A call to action:
Striving towards inclusion in academic biology

Beyond information: Walking the path of truth, reconciliation, and liberation to make academic biology more inclusive

Desmond Tutu reminds us that our “humanity is caught up and is inextricably bound up in others.” In this seminar, we will build on the previous seminars in this series to examine the work of social justice using the lens of our interconnectedness and interdependence. Together, we will consider why we must strive to move beyond ally-ship and statements of solidarity toward truth, reconciliation, and liberation. Specifically, how can we take what we have learned in this seminar series and move towards action.

Joy Harjo
"Remember."
1983
Remember the sky that you were born under, know each of the star's stories.
Remember the moon, know who she is.
Remember the sun's birth at dawn, that is the strongest point of time.
Remember sundown and the giving away to night.
Remember your birth, how your mother struggled to give you form and breath. You are evidence of her life, and her mother's, and hers.
Remember your father. He is your life, also.
Remember the earth whose skin you are: red earth, black earth, yellow earth, white earth brown earth, we are earth.
Remember the plants, trees, animal life who all have their tribes, their families, their histories, too.
Talk to them, listen to them. They are alive poems.
Remember the wind. Remember her voice. She knows the origin of this universe.
Remember you are all people and all people are you.
Remember you are this universe and this universe is you.
Remember all is in motion, is growing, is you.
Remember language comes from this.
Remember the dance language is, that life is.
Remember.

https://people.com/crime/george-floyds-6-year-old-daughter-says-she-misses-him/
Today’s Seminar:

• What’s the problem? Why are we here today?
• Inner landscape of inclusion, equity, and justice.
• An Invitation.
• Discussion.

Starting Points & Assumptions:

• I am: Muslim, Survival of Wars, Refugee from Iraq, English ≠ first language, CC Educator, Colonized, and Settler Colonizer.
• While I will speak to inclusion and equity in general, I will center our Black and Indigenous brothers and sisters.
• I assume that you are here because you care about inclusion and equity and are willing to work to correct past and present unjust systems.
• I assume you will hear things you won’t agree with; when that happens I invite to engage in the “believing game.”
Believing Game

Give up “methodological doubt” and instead, try to be welcoming and accepting to the ideas we encounter, to find truths, not errors, and to try to believe those ideas.

The Problem

Efforts to promote equity and inclusion in science, technology, engineering and math have a long way to go.
Employment data from 2017-19 show that Black & Hispanic professionals are underrepresented in STEM, compared with their share of the overall U.S. workforce. Asian & white workers, on the other hand, are overrepresented.

<table>
<thead>
<tr>
<th>All jobs</th>
<th>White</th>
<th>Other</th>
<th>Asian</th>
<th>Hispanic</th>
<th>Black</th>
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</thead>
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<tr>
<td>All STEM jobs</td>
<td>67%</td>
<td>3%</td>
<td>13%</td>
<td>8%</td>
<td>9%</td>
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<tr>
<td>Health related</td>
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<td>3%</td>
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<td>3%</td>
<td>20%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Engineering</td>
<td>71%</td>
<td>2%</td>
<td>13%</td>
<td>9%</td>
<td>5%</td>
</tr>
</tbody>
</table>

“Racism, I often say, is a form of theft. Yes, it has justified the theft of land, labor, and life throughout the centuries. But racism also robs us of our relationships, stealing our capacity to trust one another, ripping away the social fabric, every anonymous post pilfering our ability to build community.”

– Ruha Benjamin

“[W]hat we are really dealing with and what we are really engaging is our own otherness. In other words, each one of us is other to ourselves and how you relate to others is one of the most decisive question of your life.”

– John O’Donohue
How can STEM act as a driving force for modeling systematic and sustainable approaches to inclusion and equity?

What factors are necessary for each STEM student to engage, learn, apply, succeed, and thrive at our institutions and beyond?
Self as a Site of Inquiry

Critical Autoethnography

Pedagogy of Remembrance

How Do We Remember & Learn From the Past?

Interdependent Relationships with the Earth & its Inhabitants

Relational Epistemology

Mays Imad, Ph.D.
@lirningsanctuary

Self as a Site of Inquiry

Critical Autoethnography
"Why? [Am I] not human?"

He Wanted to be Seen
"Don’t Forget Us"

Longing to Connect, to Belong, and to Matter
How has my truth—personally or as part of a system—intentionally or otherwise prevented or challenged others’ truth?
Salient Questions:

• Science was used to justify and inculcate the construct of race as caste.

• Science education has remained silent, overwhelmingly so, with respect to the point above. A person is silent because:
  • One doesn’t care.
  • One doesn’t know.
  • One doesn’t feel comfortable or empowered to speak up.

• Educational and funding policies are now used to maintain the racial-caste system.

In the 1980s, the Los Angeles police and law enforcements used the acronym “NHI” to informally classify cases involving the murder of sex workers, drug users, gang members, or homeless persons, the majority of those from Black and Brown populations. Those cases were given low or no priority because their victims are regarded as having a low or no social status.

“No Human Involved.”
“No Humans Involved”: An Open Letter to My Colleagues
By Sylvia Wynter, 1994

“It was therefore the role of these systemic cognitive distortions to provide the mode of ‘truth’ ... ."

“Yet where did this system of classification come from?”

“How did they come to conceive of what it means to be human?”
Wynter argues for the vitality of reconsidering what constitute knowledge in academia in the face of racial, economical, and environmental injustices.

“How can we marry our thoughts so that we can now pose the questions whose answers can resolve the plight of the jobless archipelagos, the NHI categories, and the environment?”
James Baldwin, On Education: “The Reason Black People are in the Streets”

Relational Epistemology

Interdependent Relationships with the Earth & its Inhabitants
“A person is a mirror to another person”

We are part of an ecology and the unit of assembly is not me or you or them but the connection between and among us.

Forecast the consequences of our actions and interactions.

Bayo Akomolafe, “Trauma as a Public Event”
Have we done enough work with ourselves and our students to cultivate the understanding about the importance of relationships and interdependence and the responsibilities we have to each other and the environment?

“Despite hundreds of initiatives and millions of dollars that were used to reduce the gender and racial gap in STEM education, nearly twenty years later, we still have a major disparity in STEM education. Why do you think that is the case?”

1. It takes more than money to solve that problem. (22.1%)
2. We need more funding. (7.8%)
3. We need representation. (11.8%)
4. There is no gap. (20.6%)
5. Some people don’t have what it takes to become a scientist. (19.1%)
6. I don’t know. (4.9%)
7. No response. (13.7%)

Imad, PCC, in preparation.
The Problem

Efforts to promote equity and inclusion in science, technology, engineering and math have a long way to go.

How do we go beyond inclusion and attend to healing through truth-telling and accountability and resisting systems of oppression and building systems of co-liberation?
Self:

For me, this work is necessarily spiritual. I could not bypass the critical step of self-work. I have to continue to ask difficult questions, about the utility and ontological reality of truth and justice. I invite you to consider the following:
Self:

1. Why is this work of diversity, equity, and inclusion important to you personally? Why is DEI not enough?
2. What makes you uncomfortable about this work? Why? Sit with that discomfort. Understand it and let it guide your evolution.
3. Resist expediency. Question traditional and binary assumptions. It’s important to pause.
4. How does your truth impact or challenge the truth of others? How might it replicate systems of oppression and injustice? How must I be in order for other’s to be free? To thrive?
5. This is tough work. Apply the same rigor to equity and co-liberation as you do to your experiments and scientific inquiry. Don’t settle.

System:

1. Re-examine the curricula: from anthropocene, dualistic fallacy, scientific reductionism to an interdisciplinary and more expansive notion of what it means to be human and to be alive. Why must we learn about and consider an Indigenous notion of causality? Of knowing?
2. What harms have we directly or indirectly caused? Implicitly or explicitly? Make a list and study it.
3. Interrogate the various consequences of exclusion from STEM. Examine and advocate for the education debt we in STEM higher education still need to pay back.
4. How do we move from truth and bearing witness to accountability and reparation – not merely from a philosophical perspective but also from a practical lived experiences and consequences in the world.
5. Engage in leadership and political positions. Ask questions. Make beautiful troubles. Ask your institutions where their money come from or go towards. Advocate for more than land acknowledgment statements–divestment from and boycotting entities that perpetuate systems of oppressions.
“There is no greater agony than bearing an untold story inside you.”
—Maya Angelou

“To be human you must bear witness to justice.”
—Cornel West

Embody, enact, and liberate the unwritten stories of your humanity:
socioeconomic, political, and environmental justice