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Medical experimentation and the roots of COVID-19 vaccine hesitancy among Indigenous Peoples in Canada

Jaris Swidrovich, BSP, PharmD, PhD, AAHIVP, RPh *(he/they)*

Assistant Professor & Indigenous Engagement Lead
Leslie Dan Faculty of Pharmacy
University of Toronto

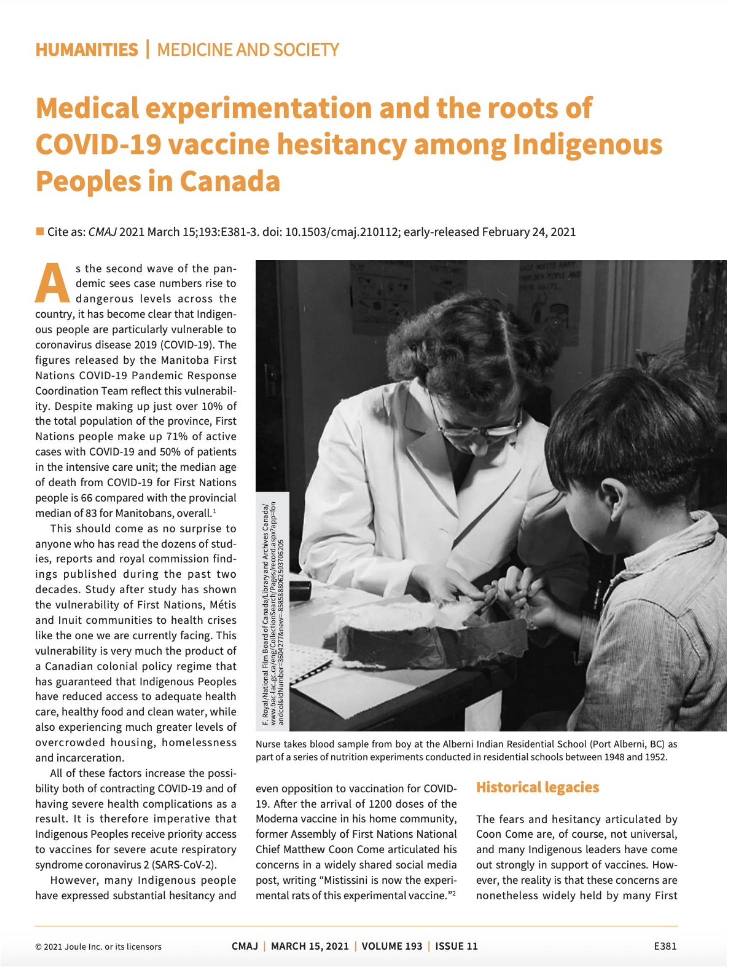
@JarisOfThePrairies
@JarisSwidrovich
Jaris Swidrovich


IF WE'RE ON SOMEONE ELSE'S LAND, SHOULDN'T WE LEAVE?
BARONESS VON SKETCH SHOW

Introduction and Self-situating Disclosure

- I am a white-presenting Saulteaux & Ukrainian urban First Nations, Two Spirit, queer, disabled person from Yellow Quill First Nation *(Treaty 4 territory, SK)*
- Spirit name = wapiska kiniw (White Eagle)
- Otter Clan and Bear Clan
- I have spent most of my life in suburban and urban Saskatoon *(Treaty 6 territory and the homeland of the Métis)*

INDIGENOUS PHARMACY
PROFESSIONALS OF CANADA



HUMANITIES | MEDICINE AND SOCIETY

Medical experimentation and the roots of COVID-19 vaccine hesitancy among Indigenous Peoples in Canada

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As the second wave of the pandemic sees case numbers rise to dangerous levels across the country, it has become clear that Indigenous people are particularly vulnerable to coronavirus disease 2019 (COVID-19). The figures released by the Manitoba First Nations COVID-19 Pandemic Response Coordination Team reflect this vulnerability. Despite making up just over 10% of the total population of the province, First Nations people make up 71% of active cases with COVID-19 and 50% of patients in the intensive care unit; the median age of death from COVID-19 for First Nations people is 66 compared with the provincial median of 83 for Manitobans, overall.[1]

This should come as no surprise to anyone who has read the dozens of studies, reports and royal commission findings published during the past two decades. Study after study has shown the vulnerability of First Nations, Métis and Inuit communities to health crises like the one we are currently facing. This vulnerability is very much the product of a Canadian colonial policy regime that has guaranteed that Indigenous Peoples have reduced access to adequate health care, healthy food and clean water, while also experiencing much greater levels of overcrowded housing, homelessness and incarceration.

All of these factors increase the possibility both of contracting COVID-19 and of having severe health complications as a result. It is therefore imperative that Indigenous Peoples receive priority access to vaccines for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

However, many Indigenous people have expressed substantial hesitancy and even opposition to vaccination for COVID-19. After the arrival of 1200 doses of the Moderna vaccine in his home community, former Assembly of First Nations National Chief Matthew Coon Come articulated his concerns in a widely shared social media post, writing "Mistissini is now the experimental rats of this experimental vaccine."[2]

F. Royal/National Film Board of Canada/Library and Archives Canada/ www.bac-lac.gc.ca/eng/CollectionSearch/Pages/record.aspx?app=fonandcol&IdNumber=3604277&new=-8585888062503706205

Nurse takes blood sample from boy at the Alberni Indian Residential School (Port Alberni, BC) as part of a series of nutrition experiments conducted in residential schools between 1948 and 1952.

Historical legacies

The fears and hesitancy articulated by Coon Come are, of course, not universal, and many Indigenous leaders have come out strongly in support of vaccines. However, the reality is that these concerns are nonetheless widely held by many First

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Humanities

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Ian Mosby and Jaris Swidrovich

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National Immunization Strategy – Indigenous Peoples

- Study after study has shown the vulnerability of First Nations, Métis and Inuit communities to health crises, such as COVID-19, influenza, and other communicable diseases.
- This vulnerability is very much the **product of a Canadian colonial policy regime** that has guaranteed that Indigenous Peoples have reduced access to adequate health care, healthy food and clean water, while also experiencing much greater levels of overcrowded housing, homelessness and incarceration.

National Immunization Strategy – Indigenous Peoples

- All these factors increase the possibility both of contracting COVID-19 ***and*** of having severe health complications as a result.
- It is therefore imperative that Indigenous Peoples receive priority access to vaccines for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

- **But … here's why prioritization (and general immunization rollouts) must be handled carefully →**

National Immunization Strategy – Indigenous Peoples

APTN News
@APTNNews

'Experimental rats': Former AFN national chief and grand chief of the Crees in Quebec Matthew Coon Come is receiving some criticism after condemning the use of the Moderna vaccine in his community of Mistissini. | @JPashagumskum

From aptnnews.ca

7:04 PM · Jan 7, 2021

National Immunization Strategy – Indigenous Peoples

- Former Manitoba Keewatinowi Okimakanak Grand Chief Sheila North:
  - “Back in residential school days, [people], that are now elders, remember being used as guinea pigs or [having] vaccines tested on them when they were children without their permission or their family’s permission.”

National Immunization Strategy – Indigenous Peoples

- These concerns, fears and experiences need to be taken seriously by health care professionals and policy-makers and **must be differentiated from the "anti-vax" movements** that have thrived on social media in recent years.
- The reality is that well-documented examples of Indigenous Peoples being subjected to medical experimentation exist.

Examples of Experimentation on Indigenous Peoples

- **Nutrition experiments** conducted in several Manitoba Cree communities in the 1940s, as well as in six residential schools between 1948 and 1952.
- One intervention included **testing an experimental fortified flour mixture on residential school students.**
  - There was a federal ban on fortified flour at the time, and there was debate over whether to legalize it.
  - An experimental flour mixture was introduced, which included substances like bone meal.
  - Researchers found increased incidences of anemia among the students who were fed the experimental flour.

> “You can draw a direct line between the types of experiments that were being done in residential schools and …. the food guide.”
>
> *-Ian Mosby*

Examples of Experimentation on Indigenous Peoples

- 12-year trial of the experimental bacilli Calmette-Guérin (BCG) vaccine for tuberculosis on Cree and Nakoda Oyadebi infants in Saskatchewan during the 1930s and 1940s.
- A whole range of experimental surgical and drug treatments were also administered to Indigenous patients, without their consent, within Canada's racially segregated system of Indian Hospitals during the early postwar years.

National Immunization Strategy: Indigenous Peoples

- The legacies of the **racist paternalism** that left Indigenous Peoples uniquely vulnerable to medical experimentation and abuse can be seen in the more recent stories of **Brian Sinclair** and **Joyce Echaquan**, who died as a direct result of racist treatment at the hands of hospital staff and physicians.
- They can also be seen in the testimony of nearly **60 Indigenous women** who launched a class action lawsuit seeking damages for what they describe as **forced sterilizations** by Saskatchewan doctors over the past 25 years

‘Dead because she was Indigenous’: Québec coroner says Atikemekw woman a victim of systemic racism

Hospital staff assumed Joyce Echaquan was an opioid addict. She was dying of a rare heart condition

National Immunization Strategy:

Indigenous Peoples

Indigenous Peoples have every reason to be wary of the Canadian medical system.

National Immunization Strategy – Indigenous Peoples

- A disturbing example of this occurred in 2009 when, during an **H1N1 outbreak**, the **federal government sent body bags** to four Manitoba First Nations communities **instead of shipments of antivirals, hand sanitizer and flu kits.**
- The story spread and contributed to distrust across the country

National Immunization Strategy – Indigenous Peoples

- Despite no genetic predisposition to or additional risk for more severe outcomes from H1N1 for Indigenous Peoples, they were nonetheless **listed as a stand-alone category** of people who should receive the H1N1 vaccine among all identified high-risk groups.
- Zeroing in on Indigeneity alone meant that many were **left feeling like guinea pigs.**

National Immunization Strategy – Indigenous Peoples

To Do:

- **Health professionals and policy-makers need to educate themselves** before going into communities to administer vaccines and/or creating and disseminating immunization strategies and communication.
  - Too many are unaware of Canada's shameful histories (and current practices) of racially segregated health care and medical experimentation, and therefore misunderstand the nature of vaccine hesitancy.

National Immunization Strategy – Indigenous Peoples

To Do:

- **Public health messaging** about the risks of infection and the benefits of receiving the associated vaccine **must clearly be positioned in a way that speaks to Indigenous Peoples'** historical and contemporary experiences with Canadian settler colonialism.
- **Risk attributes must also be described individually rather than simply categorizing Indigeneity as an individual risk category.**

Influenza vaccines: Canadian Immunization Guide

For health professionals

Indigenous Peoples

Influenza vaccination is particularly recommended for Indigenous Peoples who tend to have higher rates of influenza-associated hospitalization and death. The increased risk of severe outcomes may be related to the presence of chronic health conditions and/or delays in accessing healthcare. Susceptibility to infection may also be increased due to living conditions that favour transmission.

https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-10-influenza-vaccine.html#a6.8

National Immunization Strategy – Indigenous Peoples

To Do:

- Public health messaging related to communicable diseases and their associated immunizations will be **more effective if delivered directly by Indigenous Elders, leaders and health practitioners who have trust and credibility in their communities.**
- For many communities, this means that public health messaging needs to focus not only on the health and wellness of the people receiving the vaccine, but also on the **health and wellness of our families, communities, the land and the next seven generations.**

National Immunization Strategy – Indigenous Peoples

- One of the, perhaps insurmountable, problems that we face is that **there has never been a reckoning for the legacy of medical experimentation and other abuses targeted at Indigenous Peoples within Canadian medical institutions.**
- In the long term, **an inquiry into the history of medical experimentation in Canada** and reparations to the affected communities will be required.
- Before that happens, though, there also needs to be a National Immunization Strategy that puts the onus on Canada for doing what is necessary to prove to Indigenous communities that immunizations are safe, effective, and in their best interests.

LEARN MORE!

Tensions between Western and Indigenous worldviews in pharmacy education and practice

3-part series in Canadian Pharmacists Journal *(Open Access)*

(Not specific to pharmacy. Applicable to all health professionals and policy-makers.)

COMMENTARY

Tensions between Western and Indigenous worldviews in pharmacy education and practice: Part I

Jaris Swidrovich, BSP, PharmD

Introduction

Pharmacy, as an educational program and profession, is often not a friendly place for Indigenous learners and practitioners, particularly for those who see and understand the world through an Indigenous worldview. While Indigenous and Western knowledge systems may often be found in the same places and spaces, they remain as independent entities and often repel one another in the same way oil and water do when brought together. For each knowledge system to contribute to pharmacy education and practice, Western intellectual traditions may benefit from the use of an emulsifier, which might be a person or collective of persons raised with both Indigenous and Western knowledge systems, to bring the oil and water together as one. Through an Indigenous lens, the same concept may be visualized through metaphorical framing of each knowledge system as a strand in a braid of sweetgrass. Perhaps the best way forward is not to amalgamate each strand into a single large strand, but rather each should maintain its own composition while being interwoven together in a way that requires tension to become something bigger and stronger.[1]

This is the first in a series of 3 articles that will describe key differences and tensions that exist between Western intellectual traditions and Indigenous worldviews, both in general and within the context of pharmacy education and practice (Table 1).[2] This article will describe the foundations of Indigenous knowledge systems and worldviews, and then the underpinnings of Western intellectual traditions, science and knowledge systems, and examine how they differ from one another. Given that Western knowledge is positioned as the foundation of pharmacy education and practice, this article will interrogate Western intellectual traditions in a similar way that Indigenous knowledge has been criticized, while respecting and emphasizing the importance of weaving multiple knowledge systems together for the greater good. Through a combination of both critical analyses of the literature and my own lived and living experiences as an Indigenous (Saulteaux First Nations) and Ukrainian person who completed pharmacy school and has spent more than 13 years as a practising pharmacist, these articles will analyze the foundations of 3 specific tensions in pharmacy education and practice between Western intellectual traditions and Indigenous worldview: 1) what constitutes evidence and truth (this article), 2) fragmentation and compartmentalization and 3) the lack of regard for land and spirituality.

Indigenous knowledge systems and worldviews

The perspective about the nature of relationships between all life forms in creation has been called a worldview.[3] For Indigenous Peoples, Indigenous worldviews have deep connections to tribe-specific creation stories and have lived and continue to live not through the written word but through oral history and storytelling.[4] The validity of Indigenous knowledge is demarcated by its geographic and ecological setting for those who hold it and therefore is called "place-based" knowledge.[5-8] Unfortunately, the term *Indigenous knowledge* itself is embedded within a Eurocentric epistemology and is therefore often replaced with a more appropriate phrase devised by Indigenous communities, such as "Indigenous ways of living" and "ways of being."[5] In fact, in the prevailing Eurocentric concept of school, *knowledge* (an accumulation of specific information, concepts and skills within a school subject) has no direct translation into most Indigenous languages because the Eurocentric concept of knowledge is largely foreign to most Indigenous worldviews.[5] The best English expression for what Indigenous Peoples

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COMMENTARY

Tensions between Western and Indigenous worldviews in pharmacy education and practice: Part II

Jaris Swidrovich, BSP, PharmD

Introduction

The first article of this series highlighted how the education and profession of pharmacy is often not a friendly place for Indigenous learners and practitioners and specifically for Indigenous learners and practitioners who see and understand the world through an Indigenous worldview.[1] Key differences in worldview and knowledge systems were examined between Indigenous and Western intellectual traditions, including the acquisition and dissemination of knowledge. These differences, described as tensions, can and certainly do work together, though. For example, in the practice of braiding together strands of sweetgrass, a certain amount of tension is required to bring each strand together. To achieve an interweaving of knowledge systems, such as Indigenous and Western intellectual traditions, we must formulate a relationship with each tension as we weave them together for the benefit of all. Certainly, Western knowledge systems predominate what is taught and practised in the profession of pharmacy, and so stronger attention must be paid to the unique tensions experienced when weaving in Indigenous knowledges and worldview into Western pharmacy education and practice.

This article is the second in a series of 3 that will elaborate on a few key tensions between Western intellectual traditions and Indigenous knowledges and worldviews. This second part of the series will narrow in on the tensions between each knowledge system with respect to (1) what constitutes evidence and truth and (2) fragmentation and compartmentalization of knowledge and understanding. The third and final article will focus on the lack of regard to land and spirituality in Western pharmacy education and practice. Each of these tensions is offered through critical analyses of the literature and through my own lived and living experiences as an Indigenous (Saulteaux) person who completed pharmacy school and has spent 13+ years as a practising pharmacist.

Tension #1 in pharmacy education and practice: Evidence-based medicine and what constitutes evidence and truth

Pharmacy education and practice are extraordinarily allegiant to what is referred to as evidence-based medicine (EBM). EBM has been described as "the conscientious, explicit, judicious and reasonable use of modern, best evidence in making decisions about the care of individual patients."[2] "EBM . . . requires new skills of the clinician, including efficient literature-searching and the application of formal rules of evidence in evaluating the clinical literature."[2] Gazing from and through an Indigenous paradigm, the definition of EBM in and of itself is problematic and oppressive. If EBM truly was "the conscientious, explicit, judicious and reasonable use of modern, best evidence in making decisions about the care of individual patients,"[2] it would encompass more than Eurocentric Western knowledge systems. The critical, although unnamed, factor of what constitutes EBM is really about who is defining; what is conscientious, explicit, judicious and reasonable; and what is considered to be best evidence.

The phenomenon of Eurocentric Western-based EBM is certainly all powerful. Goldstein and Goldstein[3] stated that "facts are what all observers agree on." The institutions of science, pharmacy and medicine are well aware of this and feed the fruits of their knowledge systems to hungry public and governments, desperate and responsible for contributing to the common good. Governments allocate public dollars to major agencies that release calls for research to be produced, such as the Government of Canada's allocations to the Canadian

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COMMENTARY

Tensions between Western and Indigenous worldviews in pharmacy education and practice: Part III

Jaris Swidrovich, BSP, PharmD

Introduction

This article is the final of 3 in a series about the tensions between Western and Indigenous worldviews in pharmacy education and practice. We first explored the general differences between Western knowledge systems and Indigenous ways of thinking, being and doing and how their worldviews, while fundamentally different, may come together. Second, we interrogated evidence-based medicine and what constitutes evidence and truth, followed by an examination of the compartmentalization of knowledge, health and wellness in pharmacy education and practice. It is clear there are central differences between Western and Indigenous worldviews in pharmacy, which are likely to not only affect the experiences of Indigenous Peoples within the pharmacy discipline but also Indigenous Peoples at large. As we explore the third of 3 fundamental tensions—the exclusion of land, place and spirituality in pharmacy education and practice—it becomes clearer that these 3 identified tensions are simply an introduction to the plethora of Western and Indigenous worldview differences in pharmacy education and practice. Fundamentally, *everything we know and have is from the land. After our physical time on Earth ends, we become the land ourselves.* Let's explore this concept further in the context of pharmacy education and practice.

Tension #3 in pharmacy education and practice: Exclusion of land, place and spirituality

While similar to the second tension examined, the exclusion of land, place and spirituality in Eurocentric Western-based science and pharmacy education is worthy of its own evaluation. Within the confines and "objectivity" of the Western scientific method, the roles of land, place and spirituality are positioned as untouchable and subjective addendums to the teaching and learning of the health, wellness, disease processes and healing captured in pharmacy education and practice. Meyer[1] referred to such subjectivity as "the stain Science and research has not yet been able to wash away." Regarding spirituality, specifically, Meyer[1] suggested "the topic of spirituality has become a pink crystal New Age embarrassment to all forms of science." Meyer[1] used what she refers to as "holographic epistemology" to design a "(k)new understanding of the philosophy of knowledge, inclusive of all 3 aspects of nature: physical, mental and spiritual." The inclusion of spirituality in Western-science-based professional programs like pharmacy is, as Meyer[1] described, "not a religious idea, *we just think it is*." Spirituality, as both a concept and as a word, does not even appear in the national learning outcomes nor accreditation standards for pharmacy education in Canada.[2,3] The exclusion of spirituality from pharmacy education creates a significant tension for Indigenous learners who operate with the understanding that "we are more than our bodies, more than our minds," and believe that "matter is not separate from spirit."[1]

Indeed, Indigenous Peoples' connection to land is deeply spiritual as well as legally recognized and constitutionally protected in Canada. Through Indigenous teachings and philosophy, we belong to and must be stewards of the land. Colonialism imposed the concept of land ownership whereby the land is separated and owned by a person, people or other entity. Traditional knowledge, languages, cultural practices and oral traditions have been developed for millennia and are all connected to the land.[4] When this connection is broken, such as through dispossession from colonialism and other assimilationist policies and practices, the health and well-being of Indigenous Peoples is dramatically affected. As such,

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Let’s collaborate!

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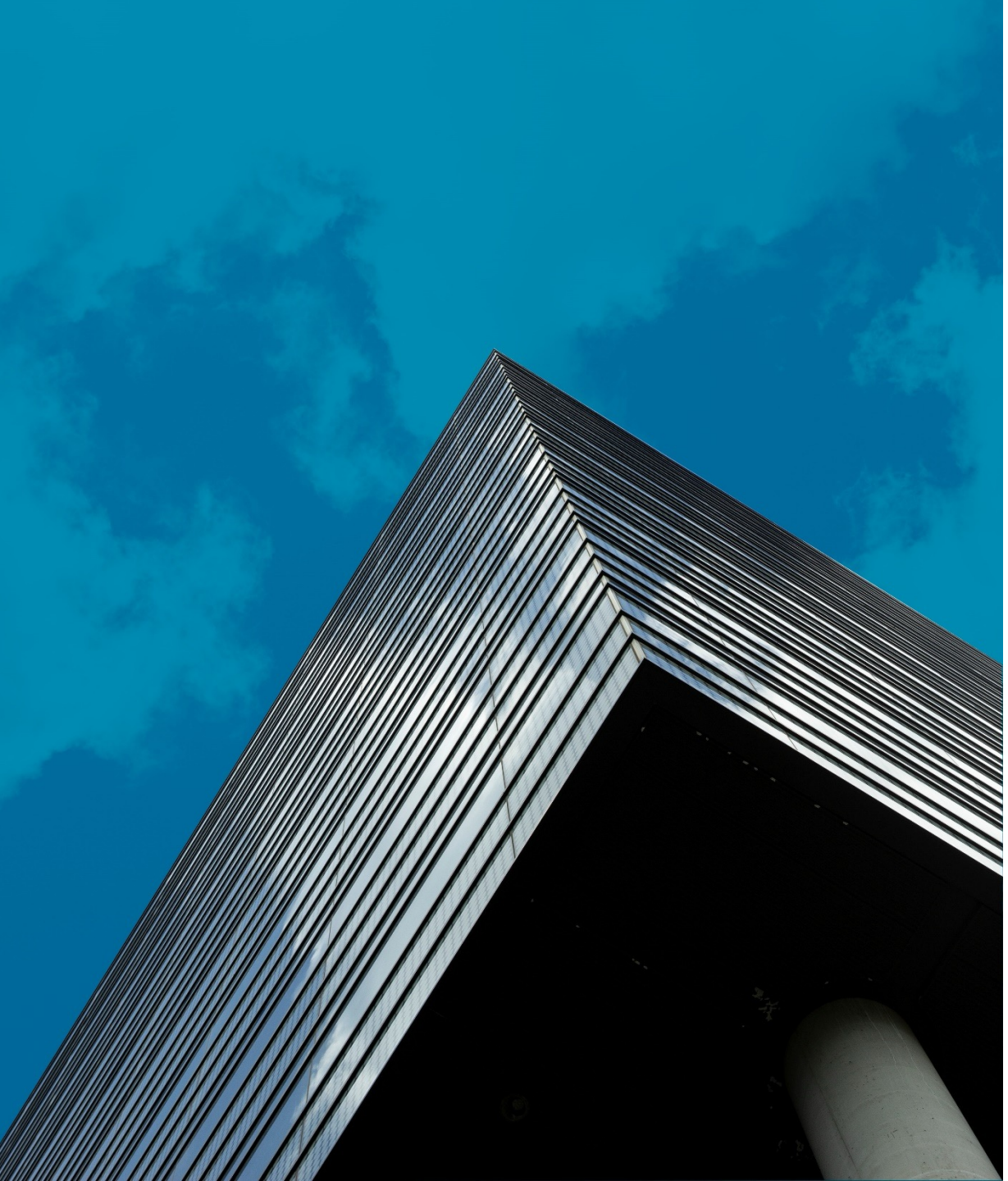

CONTACT

Jaris Swidrovich

Assistant Professor, Teaching Stream
Indigenous Engagement Lead

jaris.swidrovich@utoronto.ca
Office: (416) 946-5302

@jarisoftheprairies

@JarisSwidrovich

Jaris Swidrovich

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