations will always be necessary, as universal design will not support every diverse disability, but a universal design perspective will increase inclusion. For example, accessibility measures, such as hybrid conference formats, have been shown to benefit many people and not just those with disabilities.

2. Designate HR specialists for accommodations and accessibility. To fix the opaque accommodations process, personnel need to be educated in disability discourse to understand the complexity and diversity of disability, and learn to respond creatively and proactively to make things work. Departments need to be made aware of their designated specialist, so that the need to assess and provide accommodations is removed from the department/unit to preserve privacy. Accommodations and accessibility specialists need to be able to hold department staff accountable to creating viable solutions with expectations that those accommodations will be implemented according to deadlines.

3. Educate! There is a profound lack of understanding of disabled people/people with disabilities. Institutions need to incentivize and provide training to educate faculty, faculty associations, and unions about the stigmatization and bias working against disabled people. Basic bias training will not suffice: carefully targeted training, for example using the 'Model of Difference and Discomfort'⁵⁶, is more likely to enable people to create a more inclusive environment.

4. Develop a policy framework that conveys an understanding that disability is a valued form of human variation affected by social contexts, not primarily a medical concern. Medicalizing disability is a way disabled scholars and educators are governed in disabling ways, requiring disabled people to engage in the unpaid work of disability in seeking medical verification to "prove" their disability.

5. Increase flexibility in the definition of leaves of absence. Currently, medical leaves are extended periods of time without work, but this does not include periods of time where reduced work is possible and desirable, or is required. Because reductions in productivity during times of reduced work hours are not legitimized by a substantiated leave, those necessary accommodations can penalize disabled academics. Ensuring that leaves can also be considered as a fraction of a full-time position, with flexibility over time, would ensure that productivity can be equitably assessed while researchers continue in their roles where possible and desired.

6. Acknowledge the role of academic institutions in perpetuating trauma, violence, and harm to disabled people, and then commit to transforming institutions. To begin any reconciliation, institutions, academic societies, and funding agencies need to acknowledge their contribution to discriminating against disabled people.

⁵⁶ Breen, J. & Forwell, S. (2021). The difference model of disability: A focus on employment. In N. Ferreira, I. Potgieter, & M. Coetzee (Eds.), *Agile coping in the digital era: Emerging issues for research and practice*. (pp. 275-298). Cham, Switzerland: Springer Nature.

7. Support the visibility of disabled people, their communities, and disability justice movements on campuses. This can be through disability affinity groups, support programs, and disability task forces or broader community coalitions with a presence/membership from academic institutions mutually represented at leadership tables.

8. Value the advocacy and activist work that disabled scholars do with disabled people to create a more inclusive academy. For instance, recognize this as service work when service is being allocated each year, or as part of the job description.

5.2 Recruitment

1. Advertise in ways that are more inclusive of disabled scholars. Job descriptions and advertisements should advertise broadly for people within a specific field, allowing for people with a diversity of specializations to apply to a position. For instance, CRC job postings could be less prescriptive to the specific research area, but rather include the field generally, to help attract a more diverse pool of researchers and perhaps increase the potential for novel thoughts and research projects.

2. Provide clear information about access and accommodations in advertisements. Having details about possible accommodations that can be made can be helpful for individuals to assess whether they can apply. Additionally, it opens up dialogue about possible access needs applicants may not have brought up in the first place. If brevity is a concern on an advertisement, a link can be included that provides more details with examples of types of accommodations.

3. Name a designated HR specialist for applicants in each job advertisement. Having disabled applicants reach out to search committee chairs is not equitable, as most non-disabled applicants do not have to have their first interaction with a potential colleague focused on accommodation. Having a designated person who is not part of the selection or search committee as the point person to first bridge issues regarding access is a key part in bringing in more disabled applicants.

5.3 Selection committees

1. Accept and validate the legitimacy of previously approved leaves, without requiring the reason. During the assessment process, leaves should only be identified as periods where one has taken personal time away from work without a required reason for them. These leaves have already been approved by the host institution and therefore more information is unnecessary for the selection committee.

2. Develop the capacity of committee members to understand and mitigate bias and ableism in selection processes. Hiring panels need to increase awareness of their own biases and have competency around disability. They need to understand accessibility and accommodations and know who can provide support. Additionally, they should be trained in a way that emphasizes the specific ways that scholarly contributions may look different for disabled applicants. Committee members need to understand that disabled scholars have additional workloads by virtue of navigating their disability in ableist institutions.

3. Include disabled voices on these committees. Consider this to be their service work and not additional to other service work.

4. Establish weighting of the selection/evaluation criteria, including the alternative metrics, prior to receiving applications. This will help prevent some of the biases that may initially appear, should you not establish this in advance.

5.4 Metrics

Incorporate more and different excellence indicators in evaluations. Moving away from standard metrics, particularly journal impact factor and as a result H-index. This is not a suggestion to forgo the traditional standard metrics, but rather to decrease their weight in relation to other metrics as the definition of excellence evolves. Consider the weighting of alternative metrics as more indicative of “qualities” of excellence that indicate development of knowledge, impact beyond the academy, and sustainability of research and the research community. These alternative metrics include: experiential knowledge, dissemination of knowledge and other forms of publication, research sustainability and mentorship, collaboration and cross-disciplinary research, and building and maintaining relationships within communities.

5.5 Interviews and Selection

Follow interviewing best practices:

- Include detailed information about access and accommodations during/beyond the interview.
- Provide more than one way of participating in an interview, so people can choose. Consider creating opportunities for virtual and/or in-person meetings spread over shorter days with more breaks.
- Always provide materials in advance for all applicants, including questions that will be asked and not simply as an accommodation upon request.
- Reduce the number of engagements during the interview days.

- Interview more candidates, perhaps via virtual conferencing, specifically designed to have the candidates explain their scholarly impact and achievements, this can help narrow in on the best candidates for the position and can help diversify the pool.

5.6 Renewal, Promotion, and Retention

1. Ensure communication across levels of promotion and hiring committees. If there is not proper communication, transparency, and continued use of the formula used during a disabled scholar's initial hire, they will not meet the criteria for future selection. This shift in metric use needs to be retained throughout all aspects of academic hire, including through to the CRC program and Secretariat. However, in order to make this feasible, other recommendations need to be implemented to create a more inclusive environment where disclosure does not present the same risk to disabled scholars.

2. Allow for flexibility. Disability is not binary and can be intermittent or change over time. There must be flexibility in access, accommodations, in promotion and hire, to allow for unique experiences. Fractional appointments that are linked to percentages of time worked could ensure that the tenure clock reflects lived experience for faculty members.

3. Provide support for CRCs. Resources could be created to help deans and department chairs/heads assist, support, and mentor first time CRCs. Mentoring programs for CRCs could be helpful to support their success and potentially their renewal.

4. Ensure all access needs and accommodations are in place prior to the start of a position. It is disrespectful and unethical to not have one's needs met upon arrival. Delays in having access not only put strain on scholarly activity, but a mental drain on the individual.

5. Recognize that disabled scholars often, similarly to other equity deserving groups, perform disproportionate service, mentorship etc. This type of work should be valued as important contributions to the university and greater community.

5.7 Higher Education

1. Integrate supportive systems and structures early in academic careers. Policy changes need to be implemented for undergraduate and graduate students to ensure

that disabled students can remain in academia, since focusing on faculty has already filtered too many potential scholars out.

2. Create and maintain central accommodation funds. All universities need centrally-administered funds that do not tax individual departments or disabled scholars. Accommodations should include funds for teaching release from disabling teaching loads.

3. Develop clear plans and communications to reduce stigma around disclosure. This will support the research and career paths of disabled scholars, build a community of disabled scholars, and encourage others to apply. Stigma attached to disability and requirements for accommodations means that disabled researchers are unable to find the support needed to focus on their research and may spend valuable time navigating inaccessible systems, administrative ignorance, etc.

4. Create greater visibility of disability. Develop a campaign, similar to the “Positive Space” campaign at UBC for LGBTQ+ people, that raises awareness and visibility of disabled people on campus. Because of stigma, faculty members are historically and currently reluctant to identify as disabled in a way that confronts ableist biases, normalizes the prevalence of disability, and more effectively supports the possibility and spectrum of disability in the campus.

4. Maintain flexible working environments. COVID-19 has demonstrated a very different way for us all to learn, work, and interact. The changes to work during this time have benefitted many disabled people and non-disabled people alike. Having flexible working and teaching environments are the way of the future and create a more equitable arrangement for all.

5. Encourage and listen to disabled voices and representation on campus. The lived experiences of disabled people provide a window into previously unconsidered aspects of research. Their perspectives on systems-failures provide insights for improvements.

6. Include disabled perspectives in internal review committees for CRCs and promotion and tenure. Serving on such committees in this capacity should be recognized as unique service work and a contribution to the university community. Considering that there are so few academics who self-identify with disabilities this should be one of their primary and perhaps sole service work requirements, if they agree to serve in this way.

5.8 CRC Program Specific Recommendations

1. Specifically address systemic ableism in policy statements and regulations.

Wherever possible, the CRC Program (CRCP) should support academic institutions in implementing the recommendations for reducing ableism that are outlined above.

2. Confirm CRC funding is used exclusively for research support and not for accommodations. Where CRC funding is used to pay for accommodations, it reduces the amount of research funding and further disadvantages disabled scholars.

3. Include disabled voices in external review committees to ensure that their perspectives and expertise is included. For CRCs with disabilities, developing and contributing this expertise in assessments should be their only service work in addition to their research and support of their students and researchers.

4. Ensure that alternative metrics and equitable consideration of disabled scholars is supported through the renewals process, otherwise it risks penalizing institutions that have broadened their definitions of excellence to include metrics that reflect the changing research environment.

5. Fund comprehensive evaluations of the impact within CRCP and within and across institutions as a result of implementing these equity targets. These initiatives attempt to create positive change and require a rigorous framework to ensure we understand their impacts and make the learning from them readily available.

6. Incorporate disabled scholars' voices and perspectives in the redesign of policies and practices. Operating from the principle that 'nothing about us, without us, is for us', all implementation measures need to include substantive engagement with disabled scholars at all stages of the process.

7. Create a CRCP pipeline for non-tenure track scholars. Develop and fund a pre-CRC award that enables researchers in precarious teaching positions to develop a research track record.

8. Consult with disabled scholars to revise and improve the definition of disability. Since there is currently no clear definition of disability in Canada, it becomes difficult for scholars to assess whether they are included within the CRC framework and are eligible to apply for a CRC position. Having a clearer definition for prospective applicants will assist in self-identification with consistency across institutions and the federal CRC Program.

9. Support units to use the suggested alternative metrics for research excellence.

Provide guidance and clarity about how to incorporate alternative metrics into the evaluation of productivity and what that looks like in practice, in consultation with disabled scholars.

10. Recommend to Tri-Council Agencies to develop more accessible granting processes. Granting processes should enable disabled graduate students and post-doctoral fellows to pursue research effectively, ensuring a greater pool of disabled academics for CRC positions.

Conclusion

Academic institutions, and by affiliation, all grant funding agencies have a history of ableism and disablism that continues today. Efforts to challenge systemic barriers for disabled academics are underway by many universities across Canada, but many of these efforts are falling short, since standard metrics of research productivity and excellence are ableist and disadvantage disabled bodies and minds.

Dismantling these barriers requires transformative initiatives that include, but are not limited to, changing research productivity assessments to better reflect 21st century society. The recommendations put forward in this report are derived from the thoughtful input of disabled and non-disabled scholars and administrators to move toward that transformation.

Education and training, the typical recommendation, will not be enough; the systems⁵⁷ that guide our practices, norms and social behaviours must change in purposeful and transparent ways. Equitable spaces for disclosure of disability and inclusion of disabled voices require that strides are made to value the contributions and lived experiences of disabled people (as a significant portion of the population) in academic settings. Because ableism is foundational to our institutions, the recommendations in this report are targeted at various sites and processes across academia.

⁵⁷ "Medicalization of discrimination reframes something that is a collective problem into this individualized patient-centric framework. Of course, maybe this is no different from where civil rights law has already gone. It relies increasingly on individual legal claims and harms, and structural interventions have become increasingly difficult in light of shifting affirmative action doctrine." Hoffman, Alice, 2020, *How Medicalization of Civil Rights Could Disappoint*, Stanford Law Review, Volume 72, downloaded here: <https://www.stanfordlawreview.org/online/how-medicalization-of-civil-rights-could-disappoint/>

The CRC Program has an important role in promoting changes in scholarly assessment by using their leverage as a national program to spread awareness and advocate for the valued contributions and inclusion of disabled scholars within academia across Canada.

Appendices

Appendix A — Interview Questions

Table 1. Questions asked during the key-informant interviews during January-February 2021.

#	Question
1.	Have you been on a hiring committee before? If so, did you take bias training or were there guidelines used for assessing applicants generally?
2.	When you think about assessing research productivity in an academic application, what are the key elements that are considered (e.g., key fundamental characteristics of research to assess quality, quantity, etc.)?
3.	What are some ways that curriculum vitae could look different for disabled scholars?
4.	What are some strategies or processes that you think would lead to more equitable assessments of research productivity?
5.	How does disclosure play into equitable hiring? Can we have equitable assessment without disclosure?
6.	What are some accommodations that can be made during the application/interview process?
7.	Are you aware whether there are faculty accommodations at your university? If so, were you aware of these when you applied for your positions and what kinds of accommodations are there?

Table 2. Questions asked during the disabled scholars and administrators focus group.

#	Question
1.	What has been your experience with how (or whether) current accommodations and/or leaves are considered in evaluating academic CVs?
2.	When we talk about considering accommodations or leaves for disability/ies, is it possible to create an equitable hiring process without disclosure of a disability?
3.	What are the barriers for disclosing disability and seeking accommodations during the recruitment process?
4.	Currently, in the CRC application process, there are options for applicants to provide details of leave (for instance medical and parental leave) in the justification process for a longer eligibility period for Tier 2 chairs (currently within 10 years from PhD completion). The justification form does not offer space for intermittent leave, reduced workload/pace of research, and fluctuating symptoms. How would you feel about having a space to detail this type of chronic leave in an application?
5.	Is assessing quality over quantity of research enough? What are the precise criteria that could be used for assessing quality?
6.	Does the lived experience of disabled scholars bring perspectives that can foster research excellence in different ways (i.e., contribution to quality in innovation, collaboration, etc., because of that perspective)?
7.	How could those perspectives be showcased in an application?
8.	What would you like a selection committee or your colleagues to know in order to be able to work and participate effectively and comfortably?

Table 3. Questions asked during the non-disabled scholars and administrators focus group.

#	Question
1.	What has been your experience with trying to assess productivity across different applicants generally?
2.	Have you ever had an applicant whose research was very intriguing and promising, but their publications, grants, and/or conference presentations were not comparable to other researchers at the same career point?
3.	If you were asked to consider an application from a scholar who had disclosed a disability, what would be your first thoughts or concerns?
4.	Traditional measures of excellence can often be exclusionary of those with disabilities – where do you see potential in adjusting how CVs are reviewed to be more equitable?
5.	What would it take to get to the same level of legitimacy in considering accommodations and capacity of a disabled research as is currently afforded to parents?
6.	Disabled researchers are often excluded early in the assessment of applications. What would need to change in the CRC program to open up our understandings of excellence to a wider range of researchers?
7.	What do you think about accommodating delays in outputs (e.g., publications, grants, and/or conference presentations) or sporadically reduced workloads (e.g., time to tenure, teaching, service, etc.) for faculty members with disabilities, which could also show up in the CVs of applicants?
8.	Does the lived experience of disabled scholars bring perspectives that can foster research excellence in different ways (i.e., contribute to ‘quality’ in innovation, collaboration, etc., because of that perspective)?
10.	Are there intra-faculty issues, or peer review issues in the CRC nomination process, that you can think of that could be a barrier to accommodating a disabled faculty member?

Appendix B – Interview & Workshop Participants

List of participants:

Elsie Achugbue	Jessica Fields	Laura Mullins
Mohammad Arjmand	Sara-Jane Finlay	Michelle Owen
Katie Aubrecht	Erica Frank	Sricamalan Pathmanathan
Gerald Audette	Jennifer Gagnon	Danielle Peers
Vanessa Auld	Andrea Gill	Gordon Price
Fatima Azimi Gutan	Sean Graham	Michael Prince
Nythalah Baker	Gillian Hanley	Pam Ratner
Marie-Lynne Boudreau	Nancy Hansen	Loren Rieseberg
Shelley Brown	Tal Jarus	Marlies Rise
Kimberley Brownlee	Lily Kim	Janice Stewart
Eliza Chandler	Sally Kimpson	James Tavares
Allison Cloth	Susan Mahipaul	Shelley Tremain
Brett Eaton	Anne McGuire	Jutta Treviranus
	Jose Moran-Mirabal	Anne Webb

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Haley Branch, Louise Griep, Sara-Jane Finlay, Pam Ratner, Elsie Achugbue, Linda Leathley, Asmin Chen, Tora Oliphant, Julia Barnham