Researching Ourselves to Life

Improving Canadian Institutes for Health Research funding for Indigenous health researchers

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Acknowledgements

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Sharissa Hantke is a white settler nursing instructor whose master's research under Dr. St. Denis's supervision is [Still a Long Way to Go: Integrating Antiracist, Anti-oppressive Education in Nursing](#).

Imagery

The dandelion was chosen for the metaphorical significance of its tenacity and for its healing properties.

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Executive Summary

In 2021, the Canadian Institutes of Health Research (CIHR) released its 2021-2031 Strategic Plan, in which they committed to implementing actions to address systemic racism faced by researchers in the health research funding system. Through an examination of First Nations, Inuit, and Métis health researchers' experiences, this research builds upon CIHR's continued efforts to remedy racial disparity in health grant allocations (NCCDH & CIHR, 2023), such as CIHR's 2022 environmental scan which outlines structural inequities in terms of "'who' is funded; 'what' is funded; and 'how' decisions are made" (CIHR, 2022). The scan revealed that "there is more funding for biomedical research than for 'wider impact' health systems, social, cultural, environmental, and population research" (CIHR, 2022, para. 7).

An extensive study on racially disparate funding outcomes in the American National Science Foundation (NSF) by Chen et al. (2022) declares that "the general picture of cumulative impacts from persistent funding rate differences is indisputable" (p. 15). A

'Who' is funded
'What' is funded
'How' decisions are made

paucity of similar Canadian data on racial disparities in health research funding must not be used to deny similar valuing of white researchers over Indigenous and other racially minoritized researchers on this side of the border. Since the conditions of racial inequity have already been established, the task has been less about proving that racism and white supremacy operate within grant allocation, and more about examining its mechanisms and specific impacts upon Indigenous researchers to identify where change in policies and practices can happen.

The underrepresentation of Indigenous researchers in academia resulting from centuries of colonial policy carries serious consequences. The academy and its institutional norms, pedagogy, and research practices play a key role in perpetuating racial disparities. Continuing with business as usual in research funding is not an option if research funding agencies are committed to addressing racism. For too long, research has produced racist knowledge that justifies ongoing colonialism and the oppression of Indigenous peoples. Research has been used as a colonial tool of appropriation while erasing the Indigenous sources of these knowledges.

Literature exposes the research enterprise and academia as value laden and therefore not neutral, demonstrating the impact of western colonial values that result in inequities experienced in the careers of racially minoritized scholars. These self-reinforcing inequities are evident, resulting in the undermining and devaluing of Indigenous researchers and Indigenous methodologies. As a mechanism of whiteness, peer review functions as an enforcement of colonial values in which reviewer bias penalizes Indigenous researchers and favours status quo research.

The insights provided in this study for improving the system of funding allocation come from qualitative interviews with fourteen First Nations (11), Inuk (1), and Métis (2) health researchers experienced in seeking health research grants. To understand the challenges that face Indigenous researchers within the existing system of grant allocation, one must understand who they are, what they value and how they conduct

themselves. Three Cree words are offered as a way to describe the Indigenous researchers in this study, who approached their work with a deep sense of kwayaskâtisiwin -- personal integrity, of kistenimitowin -- respecting each other, and of kitimagenimowin -- showing empathy and compassion. They seek to advance Indigenous health and redress colonial harm through honouring Indigenous communities. This includes shifting power to Indigenous communities, prioritizing relationships, elevating Indigenous knowledge, challenging extractive, deficit oriented colonial research practices. In this research, we gain an understanding of their significant accomplishments, efforts to protect First Nations, Inuit, and Métis knowledge, contributions to policy development, and advocacy for systemic change.

kwayaskâtisiwin
kistenimitowin
kitimagenimowin

Surviving and thriving within the western academy entails a level of fortitude not expected of others and which impedes Indigenous health researchers' success with grant allocation. Within frequently hostile settings, they are often overstretched, tokenized, and essentialized. Despite a lack of mentorship, they end up in an exploitative role advising the institution regarding Indigenous research, and are often left alone to navigate the consequences of identity fraud.

Indigenous researchers appreciate CIHR's recognition of the need for change, and efforts such as the implementation of targeted funding. Although improvements can be made to the RFP and application process, the most significant barriers lie within the norms of peer review. The goals and mechanisms of peer review must be reconsidered as the process is deeply flawed with multiple sites of bias, including reviewer bias, topic bias, and career bias. Peer review falters in the selection of reviewers who do not have the appropriate background knowledge, reviewers who show up ill-prepared, and reviewers who hold disproportionate power within the review panel. The inconsistency of quality reviewer feedback and the impact of research proposals that are rejected contribute to harming Indigenous research and Indigenous communities. Given this context, efforts to recruit and support Indigenous reviewers are urgently needed. If research is to contribute to the amelioration of racial health disparities, and Indigenous wellbeing is in the best interests of the Canadian public, then those who administer and control that research enterprise have a responsibility to make the shifts in policy informed by Indigenous knowledge and experience.

First Nations, Inuit, and Métis health researchers are not in charge of the system and do not alone have the power to make the necessary changes; indeed, the status quo research enterprise is defended as white property. Using the framework of whiteness as property (Harris, 1993), this research provides insights from which to navigate a route to more equitable outcomes for Indigenous health and Indigenous researchers. Indigenous academics and researchers make important, though often unrecognized, contributions to their communities and the academy. On the one hand, Indigenous health researchers are calling for a massive overhaul of the system of research funding and on the other hand, they are seeking amicable conditions for "researching ourselves to life" (P11).

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1. Introduction

In 2021, the Canadian Institutes of Health Research (CIHR) released its 2021-2031 Strategic Plan, in which they committed to implementing actions to address systemic racism faced by researchers in the health research funding system. The Anti-Racism Secretariat of CIHR's Equity Strategy Branch worked on an anti-racism action plan to address systemic racism across CIHR's funding system such as funding policies, processes, and practices. During the first phase of this action plan, an environmental scan and several engagements were carried out to identify issues of systemic racism in the health research funding system. The environmental scan revealed that "CIHR data shows that there is more funding for biomedical research than for 'wider impact' health systems, social, cultural, environmental, and population research" (CIHR, 2022). This research project builds on the CIHR's work to address racism, to inquire further on the specific barriers that impact Indigenous health research, to consider actions that mitigate anti-Indigenous racism in the health research funding system, and to provide a framework to conceptualize research as white property and therefore recognize where reconceptualization may aid in more equitable grant allocation.

Commissioned by the Institute of Indigenous Peoples Health (IIPH) in the fall of 2023, this research about funding disparities came about as a result of ongoing conversations among First Nations, Inuit, and Métis (FNIM) health researchers connected to IIPH. The research report includes a review of literature pertaining to the colonial values that inform the research enterprise, the discrimination in grant allocation experienced by racially minoritized scholars, and peer review as a white location of gatekeeping. We included relevant studies regarding racism in health research funding in similar colonial countries (USA, Australia, Aotearoa/New Zealand).

This is a qualitative study involving primary data collected through individual interviews with fourteen Indigenous researchers seeking to understand their experiences with the processes of grant allocation. These researchers offer insightful observations into the research enterprise including construction of the request for proposals (RFP), the application process, privileged methodologies, and biases in the peer review processes. Their accomplishments are significant in the face of a foundationally oppressive system that protects research processes as white property, Indigenous researchers demonstrate a level of fortitude not expected of others. Despite being subjected to hostility within the academy, including a lack of mentorship, they continue to work to protect Indigenous knowledge, to contribute to policy development and to advocate for systemic change.

The concluding discussion builds upon Cheryl Harris's (1993) property value of whiteness which helps to illustrate the enormity of the challenges ahead, the importance of building a research enterprise informed by Indigenous knowledges, that will honour the humanity of Indigenous people, and produce racially equitable health outcomes. Several recommendations are included.

A. Racism in Canadian Healthcare and Research

There is urgency to accurately understand the depth of racism in the context of Canada as it pertains to health, healthcare, and grant allocation. Although there are many examples of racism in Canada, both historically and in the present, the Canadian government and major institutions such as the RCMP and the healthcare system have until recently been reluctant to acknowledge that racism is embedded within and even foundational in a settler society (Allan & Smylie, 2015; Melton-Fant, 2020). The reality of ongoing systemic racism can no longer be denied, particularly as the deaths of Brian Sinclair (Brian Sinclair Working Group September, 2017; Allan & Smylie, 2015; Crowshoe et al., 2016) and Joyce

Echaquan (Kamel, 2021; Browne et al., 2022), as well as the coerced tubal ligations of Indigenous women in Saskatchewan (Boyer & Bartlett, 2017) have "renewed attention to the devastating harms of Indigenous-specific racism" (Browne et al., 2022, p. 222). The racial bias of healthcare providers against Indigenous patients has been established (Turpel-Lafond et al., 2020; Crowshoe et al., 2016; Roach et al., 2023; Sharda et al., 2021).

Three key documents situate this research in the context of anti-Indigenous racism in Canadian healthcare. The In Plain Sight (Turpel-Lafond et al., 2020) report on Indigenous specific racism in the British Columbia healthcare system offers numerous accounts of anti-Indigenous racism against patients and healthcare workers, and is likely relevant to all healthcare systems in Canada. Alongside important documentation of the historic and ongoing racism that Indigenous people experience in healthcare, First Peoples, Second Class Treatment (Allan & Smylie, 2015) powerfully emphasizes the entwined nature of colonialism and racism, reinforcing that Indigenous health cannot be understood outside of colonial policies. These reports explain that a critical next step is to reframe anti-Indigenous racism by acknowledging how the foundational realities of racism and colonialism become obscured by multicultural mosaic framing (Allan & Smylie, 2015). A recent collaborative report by the National Collaborating Centre for Determinants of Health and CIHR Institute of Population and Public Health: Future Search: Action for Disrupting White Supremacy and Racism in Public Health Systems (2023) clearly identifies the roots of racism in health care and unequivocally calls for future research that will assist in disrupting white supremacy and racism both in public health systems and in research funding practices. Musings about whether racism exists in Canadian society and its institutions are disingenuous and are no longer tenable (TRCC, 2015). Indeed, "the burden of proof should be shifted from those highlighting the existence of racist policies and… to those denying its existence" (Strauss et al., 2023, p. 11).

i. Definitions

"Indigenous peoples' perceptions of wellbeing differ from non-Indigenous constructs" (Tsuji et al., 2023). Therefore, use of the term health in this report draws on existing efforts to broaden the understanding of health beyond a biomedical focus to include a holistic vision of wellness which considers environmental, social, cultural, and economic factors (AFN, n.d.; FNHA, n.d). Tsuji et al. (2023) found that "wellbeing was often referred to in the context of interconnectedness, honouring inherent obligations, maintaining (or re-establishing) balance, and harmonious relationships with everything in Creation" (p. 25). In another effort to articulate a broader understanding of Indigenous health and wellbeing, Mackean et al. (2022) suggest "strategies to cultivate personal resources for wellbeing, create supportive social environments for mental health and wellbeing, engage and empower communities, and connect with and care for the country" (p. 13). Indigenous health research recognizes that health and wellbeing must be understood holistically and interconnected between the individual, the community and the broader social and political context.

Although racism is widely recognized to exist at all levels in Canadian systems, including healthcare, it is nonetheless important to establish in this report that: "racism is a social injustice based on falsely constructed, but deeply embedded assumptions about people and their relative social value; it is often used to justify disparities in the distribution of resources" (National Collaborating Centre for Indigenous Health, 2014, p. 3). From the Investigation report on Joyce Echaquan's death, the Commission des Droits de la Personne et De la Jeunesse defines systemic racism as the "sum total of disproportionate exclusionary effects that result from the combined effect of prejudiced and stereotypical attitudes, often unconscious, and policies and practices that are generally adopted without regard to the characteristics of members of groups prohibited from discrimination" (Kamel, 2020, p. 12). This report understands anti-racism as "the active process of identifying and challenging racism, by

changing systems, organizational structures, policies and practices, and attitudes, to redistribute power in an equitable manner" (CIHR, 2022, Glossary).

This report uses the word Indigenous to mean the First Peoples, which means the First Nations, Inuit, and Métis people in what is colonially known as Canada (Allan & Smylie, 2015). Each of these groups have been subjected to distinct government policies and histories and, despite the umbrella term of Indigenous, it is imperative to attentively respect their different positioning and needs moving forward. This report follows the lead of the National Collaborating Centre for the Determinants of Health (NCCDH) and CIHR Institute of Population and Public Health Future Search report (NCCDH & CIHR, 2023) in utilizing the terms white, whiteness, and white supremacy to keep the settler colonial racial power dynamic at the forefront. These terms signify the racial hierarchical structure in society which serves to center the interests and material gains of those included in the white racial group at the expense of everyone else. This report does not use the term 'Caucasian' because it "invokes scientific racism, the false idea that races are naturally occurring, biologically ranked subdivisions of the human species and that Caucasians are the superior race" (Mukhopadhyay, 2008, p. 12). Although the acronym BIPOC to mean Black, Indigenous, and People of Colour is utilized in some of the literature cited, this report generally favours the term racially minoritized when discussing those who experience racism. This term sometimes gets shortened to racialized in the literature, however, recognizing that race is socially constructed entails recognizing that all people undergo the social process of racialization (i.e. being assigned to a racial group). White people are racialized into a position of false superiority in the oppressor group while everyone else that whiteness excludes as "Other" gets inferiorized. Out of convenience, or because of a lack of Indigenous-specific data, this report draws upon research that reports on racially minoritized scholars' experiences. It is worth noting that there are overlaps in experiences but also significant differences in the consequences of

how Indigenous people and other racially minoritized groups are positioned on these lands.

ii. Racism is Deeply Embedded in the Foundation of Systems

To understand racial disparity in health grant allocations, the depth with which racism has been integrated in the creation of Canadian systems must be acknowledged. Although pervasive racial health inequities are widely known and well documented, there is reluctance in the literature to name racism's existence, to identify its role as a root cause of health inequity, and to measure its impacts (Hardeman et al., 2022; Hassen et al., 2021; Lia et al., 2020; Melton-Fant, 2020). "Too often our organizations give short shrift to the centuries of subjugation, discrimination, exclusion, and injustice that have produced these inequities." (Brown et al., 2019, p. 1). This includes academia, which plays a key role in perpetuating racism "and its effects on health through institutional norms, pedagogy, and research practices" (Hall & Boulware, 2023, p. 2). The underrepresentation of Indigenous researchers in academia carries serious consequences for building research environments that foster inclusion and collegiality (Love & Hall, 2020).

Rather than acknowledging that racism and white supremacy are foundational in society and its institutions, dominant and colonial institutions too often invest in reducing racism to the behavior of individuals (Brown et al., 2019) -- such as the few people caught in egregious racist acts, such as Joyce Echaquan's nurses or the emergency room staff who neglected Brian Sinclair. Since racism is a feature of the Canadian economic, academic, and sociopolitical context, it requires broad policy level changes which shift the very foundation of the colonial systems (Hassen et al., 2021; Jonker et al., 2021). These colonial systems, including the knowledges that academia produces, "have been created and constructed over centuries to value the lives, institutions, and knowledge of White people and devalue the

human dignity and lives of Black, Indigenous, Latinx, Arab, Asian, and other marginalized groups" (Fleming et al., 2023, p. 72). Understanding racism to be embedded in the foundations of knowledge production illustrates the depth to which change is needed in the research enterprise.

iii. Deliberate Denial of Racism in Healthcare

It is imperative for connections to be made between racism and its deep roots. An American publication from Melton-Fant (2020) observes that "although structural racism has the most profound effect on population health, the health effects of it are understudied, and divorced from politics and policy" (p. 628). This manifests in underfunding of research on health inequities and minority health, underfunding of minority researchers, as well as a funder focus on proximal causes and their medical solutions, rather than addressing the root causes of racial health disparities (Chen et al., 2022; Collins et al., 2021; Fleming et al., 2023; Lia et al., 2020; Rhode Island Medical Journal, 2021). Although the above articles are American, they are echoed in Canadian analysis. Insufficient understanding and defining of racism in healthcare leads to inadequate changes that aim at the individual or interpersonal level, instead of the deeper and broader change that is needed (Hassen et al., 2021). The Future Search report similarly observes a) the lack of focus on upstream drivers and a tendency to focus only on downstream impacts, b) the absence of research on racism as a social determinant of health in the Canadian context, and c) the reinforcement of a deficit model to explain disparities (NCCDH & CIHR, 2023). Finally, Datta et al. (2021) propose that "if we are serious about addressing race-based inequalities… to substantially increase the quantity and quality of research on the topic… Canada [must] commit to the dedicated study of the impact of racism and antiracist initiatives on health by creating an Institute of Racism and Health within the CIHR" (p. E99). If the research enterprise seeks to address racism, it needs to connect racial inequity with its colonial

underlying causes.

iv. Research Produces Racist Knowledge

Since racist values and outcomes are thoroughly embedded in all systems of colonial societies such as Canada, it is unsurprising that "structural racism is also embedded in the conventional research process, informing not only what is studied, but how it is studied" (Goings et al., 2023, p. 103). Continuing with business as usual in research funding is not an option if research funding agencies are committed to addressing racism. This research seeks to understand FNIM health researchers' experiences with the processes of grant allocation.

The production of racist knowledge is perpetuated within research in a variety of ways, some of which are more blatant, such as a continued reliance on scientific racism, including inaccurate conceptions of race as biological, and the naturalizing of racial hierarchies (Strauss et al., 2023). Goings et al. (2023) emphasize that "biological conceptualization of race fuels racist beliefs that disparate outcomes for BIPOC are due to genetic differences and distracts from recognizing that structural racism is a far stronger cause of disparities than genetic factors" (p. 103). Research also produces racist knowledge in subtler ways. For example, "who gets funded to carry out research has drastic impacts on society. The voices and ideas that are excluded and the science that is underfunded cause harm to minoritized communities" (Lia et al., 2020, p. 17). While criticality is necessary regarding which researchers and which types of research are being unfairly disadvantaged, funders unfairly advantaging certain individuals and communities not only maintains the status quo, but ignores the intellectual, experience-informed contributions of those who are disadvantaged (Fleming et al., 2023). Another subtler means by which racism functions to determine which knowledge is produced is through deprioritizing research and action on the sociopolitical roots of health inequity and instead funding research

that focuses on proximate causes of diseases such as nutrition or exercise (Fleming et al., 2023). This enables the continuation of racially inequitable outcomes (Fleming et al., 2023). Research produces racist knowledge that justifies ongoing colonialism and the oppression of Indigenous peoples.

v. Context of Indigenous Research

Linda Tuhiwai Smith (2012), an esteemed Maori scholar is widely quoted as saying "the word itself, 'research', is probably one of the dirtiest words in the indigenous world's vocabulary" (p. 1). Research has been used as a tool of imperialism & colonialism: "as Indigenous peoples were systematically colonized, their societies and cultures were studied from the point of view of groups with more power and privilege, and with different systems of knowledge" (Laycock et al., 2011, p. 5). Indigenous peoples were treated as specimens or objects; inferiorized, characterized as "headed for extinction" (Laycock et al., 2011, p. 6), studied, displayed in museums. Indigenous knowledges were appropriated for the gains of colonizers, while erasing the Indigenous sources of these knowledges.

It would be convenient for present day research institutions to distance themselves from the violent colonial history of research, and to present an image of research as the forefront of societal improvement, but Indigenous peoples globally are being over-researched and yet not receiving corresponding health improvements; disparities persist (Bacciaglia et al., 2023; Gurven et al., 2024; Kinchin et al., 2017; Laycock et al., 2011). Similarly, recent reviews demonstrate that despite tri-agency changes in Canada, research in general still is not benefitting FNIM communities or involving them at meaningful levels (Lin et al., 2020). Studies in Canada, USA, Australia, and New Zealand have shown "up to 92% of Indigenous health research is descriptive and no more than 18% is interventional" (Anderson, 2019, p. 930) and yet interventional research "is recognized as one necessary part of closing the gaps in Indigenous health outcomes, but in some situations these gaps are actually widening" (Anderson, 2019, p. 930).

Although health research has been implicated in producing racist knowledge, it often rests with Indigenous health researchers to navigate a racist system that perpetuates harm. To address racism, the research enterprise must understand the specific barriers impacting equitable grant allocation for Indigenous Health research. Canadian society's reluctance to own its colonial and racist foundations impedes progress towards racial health equity.

2. Review of Literature

In addition to relying upon CIHR and Tri-agency reports, this literature review utilized initial database search terms including combinations of "Indigenous"; "health research"; "funding"; "racism"; "policy" and employed snowballing to find relevant sources. Since there is minimal research specifically studying the allocation of health research funds to FNIM researchers (demonstrating the need for further research into this topic), we included relevant studies regarding racism in health research funding in similar colonial countries (USA, Australia, Aotearoa/New Zealand) in spite of a recent and troubling development of the elimination of social science research funding in New Zealand (Meduna, 2024). As more specific subtopics emerged, such as peer review, and methodological discrimination, further database searches were conducted. The organization of this literature review seeks to follow that of the grant application process, but first, there is some background context which must be established.

Racism within grant funding agencies is a complex problem and therefore requires significant investments to understand and address through changes that intentionally improve outcomes for racially minoritized researchers and communities. Siloed diversity initiatives are not sufficient (Collins et al., 2021), and simply making people (including peer reviewers) aware of bias does not necessarily change outcomes (Jonker et al., 2021). This can be understood as a disconnect, as "measures such as diversity training miss the root causes of the disparities" (Wright, 2022, p. 5). Another factor on an individual level is aversive racism, or "someone who publicly proclaims support for affirmative action or racial equality may still have racial biases that cause them to act in ways that undermine their stated value" (Strauss et al., 2023, p. 8). Verbal behaviour must be distinguished from actual behaviour; truly effective action requires self-education which takes time and effort (Taffe & Gilpin, 2021). On an organization level, that could look like mentioning systemic racism in a strategic plan,

but not recognizing racial health equity at the level of mission/mandate/values. Systemic change is made more challenging by the self-reinforcement of the status quo and by investments in continuing the system as is. There is no penalty to the system for discriminating against racially minoritized researchers.

A. A Value Laden Research Enterprise

The guise of neutrality ascribed to the research enterprise prioritizes white researchers and penalizes FNIM health researchers in the awarding of research grants despite CIHR's declared values of integrity, accountability, excellence, and respect (CIHR, 2021a). "A vast body of research shows that systems designed to facilitate impartiality and merit-based rewarding can instead perpetuate the very biases they seek to prevent" (Chen et al., 2022, p. 17). In a meritocracy, power would be accorded based on merit, but the inaccurate belief that our society is meritocratic "is built on this racist assumption that everyone has had the same access and opportunities" (Dutt-Ballerstadt, 2019, p. 83). Chen et al. (2022) are critical of the "ethos of meritocracy that permeates the practice of science" (p. 17) because judging the best researchers and most worthy ideas is precluded by personal interpretations subject to several tendencies: "halo effects" which favor scientists and institutions based on reputation; "increased bias in individuals with stronger self-perceptions of objectivity" (p. 17); and "explicit overtures of meritocracy [which] are paradoxically more likely to produce and legitimize non-meritorious outcomes" (p. 17). Although CIHR is a signatory of the San Francisco Declaration on Research Assessment, or DORA (CIHR, 2024), which seeks to critically challenge measures such as journal impact factor as a means of disrupting evaluative practices, these "halo effect" tendencies may still undermine the fairness of the funding allocation system. "In this context, the racial funding disparities can be viewed as

the product of a system and culture operating under an assumed meritocracy, rather than an aspiring one" (Chen et al., 2022, p. 17). The values observed in practice within the research enterprise do not always align with the stated values of research funding organizations. These values show up in the production of research for profit, in the allocation of health research funds, in the undermining of Indigenous knowledge, in the penalizing of racially minoritized scholars, and all of these serve to penalize FNIM researchers.

i. Research for Profit

While CIHR aspires to uphold values of excellence, innovation, and meaningful consultation (CIHR, 2021a), funding institutions are subject to the broader trends in society, and may not see themselves as exempt from the forces of neoliberalism. Despite the stated values, there is evidence of CIHR having valued: methodological conservatism; homogenization/monoculture; positivism; privileging numbers over narrative; and framing health research around industry to the exclusion of community-based methodologies (Rose & Castleden, 2022). Neoliberalism has pushed a corporate business logic framing of research, which imposes an individualistic economization and a utilitarian approach "which in itself is in opposition to Indigenous notions of the collective and communitarian nature of research" (Love & Hall, 2020, p. 3), and contributes to a preoccupation with shorter term profits for institutions at the expense of longer-term investment in communities (Fleming et al., 2023). Research fund assessment within such approaches have "led to a strong focus on various metrics such as the number and quality of publications produced by academics" (Love & Hall, 2020, p. 3) rather than the community relationships or knowledge products created for community partners. Profitable research, and research which fits into neoliberal values, ought not to be seen as neutral.

ii. Racism in Health Research Grant Allocation

The extensive study on racially disparate funding outcomes in the American National Science Foundation (NSF) by Chen et al. (2022) declares that "the general picture of cumulative impacts from persistent funding rate differences is indisputable" (p. 15). There is also widespread evidence of persistent disparities in the success rates for grants supporting Black and ethnic minority researchers in general (Collins et al., 2021; Taffe & Gilpin, 2021). Over two decades, racial disparities have been consistent in the NSF's awarding of research grants (Wright, 2022). These racial funding disparities lead to significant accumulation of disadvantage for a given racial group amid a misconception that NSF funding favours historically excluded racial groups (Wright, 2022). Chen et al. (2022) also found consistencies between NIH and NSF as "racial disparities persist at the directorate level" in both (p. 11).

There is much to learn by studying the health research funding racial disparities of our neighbours to the south. National Institutes of Health (NIH) Director Francis Collins "issued a public apology for what he called 'structural racism in bio-medical research' and pledged to address it with sweeping actions" (Kaiser, 2021, p. 977). Yet, "despite the clear message from the NIH that health disparities are a significant concern" the scientific community more broadly may not yet embrace the message (Carnethon et al., 2019, p. 211). Dzirasa (2020) expressed disappointment that research funders have not worked to "reimagine the grant review processes and eliminate any harm experienced by its black grant applicants" (Dzirasa, 2020, p. 576). Ko (2023) argues that it is necessary to begin by addressing the internal, institutionalized racism within the research enterprise before attending to broader issues of structural racism.

Responses to the revelation of racial disparities at NIH have included "first, attempts to explain away the disparities by attributing the funding gap to factors other than the race/ethnicity of the

PI; second, attempts to fix the 'pipeline' by funding more African-American/Black trainees; third, attempts to identify and eliminate bias at the level of peer reviewers, with an emphasis on the subconscious, or implicit, biases. However… these responses have been inadequate" (Taffe & Gilpin, 2021, p. 4; also, Comfort, 2021). Taffe and Gilpin (2021) hold firm in declaring it "unacceptable that programs have been implemented across the NIH to address some disparities (e.g., career stage), but have not been implemented to address racial disparities… that data on racial disparities in funding are often presented in a way that appears to excuse the NIH and blame African-American/Black PIs (e.g., for their choice of research topic). Finally, it is unacceptable that health conditions and topics of interest to Black citizens are systematically overlooked for research funding" (Taffe & Gilpin, 2021, p. 9).

A paucity of similar Canadian data on racial disparities in health research funding must not be used to deny similar valuing of white researchers over Indigenous and other racially minoritized researchers on this side of the border. Instead, the examination of this funding racism in the USA ought to strengthen our resolve to address the racist values playing out within our own system. McConnell's (2010) article about policy success points out that "it is often easier for governments to deal with symptoms rather than tackle underlying social causes" (p. 358). Since this easy route will not improve our outcomes, we must instead take a thorough look at the problem CIHR has previously identified of systemic racism to understand how racist values impact health research funding for FNIM researchers.

iii. Undermining Indigenous Knowledge

Colonialism has long been implicated in discrediting and devaluing Indigenous knowledge, however, Indigenous people are knowers with a capacity to make empirical observations about their experience based on their own values and worldview (Aikenhead & Michell, 2011). The interrogation of research

funder values opens questions of who has epistemic priority. Indigenous researchers who are not favoured in the "right" bibliometric databases or institutional rankings are surveilled and penalized by relationships with research institutions (Love & Hall, 2020). From an "Indigenous perspective, such a situation may only further reflect colonial knowledge relationships as the various institutional arrangements for assessing knowledge will frame the local knowledge of the colonised in relation to the knowledge and assessments of the coloniser" (Love & Hall, 2020, p. 2).

iv. Normative Academia Penalizes Racially Minoritized Scholars

To value the maintenance of the status quo is to devalue (and even penalize) the change needed to address racism. To address racist outcomes for researchers, the research enterprise must recognize the current conditions which continue to unfairly harm racially minoritized academics, for whom success is made more difficult (Jonker et al., 2021). The broad, meritocratic belief in the existence of a level playing field serves to mask structural racism and harm researcher success rates (Jonker et al., 2021).

Trends show that compared to their white colleagues, even when CVs are equivalent, Black scientists still lose out on grant allocation (Dzirasa, 2020). Applicants who identify in funding applications as an ethnic minority have been less successful in their grant application than those who identify as white, and when ethnic minority researchers win grants, they are lower in funds than those of white awardees (Lia et al., 2020). Such racial trends are compounded by gender factors, with racially minoritized women being less likely to succeed in funding awards that their white women counterparts (Ginther et al., 2016). Some have attributed the underrepresentation of racially minoritized faculty to a metaphorical "leaky pipeline" where there is a paucity of talent, however such conceptualization "fails to capture the realities of an unequal system that disproportionately supports some while diminishing or excluding others" (Chen et al., 2022, p. 16).

In addition to the awards odds being stacked against Indigenous scholars for being minoritized researchers, "the requirements of tenure and promotion processes have the potential to create a conflict between researchers' relational accountability to Indigenous community partners, and their academic accountability to their disciplines and peers" (Castleden et al., 2015, p. 2). This conflict pits academic values against Indigenous understandings of what it means to undertake research 'in a good way', which means engaging in research shaped by values of relatedness, objectivity & subjectivity, and manifested in 'technologies' that benefits the wellbeing of the community (Aikenhead & Michell, 2011). These conflicting values amplify the discrimination experienced by Indigenous researchers, exposing the guise of neutrality that undergirds the research enterprise, and signaling where change is needed.

B. Application Process

Having established the racism inherent to the colonial context within which the health research enterprise is situated, and having discussed some values of the research enterprise, the remainder of the literature review explores the impacts these values have upon Indigenous and other racially minoritized researchers. The sections are roughly based on the sequence of the CIHR application process. In some cases, it includes recommendations from the literature that pertain to the aspects of the application process.

i. Journey to Application Eligibility

To gain eligibility to apply for health research funding, Indigenous researchers must first be scholars, and as racially minoritized persons, their journey of scholarship is beset with the unfair challenges common to "those of underrepresented or historically excluded groups" (Chen et al., 2022, p. 16) in the academy more generally. "In addition to the significant challenge of underrepresentation, there are a range of career barriers that Indigenous [early career researchers] face in

their attempts to establish and build their academic research careers" (Locke et al., 2023, p. 2). Jonker et al. (2021), Comfort (2021), and Lia et al. (2020) have noted disparities in career tracks for racially minoritized people in academia and in research, with Lia et al. observing "the privileging of 'white' researchers in both job promotions and the institutional sifting processes that determine who is allowed to apply for grants" (p. 17). In this lengthy but vital quote, Chen et al. (2022) paint a big picture of the multitude of burdens harming racially minoritized scholars in every aspect of their careers, who: "are systematically burdened with barriers at every stage of their professional development—from placement into **lower-prestige** institutions as faculty (Clauset et al.,2015), smaller institutional start-up **funds** (Sege et al., 2015), smaller and less beneficial **collaboration networks** (Ginther et al., 2018; Warner et al., 2016; Rubin and O'Connor, 2018), **disproportionate service expectations** (Jimenez et al., 2019), **lower salaries** (Cech, 2022; Thomson et al., 2021), increased **scrutiny and tokenization** (Settles et al., 2019), and added stressors in **suboptimal work environments** (Eagan and Garvey, 2015), to **gaps in citations, publications, promotions, and peer recognition** that increase with career stage (Ginther et al., 2018; Huang et al., 2020; Eagan and Garvey, 2015; Mendoza-Denton et al., 2017; Roksa et al., 2022; Hofstra et al., 2020; Kozlowski et al., 2022; Larivière et al., 2013; West et al., 2013; Bertolero et al., 2020; Settles et al., 2021; Settles et al., 2022). Together, these barriers **traumatize** researchers (McGee, 2021), aggravate **attrition** (Huang et al., 2020; Hofstra et al., 2020; Settles et al.,2022), and **impair health** (Zambrana, 2018). The synthesis of these interlocking dynamics magnifies and perpetuates a cycle of funding disadvantage for marginalized researchers, functioning as both a cause and effect of the racial funding disparities described herein" (Chen et al., 2022, p. 16, bolding added). Dzirasa (2020) points out that the overall lack of support racially minoritized scholars have navigating obstacles is rooted in an academic system invested in belief of racial inferiority.

Meanwhile, instead of recognizing inferiorizing/ superiorizing as the roots of these disparities, institutions may "fall for the 'pipeline' fallacy: that is, the mistaken idea that the lack of Black professors is due to a lack of candidates for these jobs, rather than being due to the difficulties that a Black scientist faces when trying to establish a career. This misconception can and does lead to suboptimal solutions that bring new junior scientists into an unchanged system, where they face the same old difficulties" (Taffe & Gilpin, 2021, p. 3).

Therefore, merely awarding more PhD degrees to racially minoritized scholars does not necessarily lead to more racially diverse representation in faculty or research positions (Comfort, 2021; Taffe & Gilpin, 2021). These barriers are additionally compounded by "administrative burdens [which] are not neutrally enforced across racial groups" and result in intellectual and emotional burdens as well as limits to productivity (Jonker et al., 2021, p. 1669). They frame these burdens along with the denial of administrative support as a tax on racially minoritized scientists, trainees, and staff.

Self-Reinforcing Racist Cycles

Racism within the academy can be understood as cyclical with racially minoritized researchers experiencing isolation, alienation, loneliness, lack of mentorship and support (Comfort, 2021; Pride et al., 2023; Love & Hall, 2020); being treated as "out of place," exceptions, and tokens; practicing self-censorship and try to 'pass as the right kind' of minority, the one who aims not to cause unhappiness or trouble (Ahmed, 2012). All the while, academic environments are hostile to Indigenous people and other racially minoritized researchers (microaggressions, paternalism, overt racism, disrespect from students, etc.). The underrepresentation of racially minoritized scholars gets reinforced by white faculty putting in less effort to recruit, promote, and mentor racially minoritized scholars (Taffe & Gilpin, 2021) thereby maintaining the academy as white property (Harris, 1993).

Taffe and Gilpin (2021) highlight several factors for grant success, such as mentorship, networks, and institutional support, and point out that "woven into this is the inevitability that early grant success leads to later grant success, or put more simply, that having funding leads to getting more funding. In colloquial terms, the rich get richer (Comfort, 2021). Inevitably, on the other side of that coin, people who do not experience early career success face an uphill battle in achieving success later" (p. 3). Taffe and Gilpin's finding is backed by Carnethon et al. (2020) who point out that lower grant funding success leads to lower probability of appointments at high ranked research institutions and to senior academic ranks, and by Lia et al. (2020) who highlight that racially minoritized students are less likely to be funded, that then leads to fewer racially minoritized senior decision-making scientists, and eventually senior researchers devising calls for research protocols and judging applications are not representative of the population.

Specifically Indigenous Faculty Experiences

There is a small body of literature specific to Indigenous experiences in the academy, and these articles are important in contextualizing and distinguishing the particular position that Indigenous faculty are put in, since "to consider racialized and Indigenous faculty as a group is deeply problematic" (Henry, 2012, p. 102). Although both Indigenous people and members of other racially minoritized groups experience profound racism in academia, there are particularities to the colonial experiences of existing as an Indigenous scholar in Canadian institutions. For Indigenous faculty, even maintaining their very identity is observed to be at odds with the values and demands of the colonial academy (Gabel, 2019; Henry, 2012). "In a context in which the ideologies of neoliberalism and whiteness structure the articulation and evaluation of merit, democracy, and diversity (in both membership and scholarship), racialized and Indigenous faculty members tend to experience work situations where they have limited control over their working conditions, institutional barriers to their

scholarly potential and productivity, and challenges to their professional judgements and entitlements – factors that are typically associated with a precarious work situation" (Henry et al., 2016, p. 302). In an age of Truth and Reconciliation, Indigenous faculty face unprecedented demands on their time and energy which goes uncompensated and unrecognized. For example, Gabel (2019) served on numerous university and government committees, and supervised many graduate students and found that "by engaging in this type of advocacy work, we risk appearing less productive by traditional standards, often by having these aspects of our work regarded as 'citizenship,' or 'service' or 'community contributions' when this is perhaps the most important work that we do as Indigenous scholars" (p. 89).

Indigenous faculty are underrepresented and get homogenized and tokenized when institutions assume that they don't mind being singled out as role models (Henry, 2012; Ottmann, 2013). Devaluing, mistrust, silencing, and isolation contribute to poor relations with institutions (Henry, 2012). Indigenous faculty experience backlash and harsh evaluations from students (Henry, 2012; Lavallee, 2022). Lack of support includes mentorship for Indigenous faculty members and inadequately operationalized equity policies (Henry, 2012; Ottmann, 2013). Recommendations include implementing support for Indigenous faculty through mentorship, broader institutional shifts to value Indigenous epistemologies, as well as calls upon universities to provide/require education for search committees to mitigate anti-Indigenous bias in hiring (Glauser, 2019; Henry, 2012; Henry et al., 2017; Ottman, 2013). This section has considered harms the academic system inflicts upon racially minoritized scholars, including Indigenous scholars, as they journey in academia to get to the point where they are eligible to apply for research funds. These impacts of racist harms show up in a scholar's CV.

ii. Delegitimizing Methodologies

To discuss various aspects of bias against Indigenous researchers' topics and methodologies, this section highlights some considerations specific to Indigenous and decolonial methodologies, and focuses on challenges researchers face when reciprocal and accountable community relationships are central to their methodologies. Application sections which discuss topics and methodologies are areas where racial discrimination can again disadvantage Indigenous scholars. Health topics proposed by minority researchers, which often consider prevention and the root causes of inequitable health outcomes, have been devalued and underfunded consistently as they may not interest or excite reviewers (Chen et al., 2022; Lia et al., 2020; Hoppe et al., 2019; Taffe and Gilpin, 2021). In 2019, Carnethon, Kershaw & Kandula highlighted that topic choice accounted for 21% of the funding gap for minority researchers in a study by the USA National Institutes of Health. This underfunding must be understood as epistemic bias which contributes to the exacerbation of social inequities (Chen et al., 2022).

Although more focus on structural level health determinants is needed if we want to address the racially inequitable health outcomes in our society, this is the very sort of research that tends to be neglected in favour of an individual level focus (Chen et al., 2023; Lia et al., 2020). Goings et al. (2023) critique the limitations that research funders place when they specify acceptable topics, methodologies, and frameworks, stating that "a significant challenge to antiracist research is the need to secure funding for proposals related to equity that overtly challenge the status quo" (Goings et al., 2023, p. 113).

"Anti Racist health policy research requires methodological innovation that creates equity-centered and antiracist solutions to health inequities by centering the complexities and insidiousness of structural racism" (Hardeman et al., 2022, p. 179). However, Rose and Castleden (2022) connected the CIHR's methodological conservatism and favoring of biomedical research to the privileging of "commercial research over projects that focus

on social determinants of health and community relations" (p. 1). This observation is consistent with a broader tendency against funding innovative research (Guthrie et al., 2017; Tamblyn et al., 2023). Although they receive less rewards for their new ideas, minority scientists tend to be more innovative in their research (Lia et al., 2020).

Regarding methodological choice, "there is a need for research that employs a range of methodological options determined by the needs of the particular Indigenous community. However, Indigenous methodologies are not a widely available choice because they are not widely recognized. This is problematic and results in a form of 'methodological discrimination'... methodology itself necessarily influences outcomes" (Kovach, 2009, p. 13).

Devalued Community Based Participatory Research

Let us consider topic and methodology discrimination as it pertains to one particular approach: Community Based Participatory Research (CBPR), which is recommended as "an approach to research that inherently facilitates inclusion of Indigenous voices" (Hyett et al., 2019, p. 106). This example is useful because although CBPR "is a process that provides a means through which research can be for [Indigenous] people" (St. Denis, 1992), it may be discriminated against with CIHR's tendency to favour methodological conservatism. As a methodology, CBPR gets perceived as too slow or not scientifically rigorous (Fleming et al., 2023) and is therefore given serious disadvantage by research funders (Castleden et al., 2015). Unlike methodologies more focused on extracting quantitative data, or biomedical methodologies studying genetic or individual characteristics, CBPR enables deep and broad understanding through prioritizing trusting relationships and shared vision between researchers and communities (St. Denis, 1992; Steigman & Castleden, 2015). It seeks to disrupt hierarchies and shift the power balance between communities and researchers to work toward positive health outcomes in marginalized communities (Fleming et al., 2023; St. Denis,

1992; Steigman & Castleden, 2015).

This disadvantaging of methodologies like CBPR creates a conflict of interest for Indigenous health researchers, "whereby the choice between internalizing institutional expectations and values or enacting deeply participative and decolonizing forms of research are incommensurable" (Castleden et al., 2015, p. 2). "Such a scenario leaves us with two choices: (a) either lie to the university and provide them with an overly detailed and culturally inappropriate research plan while going about 'business as usual' with our community partners, or (b) completely disempower our partners by imposing university regulations on them" (Steigman & Castleden, 2015, p. 4). Neither option is acceptable. Thus, there are calls for research funders to shift structures to support CBPR and other methodologies that build trust and work toward mutuality between researchers and Indigenous communities (Castleden et al., 2015; Fleming et al., 2023; Hyett et al., 2019; Steigman & Castleden, 2015).

Ignored Data Sovereignty

Any consideration of Indigenous research ought to also consider Indigenous data sovereignty because "Indigenous self-determination relies on data self-determination" (Walter and Suina, 2019, p. 236). There is risk of mainstream data on Indigenous health "creating a dominant portrait of Indigenous peoples as defined by their statistically measured Disparity, Deprivation, Disadvantage, Dysfunction, and Difference" (Rainie et al., 2019, p. 304), which are what Walter and Suina (2019) refer to as the 5 Ds. Indigenous communities need control of their data, as noted in the First Nations principles of Ownership, Control, Access, and Possession, or OCAP (FNIGC, n.d.), including decisions about which data gets gathered, since "government datasets only include data of interest to government, not data relating to the broader determinants and elements of Indigenous health and wellbeing" (Laycock et al., 2011, p. 21). In the work toward health equity, Indigenous communities also need "data that disrupt deficit narratives, data that are

disaggregated, data that reflect the embodied social, political, historical, and cultural realities of Indigenous people's lives, as Indigenous peoples, and data that address Indigenous nation re-building agendas" (Walter & Suina, 2019, p. 236).

It is worthwhile to note that literature around Indigenous data sovereignty has very different and sometimes contrasting aims to the ongoing conversation around data within mainstream research. The Open Data Charter (2015) principles call for (particularly digital) data to be openly accessible, which "is in direct tension with the rights of Indigenous peoples to govern their data, including the right to decide what is shared or withheld" (Rainie et al., 2019, p. 301). Changes made to rectify Indigenous health inequity must be made according to processes which prioritize Indigenous self-determination, policy decisions, and nurture progress toward Indigenous aspirations for healthy, sustainable communities (Rainie et al., 2019; FNIGC, n.d.).

C. Indigenous Research & Methodologies

This section considers Indigenous methodologies as well as Indigenous research more broadly, and contextual reasons it is needed.

i. Indigenous Methodologies

Indigenous methodologies share some attributes with mainstream Western qualitative approaches, and yet they cannot neatly fit within the umbrella of Western qualitative approaches, which have historically devalued Indigenous epistemologies (Kovach, 2009). While there can be much overlap with mainstream Western qualitative methodologies, Indigenous methodologies still have distinct qualities. Wilson (2008) emphasizes the centrality of relationality for Indigenous ontologies and epistemologies along with the accountability to relationships in axiologies and methodologies. "Although researchers are more willing to take up [Indigenous methodologies] within their research studies, not much research is being

done that specifically uses Indigenous epistemologies as its underlying framework" (Pidgeon & Riley, 2021, p. 13).

Indigenous methodologies differ philosophically from western approaches. They "interrupt a pre-existing, ongoing conversation. In fact, the resistance to epistemological disruptions within academia is so great that it can stymie that which it seeks to create -- new knowledge" (Kovach, 2009, p. 36). Indeed, "there has been a continuous expectation that Indigenous ways must be congruent with Western customs, even though it is understood that the cultures are philosophically different" (Kovach, 2009, p. 38). Therefore, if research funders want equity for Indigenous peoples and Indigenous researchers, they must fund methodologies and epistemologies outside of Western traditions. "Indigenous epistemologies challenge the very core of knowledge production and purpose. While this is not a matter of one worldview over another, how we make room to privilege both, while also bridging the epistemic differences, is not going to be easy" (Kovach, 2009, p. 29).

Indigenous methodologies are characterized by an "awareness of the history and relationship between the Indigenous world and the world of research" (Laycock et al., 2011, p. 2). Research on Indigenous peoples which is devoid of thoughtful consideration of the historical context reproduces harm. Therefore, research on Indigenous health disparities must meaningfully reflect upon racism and colonization (Anderson, 2019; Hyett et al., 2019). The report by the Truth and Reconciliation Commission of Canada (TRCC, 2015) calls us to recognize gaps in Indigenous health outcomes as resulting from colonization and racism. Otherwise, research risks perpetuating deficit narratives. "A continuing legacy of what has come to be taken for granted as a natural link between the term 'indigenous' (or its substitutes) and 'problem' is that many researchers, even those with the best of intentions, frame their research in ways that assume that the locus of a particular research problem lies with the indigenous individual or community rather that with other social or structural issues… For indigenous communities the issue is not just that they are blamed for

their own failures but that it is also communicated to them, explicitly or implicitly, that they themselves have no solutions to their own problems" (Smith, 2012, p. 95).

Indigenous methodologies challenge deficit narratives. Without the explicit connection back to the colonial roots, research that examines disparities between Indigenous and non-Indigenous populations can reproduce deficit discourse about Indigenous peoples which implies that Indigenous peoples are to blame for the inequity that colonization has subjected them to. "Deficit-based research risks contributing to the stereotyping and stigmatization of Indigenous Peoples" (Hyett et al., 2019, p. 107). Even so-called "strengths-based" approaches can reproduce deficit discourses if they are not collectivist/ sociocultural, for example by focusing on individualistic narratives such as resilience (Bryant et al., 2021). Therefore, a strengths-based approach needs to be grounded in an understanding of the broader colonial context and the resultant systemic barriers.

A consistent theme in Indigenous methodologies is the goal of shifting power in the research relationship from the researcher to the communities involved in the research. Research needs to create liberation for communities rather than manipulation (St. Denis, 1992). Hyett et al. (2019) remind us that "a simple and important measure to produce good Indigenous health research is to privilege Indigenous voice, as Indigenous Peoples are primary stakeholders in the research with their communities. Indigenous health research is inextricably connected to how the wider society perceives Indigenous Peoples, and how Indigenous Peoples are perceived inherently affects their overall health and wellbeing – and this must guide the approach of ethicists and health researchers to this field of work" (p. 107). Indigenous communities being researched need control of "what, why, how and when research is done, and how it is used" (Laycock et al., 2011, p. 2; St. Denis, 1992). Such research must follow Indigenous ethical principles, including "reciprocity, benefit and empowerment. They are about privileging Indigenous views and voices in research, and

setting up an environment both for Indigenous ownership of and leadership in research" (Laycock et al., 2011, p. 25; Smith, 2012).

Alongside the above attributes, Kovach (2009) characterizes Indigenous methodologies as: having respect and Tribal epistemologies at the center; prioritizing both process and content, relationally constructed knowledge and experiential knowledge; including story and narrative; involving holistic approaches that rely upon observation and which center interconnectedness; and answering to all your relations to ensure people are not exploited. Morton Ninomiya et al. (2022) also emphasize the importance of ensuring knowledge translation benefits the Indigenous communities being researched.

Although less prominent in the literature, Indigenous research methodologies may also be quantitative and there is a need for quantitative research led by Indigenous researchers (Walter & Suina, 2019). Critiques of the harms of positivism's supposed objectivity "tends to scoop up all quantitative research as methodologically similar" (Walter & Suina, 2019, p. 233) which presumes that Indigenous methodologies are qualitative while quantitative methodologies are western. However, Smith's seminal book *Decolonizing Methodologies* in 2012 (but first published in 1999) notes that the "delineation of the set of principles and broad-based philosophy of Kaupapa Maori is as an approach to any research, qualitative, quantitative or mixed methods" (Walter & Suina, 2019, p. 233). Indigenous researchers may shape the question/issue/problem and inform the appropriate methodology.

ii. Non-Indigenous Researchers

"Non-Indigenous researchers carry out most Indigenous health research (with ensuing academic and career benefits), and the relative lack of benefits and sometimes harms to Indigenous communities" (Anderson, 2019, p. 930). Therefore, non-Indigenous researchers of Indigenous health "must understand and self-

reflect on the concept of white fragility. They will then need to take the next step and identify the ways in which they participate in systems of whiteness from which they disproportionately benefit at the same time as those systems create the gaps in Indigenous health outcomes their research is trying to close" (Anderson, 2019, p. 931). DiAngelo (2016) describes white fragility as a state of white people having low tolerance for racial stress combined with expectations for racial comfort. Anderson (2019) goes on to recognize CIHR IIPH strategic priority #3, saying "research will be transformative at the structural level to benefit Indigenous Peoples only if it is explicitly antiracist and anticolonial" (Anderson, 2019, p. 931). Non-Indigenous researchers doing Indigenous research have a long way to go. In a 2021 study of Indigenous research methodologies, Pidgeon and Riley found that non-Indigenous authors engaged in Indigenous research situated themselves on the land less frequently than Indigenous authors or non-Indigenous authors who co-authored with Indigenous authors.

D. Research Ethics Boards

Indigenous and racially minoritized researchers face discrimination at the level of attaining ethics approval. This section briefly discusses some problems and recommendations from the literature.

i. REB Problems and Recommendations

Given that we have established the embeddedness of racism, it is unsurprising that institutional processes such as research ethics boards (REBs) factor into Indigenous researchers' experiences of racism - indeed, REBs are not apolitical spaces (Denzin, 2009; Steigman & Castleden, 2015). Jonker et al. (2021) connect the dearth of literature on racism within Institutional Review Boards (IRBs) to an oversight in the obligations of IRBs. Although the purpose of IRBs/REBs is to ensure ethical research, the process of obtaining ethics approval can act as a barrier to researchers.

The intensity of regulation can create a "gatekeeping effect" (Jonker et al., 2021, p. 1668), decreasing researcher productivity while stripping power from community partners (Steigman & Castleden, 2015). Steigman & Castleden (2015) provide an example of their project partnered with an Indigenous community taking 100 days to obtain institutional REB approval, delaying their season-sensitive project an entire year. Meanwhile the same project had received approval from the Indigenous community's REB in one month. It is not only the length of the process which acts as a barrier to research, but also the time and energy spent on the minutiae of forms and revisions which the researchers could better spend on the actual project. Simultaneously, decolonial efforts by researchers to share power equitably with their community partners may be undermined by tedious REB processes which limit the community's emerging guidance. Funding may be put at risk where the ethical guidance of the partnering Indigenous community contradicts that of the institutional REB (Steigman & Castleden, 2015). Concerns with mainstream ethics approval have also been identified, particularly related to privately funded research (Leo, 2024).

Are the structures of REBs/IRBs suited for decolonial methodologies, or even qualitative methodologies more broadly (Steigman & Castleden, 2015)? They were, after all, designed for positivist research and may not be suited for the task of guiding the types of qualitative methodologies which seek to describe complex phenomena (Denzin, 2009) such as racism.

Some recommendations for improving IRBs/ REBs center around changing power structures to ensure that communities being researched (especially Indigenous communities) are able to drive the research, to expect mutual accountability from REBs, and for institutional REBs to defer to REBs of Indigenous communities, where those exist (Steigman & Castleden, 2015). Steigman and Castleden (2015) also recommend for REBs to shift their focus to the general parameters of the research and defer to those on the ground regarding the

details. As part of a broader focus, REBs could examine how researchers understand and operationalize the four Rs of Indigenous research: respect, reciprocity, relevance, and responsibility (Kirkness & Barnhardt, 1991).

Jonker et al. (2021) provide the following recommendations to raise the standards for IRBs: make equity, diversity, and inclusion performance goals in the job evaluations of IRB members; improve cultural and communications competence for committee and staff members; increase the transparency of IRBs. Additionally, since we know that racism is present and operational within REBs/IRBs, Jonkers et al. (2021) urges ongoing research into this phenomenon which must be fed back into the system to continuously address racist actions and patterns.

ii. An Australian Model

The deep reflection, reciprocity, and dialogue needed for excellent Indigenous research (Skille, 2021) must not rest solely on the discretion of non-Indigenous researchers, but have accountability built in. For example, Bond et al. (2016) evaluate an Australian system of accountability to Indigenous peoples which consists of a jury of Indigenous community members whose approval is needed in order for the Ethics board to grant approval. Researchers also report back directly to the jury on the research progress and findings. "Regardless of the different contexts in which Indigenous people and researchers operate, there remains a cultural, political and ethical imperative to reposition Indigenous peoples from passive subjects of research to autonomous actors in health research governance" (Bond et al., 2016, p. 94). Similar to how Fournier et al. (2024) propose that following guidance from a diversity of Indigenous communities, journals should require authors to "report the details of how and when community engagement was undertaken and how it unfolded" (p. 247), CIHR also needs to require more accountability for health researchers engaging with Indigenous communities.

E. Peer Review

The process of peer review must be examined for its role in the perpetuation of racism both for grant funding decisions and within health research more broadly. At a broad level, assumptions of the peer review process being neutral and objective must be interrogated (Castleden et al., 2015). Indeed, many are questioning its efficacy and reliability (Castleden et al., 2015; Tamblyn et al., 2018), with some asserting that there is "little robust evidence [for] peer review as a method for grant allocation" (Guthrie et al., 2017, p. 12). Reviewer inconsistency and disagreement on ratings (Guthrie et al., 2017), on application quality (Tamblyn et al., 2023), and on which applications should be funded (Tamblyn et al., 2023) are relevant concerns. There is mixed evidence on the reproducibility of panel discussions (Guthrie et al., 2017). While peer review demonstrates weak powers to predict future research performance, it simultaneously fails to factor in the uncertainty inherent in funding decision processes (Guthrie et al., 2017).

There is no absolute standard for peer review (Guthrie et al., 2017), and it has been observed to become an "unbalanced echo chamber", particularly if holding current funding is a criterion for reviewers (Carnethon et al., 2020). While some are calling for major overhauls such as abolishing anonymous peer review (Rabesandratana, 2013), others are calling for better evidence with which to improve the design of peer review processes (Guthrie et al., 2017, p. 12). Let us now examine more specific mechanisms within peer review processes. The peer review system holds immense power over the careers of all researchers. Having established that systems consistently act to disproportionately harm and penalize racially marginalized researchers, we now explore how racial bias functions in peer review processes.

Unprofessional behaviour among reviewers including racial hostility, systemic and implicit bias, and gatekeeping have been discussed (Carnethon et al., 2019; Chen et al., 2022; Ko, 2023; Rose & Castleden, 2022; Strauss et al., 2023; Tamblyn et al., 2018), with Guthrie et al.

(2017) highlighting that even low levels of passive bias significantly impact outcomes. Tamblyn et al. (2018) expand that "the peer review bias in Canada is significant enough to change an application from fundable to nonfundable" (p. E493). Despite the substantial biases reviewers hold, a censorship of critical perspectives on panels (Strauss et al., 2023) functions in tandem with the general regard for peer review as the standard bearer of excellence to keep the system intact and defended. Grant reviewer bias is powerful, "deciding what can be labeled as science and what knowledge is policy relevant" (Ko, 2023, p. 1).

i. Outlining Bias in Peer Review

"There is good evidence that peer review suffers from biases" (Guthrie et al., 2017, p. 11). Some sources point out bias that functions more directly against Indigenous researchers, and some discuss bias that has racist impacts (Comfort, 2021) in less direct ways, such as age biases and biases against innovation (Guthrie et al., 2017) which can reinforce the current racist system.

Directly Racist/Anti-Indigenous

Rose and Castleden (2022) note the dismissal of Indigenous health researchers' concerns in the grant peer review process within CIHR, observing that "reviewers could be non-experts in Indigenous health who didn't understand the content, didn't take it seriously, didn't see the value, or didn't engage meaningfully" (p. 13). Peer review has been observed to privilege quantitative research while excluding and devaluing Indigenous Ways of Knowing and research on social determinants of health (Rose & Castleden, 2022) Strauss et al. (2023) open the discussion on the potential for racial hostility in peer review of manuscripts when they say that "excellent papers are frequently subjected to harsh generalised criticism by reviewers simply because it makes the reviewer uncomfortable" (p. 10). They also point out that "editors and reviewers exhibit contempt for papers about people of color. Papers that discuss racial issues tend to face barriers to

publication in the form of an inequitable higher level of scrutiny and greater rates of rejection" (Strauss et al., 2023, p. 6). In peer review of grant applications, "systematic biases in judgement are observed for black compared to white applicants in NIH competitions, biases that appear to be related to differences in how individual criteria are rated" (Tamblyn et al., 2023, p.2).

Indirectly Racist

Reviewers with high expertise were more likely than those with less expertise to provide higher scores to applicants with higher past success rates, (Tamblyn et al., 2018), thereby penalizing early career investigators (Tamblyn et al., 2023). This dynamic factors into a broader phenomenon of advantage and disadvantage accumulating "in which past success begets future success [which] has been widely documented in science since the 1960s" (Chen et al., 2022, p. 14) and which contributes to "rising inequality in biomedical research funding" (Chen et al., 2022, p. 14).

The racial makeup of reviewer panels demonstrates a "failure to attract, retain and promote to the highest levels scientists from underrepresented groups" (Collins et al., 2021, p. 3076). Panels are "primarily comprised of white researchers who have been funded previously" (Goings et al., 2023, p. 113) whose judgements determine which research may be considered for funding. Ko (2023) describes how "white fragility may lead reviewers to offer commentary that dismisses, insults or otherwise demeans the authors who introduce and interrogate the linkage between structural racism and health… Demeaning language is also a way of asserting the right to comfort by scapegoating those who cause discomfort… Defensive reviewers may choose not to engage with the substance of the submission and instead focus on identifying many minor technical criticisms as a rationale for recommending rejection" (Ko, 2023, p. 4-6).

A nuanced perspective on expertise-related bias ought to be considered. Carnethon, Kershaw, and Kandula (2019) point out that peer

reviewers introduce biases that may perpetuate the status quo when they are not experts in the disease condition, population, or research methodologies used. Meanwhile, by way of addressing these biases, Ko (2023) recommends intentionally "drawing reviewers from disciplines outside of health services and policy research, such as history, sociology, and feminist and ethnic studies traditions" (p. 6) since rejecting proposals because they are not consistent with the norms of health research will limit the enactment of anti-racist change.

ii. Addressing Bias

Three common directions in the recommendations for addressing peer review bias involve adjusting the use of anonymization; providing education or training to peer reviewers; and focusing on the racial makeup of review panels.

Anonymizing

One might assume that an effective response to bias, and particularly racial bias, would be to work to further anonymize the identities of applicants. Critiques of double-anonymous review, however, include suspicions that even if names are blanked out, reviewers can still find the researcher's name with ease (Wright, 2022). According to 2019 assessments, the NIH's 2011 implementation of double-anonymous review did not address racial bias (Wright, 2022). Guthrie et al. (2017) suggest that there is limited evidence that anonymizing actually reduces discrepancies between reviewers. Strauss et al. (2023) point out that "double-anonymous review is not helpful if reviewers are biased against the fundamental ideas and concepts in a paper" (p. 11). Instead, they recommend the trial of and research into open review processes, as well as including positionality statements for authors and reviewers.

Reviewer Education

Although training for peer reviewers is broadly recommended (Goings et al., 2023; Ko, 2023; Lia et al., 2020; Shavers et al., 2005; Tamblyn et al., 2018), it alone cannot solve the problem of

racial bias in peer review. Some sources are questioning whether merely training individual reviewers "can reasonably equip researchers on these issues that are so complex to identify and study" (Guichard & Ridd, 2019, p. 116). Chen et al. (2022) are critical of "interventions focused solely on individual actions, such as increased bias-awareness training, or specific decision points within the merit review process, like blinding peer review, [as these] are inadequate as standalone cure-all solutions" (p. 17). While anti-racism education holds transformative potential, training focused on individual bias has limited capacity to change a person's core values if they are not interested in changing and may entirely miss the root causes of the disparities (Wright, 2022). Carnethon, Kershaw, and Kandula (2019) emphasize that "focusing too heavily on implicit bias can obscure the structural and cultural changes needed to eliminate funding gaps between black and white scientists and achieve equity in the NIH grant review process" (p. 212).

In reflections on NIH responses to a study which showed that racial inequity in health research funding has not improved (Hoppe et al., 2019), Taffe and Gilpin (2021) critique bias awareness training, asserting that anti-bias training does not result in changes to biased behaviour. More evidence is needed to understand whether bias training can actually reduce discrepancies between reviewers (Guthrie et al., 2017). Although education of peer review panels is necessary, it must go deeper than anti-bias training; and it must be an ongoing commitment to quality education. "We must train reviewers to understand and value how the core tenets of health research can address structural and institutional racism" (Ko, 2023, p 1). This education needs to be delivered by those with a deep understanding of anti-racism as a scholarly discipline.

Identity Matters

The overrepresentation of white researchers in powerful positions such as on grant allocations review panels means that Black and minority researchers are largely not judged by their Black and minority peers (Lia et al., 2020). Several

sources call for increased racial diversity on panels (Carnethon et al., 2020; Chen et al., 2022; Lia et al., 2020; Shavers et al., 2005; Strauss et al., 2023; Wright, 2022). Taffe & Gilpin (2021) more specifically recommends "a target percentage of African/American Black reviewers that reflects the diversity of the US population" (p. 7). They go on to state that broadening the pool of reviewers with respect to the career stage has some hope of addressing racial disparity.

iii. Recommendations for Restructuring Peer Review

Calls have been issued for research funders to "critically examine and reform their review processes for structural racism and health research" (Ko, 2023, p. 3). Here are a variety of changes for research funders to consider. Tamblyn et al. (2018) recommend increasing the number of reviewers to increase reliability. Funders need to provide infrastructural support for anti-racist research (Goings et al., 2023) which includes anti-racist peer review guides which funders continuously update and can refer reviewers to (Ko, 2023). To improve reviewer consistency, Tamblyn et al. (2018) recommend providing more structure around the weighting of "evaluation criteria such as originality, usefulness, methodology and feasibility" (p. E498). To improve mentorship from senior researchers, funders could incentivize mentorship and create a database of senior researchers willing to mentor minority investigators (Shavers et al., 2005).

Reshape the Norms of Peer Review Processes

Since the burden of work for applicants is higher than that of reviewers, with 75% of the work falling on applicants, funding agencies can work to reduce the level of burden or to increase the value that unsuccessful applicants receive in the process of applying through the provision of constructive feedback (Guthrie et al., 2017). "For structural racism and health submissions, reviewers, editors, and program officers should reflect on whether their criticisms address the

work's significance and offer guidance for substantive improvements" (Ko, 2023, p. 6) as defensive reviewers might focus on technicalities instead of engaging with the substance of the proposal (Chen et al., 2023). The burden of proof regarding systemic racism ought also to be considered. As noted above, it ought to be up to those denying racism to prove their claims (Strauss et al., 2023). Another adjustment funders could make is to allow applicants to respond to reviewers' comments (Tamblyn et al., 2018), as is practiced in CIHR's Iterative review process for Indigenous applicants whose score is above a cutoff. Considering changes research funders can implement to address the problems of peer review more broadly, Tamblyn et al. (2023) "found that ranking was more reliable than rating, and less susceptible to characteristics of the review panel such as level of expertise and experience for both reliability and potential sources of bias" (p. 12). The mechanisms of peer review require further research. Guthrie et al. (2017) found "no studies examining the social processes that occur during panel discussions – a central part of the peer review process" (p. 12) but such studies will certainly be necessary if peer review is to address its racism issue.

Adjusting Criteria to Be a Reviewer

If holding current funding is a requirement to serve on a funding review panel, consider removing it. "Implementing a holistic definition of qualifications for grant review could eliminate one barrier to participation" by racially underrepresented researchers (Carnethon et al., 2019, p. 212). Alternative requirements which may serve as more holistic qualifications may include publication history, history of engagement with professional organizations, or public health influence in the community (Carnethon et al., 2019). Health research funding agencies need to ensure that the reviewers possess both the expertise necessary to judge both the quality of the proposal and the feasibility of the study (Carnethon et al., 2019) and "competencies that support the delivery of constructive feedback (i.e., coachability, clear communication)" (Chen et al., 2023, p. 53). Ko

(2023) discusses the development of review boards consisting of members of racially minoritized communities to evaluate studies through the lens of lived experience, and compensating them for their time and unique expertise.

Researchers serving on peer review panels for health research must understand how structural racism functions. For example, "reviewers should not request that authors 'control' for social determinants of health in an analytic model with structural racism as an explanatory variable. As with any statistical approach, improperly including mediating terms—such as social determinants of health—can lead to biased estimates and incorrect interpretations of study results" (Ko, 2023, p. 5).

Changing Funding Decisions

Several suggestions are offered on how to address funding disparities. Since findings demonstrate inconsistency among reviewers, Guthrie et al. (2017) and Comfort (2021) recommend accounting for and mitigating reviewer uncertainty as an input to funding decisions and suggest implementing a lottery element in parts of the process. While "some observers have argued NIH could narrow the gap by funding Black scientists whose proposals receive peer-review scores that fall just outside the cutoff for funding," (Kaiser, 2021, p. 977). Although this research is American, it holds relevance in a Canadian context. Expanding upon the work CIHR has done on iterative review, similar measures for Indigenous health researchers in Canada ought to be considered. Guthrie et al. (2017) also recommend utilizing scores to identify innovative research and mitigate the bias against it. Since more bias may come into play when reviewers must rank the value of research outside their own expertise, Carnethon et al. (2020) suggest clustering grants of similar types or subdisciplines. "As a society, if we are to improve how we use our research funds, we need a better understanding of the peer review process. When making changes, funders should: build in before and after comparisons; strive to make data available for analysis; openly publish studies of their

processes and work together on comparative analysis. We need to overcome the reluctance of funders and scientists to acknowledge the uncertainties intrinsic to allocating research funding, and encourage them to experiment with peer review and other allocation processes" (Guthrie et al., 2017, p. 13).

iv. Application Rejections

At the point of grant decision making, bias against racially minoritized scholars manifests in several ways, some of which may be resulting from white resentment (Schick, 2014). "There is a lack of recognition of the ways in which minoritized researchers carve out alternative career pathways" (Lia et al., 2020, p. 17). Despite minority scientists being more innovative, they receive less awards at the granting level (Lia et al., 2020). Chen et al. (2022) found that proposals by Black and Asian scientists were systematically rated lower than white scientists. The "underfunding, under-investigation, and devaluation of ideas and topics studied by marginalized groups," especially under a presumed meritocracy, is another trend observed at the reviewer level (Chen et al., 2022, p 18). Black and Asian PIs "revised and resubmitted applications more times than white PIs before getting funded, and Black/AA PIs were also less likely to revise and resubmit a new proposal after a failed attempt due to lower review scores" (Chen et al., 2022, p. 12).

Unsuccessful results sometimes get communicated to applicants with feedback that their project is "too ambitious" to which one racially minoritized researcher replied that "you know exactly why they are not funding you" (Wright, 2022, p. 3). The peer review process (including the iterative process) for grant allocation could result in epistemic exclusion, which "is related to the concept of epistemic exploitation, which occurs when marginalised groups are expected to explain and justify their experiences and perspectives to those who do not intend to accept or understand them. This type of behaviour also reinforces the power dynamics that allow certain groups to control the production of knowledge, and ultimately leads to

the marginalisation and oppression of certain groups" (Strauss et al., 2023, pp. 2-3). Health research funders need to recognize the inequitable burden that unsuccessful applications can place on "resource-stretched community practitioners" (Lia et al., 2020), particularly in the cases where the community involved is Indigenous and therefore already suffering from inequitable health outcomes.

Racial disparity in health grant allocations has become a focus of research interest. Literature exposes the research enterprise and academia as value laden and therefore not neutral, demonstrating the impact of western colonial values that result in inequities experienced in the careers of racially minoritized scholars. These self-reinforcing inequities are evident throughout the trajectory of "'who' is funded; 'what' is funded; and 'how' decisions are made" (CIHR, 2022, para. 7), resulting in the undermining and devaluing of Indigenous researchers and Indigenous methodologies. As a predominantly white space, peer review is the fulcrum of where colonial values are expressed, especially through reviewer bias which penalizes Indigenous researchers and favours status quo research.

3. Methodology

Building upon existing CIHR documents and based on a preliminary environmental scan, a draft of the proposed research was presented to the Indigenous Advisory Board of IIPH in November 2023. Knowing that ethics approval can take several months, the ethics application was first submitted in late October of 2023 and REB feedback arrived in late January 2024. Revisions were submitted and approved in February, 2024 (see appendix A). Recruitment started in April under the title Anti-Indigenous Racism in Health Research Funding but the REB had restricted us from recruiting directly (snowball sampling) and we received minimal interest. On May 14, 2024 we submitted an ethics amendment to recruit participants directly but still received minimal response. Surmising that the title might be causing a barrier, on May 31 we submitted a revised title to the REB: Improving CIHR funding for Indigenous Health Researchers, which was approved on June 3, 2024. Response was much greater after this. However, there are a number of factors which may have contributed to overall low response such as time of year, disproportionate workload, and especially the historical and recent violations of the trust of Indigenous researchers and communities.

The approved recruitment flyer (see appendix B) sought First Nations, Inuit, and Métis researchers who could reflect on their experiences applying for CIHR funding during a 45-90 minute individual video conference interview with Dr. Verna St. Denis. The flyer was circulated to key national administrators involved in Indigenous health, among networks of FNIM researchers, and on social media. A concentrated effort was put into identifying and recruiting Inuit researchers.

A total of fourteen FNIM researchers (12 female and 2 male) participated in the 13 interviews (one interview had 2 First Nations researchers participating). Ten of the researchers identify as First Nations, three identify as Métis, and one identifies as Inuk. The majority of the researchers (10) are based in an academic institution, and four work primarily in community organizations, although several participants have experience as researchers in both university and community organizations. Seven of the researchers had experienced success as a Principal Investigator on a CIHR grant application. Ten of the researchers discussed their experiences of grant rejection. Three of the researchers had been included in tokenistic ways on successful grants. Seven of the researchers had experience on CIHR grant review panels.

Participants were asked to identify their cultural identity, their experiences with CIHR funding, their insights on mitigating barriers, their perceptions about topics seen as less fundable or favoured, their insights on targeted funding, their experiences with grant peer review, and suggestions for improving the grant process, and greatest successes and disappointments in academia. The questions (appendix C) were informed by issues that had been identified in the literature review. Although no questions focused specifically on mentorship, on identity fraud, or on community based research, these were themes that most of the researchers spoke about.

The interviews were transcribed by a bonded transcription company. The data was analyzed separately by St. Denis and Hantke in batches as transcripts arrived. Data was pulled from transcripts and coded using open content analysis to identify themes. Upon bringing together data from the first six transcripts which were coded separately by St. Denis and Hantke, the themes, content, and organization were discussed, and the refined new themes of Strengths, Challenges, and Solutions were selected to organize all the data at a broad level. Independent analysis of data from the next three interviews according to those broad categories led to further refinement of subcategories, such as Commitment to Community, Valuing Indigenous Knowledge, and Innovations within Strengths; the Academy as a Colonial Institution, the Guise of Neutrality in Valuing Western

Methodologies, How the System and Demoralizes Indigenous Researchers, Specific Issues with the Application Process within Challenges; Legitimizing Community Organizations as Grant Holders, Support Targeted Funding, and Improving Peer Review in Solutions. Independently coded data from the final four transcripts was refined according to this set of themes and then a draft of key content, themes, issues, and were presented to Indigenous Advisory Board on Oct 7, 2024 (figure 1). Finally, we brought our analyses together and edited out filler words (eg. "like", "that", "you know") from quotes, removed

duplication, collapsed subthemes, and rearranged the themes. We further refined the categories to the final version while constantly checking back with the original interviews to ensure fidelity to the meaning of data to the broader context in the interview.

Figure 1
Overview of Preliminary Data presented to IAB October 7, 2024

DATA THEMES: OVERVIEW

CHALLENGES:

- Surviving Academia
- RFP
- Application
- Identity
- Topic & Issues
- Methodologies
- Peer Review

PRELIMINARY RECOMMENDATIONS:

- Funding
- Peer Review
- Mentoring
- Knowledge Translation

APPRECIATION OF CIHR
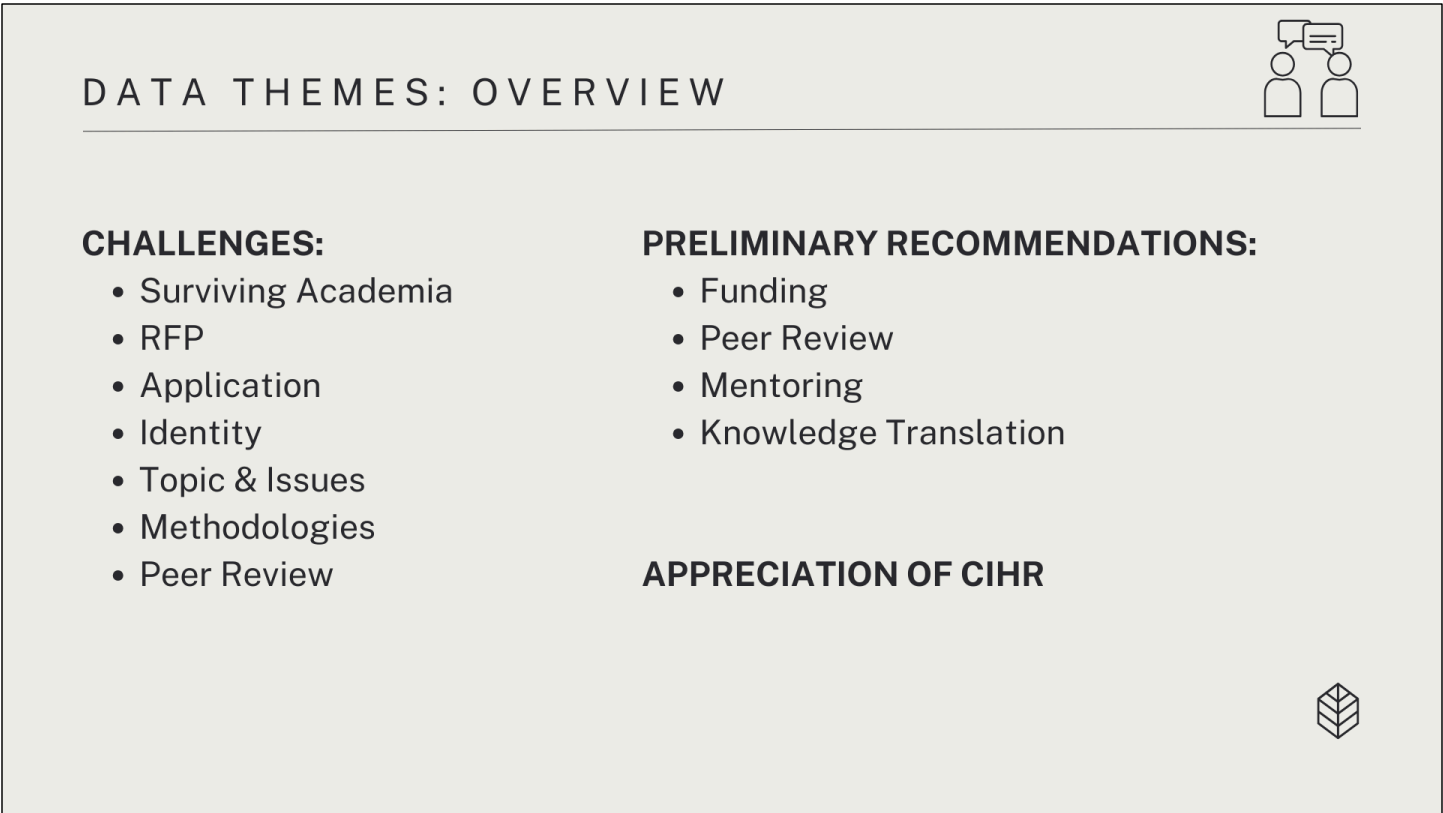
4. Findings

A. Indigenous Researchers and Research Methodology

The researchers in this study belong to a variety of First Nations, Métis and Inuit communities. Their interviews inspired and necessitated finding a description outside the English language, to describe who they are and how they approach their work. Since St. Denis grew up in a home where Cree was the primary language, she consulted with expert Cree speakers Edie Venne and Dr. Keith Goulet to find a Cree word to describe 'personal integrity'. These Cree words were offered as a way to describe the FNIM researchers in this study, who approached their work with a deep sense of kwayaskâtisiwin -- personal integrity, of kistenimitowin -- respecting each other, and of kitimagenimowin -- showing empathy and compassion. The researchers that we interviewed have strong, active connections and relationships with geographic communities of Indigenous people. Although not all would identify as primarily community based researchers, the university based researchers are exploring health issues that are specific to Indigenous people. Even where some may have a biomedical focus (sexually transmitted/ bloodborne infections or a particular disease), a sociopolitical analysis remains central. All participating researchers described their work in relation to community even though recruitment did not mention community, nor were interview questions focused on community. "Community" is broadly defined here to include geographical (eg. a particular First Nation, Métis, Inuit or an urban center), based on a medical issue (eg. a specific diagnosis or illness), and cultural specific (eg. belonging to a Métis or Inuit or First Nations cultural community/ communities).

What it means to be an academic is different for Indigenous scholars compared to Western norms. There is a commitment to the collective among Indigenous scholars. "As an Indigenous person, you move into a space being much more aware of how things are all connected. Whereas someone else who is not Indigenous or aware of those things moves into a space to see what they can get out of it" (P7). Taking from the concept of "citizens plus" (Cairns & Murphy, 2000), Indigenous scholars can be understood as "researchers plus", meaning that they operate fully as researchers within the Western academic system, but also hold responsibilities and values particular to their belonging to Indigenous communities. The typical non-Indigenous researcher may research to further their career and rise through the ranks, while FNIM researchers want change and express a desire to empower research subjects.

The collective of Indigenous peoples has been profoundly violated, and FNIM researchers express a deeply felt desire and commitment to pursue change for the betterment of their communities. They are held to a higher standard of expectations (P11) because they're operating within a colonial context and they have to be accountable there and at the same time have to maintain their credibility and relevance and be trustworthy with their community, however community is defined, with people that have developed trepidation and lack of trust toward research and researchers. They have a more immediate and urgent sense of accountability to communities (P2); not just institutionally driven accountability. They recognize: "if I misspeak or misrepresent, that hurts people. And I see that hurt in their eyes immediately in living colour…. The reward is when our research is meaningful to those who are researched, and the people feel heard and valued and respected and cared for" (P11). "I try to live according to the code of ethics that our communities teach us to live by and just try and… be a good human being… be of service to the community in some way" (P1).

Just as Indigenous health researchers are held to higher standards, they themselves have higher standards (P3), evidenced in their efforts to include community voices (P11), and insistence on rigor in their research to ensure misconceptions of Indigenous wellbeing and life worlds are not trivialized (P10). Researchers provided a platform for Elders to contribute, and

Elders came up with topics that practically improved the health outcomes for Indigenous people when provided the opportunity (P1, P7, P11, P12, P13). Substantive, meaningful community participation responds to needs articulated by the community (P7, P9, P11, P12, P13).

FNIM health researchers have both the lived experience and the academic training (P3, P10) and remain motivated by family, community and by the collective good (P1, P3). Researchers consistently expressed a strong sense of responsibility to work for the health and wellbeing of FNIM communities (P9); FNIM researchers are held to more immediate and urgent accountability (P2). This is a central focus in their motivations. P1 became a scholar because of their grandparents' vision and teaching, to get an education and bring it back to their community. P3 stayed in the work for the collective good and for their relatives. P5a and P5b were proud of their organization's collaboration with community partners. Researchers emphasized the collaborative nature of Indigenous organizations which requires specialized skills to navigate (P3, P5a/b, P8, P11). For example, "a non-Indigenous researcher is just seen as a researcher. They don't have to get engaged in politics… in those sort of everyday relationships within those communities" (P10). Researchers tied their collaboration with peers & community members to achieving significant strides (P1, P2, P3, P4). "Indigenous researchers are often characterized as trying to do too much in a proposal, but that is how we live our lives every day as Indigenous academics" (P11). When you're embedded in the community as an Indigenous health researcher, you don't parachute in and out; not the same level of commitment/urgency.

There is a drive towards strengths based approaches (P7, P8, P9, P10, P11). "We kind of struggle with maintaining that balance between acknowledging the issues, like the challenges that our communities are facing, or the communities we serve rather, but also acknowledging the strengths" (P8). "We really saw ourselves as researching ourselves to life,

and communities began generating projects, topics and issues that needed to be researched…. We shifted our research from deficit and problem based to strength based, [we] begin with acknowledgement that Indigenous people are wise and capable, we are more than capable of knowing the world and we know where to look for solutions, that is how we design our research" (P11). An Elder who P13 works with said "through research, the goal should be to reawaken our own strength."

i. Honouring Indigenous Communities

FNIM health researchers raise the question of what makes research Indigenous. This question needs to be further explored as it has repercussions in peer review and in the assessment of grants. From our interviews, these are three aspects that came forward which characterize Indigenous research. Establishing trust is an especially significant requirement for research in FNIM communities because of the history of exploitative research (Smith, 2012). Communities have uncertainty about researchers doing what they say, especially after the proposal has been through ethics (P3). Amid the burden of disrupting a research enterprise implicated in ongoing colonialism, Indigenous health researchers are finding ways to empower Indigenous communities through health research.

Relationship Building

Strong, respectful relationships are essential to Indigenous research in communities (P1, P2, P3, P5a/b, P7, P8, P13). An acknowledgement that respectful research builds on organic strong ties to the community (P2). P3 highlighted the necessity of grounding research in relationship principles. P1 discussed the importance and process of relationship building, trust and how they treat Elders. Communities want to control who comes into their communities to do research (P5a/b). We must consider how to facilitate community ownership, often communities are overextended, and must build community capacity to participate in research (P1). P13 describes an engaged process as "one where… we don't know what the question

is yet. But once we start to talk with the community, questions will emerge… [CIHR are] not keen on that kind of stuff… I always find that when we get the feedback, they say 'well, like what are you going to do… just go and talk and visit?' And they just don't get the idea that actually when you spend that time in the relational part of the grant, then work moves very quickly to the investigative portion. And in fact, if the community is involved in describing how to investigate a problem, it can happen very fast after you've had that initial time" (P13). FNIM researchers need recognition that establishing a relationship takes time (P2). Time matters; FNIM research can't be rushed, it needs to be ongoing (P4). "When you're wanting to fund more community based research that truly comes from and [is] led by communities… there needs to be… more room and openness to allow things to develop in that way…. And [that] takes time" (P8).

Researchers have to help the community understand the research, give them time to think about it, establish presence, and (re)affirm relationships (P8). "If I travel to a community… it's not like you just walk in a room and you say, okay, well, I'm here to talk about racism… even with people… in leadership positions… [who are] used to talking about these issues… it's not really the way you do it. So, I usually go into the community and I'll spend a few days… just being there, talking to people, going berry picking, going for a drive, doing… an event, a suicide walk or… something going on in the community, I'll go out, let people know who I am, what I'm doing, what my work is, and just be around… go to the hall if they're selling bingo cards and just see who's there… like those activities. And then usually about 2 or 3 days later, somebody will say, oh, hey… I heard that you're working on this or you're doing something about this… tell me more about it. Or I know somebody who had this issue or… it's after you're there for a few days, then people start to reach out. They've had time to think about it… maybe that's an issue or maybe she's thinking about this or that. And then you can come back and… if you get that kind of engagement, you

can have a few contacts… but the next time you come back, you can do an information session or… start to really talk more about what the research is and how you're conceiving it and what does the community think about this. And sometimes you'll get some thoughts… but sometimes, you have to stay a few more days and people will approach you again in the grocery store or somewhere" (P13)"

CIHR "won't really fund that [the relationship building, travel]…. They want to fund the project, not the relationship-building" (P2). "Just thinking about the way that we try to operate in the community… there's a lot of relational work that needs to be done beforehand… that's not really funded" (P13). The reluctance to fund the relationship building may come from its deviation from standard research. There is often a marked difference in terms of the importance of relationship building that Indigenous researchers know is foundational, even though there can be unexpected strains and entanglements. "Non-Indigenous researchers more easily maintain professional distance from research context… just seen as a researcher, they don't have to get engaged in politics [or] in everyday relationships within those communities… so there is less stress working as a non-Indigenous researcher in Indigenous communities" (P10). Not only is there less stress for non-Indigenous researchers, they also fail to recognize the unpredictability of disruptive community events/crises.

"What worries me [and] I wonder… are we doing these applications justice?…. Sometimes people who are non-Indigenous… romanticize a little bit what it could be like to do like work in community. They don't… understand that, for example, just because you have a chief writing a letter of support doesn't mean that that's… the best place… or the most healthy… organization… and I think sometimes those risks aren't clear if you haven't lived or worked in the community" (P13).

"They want to fund the project, not the relationship-building" (P2)

Communities Identify the Focus

Choosing not to predetermine the focus of health research goes against the western system. Some researchers do research "on behalf" of the community rather than "for" the community, which looks like western model imposed on the community (P1). For Indigenous health researchers, research ideas must be discussed, considered and supported by the community (P1). Goal: Research proposals and research must be tied to those who will benefit from the research (P11). Respecting community knowledge; seeing the people as knowledgeable about their own lives & situation.

Addressing the issues that need to be changed honours the community. "We do our work… not researcher driven, it's driven by the organizations and the communities" (P8). Trying to take the lead from the community, "we would… be really thoughtful about how we can design a project that will answer questions that are important to the community in a timely manner that can help the organizations… to be able to… provide evidence, write proposals, to advance the work that they need… at their local levels" (P11). "All of our research was led by our community, by our membership saying this is what we want you to learn more about, 100%" (P11). "And communities, I think it's important for them to see their goals and… how they think they're going to get to the answer reflected in the grant application… there needs to be a sense of ownership" (P13).

Indigenous health researchers offer themselves as resources for mutual benefit and to take direction from the community: P9 explains that their research "was in response to the community, that… I had connected with and asked them 'what can I do?'" (P9). "When I came to my research, I just would like it to be practical, like provid[ing] something and also research[ing] it" (P12). For example, generating a topic respectfully entails making connections with a local Indigenous/Métis agency providing services to Métis children and families who are in government care "we partnered with them to find out what they're interested in… then we did some engagement sessions with the community, and we learned that the youth were really wanting to do activities like to learn more about their culture" (P12).

Allow the community to shape the focus of the research. Applications ask for their outcomes but FNIM researchers working in communities do not know. We cannot predetermine the outcomes or sometimes even the processes of the research without community engagement and within community engagement (P11). "Having some flexibility to understand that… we don't necessarily know what the outcome is gonna be and we need to be able to honour that I think is really important" (P8).

Answers are there, we don't need to invent them (P6). "In the community, we assume that people don't understand…. And it's so untrue. Community members totally understand the issue. They understand it better than anybody. And if we're listening, we will get an insight into what the policy barriers are…. But instead of saying, well, that has nothing to do with it, you should be aware that community members know exactly how it impacts them, housing or education or employment. They know" (P13). Researchers must be open and leave time for the community to come up with the ideas.

Building upon long term relationships is important. P12 has a long term relationship with an Elder who has so many ideas of things to do "but she's not in academia. They have really good ideas… I know she's really passionate about doing things in the community…. And then [at a CIHR funded conference] a topic came up that she was really interested in and I wanted to support that… 'cause it came out of these talks and what's practically happening in our community" (P12). The people's knowledge must be trusted and required; lived experience must be valued on grants (P11). FNIM researchers might say you

> *"Community members totally understand the issue. They understand it better than anybody." (P13)*

can't find truth without the lived experience. P9 worked with an existing "community advisory circle essentially… which is led by… a local Elder… and other community folks… taking direction from them and… propose how things could go… because they don't understand… the research world of steps required and so… we've put forward some options and then they tell us what would be best to do" (P9). What happens when you really listen to and work with community: "What we said was the priority areas for Indigenous research were like building capacity, community-based participatory research, upholding co-learning strategies and then the knowledge translation" (P13).

Legitimizing Community as Grant Holders

Community organizations have qualities that are important to facilitating community focused research. Participants emphasized the collaborative nature of Indigenous organizations (P3, P5a/b, P8, P11). Participants tied their collaboration with peers & community members to achieving significant strides (P1, P3, P4). P5a/b was proud to belong to a really strong community based research team. And yet, "Community-based research, Indigenous or non-Indigenous, is still really challenging to a mainstream academic research program. Like if we were looking at project scheme grants, the big multimillion-dollar application process, CBR is still confusing" (P11). Community organizations are denied funding as decisions to fund research too heavily favour institutions (P5a/b) and an individual, clearly identified PI (P8). "While I understand the need for CIHR to identify one person who can be responsible for the work, I think this is an inherent challenge for Indigenous based organizations, and one that moves away from… Indigenous perspectives and values... [such as] consensus based collaborative efforts. If [the requirement to have one PI] had clearly been identified in the application I think it would have made a difference in our decision to apply" (P8).

The result is sometimes smaller community relationally engaged projects that make a difference don't get funded because they are not connected to big names or the corporate world (P7). "I know that there's a lot of community projects that should be getting CIHR funding, but they aren't connected in the typical way to a funding-approved organization so then they can't apply.... Mak[e] it easier for smaller organizations or community-based work to happen…. The way it's set up right now you have to have all these PhD people on there or else you're never gonna get anywhere. And community voice and experience and knowledge is… often more valuable than all of those letters behind people's names, and there isn't space within the current system to acknowledge that" (P7).

It is important to support the infrastructure of community based organizations to do research (P11). Those organizations not affiliated with an institution experienced the rigidity of REB requirements as a barrier (P8, P13). Community organizations are overextended, struggle with strict university control of money and research (P5a/b). "We didn't receive any indirect costs, no overhead to administer the grants" (P11). For community organizations eligible to apply: CIHR needs to fund the administration of the grant. Community organizations don't have sufficient infrastructure; P11 says, "I was both administering the grant and leading the grant as a PI…. So, our university receives every grant that is funded through the university, there was an additional top-up of funds for the university to administer these projects, as a community-based organization we did not receive any of that additional funding. So, we would move from grant to grant to grant and keep ourselves going from grant to grant to grant to grant.... we didn't get a chance to build a research infrastructure in the organization." P13 and P10 both echoed the need for providing admin support.

Control of money is critical in terms of controlling the research and the process (P5a/b, P11). Community organizations are engaged in crisis work and therefore need funds to support administration of research (P5a/b, P8, P11). Given the opportunity, Indigenous organizations can successfully administer grants and achieve organizational legitimacy and authority (P11). P9 recognizes prior efforts by IIPH to advocate for

community partners to be eligible fund holders. "Allowing a non-academic Indigenous institution to be the holder of the grant funds… is a good thing… that it doesn't always have to be in the bank account of a university" (P9). The motivation for P12 "was to give them money, like practically giving funding so that they can do the work they want to do in their communities" (P12).

ii. Inspiring Accomplishments

When asked about their greatest career successes, several participants responded that graduating, or surviving and thriving were significant successes (P3, P7, P9). "I'm still here, still standing" (P3). "My biggest success is surviving and thriving in this space" (P9). This takes fortitude; strength amid the storm, despite immense adversity (P3). "I knew in my heart that it was valuable work and that it was needed and that it would matter even if it didn't matter [to the western system]" (P7). We have problems, we know it, we need to change. We can't just study problem after problem. Advocated successfully for Indigenous led leadership and Indigenous led research (P11).

Proud of the impact of research, researchers advocated and witnessed change in accreditation & policy (P3, P11). Changing people's lives; impact through teaching (P4, P9). Our research has enabled people to return to education, employment, with confidence and a sense of belonging (P11). Increasing Indigenous student enrollment, faculty and changes to the education of health professionals (P3, P4). Greatest success is seeing the change that can happen when everyone's on board (P4). P12 founding it really motivating and a big success that her research was able to provide opportunities for youth to engage in a cultural activity facilitated by an elder and the unexpected impact was that youth reported an improvement in their mental health and that the Indigenous organization wanted to "keep going and build on that momentum of creating youth councils and Elders councils to help with planning and ideas for connecting with culture

activities… they wanted to make it more meaningful and come from what the community wants" (P12).

"I think in the end… our research is stronger than others… we get richer data when we do it in a good way" (P10). "I think you can get really rich information from talking to people who've had these experiences" (P12). FNIM researchers strive to position themselves in "equal standing" (P3) with the community and not as experts (P3) extracting, but as collaborators, who strive to nurture confidence in the community as capable people. One doesn't need an advanced degree to make sense of data and know how to use it. "One of the big successes… for our most recent project we… got together… to share preliminary data with… the communities and organizations we serve to co-interpret the data… because we recognize that community has so much lived experience and expertise and that adds so much nuance and rich context to help us understand the data as opposed to if we were just to look at it by ourselves…. And we walked out with such a richer understanding of what those numbers actually meant… it made us feel good 'cause we knew…. It was a lot of work and it was outside the norm, but it's important… there is no point in doing the work if it's not gonna be applied" (P8).

This community based researcher further explained the value of meaningfully engaging and taking time to consult with the community beyond the community serving as source of data collection. "One person at our session last week said that they use the data in their work every single week, which was amazing, because that really shows the kind of impact it had… at the end of the day it's' all about them not about us as researchers" (P8). Another benefit from engaging in Indigenous methodologies is the opportunity that communities can provide for continued self growth of the researcher. For example, P13 who comments on the honour of working with "Elders almost every day… what I'm really learning… is how my own thinking has been changed and coloured by that… colonial kind of context… and

"We get richer data when we do it in a good way" (P10)

having realizations on a regular basis through the research or the community work or the work with Elders, that I am thinking in a way that is preventing progress for people, for Indigenous people…. When I get that feedback, and learn to adjust my expectations as opposed to thinking of it as a failure or thinking of it… like we're not making progress. So, I love that and that's something that I feel I've learned, especially… as I'm getting older, this is coming together like personal growth professionally. I'm starting to recognize. And that's such a gift for me. And so, I feel like that's a really big accomplishment" (P13).

Although Indigenous health researchers are validated by their community focused research, it's not without challenges. "Sometimes Indigenous people are very hard on others…. The lateral violence is very real." (P7) Sometimes their own communities "think I'm trying to manipulate things… it's a double-edged sword, I believe because at one point it's like saying ok I'm not just an academic at the university, I'm part of the community but at the same time it's my job in the community to be an academic" (P10). Indigenous communities are also adjusting to Indigenous people in the position of researcher and not just non-Indigenous people. Sometimes their communities are simply not into research (P1), or feel they have been researched to death (P1, P11). It is difficult to hire community members to be involved and difficult to recruit participation (P1).

iii. Mobilizing knowledge

FNIM researchers regard sharing as a core purpose of Indigenous health research. "We pass it on. We pass on what we know" (P13). Sharing knowledge products with respect and care is a priority (P7). CIHR needs to give more time, attention, and resources to knowledge translation and mobilization. "By the time everything's done because of… issues with timelines and… community members having a lot on their plate, often it gets to the end of a grant at CIHR and there's not really any time

"Communities don't want to see journal articles" (P10)

[and resources] left over for knowledge translation" (P8). Stronger criteria must be develope which prioritize a "need... an understanding of, and even prioritizing Indigenous understandings of knowledge translation" (P8). There's a push for integrated knowledge translation at the end of the grant but it is still treated as secondary to the actual research (P8). Promote and facilitate integrated knowledge translation. A strong proposal must involve a meaningful knowledge translation plan, who is going to take up this knowledge, why is it important, how is it relevant and who asked for it (P11).

Despite having adopted DORA, the metrics which CIHR uses to evaluate grant applications are not relevant to communities and the required reporting do not sufficiently consider or capture the impact of the projects (P3). "Communities don't want to see journal articles and the traditional standard approaches in academics. So, if they're looking for arts based or sort of what we consider in the academy innovative but they're like well that's the only way we're gonna be able to get people out there. So, looking at, we're gonna go on the radio and talk about results and seeing that come into the grant itself shows that the individuals have a better understanding of how the community wants to relay results back" (P10). When the knowledge is translated in a way the community wants, they use it. The Indigenous organization P8 works with found their community utilizes the data they produce as well as their knowledge products, which they tailor to suit their community (e.g. animated video) (P8). "We try and really think outside the box and make very clear links between our objectives, our audiences, and our knowledge products" (P8). For example, authentic diversified knowledge mobilization, i.e. radio programming (P10). Indigenous health researchers see the importance of "spending way more time meeting with and sharing verbally back to the community than publishing an article…. Acknowledging all of that extra time that we spend sharing knowledge orally is important" (P7).

Contributing to Policy Development & Change

There is much disappointment in how the TRC Calls to Action are so slow to be acted upon (P3, P4, P6). Indigenous health researchers recognize the urgency of affecting policy with the research they conduct, but also raise concern that they have not had opportunity to make an impact at policy tables (P3, P10, P11, P12). Indigenous people don't benefit from the research that is done (P4). We don't need people with "10 million excuses of why… they have no action steps" (P4). "If we're putting all this money into Indigenous health research what good have we done? We're still at the bottom of everything…. We're understanding some things better but we're not making any real changes. So how do we get these reports off the ground" (P10). "It… seems like lip service…. You do your report, what's gonna come from it… we need stronger accountability mechanisms put in place in order for change, actual change to happen" (P10). FNIM researchers recognize the importance of assessing impacts on community health disparities, and using that information to propose policy changes (P3, P11).

The importance of the relationship between conducting research and impacting policy change is apparent to Indigenous health researchers "'cause if there's no research that supports [change], there will be no funding [for required health services]" (P12). "We did not do the big policy change that we might have… [we need to] think about how we develop policy statements out of our research [to take] to the Hill and present to politicians, and… to AFN" (P11). The opportunity to have the attention of policymakers is important because "there's data out there, but how does [research] get to people who actually make policies. I would like to learn more about that" (P12). "CIHR used to bring everybody to the Hill and all the top researchers would be able to talk to the government… we need those… networking opportunities. Like the program 'science meets parliament,' I think that needs to be broadened out into CIHR" (P10).

Protecting Knowledge & Data Sovereignty

Since the status quo within the research enterprise conceptualizes data as belonging to the researcher (P3), Indigenous communities involved in research need safeguards and documentation requirements to ensure data sovereignty, such as Ownership, Control, Access, and Possession (OCAP) provides for First Nations (P3, P4, P5a/b, P6, P7). Both community and researchers have to agree on sovereign processes (P4, P7). Results of research should be recognized as intellectual property rights of the communities. Peer reviewers and researchers need to be well versed in OCAP and apply similar principles to data generated in Métis and Inuit communities (P6). There is awareness that non-Indigenous research is not motivated by the responsibility to learn and use data protection, so P3 is always considering how to safeguard data.

B. Indigenous Health Researchers in Western Institutions

Indigenous health researchers are not necessarily special; they do share circumstances of living in a nation state that has deemed Indigenous lives and health irrelevant (Allan & Smylie, 2015). Only occasionally does the daily failure of the health care system to care for Indigenous bodies make national news. While historic examples of the system's violations include unethical nutrition studies (Mosby, 2013), tuberculosis studies (Lux, 1998), drug trials (Lux, 2017), there is much more that goes unreported (P4; Turpel-Lafond et al., 2020). Consequently, the legacy of this violation often falls on the shoulders of Indigenous health researchers who are required to both clean up the mess created by the western research enterprise and chart respectful and collaborative research practices. Indigenous scholars are penalized and scrutinized because of the mistakes made by the system in the past (P4). Furthermore, there's a fundamental disconnect between what the western research enterprise rewards and incentivizes and FNIM researchers who are invested in addressing the profound

health disparity. The necessity for Indigenous health researchers to operate within the western framework does not align with the values, epistemology, and the goals of western research practices. For example, there is a real reluctance to name racism and genocide in the health research funding system (P1). Subsequently, the gifts and insight of Indigenous health researchers are often not valued or acknowledged by the colonial research enterprise including by universities and funding agencies.

The Western research enterprise presents itself as neutral, objective, and the measuring stick of high standards, but this veneer crumbles under the scrutiny of those subject to the system's colonial harms, and exposes the biases within. Since Western academia is generally grounded in individualistic motivations, the Western notion of an academic cannot encompass what Indigenous scholars do, who they are, what they are. Western academics' lives may not be complicated by the research; perhaps the data is just numbers, or just words on a screen. Individualism and competitive self-promotion (and the dysfunction that goes with it) is rewarded (P3, P9, P12). For example, the hierarchy of the academy sorts who is invited into important conversations and generates 'stars' researchers (P6). All the while, this western model of academia/research presents itself as the Standard Bearer or exemplar, ideal/ neutral and doesn't acknowledge its own harm. There is a pressing need to acknowledge the colonial oppression which forms the foundations of the research enterprise. The status quo is a machine, it does one thing; standardization determines/defines success and it's not addressing the issues or needs of the people (P6).

Not only does the system favour western research practices, but Indigenous health researchers are aware that "education is built for a particular mind and mindset. And all of us who don't think like that… it's not a fit. So, at each stage, those particular people who the system was made for obviously are going to get the

good grades, get all the accolades, get all the funding because they know how the system works 'cause the system was made for them" (P7).

And therefore, they are enveloped by a "good old boy buddy system that supports them" (P3) and provides access to backdoor funding (P2). White researchers aren't contending with the continuous stressors of colonization killing their families; "they've grown up in the English language. Their literacy levels are really high" (P3); they don't have the racial trauma of never feeling good enough. "We've worked 10 times harder, 100 times more obstacles but they can't truly acknowledge it 'cause they can't even imagine… what it's like to live in our lives" (P3). Furthermore, the Western research enterprise is not trying to change white scholars.

When Indigenous health researchers try to clean up colonial research mess with respectful methodology, it gets dismissed. Their methodologies and reasons for doing research are not understood or valued. The status quo is "what they like to fund 'cause they know they'll get something out of it. And when you want to push those boundaries and do something that is a little harder to put boundaries… or parameters around… it makes funders uncomfortable, it makes any kind of structured system uncomfortable…. They feel like it's a gamble if they're gonna fund that…. I was told that my work wouldn't work, that it wouldn't pass, that it was too qualitative and wasn't quantitative enough, that it wouldn't make a difference" (P7). Western research funders are comfortable with the standard quantitative biomedical research rather than community based action research that many Indigenous health researchers practice. "There's a general bias towards quantitative research because it's seen as more 'objective' if you believe that that's possible. I was trained in the social sciences so I [believe] that no one can really truly be objective. But I think that yeah, applications that are based on more quantitative methods are probably more likely to be

"We've worked 10 times harder, 100 times more obstacles but they can't truly acknowledge it" (P3)

successful. Obviously, it does depend on the quality of the proposal as well. But there seems to be a bit of a bias toward that I would say" (P8).

Indigenous health researchers are invested in creating change and responding to the health needs of Indigenous people and yet regarding topics and methodology, "I would say that community based research is probably a little bit less likely to get funded" (P8). As a PhD student in a methods class, P12 used an Indigenous methodology, and it was treated as less valid or "this fake made up one… this is how people think of it" (P12). CBPR whether conducted by Indigenous or non-Indigenous is still really challenging to mainstream academic research programs, CBPR is still confusing to the western system (P11). Indigenous health researchers are trying to do this research in a respectful way drawing from community interest, but their practice is not seen as legitimate or as valid as the western ways of research. "It breaks my heart that we have to continuously prove to CIHR that we have valid ways of knowing and that our ways are worthy of respect" (P11). These challenges faced by Indigenous health researchers are magnified within a broader academic university context that often marginalizes Indigenous academics.

i. Hostility

Anti-Indigenous racism has been the greatest disappointment in the careers of (many of) the participants; "whether it's [our] day-to-day interactions, existence in your own divisions, departments, universities, or promotion and tenure… getting it versus being denied" (P9). The academy can be duplicitous, "saying that they want somebody with… experience on intergenerational trauma or lived experience. And then when we apply, regularly we don't get hired" (P1). P4 identified their greatest disappointment as "realizing I am all alone, realizing I had to do all the work myself was hard and it was a struggle" (P4). Indigenous health researchers are subjected to

"It breaks my heart that we have to continuously prove to CIHR that we have valid ways of knowing" (P11)

unpaid, unrecognized labour and not being seen as equals (P3, P4, P9) which shows up as hostility (P1, P3) and being ignored (P6). "They really try to erase us, get rid of us, not have us speak" (P3). As P4 pointed out, "unconscious bias exist[s] everywhere" and we cannot assume everybody is an ally (P4). Within the system, "there is an element of just straight up anti-Indigenous racism… all relating back to that horrible rhetoric of like the lazy Indian" (P9). For example, P7 was told they probably wouldn't graduate. But yet, given the opportunity "we are more than capable to compete, but the system is not designed to support our competence" (P11). Indigenous health researchers are reduced to second class citizens remaining at the margins, with their voices being muffled (P1). Indigenous health researchers are not recognized as experts; "when I started, I was told [by a non-Indigenous academic] I gotta work twice as hard to be respected" (P10). Yet when they succeed at making a difference, the system subsumes it as their own and takes the credit (P3) and their contributions to and challenges of the academy are trivialized as a personality quirk (P6). "When you try to call somebody out and they're a senior scholar or they hold power in places you're shunned to the side" (P10).

ii. Overstretched and run ragged

On one hand, Indigenous health researchers are seen as inadequate, and yet are often overburdened (P3) with competing demands that impinge upon their ability to focus exclusively on research (P4). "We're already overwhelmed, overburdened and have all these other losses going on" (P3). FNIM researchers fill many demands besides research (teaching classes, educating faculty, dealing with institutional racism) and are compared to non-Indigenous faculty who have dedicated research positions (P4). FNIM researchers are "being overtaxed and overworked in other areas, that is not allowing us to focus the time necessary to put in a grant" (P10). Whereas their non-Indigenous

counterparts "dedicate their life to research, they get grants all the time because that's what they do and they… know the wording, they know the process, they have the time to do those things. Whereas I don't have that, I don't have a research assistant. I do it all by myself. I don't have… dedicated research paid time in my position" (P4). This is not uncommon; P12 also has no paid research time within their faculty position. Non-Indigenous researchers can exercise entitlement to the time and insights of Indigenous health researchers. "We get pulled in a lot of different directions. A completely non-Indigenous group of scholars, they'll come in, they'll say, oh, we're doing this policy, can you guys have a look at this and give us feedback on this? And you know, oh, and like we're trying to do this. Can you look at this?" (P13). Contributions from Indigenous health researchers are not consistently properly attributed (P3). "The unpaid, non-recognized labor of being on like four times more committees than our non-Indigenous counterparts. Like that alone could potentially be okay if it was recognized, paid for, teaching release like you know, that could happen but it's the fact that it's not which is rooted in anti-Indigenous racism" (P9). The system takes your time and energy and yet little changes; in fact, change is actively resisted (P6).

iii. Lack of mentorship

Many FNIM researchers do not have access to sufficient mentorship (P4, P6, P7, P9, P10, P13) and therefore access to feedback on applications (P7, P12), P10 explains that they "didn't have the proper connections, networks, the right questions to be asked" (P10). A lack of mentors is exacerbated by "so many fewer Indigenous academics, [and] the ones that do exist in this space are beyond capacity because they have to do their role, then they have to do their advocacy work within… the academic space, but then also the Indigenous space…. And because there are so few, all of us up-and-coming Indigenous students are looking for those Indigenous mentors and they can't take all of us… I think that's both a barrier and a gap" (P7).

So many of the FNIM researchers are "not as far along in their careers" (P2). Consequently, Indigenous graduates cannot find mentors in their "exact arena to learn from… we may not have had enough mentorship from non-Indigenous supervisors, non-Indigenous committee members in [our] respective graduate degrees" (P9). Mentorship is needed at the undergrad level (P7). "We have to find better ways to lift up… Indigenous young people… give them tools, give them the funds they need, help them to be put in spaces where they can really create and innovate" (P7). On the whole, mentorship was almost non-existent, with the odd exception, "I credit much if not almost all of what I know… to programs like the NEIHR… that crew is what… sent my knowledge on a steep incline… otherwise, it would have been very slow learning, not understanding certain ins and outs, not knowing what scoring means… I learned that all from them" (P9). The NEIHR model ought to receive abundant support, especially given how rare and needed mentorship is among FNIM researchers.

iv. Ethics

Not only do FNIM researchers lack mentorship, but they are also asked to provide mentorship for established non-Indigenous researchers, even as graduate students and early career researchers (P3, P4, P7, P9, P12). Some university REB don't have a robust Indigenous lens on research ethics (P1, P4, P8, P9, P10). P9 ended up teaching the research facilitator about strengths-based approaches, OCAP, TCPS Chapter 9, reciprocity, appropriate payment for Elders, etc. Institutions vary in their support for FNIM researchers. P4, P9, P10, and P12 lacked institutional support informed by knowledge about research involving Indigenous communities. Research ethics boards are also "challenging… we have to argue with them to get them to agree with us paying Elders honoraria… the gifting, we have to be innovative about the language that we use… they're definitely not on our side. And they don't seem to want to learn, either" (P1). The current institution where P9 is faculty lacks a "robust… Indigenous lens on research ethics…. And so… I might be doing bad Indigenous research, and I

don't know that they would know that" (P9). P5a/b also talked about the dearth of reporting systems and resolution mechanisms for people who have identified a racist incident and to improve system response. "There's a poor mechanism for communities and researchers to go to if there's unethical activities happening" (P10).

v. Tokenization

Indigenous scholars are demoralized through frequent tokenization on grant applications (P1, P2, P3, P4, P7). Indigenous scholars are left to wonder if their meaningful, substantive inclusion risks the credibility of non-Indigenous researchers (P7). "I have been added to applications only so that I'm an Indigenous name on the roster. This has happened multiple times. I am the token Indigenous. Yeah, they don't want me to say anything. They just want my name and my tribal affiliation to be on their application…. And if I speak up, I'm told 'oh it's almost like a pat on the head, oh thank you, that's enough now, you can be quiet now'" (P7). P3 was brought in to pad someone else's application, and then didn't hear from them once they were successful with receiving the grant and the money was awarded. P1 was included in a project "just to tick a box off to meet the criteria" until unexpected life events made their involvement less convenient and then they were dropped. Participation is conditional; presence and participation are managed and regulated (P6). Token invitations waste your time, they don't really want to engage, they squeeze in an Indigenous focus and don't follow through, because you never hear from them again (P6). P2 said "nothing about us without us should mean that you have Indigenous people on your research team and not just be a team of non-Indigenous people partnering with the community." Obtaining a letter of support from the Chief doesn't necessarily mean the community is onboard (P13).

> ***"They don't want me to say anything. They just want my name and my tribal affiliation to be on their application" (P7)***

vi. Essentializing Indigenous Knowledge & Identity

FNIM researchers raised concerns about which Indigenous person speaks and makes decisions on their behalf (P5a/b) and whose knowledge informs research (P2, P3, P5a/b, P9, P10). Pan-Indianism, such as when Indigenous and non-Indigenous health researchers "just add a dreamcatcher or a medicine wheel… or Two-eyed seeing that just really messed up the way in which we do health research" (P10) and become a convenient way of ignoring local Indigenous knowledge and foregoing the work of establishing meaningful relationships. There is a "growing concern that… people who identify as Indigenous are being put in position to make decisions on behalf of other Indigenous people but some of those people have no lived experience, no strong connection to community" (P9). For example, concerns that Indigenous people who don't have "a lot of connection to community, language, and culture" (P5a/b) yet are sitting in powerful positions. People in such positions really need appropriate "knowledge, expertise, and lived experience in community" (P5a/b). This acknowledgement of the importance of "lived experience… needs to be the criteria. We need to prioritize the Indigenous who have grown up in the community" (P3). Because there are "some big red flags from an Indigenous perspective of like you have one person you're calling a knowledge keeper, but their identity doesn't even fit the knowledge their communities they're teaching knowledge from and like just this looks wrong" (P2). It's important that researchers are transparent in their knowledge and who and where it comes from (P10).

vii. Identity Fraud

In light of identity fraud in recent years, this awareness demands that institutions and universities ensure that projects dedicated to improving Indigenous lives are led by

Indigenous scholars (P1). Non-Indigenous institutions have an obligation to understand how they might be manipulated by individuals claiming a fraudulent identity (P10). The controversy around Carrie Bourassa has heightened awareness about the importance of universities and institutions developing transparent policies and procedures that determine "who can qualify for these Indigenous opportunities" (P8). These questions of who qualifies as Indigenous raises further dilemmas for Indigenous health researchers who want assurances that CIHR will take measures to prevent fraud (P4). They ponder what experiences one has to have had to be Indigenous. "I think that many of us have our own worries or self-questioning of authenticity, like who is truly Indigenous, like what are those experiences that you need to have had to be" (P9). The consequences of identity fraud have penalized Indigenous health researchers. P2 spoke to the complexity of who counts as Indigenous, and "how much time [fraudulent identity cases] suck up." P4 talked about researchers with names that aren't identifiably Indigenous having their research scrutinized with the assumption that they aren't Indigenous. We now have to write how we are connected to the community and prove who we are which is an additional burden that others are not required to do. "There's extra supplements that I have to do that my non-Indigenous colleagues don't have to do. And I find that a hard pill to swallow" (P11).

C. A Responsive CIHR

Indigenous health researchers acknowledge that CIHR is engaged in making changes to better ensure their success with grant allocation. "In my limited interactions with… the CIHR funding model it seems to me that there's been a positive change in the things that are prioritized and valued" (P8). P11 has been involved in seeing institutional structural changes and transitions and therefore CIHR is capable of change. Indigenous health researchers ignored by funding agencies, are getting more attention now (P3). "CIHR definitely has a focus or an understanding that

more needs to be done" (P13). "I see real efforts to try to improve the understanding of Indigenous involvement in health research." (P13). For example, "I really liked… the phased thing… [where] they were inviting people from the community, with no education… credentials, to join and… make relationships, I think that's really important. They did remove some barriers in that sense, but perhaps reducing even more barriers in some way" (P12). P11 & P12 were positive about the info session webinars CIHR provided ahead of grants; "Sometimes when there's a big call, there'll be… an opportunity to have questions answered beforehand, and… even those don't necessarily feel like there's a chance to ask the questions that you really would need answered" (P6). "There's been a move hopefully toward more resilience based research to prioritize those kinds of topics, which I think is great" (P8). The change that is needed must go beyond merely changing forms (P6). It requires substantive change in collaboration with Indigenous health researchers where Indigenous health issues are a priority.

Indigenous health researchers provided many insightful ideas of how CIHR can continue to respond to their needs, including ensuring there are Indigenous administrators (P13), providing spaces "where we can have hard conversations ethically" (P10), hiring guides to assist people with the application process (P6), developing mechanisms for CIHR accountability to Indigenous communities participating in research (P4, P10), collecting feedback from researchers to improve processes (P4), and prioritize FNIM researchers who are local to the communities in which the proposed research is happening (P1, P3, P6).

i. Targeted Funds

There is unanimous support for Indigenous health targeted funds to go exclusively to FNIM researchers (P1-P13). There was a range of insights and nuances discussed: "I can't see any reason why that shouldn't be done. I can't think of any drawbacks in my head. I can only think of positives" (P8); as expressed "that would be amazing. But… if there is going to be a pool of money for us it needs to have Indigenous voices

involved… not just… because it's trendy or as a check box… [but] that they understand what is involved with supporting Indigenous research so it's not just this 5-year funding pot and then… it's gone. It [needs to be] a sustained system where Indigenous researchers can really feel that their work will be acknowledged" (P4). P6 also said Indigenous voices need to be involved and P1 suggested developing an Indigenous council to adjudicate targeted funds and ensure OCAP is being followed. P3 also asserted "Absolutely, we need targeted funds" explaining that if the targeted funds are based on Indigenous people constituting 4.9% of the population, that is more of an equality initiative, whereas "if there's any bone of ethics," equity would take into account health disparities to increase that number for 20% of funds. Concerns about "what happened to the Indigenous-targeted dollars that weren't allocated to Indigenous communities and to Indigenous grants? I think they just got sucked up and went into the general stream and never came back to us" (P11). Although P13 wishes for a day when targeted funds are no longer necessary, in the meantime, "we do have a disadvantage in terms of access to those funds" (P13). But there were also concerns that targeted funds might have the unintended impact of Indigenous scholars being declined from the bigger pot of money because targeted funds exist (P7). A shift is happening away from non-Indigenous researchers getting Indigenous health research dollars, but "we also shouldn't be getting grants simply because it's an Indigenous grant" (P10). P9 recognizes the risks of targeted funds being used to dismiss and undermine FNIM researchers through the perception that they only got funded because the targeted funds exist and not because their project/application deserved it, i.e. "you probably got that because you're Indigenous" (P9)? While support for targeted funds was unanimous, these nuances need to be considered.

Identity issues concerning targeted funds are also nuanced. For example, Indigenous funding is fine, but there needs to be some consideration of the specificity of First Nations, Métis, or Inuit since there are differences (P2,

"Absolutely, we need targeted funds" (P3)

P12). P11 named the increased work required of Indigenous applicants to prove their Indigeneity. "Often calls on special topics… don't necessarily say who they want doing the research" (P6) and it is imperative that clarity regarding identity criteria for targeted funds and positions earmarked for Indigenous recipients are adhered to because there are "so many ways to work around criteria and make something else fit in… what starts off as a really good idea can end up in a really strange space" (P6). P4 raised concerns that initiatives are quickly opened to everybody instead of keeping it for FNIM researchers. Concerns that "they awarded funds because no Indigenous people applied… it's interesting… how things like that happen… I can see where there's space for abuses of that system" (P7).

Non-Indigenous researchers can do good work on Indigenous health, but this should not come from targeted funding pots (P8, P9). The need for researchers of Indigenous health must be supported. "We're already so overstretched… we really need good people to join us…. And I find it exhausting to work with non-Indigenous colleagues who need to apologize for being non-Indigenous… if you're working with us, know who you are and why you're here… [and] the gifts you offer… and use them in whatever way they're needed and not impose… your ego" (P11). Effective non-Indigenous allies work within their institutions to shift funds and power to FNIM researchers and organizations (P11). Non-Indigenous scholars need to exercise humility and not put themselves forward as experts of Indigenous health when they don't even know the basics of the history, such as Indian hospitals (P1, P3).

D. The Application Challenges & Recommendations

i. Request For Proposals (RFP)

Indigenous health researchers raise concerns about how and who determines RFP's priorities (P5a/b), they do not want RFP's that are subjected to trends (P4), or based on examining

deficits (P9, P11), or pigeonhole community needs (P13). "Sometimes we get pigeonholed… CIHR has like a strategic area. And, of course, we want to do research that's meaningful to the community and sometimes we describe it in a certain way so that we can access funding that's been described a different way" (P13). P6 said they "could see applications that people had taken… research and they were trying to squeeze it into a call. And to me, they were adding Indigenous like that mix-and-stir afterwards, to say, 'oh, I can fit it into this call'... the folks who were reviewing it had been reviewers at CIHR for a long time, and as such, when you step into a culture that there's a machine to it already, that you're like okay, I feel how this is gonna work…. It becomes a game of who knows how to make it work, and it's no longer about the work." The CIHR gender analysis prioritizes a western lens to the exclusion of Indigenous gender perspectives and expertise (P1, P8). Researchers recognized Sex and Gender Based Analysis (SGBA) as important but having it frame and be such a huge component of every single grant is really limiting and somewhat of a barrier (P8).

CIHR also focuses too much on the symptoms rather than the cause. so we need a more social determinant focus. This focus on deficits rather than strengths restricts proposals to a focus on where people are experiencing harm (P9). For example, "some health priorities that are highlighted, cancer, addictions, mental health…. We see a lot of that within the Indigenous spaces. It seems to continue to focus on this deficit pathologized spaces of what's going on" (P10). Whereas FNIM researchers wish to bring a strengths based lens even when the RFPs might not be seeking that (P11). FNIM health researchers value approaching topics from a strength based perspective (P8, P11, P13).

The turnaround for RFP is often too short, and doesn't allow for proper community input & relationship building (P8, P10, P13). Otherwise, a rushed application process contributes to the violation of Indigenous research processes. The community partners are busy with frontline, urgent, sometimes life saving work, and to bring them into the process of applying for research funding is a substantial request (P8). "With a lot of these grants they're written so quickly because of the grant call they don't have a lot of time…. It's almost rushed" (P10). And so "time is probably one of the biggest barriers" (P8). Indigenous health researchers want more notice that the RFPs are coming down. P3 suggests putting RFP's earlier and giving more notice as to what is coming, to support more planning in advance.

ii. Mechanics of Application

The process of applying for funding is so complicated and difficult (P5a/b); confusing and onerous (P8). "It's such a big machine... government funding" (P7). The application process is intimidating (P7). P6 said "It has not been my experience that I can easily reach out and have somebody guide me through that process." "There's… a lot of secrecy for the applicant to understand the process from when the application is put forward to how it's adjudicated" (P1). CIHR's website is quite tedious and hard to maneuver through. So, it was very, very stressful" (P7). P5a/b spoke about "how convoluted it is to come up with the pins and putting in your CV, like all of that was quite difficult for me to navigate. I'm not a university academic by any means, but I'm also not a simple person. I like to think of myself as semi-high functioning and I found a lot of that hard to navigate." "It's frustrating… that you have everything lined up and then realize oh you need someone's signature here and you need this letter of support there. It would be really nice to have that in the checklist to plan ahead" (P7). P12 found "in terms of the application process, that was a whole part-time job, figuring out the application and getting everyone to sign things."

"In terms of the application process, that was a whole part-time job" (P12)

There's an "arbitrary gold standard of what an application looks like and it's an impossible measure if no one can show you actually how to do it. It's like an invisible curriculum conversation all over again, right, but it's even a

little more mysterious. So how do you navigate that?" (P6). "I wasn't writing it the right way" (P10). But the right way is elusive. Rather than the quality of the ideas, for an applicant to succeed, they must "really align with the language that's required on these applications" (P1) but this language is not transparent. "It would be great to see more mentorship activities for emerging scholars to see what a good grant [application] looks like…. We don't have [that] training" (P10). For example, advice on how to attain letters of support and who best to provide support letters of application (P5a/b); types of CV for different team members and roles on the application (P8) and acceptable timeline and budgets because even though they don't say it, that is what reviewers seem to actually want (P3). Examples of previously successful applications (P7) would be useful both for applicants and for reviewers.

E. Peer Review

i. Reframe Peer Review

Indigenous health researchers feel the dual pressure and responsibility of disrupting a colonial system while charting a way that is respectful and empowering for themselves and the communities they work with. In addition to being researchers, Indigenous scholars are not only engaged in cleaning up the messes of colonial research (Smith, 2012), but they also run up against a culture of peer review that is fraught. An examination of the peer review processes and operations highlight the need for a paradigm shift. For example, P13 described reviewers as punitive gatekeepers with the goal of finding flaws instead of finding potential. Such framing positions applicants as "constantly trying to prove the eligibility and the merit piece… this element of competition… can be a real barrier… that mentality of… when you're on a review, your job is to… make sure people don't get the money if they don't deserve it… versus… this money is here, it could be used to support priorities in a community, or

"We should have the ability as Indigenous researchers to determine who's going to be our allies to work on projects" (P4)

priorities in health research. What… can [we] do to make sure that it's… allocated strategically… to community priorities" (P13). Regrettably reviewers exercise a sense of superiority (P13). "It's almost as if we learn to take pride in knowing more and being better.... It's not a malicious thing. It's just human nature… [reviewers] look for what is wrong rather than what is right that can be built upon... every once in a while, we need to remind ourselves… What is the goal? Why are we here?" (P13). The peer review process shouldn't just be about deciding who is getting money; "it's also about growing a scholarship and growing a shared understanding of not just Indigenous health but Indigenous research" (P6).

As discussed earlier, what Indigenous health research means to FNIM researchers includes taking a strengths based approach such as "researching ourselves to life" (P11), honouring Indigenous communities through a focus on relationship building, and contributing to the development of impactful knowledge mobilization. FNIM researchers work to shift power so that Indigenous communities identify the research focus, legitimize communities as knowers, as worthy of holding grants, analyzing findings, and maintaining data sovereignty. These insights provide clarity on what Indigenous health researchers are trying to achieve: community impact, addressing health disparities, and action or policy change (P3).

In contrast, however, CIHR needs to clarify what is meant by Indigenous health research, and these criteria ought to be key in evaluation of grants applications. What qualifies a project as Indigenous health research? Is the mere presence of Indigenous researchers or subjects? For example, it was suggested that because the entire team was not all Indigenous, maybe they should not be doing research (P4). "We have allies, we should have the ability as Indigenous researchers to determine who's going to be our allies to work on projects" (P4). Indigenous health research entails more than adding a 'smudge' (P8) or

getting a letter from the chief (P13). Reviewers of Indigenous health proposals need to approach their analysis from the social determinants of health perspective (P10).

The pervasiveness of anti-Indigenous racism necessitates Indigenous health researchers and reviewers to develop a theoretically informed analysis of systemic and structural racism. "Anti-racism has become such a catch phrase that everybody's like 'oh I know what it is because I feel racism,' and I'm like 'no… that's not what it is'" (P10). On reviewer panels, anti-racism gets misidentified when it lacks a power analysis (P10). "I just reviewed a paper the other day on cultural safety and anti-racism training and... there's not one analysis of power… how can you say that this is anti-racism when you're not even looking at power... and your quotes from your people are talking about how they got treated by individuals not the system?" (P10).

To be prepared, reviewers need to receive high quality education on "anti-racism, cultural programming, identity, community engagement" (P10) and cultural safety and decolonization (P7). Teaching people not to be bad, or just bringing in an Elder, are not examples of anti-racism (P10). To decolonize and to work towards Indigenous health, non-Indigenous health professionals need to integrate concerns for Indigenous health into their "regular thinking pattern" (P4). "There's gotta be more work around… bias… it's hard to bring awareness to these biases that you grow up with and are part of [the] very… fabric of who you are" (P7).

ii. A Flawed Process

Reviewer Bias

Grant review often depends on who is in the room (P2). The peer review scores for more established/familiar scholars get inflated. P9 observed more established and well-known researchers being assigned a mark that gives them the benefit of the doubt based on reviewer familiarity with the researcher, even when the application was not well written. "High impact names don't really exist yet within Indigenous circles" (P7) so when peer reviewers are

seeking that status, FNIM researchers are at a disadvantage. Consistent with trends noted in the literature, P4 observed that "most of the successful applications are by individuals that have been well-established in the Indigenous research community. They may have a particular name that's familiar. They may have a particular champion behind their application." Name recognition factors too highly in review. "We know each other so well and hold some people in such high regards and some people we maybe don't know yet and I think the folks who we hold in such high regards we've inflated their scores a little bit too because of that" (P9). Names matter: "That would be an interesting study actually. Putting forward the same grant under different names" (P9). "Like oh this is their first time applying for something versus this researcher with 100 publications. You know I can see how they would be not chosen versus others even though they're eligible" (P9). "For example, I have colleagues who are data scientists and they can buy a big data set from the province… and they can pump out… 20 different research questions with the same data set and publish 20 different papers… within months, maybe not even a whole year. Whereas… oh my goodness I got this latest… grant a year ago and it's next month that we start data collection" (P9). Building community investment, following community leadership, and receiving ethical approval take time.

The supposed neutrality of reviewers is called into question by instances of implicit bias such as when P9 shared about their own identity in the peer review space but then wondered if people interpreted their critiques of grants as less-than. "And if I were to say oh they didn't say X Y Z would they change their scores based on my saying of that, or would they only do that based on like the more senior White peer reviewer" (P9). "I know that people [say] oh well you probably got that 'cause you're Indigenous. Getting into the PhD program, oh you probably did that 'cause you're Indigenous. Getting the faculty job at all, you probably got that 'cause the university wanted to hire Indigenous people.. .. So, all throughout the whole process there's this… assumption that you are where you are because of your Indigeneity and not because of

your qualifications, your smarts. Whereas non-Indigenous folks or like White academics and researchers they are where they are… because they are good enough and I wonder if there's some element of that in people's minds when they're assessing work put forward by Indigenous academics versus non-Indigenous" (P9). FNIM researchers are concerned about people in power who may use their status to inappropriately deny a grant because they don't value it (P4).

There is also bias against community based research. Applicants ought not to be penalized for vagueness if part of the research process will include determining the outcomes of the research based on community insights (P8, P12, P13). Reviewers must understand the difference between "being ill prepared as opposed to being respectful" (P11). Can't predetermine everything about the application before getting community input. It's about the system ideals.

"I think academics and funders are often uncomfortable with anything that looks a little bit different or has space for emotion or relationship" (P7). Reviewers favour "the cut-and-dried, here's your timeline, here's your funds, here's exactly how you're gonna spend it, and here's gonna be your results, and the funder is happy. It's predictable. It's very rigid, you have to follow a very strict protocol in the research, and I think that's what funders are comfortable with 'cause they know they'll get something out of it" (P7). Feedback P2 received suggested the project needed a control group, which was quite inappropriate feedback for a community project, and demonstrated a lack of understanding of community health and evidence that positivist approaches are prioritized.

Considering bias against unusual or innovative research, "the majority of the conversation always came back to the budget, and it was never about the caliber of the research or of who was doing the research…. To me it was like

who could do the best construction on paper… I never felt like there was a real conversation around Indigenous methodology or the novelty of the research. It felt to me that they were looking for a certain look and feel to an application" (P6). Yet, creative and original work doesn't make it into the criteria (P6). For example, as a reviewer, "in the whole 2 days, there was only one proposal that made me go wow… This is really novel. [where most proposals felt] very similar… that [research] reproduces itself and I remember reading that proposal and thinking wow, 'cause the proposal wasn't successful but I remember thinking that scholar with support is really onto something… and could really use that support but that's not where the peer review process goes, there's a grade assigned, and everybody moves on to the next one" (P6). This is an example of how the dysfunctional status quo gets reproduced.

In the past, white researchers studying Indigenous health "would get the money because they were able to write about the research in a way that was familiar to the other White peer reviewers. It was like this is high quality, this is recognizable" (P11). Non-Indigenous reviewers do not understand the complexity, innovation or originality because they're using a western research framework, and therefore may not recognize the necessity of a multiplicity of approaches/frameworks when working with multiple nations/Indigenous communities; and therefore might even penalize applicants for having "too many frameworks" or being "too ambitious" (P11).

Topic Bias

Reviewers don't understand the commitments researchers have to community generated knowledge. Community leading the focus, which the application process doesn't allow time for. If research is to benefit Indigenous people/ communities, they have to have ownership of the objectives and goals of the research and

"When you start talking about… racism or inequity or ways that institutions need to be accountable, that's… a no-fly zone" (P6)

they have to buy in, see themselves in that research.

Creativity and originality of application is not valued, there are favoured topics and other topics that are discouraged (P6). P4 talked about their research area only being seen as relevant if it was trendy in the media. Topics are only valued when non-Indigenous researchers show interest (P1). While issues in the media get funded, there is no mandate to address the big, long standing, systemic issues which are not a quick fix and institutions don't want the burden (P4). They go for what is splashy, what it's going to look like, what will get media awareness, and what is connected to existing proposals, networks, collaboration in the big world of academics and science (P7). For example, "people love to support breastfeeding research when we don't necessarily need a whole lot more breastfeeding research. When you start talking about… racism or inequity or ways that institutions need to be accountable, that's… a no-fly zone" (P6). P3 sees a lot of cultural interventions being prioritized. These interventions can be problematic. They fund cultural interventions, applications that use culture as part of healing (P3). Biomedical research is highly valued (P1). "I feel like there's a lot of funding for the clinical side of research and not very much funding for the story and relationship and value side of research. Those other sides of that, you know, the quadrant of the four aspects of wellness. You know, we just focus on the science-y side" (P7). For example, research on HIV from a western science perspective gets funded (P2, P9). Rather than holistic research, there is a narrow focus on a body part or a specific illness. "It's less about the topic. It's more about feasibility" (P3).

"We don't benefit from any of the research that's really been done… once it [is no longer] a trend" (P4). P4 was speaking about Joyce Echaquan's death and how funds get focused on a "reaction to an event." P5a/b similarly discussed Joyce Echaquan's death, reflecting that "it's never

"We don't need to survey Indigenous patients to say '[do] you experience racism?' We already know" (P4)

about needs based, it's about what gets the attention…. I'm not finding that the call for proposals or call for researchers is based on need coming from the community but rather interest from the academics." P12 observed a non-Indigenous mentor who, although very knowledgeable, suggested research that would replicate existing research to provide further evidence of racism in health care. "That's the kind of idea that came out of a researcher who has so much knowledge but is just not connected with the community" (P12). Although it might be fundable, research into the existence of racism in healthcare is a waste of time. "We don't need to survey Indigenous patients to say '[do] you experience racism?' We already know" (P4). They fund educational initiatives, but why, when it's in our mandate to learn basic things, we advance reconciliation for non-indigenous people, they get paid to figure out how to reconcile (P3). P4 stated that funding gets focused on "what do we do to prevent what has happened in the last 5 years. Not how do we address colonialism that's been around for 200 years" (P4).

Research applications must be informed by Indigenous knowledge and should have priority not be secondary (P1). A concern that community projects don't seem as likely to be funded (P2). Topics are not necessarily addressing the problems at the community level (P10). There should be funding focused on addressing complex issues with no easy solution. Research focused on solutions to social issues like accessing clean water, housing, social conditions, suicide, MMIW, and gang violence need funding (P1). Yet, there is an awareness that institutions may also be reluctant to take on colonial outcomes: "they don't wanna be known as… the institution that's tackling murdered Indigenous women or… sterilization practices or… clean water because then… do they have a greater responsibility… what's gonna come next?" (P4).

Indigenous scholars see interconnections and the broad picture: P10's research straddled

social sciences & health and while they could clearly see the connection that their research area was health focused, this was not yet clear to the CIHR reviewers. P1, P2, and P6 mentioned similar experiences. Indigenous health researchers understand the importance of research that is holistic, believing "that we're not gonna be well and we're not gonna return to a state of wellness until we can add in those other aspects of mental, social, and spiritual" (P7). P7 recognized that community wellness or broad wellness won't happen until mental, social, and spiritual wellbeing is prioritized. This holistic perspective doesn't fit into the existing tri-agency boxes: "You call health and they say no, your research is SSHRC, and… there's a problem here if health and SSHRC don't see themselves as related, especially in Indigenous health research, then we have a bigger problem. So, it's very siloed and I feel like if we're gonna break barriers down, then there needs to be new paths" (P6). Indigenous research "cuts across the tri-councils. There has to be a better way of communicating across these tri-councils. Indigenous methodologies are about power dynamics and trying to understand a system from a whole bunch of different perspectives at one time" (P10). There needs to be a restructuring of the distinctions between the tri-council and the interconnectedness of Indigenous lives, between the physical environment, social issues and health.

Career Bias

There is bias against the career trajectory, methodology, and focus of FNIM researchers. This bias becomes evident during the evaluation of the applicants' CV. Concerns that the standard CV format isn't evaluating what it needs to (P3); it doesn't provide opportunity to showcase strengths and work beyond publications (i.e. community connections, policy change work not valued on CV). Application process doesn't value or provide an opportunity to showcase our full strengths (P1). It's hard to fit into a template that gives full value to one's work in an application process, when it includes community engagement, qualitative, story based and connected to culture (P7). CIHR should recognize the colonial roots in the differences

between Indigenous and non-Indigenous researchers and tailor the process for Indigenous researchers (P4). For example, CIHR could adjust CV requirements so community involvement and lived experience can be a valued component than a footnote at the bottom (P2, P7, P8). The system rewards researchers rapidly churning out publications whereas it takes time to do community based research (P9). Currently, the number of publications a researcher has to their name gets seen as an indicator of a worthy applicant, but merely churning out papers must not be valued over the time-intensive and deep challenge of building and maintaining community relationships (P7, P9).

It is challenging for Indigenous scholars to articulate their lived experience within the limitations of the western colonial application form (P1). For example, P3 set up a review process for a regulatory body, and despite this taking a lot of work and leading to significant change, it is not really recognized by CIHR. P3 said "actually, it's so much easier to write a paper." For community-based research grants, CIHR needs to adjust its CV requirements so that those with robust and long-term community relationships are valued. Revising the CV by raising the profile of the community contributions rather than making it a footnote, might thin out the comparison of white men who have 30 years experience with 20 million in grants (P2).

FNIM people fall between the cracks in categories of career progression because of unconventional journeys through the academy because of changes in position, moving institutions, family obligations. Those of us who work in professional colleges and are active professionals are not full time researchers and that needs to be taken into account (P4). Sometimes Indigenous scholars don't follow the conventional career trajectories, making it difficult to situate them in terms of early career categories - if for example they move institutions or have multiple leaves, that may suggest they've been in the position for longer than they have (P2, P9). Building the CV carries an enormous amount of capital and building it has to start during the graduate program, where

some folks are poorly mentored. Relatedly, a disparity in networking, both as graduate student and early career researcher becomes evident within "a big institution or big organization [where] you have a lot of scientists at your back who are ready to just slap their name on something and then you have a really good shoe in" (P7), such that if you are not a known applicant - how do you get "in" (P4). P10 attributed past unsuccessful applications to lack of proper networks, connections, and experience. Indigenous health researchers need professional development on how to interpret topics and issues, and how to access grants, and what theories to mobilize (P10). Non-Indigenous researchers holding chairs in Indigenous health should be required to mentor Indigenous scholars to take over (P3, P6).

Misalignment of Expertise

CIHR needs a way to better ensure alignment of reviewer expertise with application content. Some peer reviewers don't have the appropriate expertise to evaluate the applications they're assigned (P6). For example, P1 & P2 were both invited to review applications outside of their respective research areas. "Within CIHR… when I think about who was evaluating, there were folks… from geography and there were folks from other disciplines, there weren't… a lot of people who were… health professionals or doing… health research…. There's… an assumption that when you come in as a peer reviewer that you have these objective skills that you can apply anywhere, and I don't think that's true" (P6). Vetting of applications needs to happen from Indigenous knowledge perspectives (P1).

FNIM researchers shared a concern that reviewers of Indigenous research are ill-informed to adequately assess applications. "We don't have reviewers who have the background… to evaluate the language… in the ways in which we are trying to change the health system. Then it comes out and it looks very amateurish" (P10). Indigenous health is not seen as a specialty (P3) and yet there is an implicit notion that white people have this all-encompassing neutrality, objectivity, and expertise that makes them more eligible to assess a grant application whether or not they're interested or have any background in Indigenous health. "They still treat our Indigenous knowledge as secondary and Indigenous applications if it's related to Indigenous knowledge, Indigenous knowledge should be primary" (P1). They don't understand our research; people who assess our research are not qualified to assess our applications (P4). "They see it as more common, and they think they have the appropriate background… like it's not a specialized area of knowledge" (P3). Indigenous health researchers don't want to be evaluated by some settlers that may not understand the true potential impact of the research project on the community (P4). A shallow understanding of Indigenous research principles such as Chapter 9 and OCAP leads to reviewer reluctance to fund research that might be controversial and consequently an overreliance on approving proposals by familiar, established researchers (P4). It's important that reviewers have knowledge of Indigenous communities, because "there's a danger in having folks [without community knowledge] making decisions on behalf of communities when they don't understand the paradigm and the way of life there" (P5a/b).

"They still treat our Indigenous knowledge as secondary" (P1)

As mentioned in the Essentializing Indigenous Knowledge and Identity section, reviewers are not equipped to evaluate the application of Indigenous theory in proposals. "I don't think CIHR health researchers have a strong enough… understanding of Indigenous theory… and they just kind of adopt them [Two-Eyed Seeing, Medicine Wheel] because they're more [bench] medical scientists" (P10). Consequently, Indigenous knowledge appears in grants in a very superficial way. For example, if a project is "only bringing [Two-Eyed Seeing] in as a cultural component, you're not actually engaging in Indigenous science… let's just put a little bit of feathers in here and say we're doing Indigenous research" (P10). P1 also mentioned non-Indigenous researchers co-opting and distorting

Two-Eyed Seeing to suit their needs. Reviewers don't have sufficient analysis to understand this misuse of theory. P2 suggested that CHR ensure some people on each panel understand what tokenism is and red flags to watch for.

Reviewers can't just assume they understand Indigenous methodologies. Raise the standards of what counts: Reviewers need to assess the fit of the applicant's methodologies. There is a need to "start pushing back against non-Indigenous researchers using Indigenous methodologies that they don't know or Indigenous researchers who've never been trained in Indigenous methodologies applying these things simply because they're Indigenous" (P10). "I think a lot of individuals that may have a PhD, may have a master's in health research methodology or just a PhD experience, don't really have the necessary insight or opportunities to really look into what an Indigenous research methodology is… and even specifically about OCAP principles" (P4).

There is a widespread need to recognize what Indigenous methodology means. People are confused about what is Indigenous research; "there is no critique on what a successful program from the Indigenous perspective is other than those that want to say 'ok, that's what an Indigenous person is supposed to do,' so that reviewers are looking for what they think makes a grant Indigenous, but they don't really know" (P10). What CIHR counts as Indigenous research must be clearly delineated. "Based on my experience, I don't think people understand us. I don't think people understand the methods and the methodologies, and I think there's a negative view… that it's not real research" (P12). Indigenous researchers are calling for better criteria, and better assessment tools for Indigenous research.

Showing Up Ill-Prepared

Indigenous health researchers raised concerns about the need to ensure adherence to established review procedures. There is

indication that reviewers are not being adequately oriented to the task, or "had not been given that respectful orientation to this is how it unfolds" (P11). P11 noted "the training and orientation to what to expect and what was expected of me as a peer reviewer was awful. I had no idea what it meant to be well prepared."

Witnessing a careless review of Indigenous applications contributes to a lack of trust in the review process. "Are people even going to read this?… Maybe I need to just make certain major areas so painfully bolded, maybe even highlighted in yellow, I don't know, because they just don't read it in full. And that confidence [of] saying something [inaccurate] with authority led to the other people on the peer review changing their scores… by a lot, like… I'll change my 4 to a 2.8" (P9). Reviewers need to be committed to reading applications.

As an Indigenous reviewer, "when I was… sharing my assessment and comparing it to others that's when I felt horrified… there's this culture of wanting to default to someone else who… might be more experienced or [is] up there on the hierarchy… people would say, really confidently in the review 'this application they didn't talk about this, they had no plan for that, they didn't do this.' And then I was 'whoa, that one was on page 37 in the second paragraph and that one was on page 50, where they talked about XYZ'…. And then they're 'okay sorry.' I'm like… did you read their application… truly? I don't think they did. I think it was a quick skim and then they're making these confident decisions based on limited information, which is impacting not only the careers of the researchers, but the people who would be impacted by the research…. So… I lost… faith in the process after being a peer reviewer just seeing how non-thorough people were with their reviews… they wouldn't have said so confidently they didn't do this, they didn't do that, if they had actually read it cover to cover, which I did and could call them out on these things… CIHR [needs to implement] some way to ensure that they know that the peer reviewers read every

"I don't think any of them read it in full… it wasn't just an isolated incident…. It was consistent" (P9)

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word… I don't know how to operationalize that but something that guarantees that it's been read in full… I don't think any of them read it in full… it wasn't just an isolated incident or one person or one grant. It was consistent" (P9).

Reviewers need to understand the criteria for the grant, particularly for applications from community organizations that do not have a dedicated sole Principal Investigator. The review feedback "impl[ied] that there was no clear PI or PA identified in our application which was a little bit contradictory from our understanding which was that the organization itself could be the NPA [Nominated Principal Applicant].... For example in the decision letter they sent us… it says Dear Mrs. [organization name].... So that right off the bat was very confusing and a bit of an indication that things were not as they seemed" (P8). Along similar lines, P6 received comments that "indicated to me that the person who was actually reviewing it didn't even understand the call." P11 was involved on a panel where the new reviewers did not seem to know what was expected of them. P11 also had experiences of being assigned to review applications "for Indigenous content, but I don't know that that's been really well explained to the review committee… there were somehow virtual eyerolls happening as I'm talking from an Indigenous perspective." The other panelists didn't seem to understand that this specific focus was a role that was assigned to them. More generally, CIHR needs to bring people together, reviewer training is key, reviewers need professional development on identifying and understanding key issues (P10).

Administrative Operations

Researchers expressed a lack of transparency regarding who reviews and how CIHR recruits reviewers (P1, P4, P5a/b, P6, P7, P10). P5a/b "had a lot of questions of who was on the selection committee of this work, how were these criteria developed?" "I have no idea how those panels are made up, of who and how many…. How long are they there, and how

"Who was on the selection committee of this work, how were these criteria developed?" (P5a/b)

much vested interest is in it for them. I've often wondered when I'm submitting proposals… who's gonna read this and what they're gonna think of this, if they're even gonna get what I'm trying to accomplish. But to me it feels like it's all secret" (P7). CIHR needs to increase transparency about who the peer reviewers are (P6). Understanding the racial identities of reviewers and staff might show important information about the broader story of Indigenous scholar success. P1 would like to see the collection and communication of racial background of reviewers and staff on both successful and unsuccessful applications. If there were Indigenous reviewers "among the grant panel…this needs to be known" (P9).

P10 agrees with the need to collect reviewer racial identity, but says it can't be to make quotas, which would lead to the wrong people being brought in to fill a quota. Implementing this change is complicated and some people will take offense (P7). There should be demographic data collected for CIHR staff & reviewers, but CIHR needs to recognize the limitations of simply checking a box without connections to a group (P3). Some people may falsely claim Indigeneity (P8). P4 would like to see an Indigenous identity expert at CIHR to ease their concerns about pretenders evaluating their application.

Researchers provided specific examples of operations within the peer review process which contribute to unfair decisions. For instance, CIHR told P8 that often reviewers don't change their review feedback to reflect what they heard in the group discussion, and therefore it might be inaccurate and possibly in contradiction to other feedback. Assessment categories like "exceptional" are not clearly defined, which "makes peer review feel very arbitrary… [and leaves] huge, huge room for subjectivity" (P11). Individual reviewers decide what in the application carries weight and a concern of reliance on irrelevant metrics like an applicant's number of publications without deeper analysis of the quality of research (P3, P9). Researchers

recognized that "if you're running a special call, you're doing something different, then there needs to be a more thorough orientation… to the peer reviewers. And I understand how challenging that is. I know that there's a lot of work and not a lot of folks available to do that work, but that doesn't mean that that's an excuse for poor work" (P6).

The value/importance of in-person peer review meetings was highlighted and contrasted to disconnect of on-line (P9, P10, P11). "I really believe in in-person meetings and the opportunity to read people's body language, to look across the table at each other, and [ask] did you wanna say something… we lose so much of that" (P11). P10 felt strongly that the shift to virtual reviewing has hurt the intensity and rigor of the process: "people have their cameras off, they're busy doing other things. Whereas if you're in a room, you're in that room and you can see, you're more focused and paying attention…. [In virtual reviews] for the most part you're not paying attention unless you're one, two, and three…. Being in a room would allow for deeper discussions on the grants" (P10). In-person review would also foster stronger relationships among reviewers. "It would be nice to know these people a little bit more before you enter into that situation…. I do think it would be better if there was a deeper relationship in the peer review community" (P13).

iii. Application Feedback

Indigenous health researchers' experiences of receiving feedback were mixed. Some received minimal feedback or even just a score without any comments (P1, P7). Some received incorrect feedback (claiming they submitted fewer CVs than they had - P8; claiming they didn't use a decolonial approach when they had - P8). Some feedback was confusing, and some was helpful. CIHR ought to ensure that the review feedback is consistent, accurate, useful, and reflects the discussion among reviewers. "The first time there was some feedback. The second time it wasn't very helpful at all. It was just like a score without any comments, so how do you know what was missing" (P7). Initially just simply denied, received no feedback (P1,

P5a/b, P10). Lack of feedback to rejected applications is frustrating when it's so time consuming to put in a grant so feedback is necessary (P4).

Reviewers need to be briefed on unique criteria for each grant they are reviewing to overcome the disconnect between eligibility and reviewer feedback (P5a/b, P6, P8). In some cases, feedback demonstrated a misalignment of reviewer and applicant understanding. For example, "the… feedback that we got was basically that our goals were too vague. And while… yes… we could have been a little more specific, we also struggled with this because… we couldn't really put together a specific application without being able to engage the communities that we serve… that was the whole point of this phase of the grant…. If we were to just make something up that wouldn't be doing community led research…. That would be doing just what we thought was valid and valued which is not really what we're about" (P8).

Reviewers with no connection to Indigenous communities are bestowed with the authority to evaluate Indigenous health grants, "I just felt this person has no connection to Indigenous community whatsoever" (P11). Some feedback is inappropriate when it is clear reviewers don't have an understanding of Indigenous communities and research methodologies (P4, P7, P11). P11 received feedback that was inaccurate at a "surreal" level, "this crazy feedback that we were wrong in the way that we had identified housing as a crisis." P4 and their Indigenous co-researcher received feedback that they were "not applying Indigenous research principles, but we are and when we ask them to elaborate, no feedback… I don't know what else I can do to… access this important funding." P4 and P6 had reviewers' comments indicating they had no understanding of OCAP, and P3 observed researchers' resistance to investing in understanding OCAP even when involved in conducting Indigenous health research.

Indigenous health researchers valued informative and clear feedback identifying strengths and ways to improve the grant application. "We applied and we weren't

successful… and we got some really helpful feedback… we could learn from this" (P8). Whether they are successful or not they still want to understand the feedback and see it as a form of mentorship to develop stronger applications (P6, P7), particularly with novel proposals (P6). P12 received a Phase 2 grant, and the feedback was useful, but although they were successful, they would have liked to ask questions about the feedback. In another example, (P7) shared that in the last grant, the content of the feedback was "encouraging… add to this and shape this better… and this would improve your scores…. That feedback can be very powerful… it's providing mentorship to people that potentially don't have anyone that could help them shape their applications and proposals, so, it's an opportunity to build better proposals" (P7). Similarly, P12 "liked how there were multiple people that reviewed… so I could see reviewer one and reviewer two comments… [which] I found helpful. I also found it refreshing when I could see how they disagreed... I [accept] that feedback, but I see how this [other reviewer] didn't care about that. It was helpful but also confusing."

Some feedback impacts the applicant differently depending on the positionality of who is providing the feedback. If an Indigenous reviewer says "there is limited cultural safety and competence throughout the proposal… I would take that… comment a lot differently coming from a non-Indigenous person than… from an Indigenous person…. You just interpret [each] differently… and I think that's fair" (P8).

An Indigenous organization received feedback that their application lacked cultural safety and a decolonized approach, but the application was written from a decolonizing approach (P8). For example, "reviewer one was saying… 'there is no mention of the impacts of colonization and the need to take a decolonized approach'… I don't even know how to take that… because… even the structure of our governments… we're not being led by one person; we're being led by people from each organization. We make decisions based on consensus as a group and we're community led, not researcher led. To me

"The application took a huge, huge effort" (P8)

that's inherently a decolonized approach…. If you don't think that the way we do our work and that what we're proposing is based on a decolonized approach… I truly don't know what else to say or do" (P8). The applicants believed that the review came across as not understanding decolonizing methodology, so it is difficult to understand how to apply this feedback.

Iterative Review

The iterative process is valued for many reasons. It "was an excellent change" (P3). It gives an important opportunity to fix applications, which is essential for the development of junior scholars, rather than a simple denial (P10). The iterative process allows researchers to go back to the community to ensure better engagement so that systemic change can happen (P10). "A lot of these grants [are] written so quickly because of the granting call [that] they don't have a lot of time…. It's… rushed" (P10).

However, there is room for improvement; CIHR could ensure iterative review uses a collective scoring system "where one person can't block it" (P3). Apparently, the structure of the iterative review is different, and someone could have the power to veto an application (P3). "I hope that I did justice to some of these Indigenous applicants. But I would have felt even better and felt like there could have been a more wholesome conversation and discussion and better iterative review process if we were all, or almost all… Indigenous peer reviewers. Whereas I don't think that's the case right now. So maybe that's one way [to improve iterative review]" (P9). The back and forth commentary provided by Iterative Review should be expanded so that successful applicants have more opportunities to ask questions and learn (P12).

Impact of Rejection

Researchers are discouraged by shallow rejections and poor quality of feedback (P4). P4 expressed frustration that after their fourth CIHR

rejected application, as well as feeling alone and struggling with how time-consuming the process is. They are not keen to apply for funding again. "Maybe I could've requested [qualitative feedback] but it's really hard when you go through all this work and you just feel rejected and then you kinda just shrug your shoulders, okay I guess I'm just not good enough" (P1). The impacts of rejection are profoundly felt by Indigenous health researchers individually but also alongside their community partners. Rejected applications are especially hard on Indigenous people because doing all that work and involving the community and then being deemed unsuccessful harms trust and community relations (P1, P4, P6, P8, P13). P6 talked about the disappointment of a rejected CIHR application because "you drag the community in, there's a lot of expectation when you start putting together something like that." Such experiences can harm the trust between a community and the researchers. "It's also really hard… to go back to the community and reassure them that all of that work was important, and it is valued, and we will try again" (P13). P8 elaborates, "the application took a huge, huge effort. And that meant that when we were unsuccessful… we just wasted everyone's time when they could have been doing work… saving people's lives… and to put them in that position was just really heartbreaking…. There was a lot of excitement and then a lot of disappointment…. It… affects your relationship with the community… that we work really hard to build and strengthen. And I don't think that a place like CIHR understands exactly what that means" (P8).

Indigenous Reviewers

Increasing the number and quality of Indigenous reviewers is necessary for improving the overall quality of peer review. Achieving wider participation of Indigenous reviewers is complex. P4 wondered if having Indigenous reviewers for Indigenous grant applicants would foster trust and make the process easier. Indigenous peer reviewers are stellar, very impressive, thorough, flexible, and easily identify

"I can't speak for other people, can't speak for other nations" (P13)

strengths and weaknesses (P3). "When you're an Indigenous researcher doing Indigenous research, being evaluated by Indigenous… peer reviewers, there are different... standards and I think that Indigenous peer reviewers especially are, rightfully so, very critical on… you doing it right" (P9). "There's much more opportunity for resonance [of feedback] when it's someone from the same perspectives, they can see the value in work that maybe doesn't fit the typical mold" (P7). As an applicant, it "would be nice to be evaluated by an all or almost all Indigenous peer review panel because that's who [we're] doing it for" (P9).

In P6's experience reviewing applications in Indigenous health for CIHR, "the majority of people were not Indigenous." P10 raised a concern that "we're [not] getting enough Indigenous reviewers because… they're too busy… and the same people [are] being recycled over and over again…. If we continuously recycle the same reviewers, we're getting the same grants pushed out all the time" (P10). An over reliance on the same FNIM reviewers has repercussions. For example, P3 who is accustomed to being assigned four applications to review was recently assigned seven and concluded "that's probably why they have a hard time getting Indigenous reviewers" (P3). Simultaneously, additional demands within the academy on the time and labour of FNIM researchers result in them serving on four times the committees (P9). Not only are they carrying a heavy load within the academy, "Indigenous scholars are so busy because of the social context of their lives that they don't have the time to review. So they may say no. Maybe they've just had a death [in their family]" (P3).

The sparsity of FNIM researchers means that "sometimes you could be the only Indigenous person on a review" (P13). The responsibility is also daunting. While there's a "need to make space for the Indigenous voice… in the peer review… if you're the only person there, it's a lot of pressure… and people… look at you and [ask]… is this right?... I don't know all the time, and I can't speak for other people, can't speak for other nations…. And it's exhausting to try

to… advocate for certain methods or when people look at a budget… they say well that's way too much for… community engagement... But you know that… to do that properly, they… have to trust that the researchers thought through this" (P13). There is concern when one Indigenous person is given the authority to grant approval or disapproval, especially when identity fraud is rampant because such problems are still being felt and the harm continues to reverberate across the country (P4). For Indigenous research, there should be more than one token Indigenous reviewer (P9).

In contrast with being the lone Indigenous reviewer, P13 has appreciated the increasing opportunities to be on an all-Indigenous review panel: "the feeling that you have in that environment is very different [compared to] when you're the only Indigenous, and maybe the only woman or whatever…. Your ability to… express yourself and not worry that you're going to have to preface your comments with… some explanation as to why you think that way, or why you think that's an important comment to make" (P13). "When Indigenous researchers are doing Indigenous research should the entire grant review panel be Indigenous… versus one or two. And I often was that one or two in some grants" (P9). "We need… accomplices in those rooms… to hold people accountable [to upholding high standards]. And we can't defer to the Indigenous person all the time to say this is what we need to do for Indigenous" (P10). P3 suggests a third of the panel should be non-Indigenous reviewers who the Indigenous panelists are mentoring into being good at reviewing Indigenous health grants. This change would come with challenges since the pool of FNIM researchers is small and some would be applying for these specific grants. Reviewers must have expertise that fits with the applications they review; "simply being Indigenous" is not enough of a qualification (P10).

Ensure people with true expertise and Indigenous perspective are evaluating applications (P1, P6). We don't want "pretend Indians" assessing our grant application (P4). People who claim Indigenous identity and have

no connections to a community reviewed differently (P3). Reviewers who "have Indigenous heritage but [haven't] been connected to the community" don't necessarily feel as safe to Indigenous applicants as reviewers with "that knowledge, expertise, and lived experience in community" (P5a/b). But also taking into consideration that "an Indigenous person can be even worse on other Indigenous people simply because of that internalized racism... simply having Indigenous people in these [reviewer] spaces doesn't mean things are gonna change. It has to be about why they are coming in, what's the training that they have…. And by having that in there and then [CIHR will] say well we have 60% Indigenous people you're still not getting it so you're just a failure and it's like you're not taking that, simply being Indigenous doesn't mean you're good at what you're doing in an Indigenous space" (P10). P4 wondered about what token Indigenous person is used to justify denying proposals "but that Indigenous person… are they a national figure? Are they recognized? Are they experienced?" (P4).

Different options were explored to bolster Indigenous involvement in peer review. Prioritizing inclusion of Indigenous community members on grant panels to bring that perspective and ensure they are compensated (P4). P1 & P6 both want to be involved in reviewing but have not had much opportunity (or were not asked back). "When I was asked for feedback, I said… It's really helpful to see the process and how this works, but to me it was like who could do the best construction on paper and who could do the best budget…. I said I'll make sure that I pay special attention to my budget 'cause that was… the priority for all the conversations… they invest in you to be on this peer opportunity with the idea that if you wanted to come back and volunteer as an advisor that you could, and I said I would but I never, ever got invited back" (P6). Although there was an interest in participating in peer review, P1 "didn't have any training on how to do a peer review" and was not made aware of what training was available (P1). Mentor newer researchers to ensure they have opportunities to be an observer in the review process, perhaps as a

fourth reviewer (P2). "I was part of a reviewer in training… program where I… sat in on reviews… as a total fly on the wall... I hadn't actually read the grant applications myself, I was just listening to what people were saying" (P9). But when another Indigenous reviewer-in-training status tried to bring attention to "some of the grants… that were… missing pieces... [they were] told you're not allowed to speak in here" (P10). So, despite the panel review consisting of all Indigenous reviewers, they did not feel that space to be safe.

CIHR's conflict of interest policy might be too rigid to effectively support FNIM researchers, who, since they are underrepresented in academia, are a more interconnected community (P9). Perhaps different requirements and more clarity are needed for disclosing conflicts of interest with applicants (P9, P11). Complexity: "You know if there's any person on that committee or anybody that can make a contribution to the decision, if they don't like you, you're toast, you're not gonna get in. And like I said, it's not based on our abilities and our experience. It's false" (P1). "I don't know what to do about [conflict of interest] because there is a very limited pool of researchers… I might also be applying… I clearly can't be on the review." (P13). Attention must be paid to managing conflict of interest. "We're on committees and all of a sudden all the Indigenous people are leaving the room because it's an Indigenous grant and we all know each other 'cause we're a small group" (P11). "There's far fewer of us [Indigenous researchers] and many of us are applying to the particular grant so there's even fewer of us available to be the reviewers. And then if you're reviewing a specific grant call like the chance of conflicts is just high… I can see it being operationally very challenging to [manage] that [given the small pool] but it would be really nice" (P9).

To understand the challenges that face FNIM researchers within the existing system of grant allocation, one must understand who they are, what they value, how they conduct themselves, and their purpose. They seek to advance

Indigenous health and redress colonial harm through honouring Indigenous communities. This includes shifting power to Indigenous communities, prioritizing relationships, elevating Indigenous knowledge, challenging extractive, deficit oriented colonial research practices. The data provides an understanding of their significant accomplishments, and effort to protect Indigenous knowledge, contribute to policy development and advocate for systemic change.

Surviving and thriving within the western academy entails a level of fortitude not expected of others and which impedes their success with grant allocation. Within frequently hostile settings, they are often overstretched, tokenized, and essentialized. Despite a lack of mentorship, they end up in an advisory role to the institution regarding Indigenous research, and are left alone to navigate the consequences of identity fraud.

FNIM researchers appreciate CIHR's recognition of the need for change, and efforts such as the implementation of targeted funding. Although improvements can be made to the RFP and aspects of the application process, the most significant barriers lie within the peer review process. The goals and mechanisms of peer review must be reconsidered as the process is deeply flawed by multiple sites of bias, including reviewer bias, topic bias, career bias. Peer review falters in the selection of reviewers without the appropriate background knowledge, reviewers who show up ill-prepared, and in the hierarchical operation of power within the review panel. The inconsistency of quality reviewer feedback and the impact of research proposals that are rejected contribute to harming Indigenous research. Given this context, efforts to recruit and support Indigenous reviewers are urgently needed.

5. A Discussion and Examination of Whiteness

This research builds upon efforts that have been underway in CIHR to bring attention to and seek to remedy racial disparity in health grant allocations (i.e. NCCDH & CIHR, 2023), such as CIHR's 2022 environmental scan which outlines structural inequities in terms of "'who' is funded; 'what' is funded; and 'how' decisions are made" (CIHR, 2022, para. 7). Since the conditions of racial inequity have already been established, the task has been less about proving that racism and white supremacy operate within grant allocation, and more about examining its mechanisms and specific impacts upon FNIM researchers to identify where change in policies and practices can happen. Following CIHR's External Anti-Racism Advisory Committee's guiding principles of System-level approach and Critical Race Framework, this report recognizes white supremacy as a root cause of racial inequity, and it's identification as necessary in addressing the ways racism has been normalized in the research sector (CIHR, 2021b).

Until recently racism has not been widely spoken about and understood as the study of whiteness and white supremacy. The examination of racism removed from a critique of whiteness can function to focus attention on the downstream consequences and symptoms of the real underlying problem of white supremacy. When white supremacy is defined as the "institutionalization of Whiteness and White privilege [it is necessary to examine] the historical, social, political and economic systems and structures that contribute to its continued dominance and [the resultant] subordination" (Giroux & McLaren, 1994 in York University, n.d.). There are many tools of analysis by which to engage in this examination of whiteness, and this report will draw upon the work of Cheryl Harris (1993). Harris examines "the emergence of whiteness as property and trace[s] the evolution of whiteness from color to race to

> *"less about proving that racism and white supremacy operate within grant allocation, and more about examining its mechanisms"*

status to property as a progression historically rooted in white supremacy and economic hegemony over Black and Native American peoples" (Harris, 1993, p. 1714). "Through this entangled relationship between race and property, historical forms of domination have evolved to reproduce subordination in the present…. This conceptual nucleus has proven to be a powerful center around which whiteness as property has taken shape" (Harris, 1993, p. 1714). One centralizing aspect of Harris's conceptualization of whiteness and property is the right to exclude (Bierdz, 2021).

A. Research as White Property

The property value of whiteness is a framework which can expose how research is maintained as exclusively white property by regulating and policing the borders of what counts as legitimate research and who does that research. As Métis scholar Gillies explains, "property rights may be attached to tangible objects but also intangible property such as stocks, inheritance, and university degrees. In this way, the value of owning property derives from the rights attached to that property and not the property itself" (Harris, 1993, in Gillies, 2021, p. 4).

The impact of colonialism and racism has produced and continues to produce the research enterprise as white property. The safeguarding of research as white property happens through the peer review process. In other words, peer review is a fundamental site of exclusion, determining who belongs, what is seen as worthy of research, whose work is deemed excellent. If the research enterprise is seen as a form of property from which one obtains rights, those researcher rights could include status within the enterprise, access to insider knowledge about how things are run, proximity to success, access to mentors and examples of successful grant applications, and

power to make decisions about grant allocations.

i. Disposition Rights

Disposition rights refers to property rights which are transferable or relinquishable (Harris 1993 in Gillies, 2021). Who has the rights to transfer or relinquish research as property? Harris (1993) argues that property is not always alienable (i.e. a doctorate degree is not transferable), and what makes white racial identity a form of valuable property is its inalienability (Gillies, 2021). But in certain cases, whiteness is transferable or conferred when one's performance upholds the white norms of what it means to be a teacher (Gillies, 2021) and in this case, health researcher. If FNIM researchers follow the white norms of doing research, if they can do it in the right/white way, then whiteness as a disposition right is precariously conferred upon them. For example, "when I started I was told I gotta work twice as hard to be respected" (P10) but this is no guarantee of gaining disposition rights. However, those who want to do research in a way that is at odds with normative research are cast outside the bounds of acceptability and are therefore denied disposition rights and access to the research enterprise. Indigenous health researchers are denied disposition rights when "anything… looks a little bit different or has space for emotion or relationship…. You have to follow a very strict protocol in the research, and I think that's what funders are comfortable with… all of us who don't think like that… it's not a fit…. Education is built for a particular mind and mindset… they know how the system works 'cause the system was made for them" (P7).

ii. Use & Enjoyment Rights

Use and enjoyment rights afford certain privileges reserved for the holders which are then denied to others (Harris, 1993 in Gillies, 2021). White identity allows for the use of property reserved for the prerogative of whiteness, in this case access to the research enterprise. White researchers are granted the rights to use and enjoy the research enterprise "without encountering racial hostility" (Gillies, 2021, p. 9). Moreover, white researchers are granted the maps, compasses, and guides (McIntosh, 1988) and the "good old boy buddy system that supports them" (P3) to successfully navigate the academy. Whereas FNIM researchers, more recent to the academy, often are left to find their own way without adequate institutional research support (P9, P10). There's an "arbitrary gold standard of what an application looks like and it's an impossible measure if no one can show you actually how to do it. It's like an invisible curriculum conversation all over again, but it's even a little more mysterious. So how do you navigate that?" (P6).

iii. Reputation & Status Rights

Reputation and status rights protect the property value of research as an exclusively white enterprise (Harris, 1993). Harris (1993) theorizes 'reputation' as a form of property, arguing that to damage someone's reputation is to damage their personal property. For example, in the USA until the late 1950's a white person who was called Black could sue for defamation (Harris, 1993 in Gillies, 2021). The mere presence of Indigenous health researchers threatens the status and reputation of institutions and of the enterprise. For example, Gillies (2021) argues that "racial designations diminish or increase the status and reputation of specific social practices and spaces" (p. 10). "It's been very political, how they really try to erase us, get rid of us, not have us speak" (P3). Outstanding FNIM researchers' contributions get subsumed as white property thereby erasing the threat to the reputation and status of white institutions. "My college was subsuming my work and calling it their own… and submitting it to the university" (P3). Indigenous research issues and topics have the potential to threaten the status and reputation of an institution, as noted by P4: "they don't wanna be known as… the institution that's tackling murdered Indigenous women or… sterilization practices or… clean water because then… what's gonna come next… responsibility?"

iv. Absolute Right to Exclude

The absolute right to exclude results from and protects the first three rights (Harris, 1993). "The possessors of whiteness were granted the legal right to exclude others from the privileges inhering in whiteness; whiteness became an exclusive club whose membership was closely and grudgingly guarded" (Harris, 1993, p. 1736). The grant peer review process is a patrolling mechanism for maintaining research as white property, assessing the level of whiteness of proposals and rewarding conformity. Exclusion happens through various practices, including reviewers not adequately preparing, "did you read their application… truly? I don't think they did. I think it was a quick skim and then they're making these confident decisions based on limited information, which is impacting not only the careers of the researchers, but the people who would be impacted by the research" (P9). The poorly defined assessment categories which "makes peer review feel very arbitrary… [and leaves] huge, huge room for subjectivity" (P11) is another means by which exclusion occurs. Reviewer focus on 'faults' also functions to exclude; "they see everything that's wrong… so they use punitive action, instead of going in with a view to what is going right in this situation and then how do we support that… here's a couple more things… to make it better" (P13).

Change depends on transforming the research processes which involves acknowledging the colonial foundations of racial disparity in society and the academy. This transformation begins with an understanding that FNIM researchers' full participation in the academy and research processes is hampered by an underlying possessive investment in whiteness, meaning whiteness pays off, and white people wish to maintain those benefits (Lipsitz, 1995). Deep internal shifts need to happen, and the foundation of that shift begins with listening to FNIM researchers and regarding them as capable knowers of both the problems with the existing system and as knowledgeable and holding insights and guides to the ways forward. According to Lipsitz (1995), "those of us who are 'white' can only become part of the solution if we recognize the degree to which we are already part of the problem - not because of our race, but because of our possessive investment in it" (p. 384).

6. Recommendations

This report is not meant to be a one-off document but rather the beginning of what needs to be an ongoing dialogue within the Tri-Agencies. The findings in this report are relevant to each CIHR Institute, the Science Council, the various Indigenous Advisory Boards, the Governing Council of CIHR, and other dialogues occurring regarding Indigenous health research nationally.

These recommendations are categorized according to short, medium, and long term with short term being immediately actionable, medium term requiring further discussion and collaboration, and long term indicating the need for deeper ongoing efforts beginning now and stretching on until shifts are made. Our first recommendation is to ensure that this report is acted upon by contracting support for its implementation.

A. Required Paradigm Shifts:

- *Long Term:* Legitimize Indigenous research (topics, research priorities, standards, methods, methodologies). Acknowledge Indigenous people, researchers, and communities as valuable knowers, as capable of knowing about how to improve their lives.

- *Long Term:* Respect Indigenous holistic conceptions of health to include interconnected factors such as social, economic, and political wellbeing.

- *Long Term:* Recognize that Indigenous wellbeing cuts across the tri-agencies and that environment, social, and health are interrelated and don't fit into existing funding categories.

- *Long Term:* Value disruption of the status quo as a necessary process of improving outcomes for Indigenous health researchers and more broadly Indigenous people.

B. Actionables:

- *Short Term:* Require anti-colonial, anti-racism module for applicants and reviewers, similar to the required SGBA module.

- *Short Term*: Ensure that non-Indigenous researchers researching Indigenous health have additional education specific to this.

- *Short Term:* Nurture Indigenous mentorship, especially by ensuring ongoing and adequate funding for the NEIHR program.

- *Short Term:* Require reviewers to understand that CIHR is a signatory to DORA, and to value diverse contributions other than publications from high impact journals.

- *Medium Term:* Develop standards and criteria for what constitutes Indigenous research. A token, Pan-Indian inclusion of a medicine wheel/Two eyed seeing reference does not qualify.

- *Medium Term:* Given its importance, expand targeted funding for Indigenous health based on an equity assessment rather than the current equality rate (4.9%) and ensure that targeted funds are earmarked specifically for Indigenous applicants. Ensure that Indigenous applicants are not limited to applying only to earmarked funds.

- *Medium Term:* To improve outcomes and address inequity, further research is needed to determine the racial identities of both recipients of Indigenous health research funds and reviewers.

- *Medium Term:* Take and implement guidance from Indigenous health researchers when determining RFP priorities and health and wellbeing issues.

- *Short Term:* Provide more advanced warning of RFP.

- **Improve processes for community organization applicants**

  - *Medium Term:* Ensure community organizations better understand the requirements.

  - *Short Term:* Support efforts to disrupt hierarchy by not requiring a PI/NPA; recognize and support when a community is making decisions collectively.

  - *Short Term:* Provide funds for administrative support to community organizations/ partners.

  - *Short Term:* Make policies and procedures clear and consistent so reviewers are not penalizing community organizations/partners.

- **Center the needs of communities**

  - *Short Term:* Remunerate rejected community organizations/partners who spent time generating grant applications. Ensure there is value added to this process in the form of substantive feedback.

  - *Short Term:* Ensure panels reviewing applications for projects in Indigenous communities understand OCAP and seek the application of data sovereignty principles.

  - *Short Term:* Increase flexibility for community projects when crises impact completion.

  - *Medium Term:* Add criteria to ensure knowledge translation and mobilization takes form in the ways that the community wants and values.

- **Rethink peer review**

  - Review Panels:

    - *Short Term:* Have FNIM researchers develop criteria for reviewers of Indigenous health grants.

    - *Short Term:* Hold review panels in person.

    - *Medium Term:* Increase the pool of Indigenous reviewers through mentorship and training (add a 4th reviewer).

    - *Short Term:* Ensure more than one Indigenous reviewer on each panel reviewing Indigenous health applications.

    - *Short Term:* Ensure that reviewers possess the necessary expertise, including subject and methodological knowledge, for the applications assigned.

    - *Short Term:* Develop criteria for flagging token inclusion of Indigenous participation on grant applications.

    - *Medium Term:* Under direction from the IIPH, tailor the Conflict of Interest requirements for FNIM reviewers to reflect the small, interconnected network of Indigenous researchers.

    - *Medium Term:* Address the biases of name recognition, number of publications, number of previous successful grants. For example, assess applicants without prior grant success against others without prior grant success.

  - Evaluation and Feedback:

    - *Short Term:* Create clearer descriptions of evaluation categories.

    - *Short Term:* Ensure innovation is valued and reduce ambiguity in the weighting of criteria.

    - *Medium Term:* Improve reviewer training and ensure reviewers are following requirements to provide substantive feedback. Build capacity building in the review process, perhaps through workshops on how to write a good, constructive, and rigorous review.

    - *Short Term:* Insist that qualitative feedback provided to research applicants reflects the panel discussion.

    - *Medium Term:* De-anonymize peer reviewers' feedback; add racial/cultural background.

    - *Medium Term:* Expand upon the iterative review and raise the standards of feedback, especially for FNIM applicants.

7. Conclusion

To recommend a direction to CIHR, this research considered experiences of Indigenous researchers in the health research funding system. While the research enterprise may be tempted to distance itself from the Canadian colonial violence of past research, such violence is still ongoing and must not be ignored if it is to be addressed. If research is to contribute to the amelioration of racial health disparities, and Indigenous wellbeing is in the best interests of the Canadian public, then those who administer and control that research enterprise have a responsibility to make the shifts in policy informed by Indigenous knowledge and experience.

Indigenous health researchers are not in charge of the system and do not alone have the power to make the necessary changes. This research provides insights from which to navigate a route to more equitable outcomes for Indigenous health/wellbeing and Indigenous researchers. Indigenous academics and researchers make important, though often unrecognized, contributions to their communities and the academy. As Maori scholar Linda Smith (2012) explained, "when Indigenous peoples become the researchers and not merely the researched, the activity of research is transformed. Questions are framed differently, priorities are ranked differently, problems are defined differently, and people participate on different terms" (p. 193). On one hand Indigenous health researchers are calling for a massive overhaul of the system of research funding and on the other hand they are seeking amicable conditions for "researching ourselves to life" (P11).

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Appendices

Appendix A: Ethics approval

UNIVERSITY OF SASKATCHEWAN

Behavioural Research Ethics Board (Beh-REB)   16-Feb-2024

Certificate of Approval

Application ID: 4464

Principal Investigator: Verna St. Denis   Department: Office of the President

Student(s):

Funder(s): Canadian Institutes of Health Research

Sponsor: The Institute of Indigenous Peoples' Health

Title: Anti-Indigenous Racism in Health Research Funding

Approved On: 16-Feb-2024

Expiry Date: 16-Feb-2025

Approval Of:
* Behavioural Ethics Application
* Recruitment letter - senior researchers (revised)
* Recruitment letter - junior researchers (revised)
* Interview and Focus Groups Questions
* Consent Form for Interviews (Feb 2024)
* Consent Form for Focus Groups (Feb 2024)

Acknowledgment Of:
* transcript_release

Review Type: Delegated Review

CERTIFICATION

The University of Saskatchewan Behavioural Research Ethics Board (Beh-REB) is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans TCPS 2 (2022). The University of Saskatchewan Beh-REB has reviewed the above-named project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this project, and for ensuring that the authorized project is carried out according to the conditions outlined in the current approved protocol. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

ONGOING REVIEW REQUIREMENTS

Any significant changes to your proposed method, or your consent and recruitment procedures must be reported to the Chair through submission of an amendment for Beh-REB consideration in advance of implementation.

To remain in compliance, a status report (renewal of closure form) must be submitted to the Beh-REB Chair for consideration within one month prior to the current expiry date each year the project remains open, and upon project completion. Please refer to the Research Ethics Office website for further instructions and current forms.

_____

Digitally Approved by Olga Lovick
Vice-Chair, Behavioural Research Ethics Board
University of Saskatchewan

PARTICIPANTS NEEDED FOR RESEARCH STUDY

////////////////////////////

Are you an Indigenous researcher?

Have you applied for CIHR funding?

Study: Improving CIHR funding for Indigenous Health Researchers

We are seeking First Nations, Inuit, and Metis volunteers from across Canada to participate in a 45-90 minute individual interview with Dr. Verna St. Denis over Zoom.

You will be asked questions that reflect on your experiences as a researcher and applying for CIHR funding.

For more information or to volunteer for this study, please contact research assistant Sharissa Hantke at sharissa.hantke@usask.ca

UNIVERSITY OF SASKATCHEWAN

CIHR IRSC
Canadian Institutes of Health Research
Instituts de recherche en santé du Canada

University of Saskatchewan

Research Project: Improving CIHR funding for Indigenous Health Researchers
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Questions for Indigenous Established Researchers (Individual Virtual Interviews)

Racism in academia
Racism in health research funding
- ○ *Who gets funded*
- ○ *What gets funded*
- ○ *How it gets funded*

1. How would you describe your trajectory in academia? What have been the main milestones for you in terms of successes, barriers, and rejections?
2. From your own experience, how would you describe the attitudes and climate towards Indigenous researchers in academia?
3. Do you see a difference between your experience and Non-Indigenous researchers?
4. From your own experience, what determines a successful application for health research? Who tends to be the successful applicants, what defines them?
5. What are the types of Indigenous health research that get to be successful and what type of research, including what kind of topics tend to be rejected?
6. What are some of the barriers for Indigenous researchers specifically when applying to health research?
7. What would you change about the process in order to mitigate or eliminate barriers that impact Indigenous researchers?
8. The literature recommends targeted research funds for racialized scholars. What are your thoughts on targeted funds for Indigenous health researchers? Have you applied for Indigenous-health-specific grants and for open grants?
9. What are your experiences and thoughts with peer review? Can you talk about your experience of being a peer reviewer? How could the peer review process be improved?
10. The literature suggests there should be more transparency and accountability regarding racial and experiential demographics of reviewers and staff within the funding agencies. What is your opinion?
11. One recommendation that recurs in the literature is the collection of race-based data; in terms of who does the peer review, successful and rejected application rates, staff in funding agencies and selection of those who select the reviewers. Could you share your insights on the collection of race-based data (in health research funding)?
12. Indigenous people experience devastating racism in the healthcare system. How can research funding agencies contribute to addressing this problem?