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"L-functions in
Analytic Number
Theory"
Collaborative
Research Group
(CRG) Launch Event

EDI and Mathematics: Disruption and Opportunity

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Executive Director Equity, Diversity, and Inclusion

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Diversity
& Inclusion
in Maths

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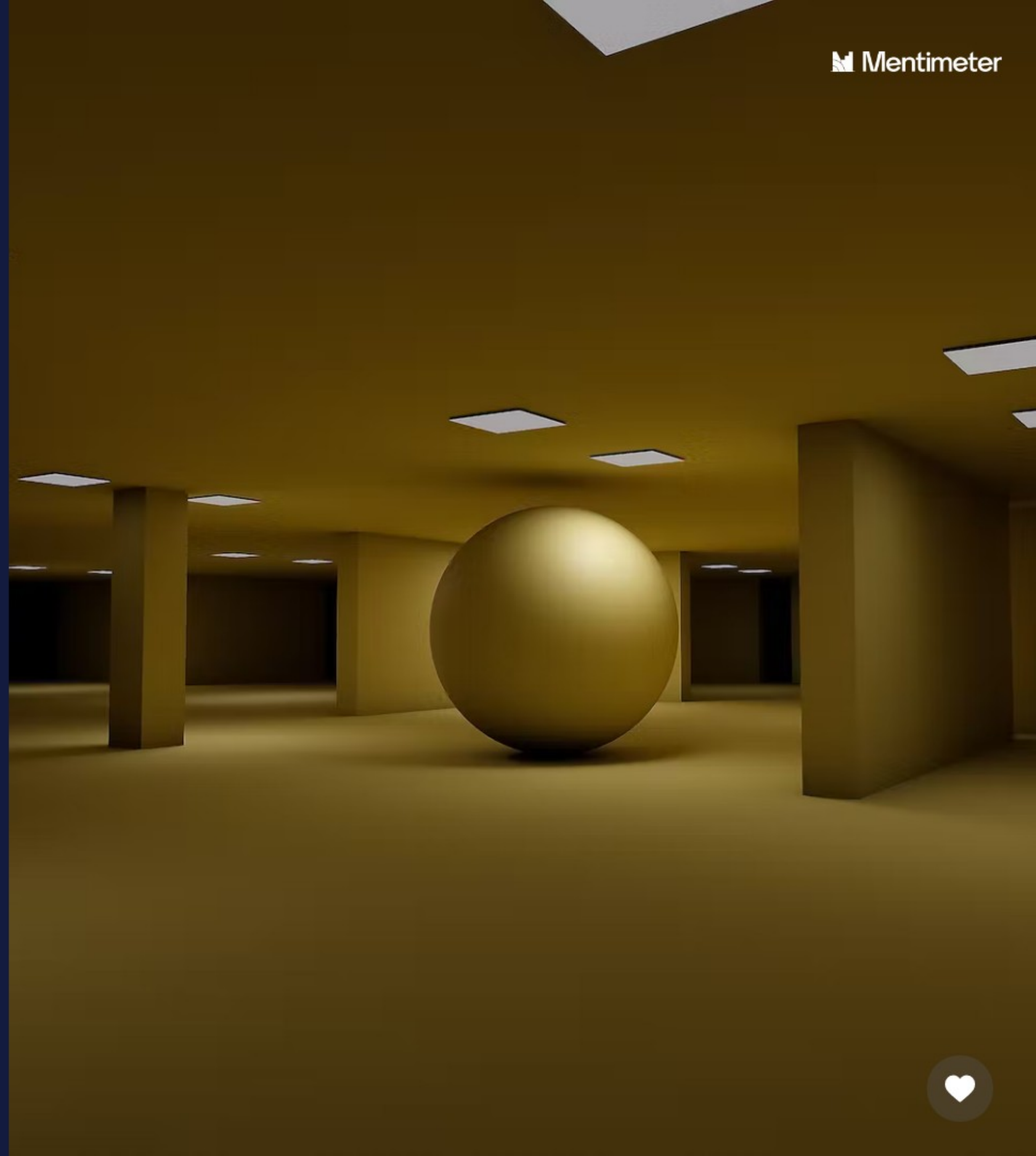
Session Instructions





The paradox of education is precisely this—that as one begins to become conscious one begins to examine the society in which [they are] being educated.

– *James Baldwin*



Intentions

- Unpack the key concepts of Equity, Diversity and Inclusion,
- Set the context, disrupt the myths and misconceptions of Equity, Diversity, Inclusion, Decolonization(EDID) and antiracist work,
- Provide some practical tools to help foster a more inclusive mathematics ecosystem,
- Facilitate a conversation on how best to embed an EDID lens into the Collaborative Research Group events.



From an EDI perspective what do you consider to be some of the biggest challenges within the Mathematics ecosystem?

privilege

opportunity

competition

believing there's no prob

elitism

unconscious bias

recognition

background

access

power

prejudice

apathy

Key Definitions



DI·VER·SI·TY

All the ways in which people differ.



EQ·UI·TY

Fair treatment, access, opportunity, and advancement



IN·CLU·SION

A variety of people have power, a voice, and decision-making

Racism Defined.....

- Shaibah (2022) defines racism as **systems and structures** that exercise **power over** one group of **people based on skin color**, **implicit or explicit** set of **beliefs or biases**, **erroneous assumptions** and actions based on an **ideology of racial superiority”**
 - Personal mediated racial discrimination
 - Institutional racism
 - Structural racism



Microaggression?



 NorthStar^{of}GIS





Equality is everyone getting a pair of shoes.



Diversity is everyone getting a different type of shoe.



Equity is everyone getting a pair of shoes that fits.



Acceptance is understanding we all wear different kinds of shoes.



Belonging is wearing the shoes you want without fear of judgment.

Equity, Diversity, Inclusion Belonging In Action



Faces of Women in Mathematics : Dr. Eugenie Hunsicker and Irene Linke

**There is no
issue here...**

“Wokeness”

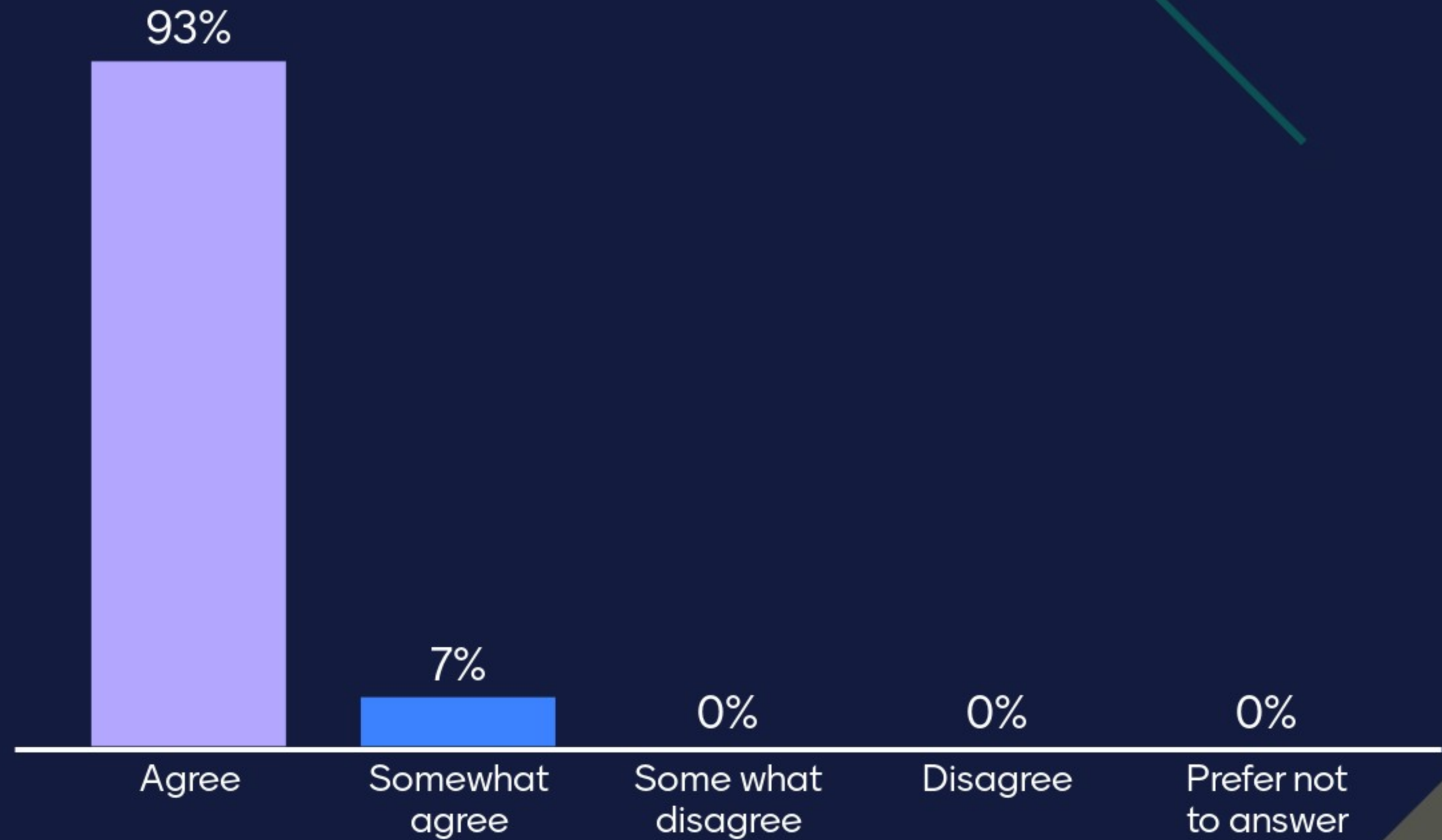
Angel complex

Critical race makes us
feel bad

This is a US issue

Polarizing views on
EDI and antiracism
work

Do you think that there is a representation issue within the mathematics discipline?



Setting the Context

COVID 19 Pandemic

Death of George Floyd

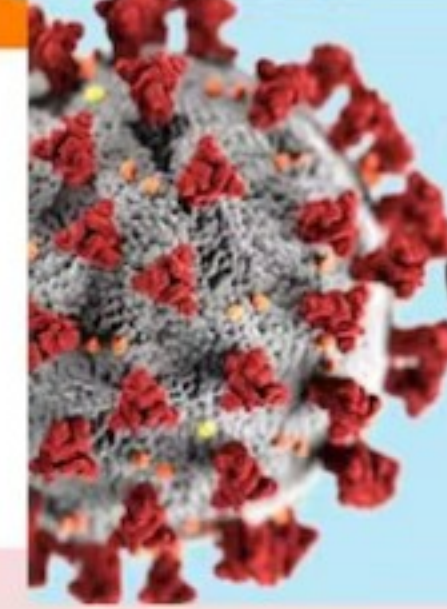
#MeToo movement

Black Lives Matter

Residential Schools



**BLACK
LIVES
MATTER**



COVID-19
CORONAVIRUS PANDEMIC

#MeToo



Setting the context

- “Despite the emphasis on multiculturalism and social equality as public policy, people living in Canada are not always treated equally. Indigenous peoples and those designated as visible minorities generally **report feeling less safe** than the rest of the population, in some cases are much more likely to be **overrepresented in the justice system**, and along with sexual minorities”
- The average pay for visible minorities can be as much as **30% lower** in similar sized workplaces.
- Underrepresented groups are at a greater risk of **physical and mental health outcomes** due to structural and institutional racism.

Source: Statistics Canada

In 2010 women accounted for 60% in Biological Sciences , 58% for General and Integrated Sciences , 19% Engineering and 16% Computer Science/Science

Source: Stats Canada

$$2x_3 - 3x_4 = 13$$

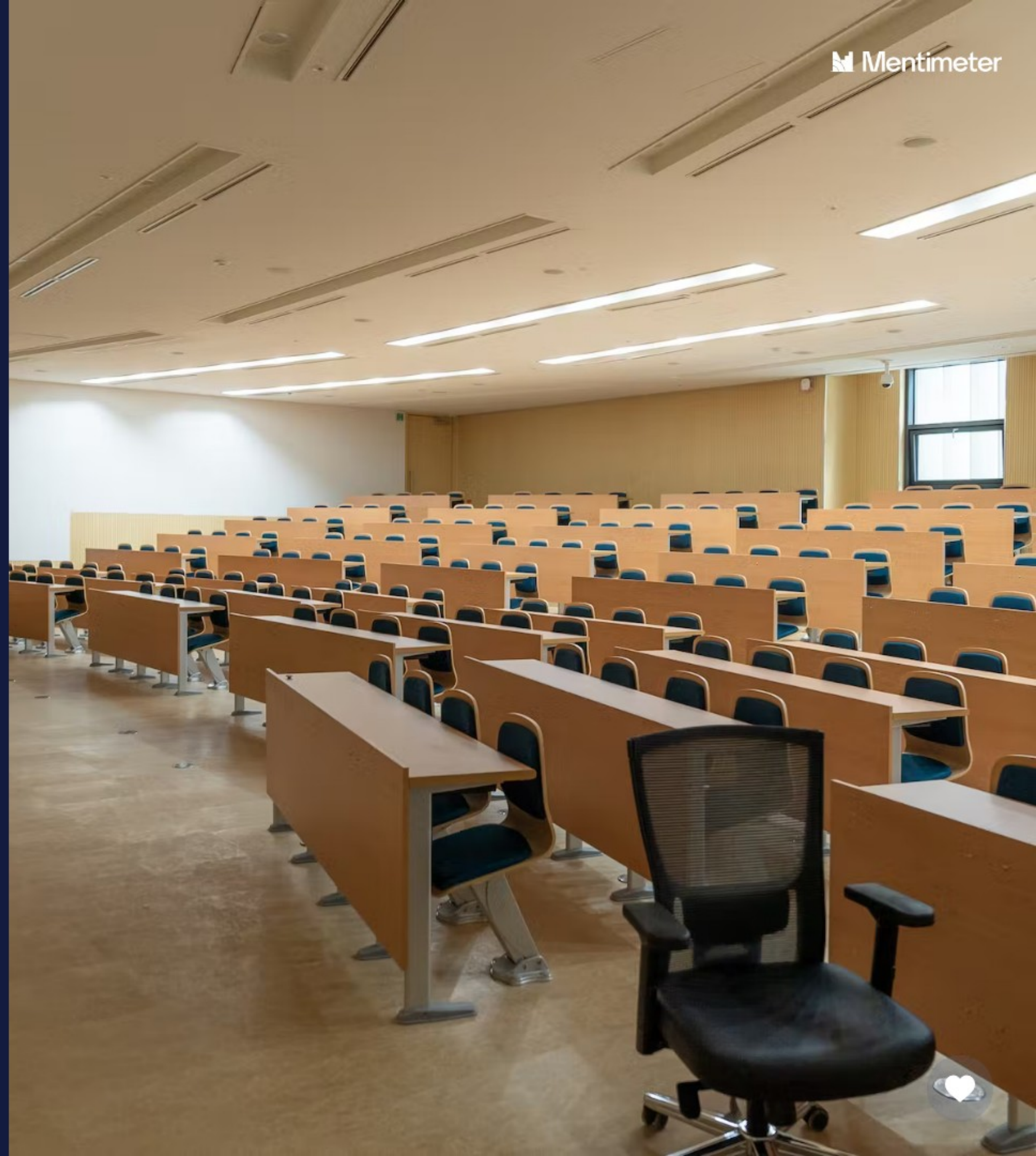


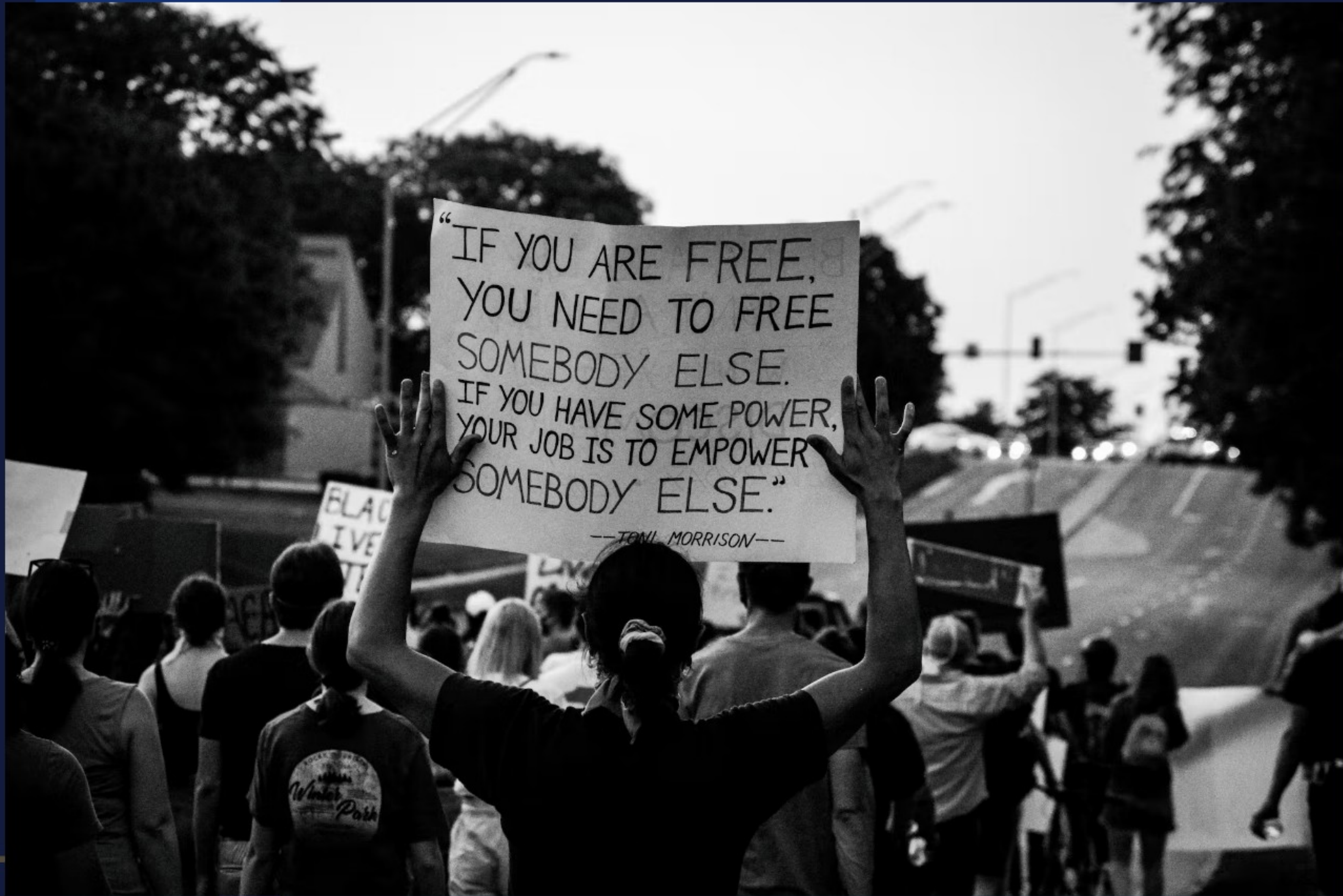


Privilege explained - Source:As/Is

Universities are "colonial structures"

- History of settler colonial past,
- History of slavery, classism, civil rights movement and indentured servitude,
- Discriminatory and exclusionary immigration practices,
- Neoliberalism,
- Increase in white nationalist and polarizing ideology.

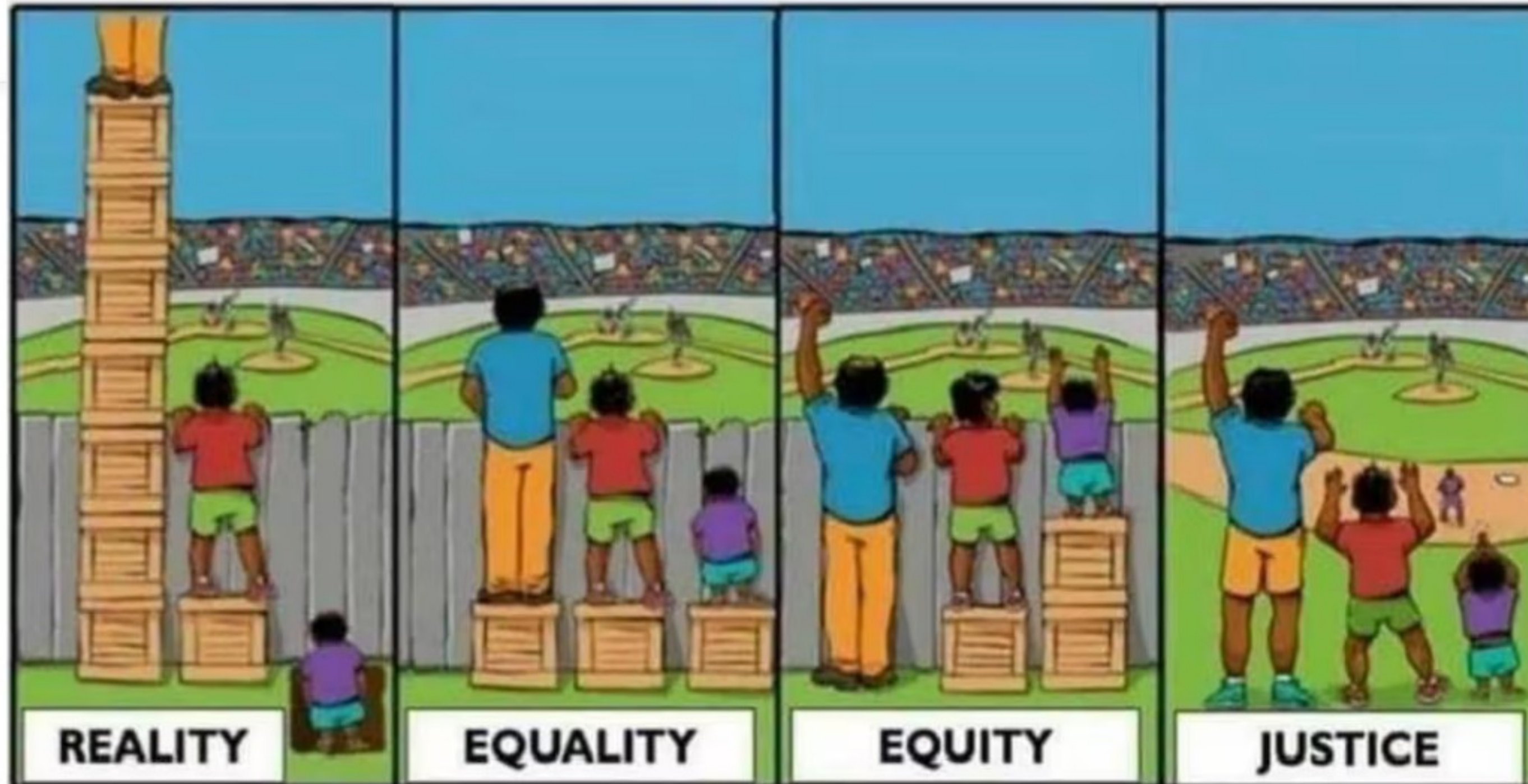




Power is always at the centre of EDI issues



What if....



One gets **more than** is needed, while the other gets **less than** is needed. Thus, a huge disparity is created.

The assumption is that **everyone benefits from the same supports**. This is considered to be equal treatment.

Everyone gets the support they need, which produces equity.

All 3 can see the game without supports or accommodations because **the cause(s) of the inequity was addressed**. The systemic barrier has been removed.



Inclusion starts with I

What are some goals you think as an individual you can do to become a better ally, advocate and champion of EDI?



encourage

awareness

bring people in the room

listen and believe

reflect and do the work

empower others

Self-Reflection

Business and Ethical Case for EDID

- Enhances educational, learning and research outcomes ,
- Creation of safe inclusive spaces for all identities, experiences and expertise,
- Re-examination of institutional policies and processes that historically exclude certain voices, identities and experience,
- Universities have an ethical responsibility to address systemic issues within education ,
- It is about the creation of Inclusive excellence in research, teaching and scholarship.



What does this look like in academia ?

- Inclusive Hiring Practice - Cluster Hiring
- EDI as an institutional priority
- Tri Agencies requiring EDI to be embedded throughout the research process
- More inclusive evaluation process for tenure and promotion
- Creation of EDI roles to support this work



What do you think are some of the most common misconceptions about Equity, Diversity, Inclusion, Decolonization (EDID) and Anti-racism work?

lowering standards
anti men no responsible for past
tokenism gets better on its own
someone else's problem
anti white unrelated to math
quotas
merit does not matter



Myth 1: Meritocracy

Myth 2: Lowering of standards





**Myth 3:
Causes more harm than
good**





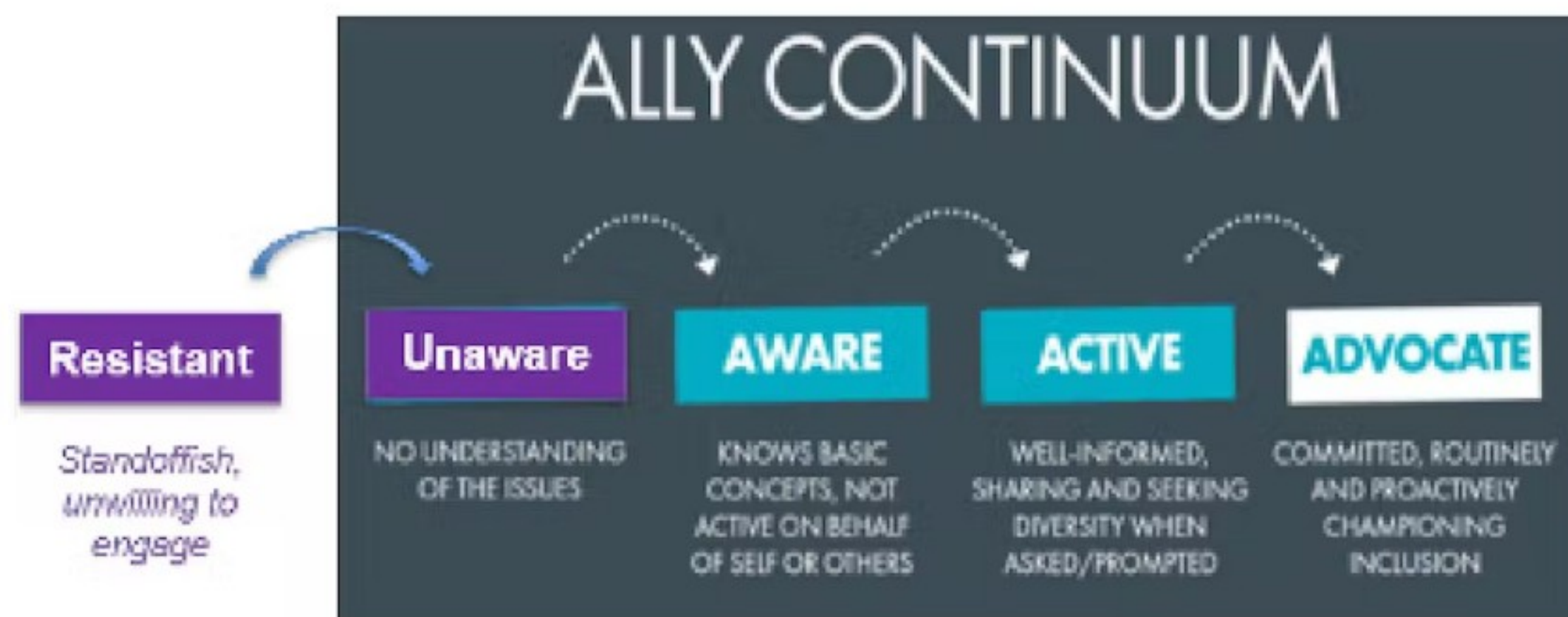
**Myth 4:
Takes from one group to
give to another**



**Myth 5:
I treat everyone the same**

Allyship Continuum

Framework for Allyship



Goal: Move an individual from one part of the continuum to the next

Source: Adapted from diversity & inclusion consultant Jennifer Brown

The ally journey



| | | | | | |
|------------------|--|-------------------------------------|---|---|--|
| | | | | Personal Empowerment | Organizational Empowerment |
| Feelings | Resistance | Curiosity | Uncertainty | | |
| Beliefs | "Not my problem." "I don't see gender or race." | "I want understand the problem." | "I want to do something about the problem." | "I am willing + equipped to do something about this problem." | "I am committed to stopping this problem." |
| How to move them | Connection* Empathy* Patience* | Judgement-Free Education Data | Ally Training Bias Training | Accountability Appreciation Training+ | Where Org Transformation Happens! |



Allyship in Action

- Speak up when the person is not in the room,
- Reflect on your power and privilege as straight, white, cisgender, heterosexual male colleagues,
- Listen to other perspectives,
- Credit your colleagues (women, racialized, Indigenous, 2SLGBTQ, persons with disabilities) fairly for their work,
- Challenge sexist, racist, homophobic, ableist behaviors,
- Build a culture of gender and culture diversity.



**GOOD
INTENTION
ARE NOT
ENOUGH.**



Stretch Break



Moving Forward





Brainstorming Activity

- With the focus towards improving inclusivity, what are some guiding principles that should become a part of the CRG events?
- What does the CRG do well?
- What could be working better in the CRG and why?
- What are 1-2 EDI related activities you would like to see?

With the focus towards improving inclusivity, what are some guiding principles that should become a part of the CRG events?

edi embedded from start
math is done by people

setting up expectations

planned mentorship

giving opportunities

value people

make the space

lasting relationships

share ideas

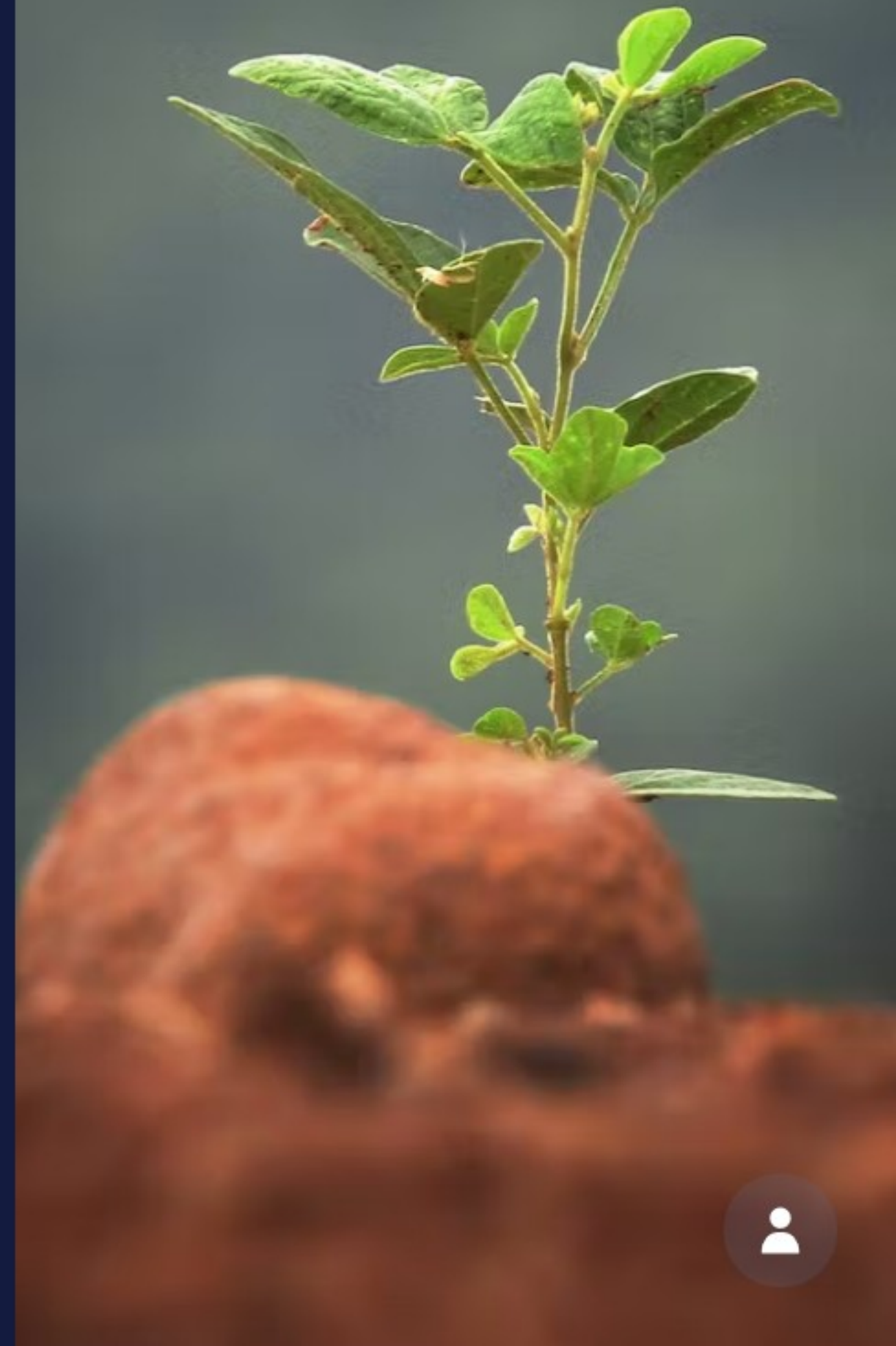
open calls

What does the CRG do well?

listening to each other
expand research network
edi is explicit priority
this



What could be working better in the CRG and why?



What are 1-2 EDI related activities you would like to see?

story sharing

sustained mentorship

intentional networking

historical learning



If you are free,
you need to
free somebody
else. If you have
some power,
then your job
is to empower
somebody else.

Thanks!

From Unsplash

