

Keeping our Pledge to Health Equity and Anti-Racism

Case Western Reserve University, Education Retreat
April 29, 2021

Monica Vela, MD
Professor of Medicine, Department of Medicine
Vice Chair for Diversity, Equity and Inclusion
Associate Dean, Multicultural Affairs
Pritzker School of Medicine

James N. Woodruff, MD
Professor of Medicine, Department of Medicine
Associate Program Director, Internal Medicine Residency
Dean of Students
Pritzker School of Medicine

Disclosures

- None
- Seriously, Neither of us have any financial disclosures

Roadmap

- 1. To demonstrate the leadership and infrastructure necessary for successful Diversity Equity and Inclusion initiatives
- 2. To recommend system level changes promoting health equity
- 3. To recommend accountable bias reporting mechanisms
- 4. To reveal the necessary structural competency training for trainees and faculty
- 5. To demonstrate the importance of establishing Civil Discourse

Start with WHY we lose without DEI:

Quality of Care is Impacted

- **Bias and discrimination contribute to inequity in patient care** through direct effects on provider judgment and negative impacts on provider–patient relationships.
- Prevalence of anti-Black and anti-Hispanic bias among providers ranges between 42% and 100%.
- Similarly, in a national sample of U.S. medical students, 81% of heterosexual respondents held anti-gay/lesbian implicit bias.
- several studies demonstrate an association between provider-held bias and **lower quality of care** for patients belonging to LGBTQ and racial/ethnic minority populations.

Quality Metrics Equity Metrics

- The COVID 19 Pandemic has demonstrated
 - Quality of testing was good but access was disparate and driven by **job status, zip code, insurance status and citizenship status,**
 - Quality of treatment was fair but access to oxygen, ventilators, and immunoglobulin were disparate and determined largely by **zip code, insurance status and citizenship**

Quality Metrics Equity Metrics

- The average age of a COVID Death is 76.6 years
- NH White patients have a higher average age (80.9):
- NH Black patients have a lower average age (71.8);
- Hispanic patients have the youngest average age at death (67.3)
- This trend has held true for all time periods
- **Difference of 11.9-15.5 years between Black and Hispanic patients and NH White patients depending on time periods—PHASE 1B (age 75 and above) was structurally violent**

Gold JA, Rossen LM, Ahmad FB, et al. Race, Ethnicity, and Age Trends in Persons Who Died from COVID-19 — United States, May–August 2020. MMWR Morb Mortal Wkly Rep 2020;69:1517–1521. DOI: <http://dx.doi.org/10.15585/mmwr.mm6942e1external> icon.

Quality Metrics Equity Metrics

- PHASE 1B recommendations included vaccinating patients aged 75 and above
- Despite a difference of 11.9-15.5 years between Black/Hispanic patients and NH White patients depending on time periods
- PHASE 1B was structurally violent

Start with the WHY we lose without DEI:

Learning Environment is Impacted

- Discrimination based on gender, racial/ethnic group, disability status, and LGBTQ identity has also been heavily reported by trainees and providers throughout the health professions.
- In one meta-analysis, **24% of medical trainees reported racial discrimination, 33% reported sexual harassment, and 54% reported gender discrimination.**
- In 2019, only 5.2% Latinx, 6.2% Black, and 0.2% American Indian or Alaskan Native among American Medical Grads (Similar in Nursing, Public Health MA/PHD)

WHY we lose without DEI:

Discrimination, quality of life, and wellness of our trainees

- large body of evidence detailing **disparities in the recruitment and evaluation** of underrepresented trainees, including bias in honors and awards, and narrative evaluations
- minority health professionals have stated that experiences of harmful bias and discrimination during training lead to feelings of **isolation, devaluation, and beliefs that their social group membership hinders their ability to succeed.**
- experiencing mistreatment, including gender and racial discrimination, even just a few times a year, was associated with a **twofold increase in the odds of both burnout symptoms and suicidal thoughts** among residents.

Why We Lose without DEI

Compositional Diversity

- In 2019, only 5.2% Latinx, 6.2% Black, and 0.2% American Indian or Alaskan Native among American Medical Grads (Similar in Nursing, Public Health MA/PHD)
- At Pritzker, 33% of our entire student body identifies as either Black or Latinx (from 14% a decade ago)
- This year, our DEI efforts led an incoming intern cohort that is 25% UIM

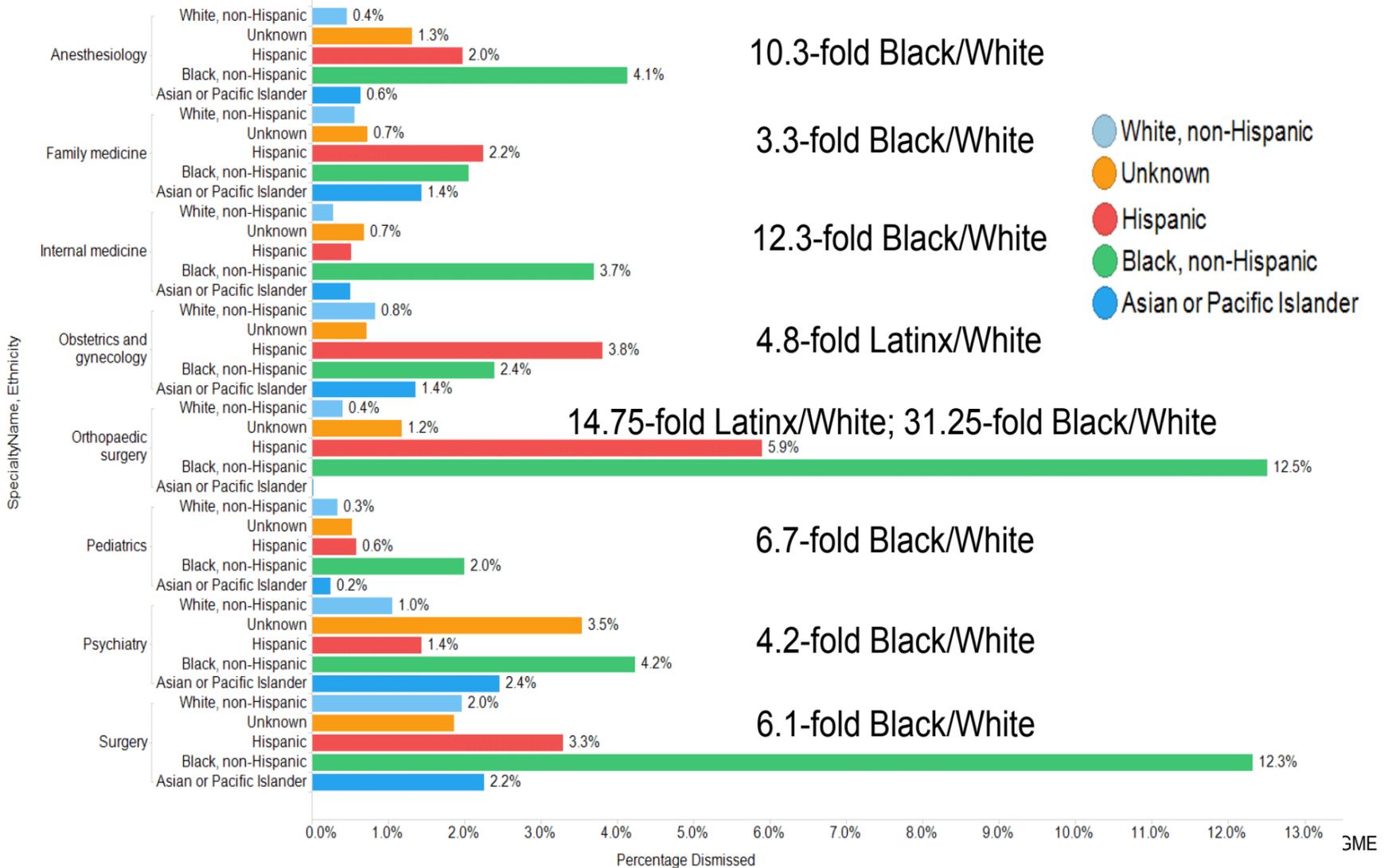
William McDade, MD PhD

ACGME Names First Chief Diversity and Inclusion Officer: March 2019



- Dr. McDade undergrad chemistry from DePaul University, PhD in biophysics and theoretical biology from the University of Chicago
- UChicago's Pritzker School of Medicine Medical Scientist Training Program, internship in Internal Medicine at the University of Chicago and residency training in Anesthesiology at the Massachusetts General Hospital-Harvard Medical School.
- past president for the Chicago Medical Society, the Cook County Physicians Association, the Prairie State Medical Society, and the Chicago Society of Anesthesiologists. He represents the American Society of Anesthesiologists in the AMA House of Delegates and currently serves as the Vice-President of the Illinois State Medical Society.
- In 2016, Dr. McDade became the Executive Vice President and Chief Academic Officer of the Ochsner Health System in New Orleans, LA.

2015-2016 Pipeline Grads Dismissed by Specialty



WHY REACH FOR DIVERSITY EQUITY AND INCLUSION?

- Working alongside trainees who belong to underrepresented groups **can benefit other trainees by reducing their implicit bias and improving their skills in caring for diverse populations.**
- Minority trainees will ultimately **enhance the lives of patients of color, for whom having race-concordant physicians has been associated with higher-quality relationships, communication, and health care delivery.**
- An influx of minority trainees can **signal a change in organizational priorities and lift the spirits of all employees, particularly employees of color, in a hospital system.**

1.van Ryn M, Hardeman R, Phelan SM, et al. Medical school experiences associated with change in implicit racial bias among 3547 students: a medical student CHANGES study report. J Gen Intern Med 2015;30:1748-56.
2.Saha S, Guiton G, Wimmers PF, Wilkerson L. Student body racial and ethnic composition and diversity-related outcomes in US medical schools. JAMA 2008;300:1135-45.

WHY **REACH** FOR DIVERSITY, EQUITY, AND INCLUSION?

It is Aligned with our **Medical Ethics Principles**

- **Distributive justice** proposes that institutions, processes, and structures should be allocated in a manner that seeks to improve **the well-being of the least advantaged in society**, whose social positions exist because of limitations placed on their opportunities.
- **Principle of reciprocity** argues that it is our collective responsibility to ensure that those being placed in harm's way are prioritized and protected.

Monica E. Peek, Russell A. Simons, William F. Parker, David A. Ansell, Selwyn O. Rogers, Brownsyne Tucker Edmonds, "COVID-19 Among African Americans: An Action Plan for Mitigating Disparities", *American Journal of Public Health* 111, no. 2 (February 1, 2021): pp. 286-292.

I. Well-structured diversity, equity, and inclusion (DEI) platforms

- 1. DEI officers must be trained or have access to **critical race theory, health disparities, and inclusive pedagogy** and be able to offer or access programming on topics ranging from **implicit bias to civil discourse** ¹
- 2. Should identify as members of a marginalized group, so that they have **shared, authentic lived experiences** with discrimination and a personal drive to address these issues
 - Successful role models and **mentors**
 - a trainer's personal experience with discrimination affects **perceptions of their effectiveness.** ²
 - We also occupy different spaces and interact with different groups and so our daily experiences vary widely*

1. Ufomata E, Merriam S, Puri A, et al. A Policy Statement of the Society of General Internal Medicine on Tackling Racism in Medical Education: Reflections on the Past and a Call to Action for the Future. *J Gen Intern Med.* 2021;36(4):1077-1081.

2. Liberman BE, Block CJ, Koch SM. Diversity trainer preconceptions: the effects of trainer race and gender on perceptions of diversity trainer effectiveness. *Basic Appl Soc Psychol* 2011;33:279–93.

I. Well-structured diversity, equity, and inclusion (DEI) platforms

- 3. report and respond to a diversity committee that includes **both** trainees and faculty
- 4. consulted on **new*** clinical and educational endeavors
- 5. compensate members for this additional work (BIPOC tax)— for instance by counting diversity-related work as part of their **salaried responsibilities (FTE)**, providing them with **administrative support**, or offering **additional training** that enhances their career trajectories.
 - 84% of underrepresented in medicine (UiM) applicants interviewed with at least 1 UiM faculty member and 11% interviewed with 2 UiM faculty
 - Meetings with leadership, writing groups, statistician hours

I. Well-structured diversity, equity, and inclusion (DEI) platforms

- 6. establish and support **Affinity Groups** — groups with shared race, culture, gender, sexual orientation, or other identities.
- Affinity groups foster personal relationships and build the social capital and sense of belonging that help trainees succeed
- foster mentoring relationships, facilitate access to institutional resources, and buffer the harm associated with imposter syndrome, social isolation, and stereotype threat that may affect trainees
- 7. Trainees should have access to a **database** of successful, well-resourced faculty from similar backgrounds.

Burgess DJ. Are Providers More Likely to Contribute to Healthcare Disparities Under High Levels of Cognitive Load? How Features of the Healthcare Setting May Lead to Biases in Medical Decision Making. *Med Decis Making*. 2010;30(2):246-257.

I. Well-structured diversity, equity, and inclusion (DEI) platforms

- 8. Recruitment initiatives, such as outreach to societies with large numbers of members of underrepresented groups, with DEI officers included in interviews
- 9. Search committee practices to increase minority faculty, such as maintaining and reporting demographic metrics for applicants, interviewed applicants, and applicants offered positions
- 10. **Metrics Matter! How will you know where you are going?**
 - Review of promotion practices to increase success of minority faculty: **Where** are BIPOC faculty facing obstacles?
 - How much **time** are BIPOC faculty spending **at each level of promotion**, as compared with other faculty?
 - Are diverse faculty in leadership positions? Which leadership positions?
 - Are promotions committees **diverse**?
 - Are promotions officers and committees required to be **trained in bias reduction**?

II. Bias Reporting Mechanisms

- Residents and faculty could receive training on reporting episodes of discrimination and bias.
- Multiple mechanisms should protect the identity and identifying characteristics of reporters and prevent retribution.
- Institutions **must be prepared to deliver a proportional response** (dismissal, suspension, training and probation, counseling)
- Mechanisms should be layered, well defined and easily accessible
 - Ombudsperson
 - Professionalism Committee
 - Making Spaces and Pedagogy more inclusive
 - language (gender neutral), access (prayer rooms), restrooms (single access, gender neutral), lectures on history of any medical innovation (must give reference to forced experimentation, exclusionary practices, etc.)

III. Advancing Health Equity: Systems Level Changes

- 1. Hospitals should **support** community outreach, service, and connections with community-based organizations paired with an **assets-based approach to advocacy training**
- 2. Faculty and Residents need **advocacy training** in supporting individual patients (e.g., making referrals and navigating insurance-related issues) and groups with chronic diseases (e.g., sickle cell disease) and in promoting distributive justice (e.g., in the area of vaccine distribution).

III. Advancing Health Equity: Systems Level Changes

- 3. Challenge **ANY** ideologies that permit the rationalization of differential care
 - trainees frequently care for the sickest patients from the most under-resourced communities, including racial and ethnic minority groups
 - ambulatory resident clinics often do not feature the level of team-based care that is available to faculty in the same practice
 - Trainees should have access to social workers, behavioral health workers, and patient navigators to help care for patients with complex medical and social needs

**Incentive based quality metrics
- 4. Residency Review Committees **MUST** adopt policies emphasizing health equity

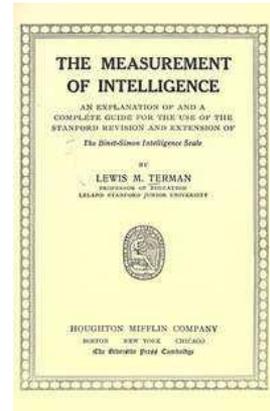
III. Advancing Health Equity: Systems Level Changes

- 5. academic hospitals should stratify care quality measures by patient race/ethnicity, gender, insurance, language
- 6. perform continuous root-cause analyses of disparities in care and outcomes that engage affected patients and communities
- 7. continuously redesign care systems to address drivers of these disparities.

IV. Structural Competency and Advocacy Training

- 1. Lectures on the history of the **Flexner Report** (closed majority of Black serving medical schools—*“though admittedly they will not be up to the need”*), the **American Medical Association’s** discriminatory practices (excluded Black physicians from specialization—only 2 Black specialists out of 25,000 in 1931), **scientific racism** (Intelligence testing, non-consented experimentation, forced sterilization and racialized medicine), and racism at every level—personal, institutional and systemic racism

1916 Lewis Terman



- intelligence was not only hereditary but directly correlated to morality, crime and poverty
- recommended institutionalization and sterilization for the “unfit.”
- low intelligence was “very common among Spanish-Indian and Mexican families of the southwest and also among negroes. Their dullness seems to be racial, or at least inherent in the family stocks from which they come.”
- They also joined gendered stereotypes of Latinos—women as hypersexual and hyper-fertile and men as violent and prone to criminality—to biology and heredity.
- Stereotypes became “scientific truths” with grave social consequences.
- **Our complicity has served as the basis to historic and modern Eugenics and White supremacy movements**

2. BRING IT HOME

University of Chicago's Institutional Racism

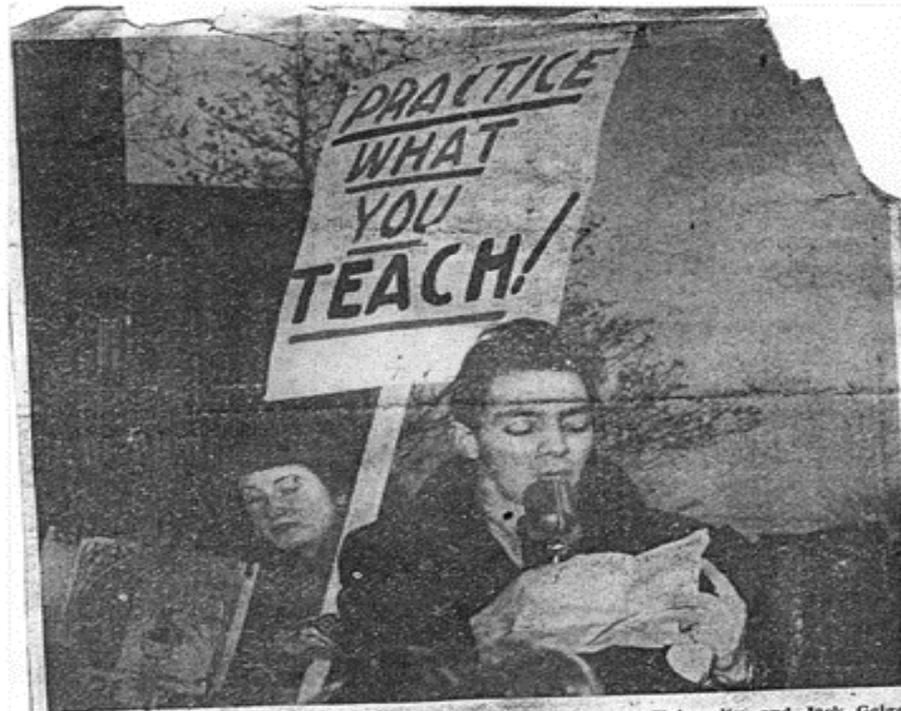
- **First 10 acre endowment** was from ***Stephen A. Douglass***
 - One of Abraham Lincoln's rivals in the 1860 Presidential Election
 - Owned 140 Africans in bondage on a cotton plantation in Mississippi
 - University's first President of Board of Trustees
- **1933-1947 the University supported Restrictive Covenants to protect "Community Interests"**
 - \$110K on "Community Interests"
 - Hyde Park, Woodlawn, and Washington Park
- **1951-1960 Lawrence Kimpton, the University's President**
 - Urban renewal was the practice of purchasing cheap tenements and redeveloping them so that the current residents can no longer afford them
 - called urban renewal a strategy for "cutting down the number of Negroes" in the neighborhood

Provident Hospital and Medical Education



- Provident Hospital founded by Dr. Daniel Hale Williams in 1891
- Among the first Black-controlled hospitals
- In 1929, partnership/affiliation with Uchicago was attempted—”the project”
- The project was established based on the premise that black medical professionals and patients would be provided for in separate facilities than their white counterparts—a place to train Black medical students.
- Eventually racial politics, Great Depression’s impact on financing, disagreements ended the affiliation
- Unfortunately, between 1931-38 only 7 black medical students graduated from the University

1947: UChicago Graduate Students Walkout to advocate for OB Care for Black Women at Lying In Hospital



Joan Redfield, daughter of an anthropology professor, at the University, and Jack Geiger, campus AVC civil liberties committee chairman at U. of C. rally, Dec. 8.

U. of C. Student Walkout Sparks Move to End Race Discrimination

Spearheaded by the U. of C. chapter of AVC, 1,200 students left their classes Monday, Dec. 8, to join a campus picket line and street meeting in protest against alleged racial discrimination practiced at the university hospitals and medical school.

between stated policy and practice within the university. He added:

"It is sometimes necessary for a great institution to compromise, but it is not necessary

U. of C. Chapt. in Van of Walkout

(Continued from page 1)
Chicago to compromise where racial discrimination is concerned . . . I urge the students to continue their fight until discrimination is entirely wiped out in the university community."

FACULTY, STUDENTS SPEAK

Other speakers included Malcolm Sharp, professor of law, Robert Ming, area vice-chairman, also of the law school, Sidney Ordower, AVC leader and radio commentator, Dave Green, chairman of the student government civil liberties committee and Jack Geiger, chairman of AVC's civil liberties committee on the campus.

Both student speakers promised that the rally was only the beginning of a concerted drive to end discrimination, and asked students to be ready for further action.

Students, in a well-documented report, charge that Billings hospital and Lying-in hospital exclude, refuse or segregate Negro patients, and point to the absence of Negro medical students from the school since 1941 in charging that Negroes are excluded there.

At the last meeting of the area council, the delegates unanimously pledged complete support for the student walkout, and for the continued effort of the U. of C. chapter to fight for the end of discrimination at the

IV. Structural Competency and Advocacy Training

- Must teach on structural violence against marginalized populations causes or exacerbates diseases such as diabetes, hypertension, chronic kidney disease, and HIV
 - **Critical review of Race and Gender as Social constructs** (sociologists, historians)—and constructed with the intent to oppress
 - That we continue to teach both as genetic or biologic constructs constitutes **institutional racism or violence**
 - And ignores our complicit history in **creating pathology** (lack of intelligence, hyper-criminality, hyper-sexuality, hyper-fertility, sexual deviancy, etc) in racial ethnic and gender and sexual nonconforming groups and any number of marginalized groups--where there was **NO PATHOLOGY**
 - **Our complicity has served as the basis to historic and modern Eugenics and White supremacy movements**

IV. Structural Competency and Advocacy Training

- **Social Determinants** —including housing policies, limited transportation systems, segregation, restrictions on educational attainment, language barriers, immigration policies, environmental racism, the history of the GI bill and labor legislation, trauma in BIPOC neighborhoods, etc.
- training in **implicit bias**, creating **safe spaces**, and **allyship** (bystander training)
- Morning-report cases demonstrating bias, discrimination, **inequitable practices** (lack of lessons on dermatologic conditions on darker skin), and **racialized medicine** (PFTs, eGFR and more), lack of use of **interpreter services** for limited English proficient patients (unethical and illegal in all Federally funded institutions)

I've Been Questioned on why I teach on things like

- Mass Incarceration
- Role of Policing? Federally Sanctioned Murders?
- Immigration Policy?

I HAVE ANSWERS.....

Immigration Policy and Enforcement and Health

- In May 2008, a major federal immigration raid in Postville, Iowa.
- without advance warning to local or state officials. ICE deployed 900 agents using military tactics, including armed officers and a UH-60 Black Hawk helicopter, to arrest 389 employees, 98% of whom were Latino.
- handcuffed ALL employees **assumed to be Latino** until immigration status verified.

Novak NL, Geronimus AT, **Martinez-Cardoso AM**. Change in birth outcomes among infants born to Latina mothers after a major immigration raid. *Int J Epidemiol*. 2017;46(3):839-849. doi:10.1093/ije/dyw346

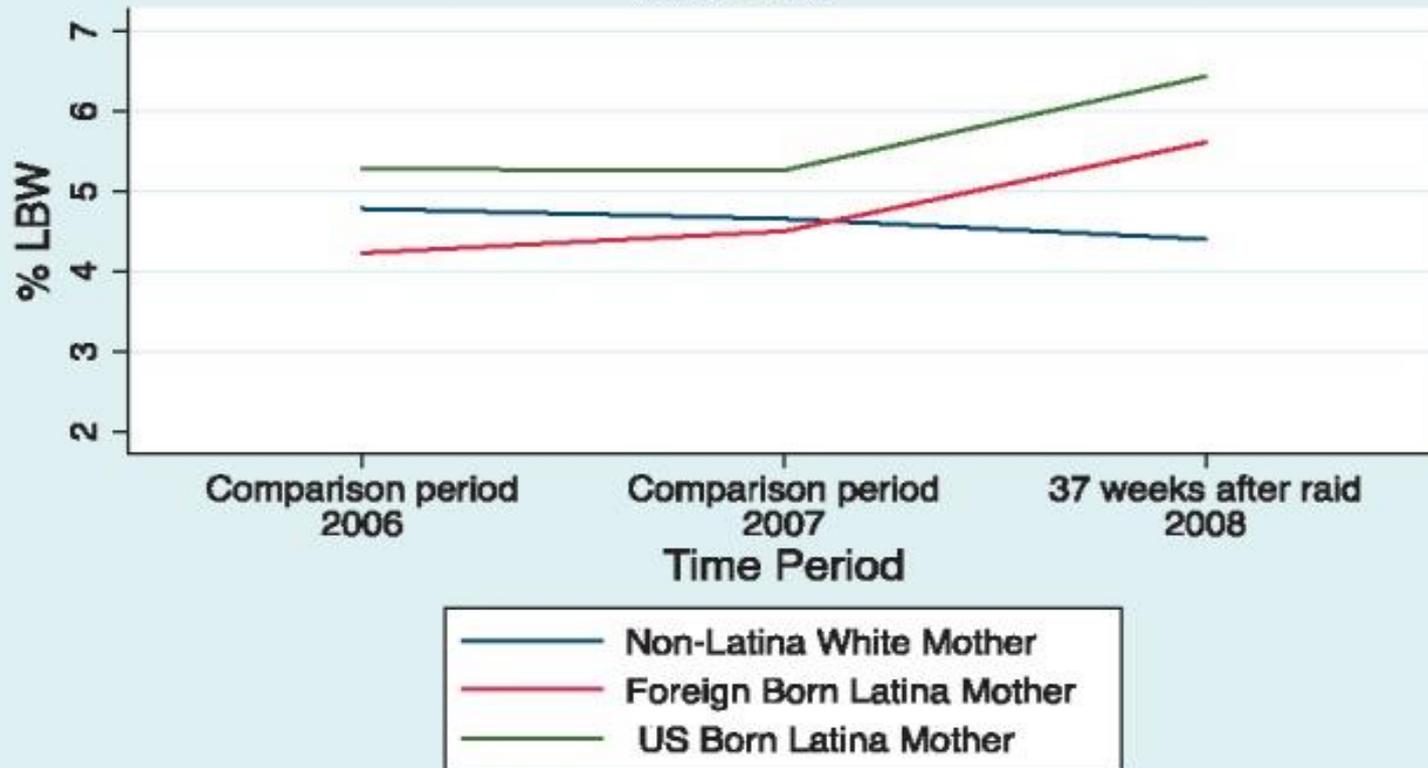
..and the violence continued

- The raid separated hundreds of families, most often from their primary breadwinner.
- Fear of follow-up home raids kept many Postville families **from** staying in their own homes, choosing instead to sleep in church pews or leave town altogether.
- News of the raid immediately spread throughout the state. *La Prensa*, a Spanish-language newspaper in western Iowa, published eyewitness testimony of arrestees detained at a cattle fairground, cuffed and chained together from the waist to the ankles.

Novak NL, Geronimus AT, **Martinez-Cardoso AM**. Change in birth outcomes among infants born to Latina mothers after a major immigration raid. *Int J Epidemiol*. 2017;46(3):839-849. doi:10.1093/ije/dyw346

Rates of low birth weight (LBW) before and after Postville Raid by mother's ethnicity/nativity

2006-2008



Novak NL, Geronimus AT, **Martinez-Cardoso AM**. Change in birth outcomes among infants born to Latina mothers after a major immigration raid. *Int J Epidemiol*. 2017;46(3):839-849. doi:10.1093/ije/dyw346

Trauma In Our Neighborhoods take a toll on everyone in the Community



Mass Incarceration

- Approximately 2.3 million incarcerated people, 420,000 guards, and 11 million jail admissions and releases per year — **churn that results in 55% turnover in the jail population each week**, providing a constant supply of people who may not have been previously exposed to SARS-CoV-2 and ensuring that carceral and community health are intertwined — this warning is ominous.
- The Bureau of Justice Statistics reports that 35% of state prisoners are white, **38% are black, and 21% are Hispanic**.
- In twelve states **more than half** of the prison population is **African American**. **The Hispanic population in state prisons is as high as 61% in New Mexico and 42% in both Arizona and California**. Three states won't report demographics.
- Stopping the epidemic in jails and prisons is vital for protecting staff and incarcerated people; it is also critical for curbing the spread of Covid-19 into surrounding communities, especially Black and Latinx communities that are disproportionately affected by jail- and prison-linked coronavirus spread.

Planned Explosion Covered Little Village In Dust During Respiratory Pandemic — Why Did The City Let It Happen?



- Black and Hispanic people on average bear a ‘pollution burden’ of 56% and 63% excess exposure, respectively, relative to the exposure caused by their consumption.”
- Activists begged the city not to allow a smokestack demolition during the coronavirus crisis at the *old Crawford Coal Plant*, but the explosion ended up coating the mostly Latino neighborhood in dust.
- April 12, 2020

Mauricio Peña
Pilsen, Little Village and West Loop
reporter mauricio@blockclubchi.org

Little Village, Chicago April 12, 2020



“a massive plume of dust drifted across this area, dropping dirt and particulate matter across homes, cars, businesses, trees and every other inch of this community,” the mayor said, “acknowledged the city doesn’t yet know the extent of what exactly landed on Little Village.”

<https://chicago.suntimes.com/2021/3/9/22322140/general-iron-southeast-side-rmg-rush-esperanza-health-centers-sinai-urban-health-institute>



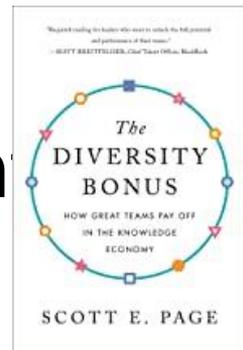
A protester marches to demand Chicago Mayor Lori Lightfoot to deny the final permit that will allow General Iron to move from Lincoln Park, a mostly white neighborhood, to the Southeast Side.

WE MUST RESPOND

- UIC MS 2 Jasmine Solola wrote, *“I am a Black student taking the USMLE Step 1 exam on Thursday, June 11. I have not had time to grieve, I have not had time to feel, and I have not had time to hurt—because in order for me to pass this exam I am required to be hyper focused and undistracted. A luxury, that I do not have.”*

WE MUST RESPOND

- Beginning with the 2020 recruitment season, 50% of our residency programs pledged to consider only pass/fail status for USMLE Step 1 for interview selections and for matching
- 25% of our incoming intern cohort identified as Black or Latinx
- These interns ARE A GIFT to us and to our patients



Lessons in building a Legacy

- Disparities in health and well-being won't be addressed by any one group of physicians
- Health Equity cannot be addressed from inside the walls of a hospital, a clinic or an academic center
- We cannot rely on structures where marginalized groups are not well represented. We can not rely on leaders in medicine who do not see or value DEI.
- We need to enter, or re-enter, the spaces where our patients live and work
- We need to partner with other professionals to dismantle structures that allow for structural violence—that allow us to create an other (language, citizenship, incarceration), to separate humans (fences, walls, prisons and detention facilities) and then to dehumanize them to allow for more violence to occur

Lessons in building a Legacy

- We can't have infectious disease specialist that don't understand how so many BIPOC live—in multigenerational homes with documented and un-documented people
- We can't have pulmonologists who don't understand environmental racism
- We cannot have scientists who perpetuate scientific racism about intelligence or kidney function or lung function or anything else
- ***We cannot have physicians who do not understand that not all trauma is visible to the eye...***
- ***We cannot have educators and leadership who do not understand the moral injury of marginalized groups cause by the cognitive load of the violence in our systems.***
- ***When our young people are leading, we have to be bold enough and humble enough to listen, think critically and be prepared to support and sometimes follow.***

**BUT WE DO NOT ALL
AGREE....Because we
occupy different spaces and
interact with different groups
and often what we SEE with
our eye and our experiences
on a daily basis vary vastly.**

What can we do when we
don't all agree?

(And it is often)

A Secular View of DEI
&
Pritzker School of Medicine (PSOM)
Identity & Inclusion Initiative (I2I)

Secular Discussion

Defined:

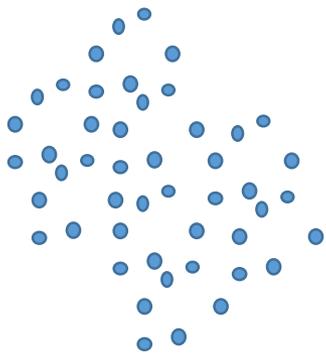
- Devoid of notions of social justice, respect, and professionalism
- Non-normative argument in favor of Diversity, Equity, and Inclusion
- Complexity science

Rationale:

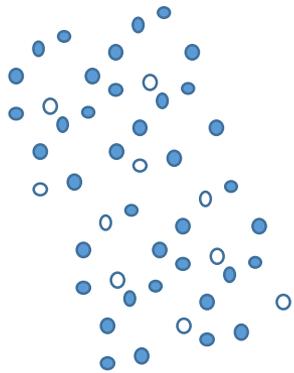
- Politics can obscure broader benefits of DEI work
- Politics can impair effective implementation of DEI

Systems Display a Spectrum of Complexity

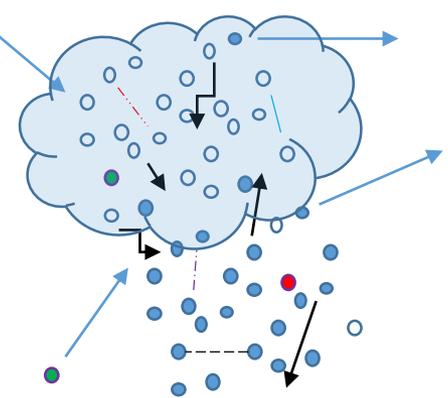
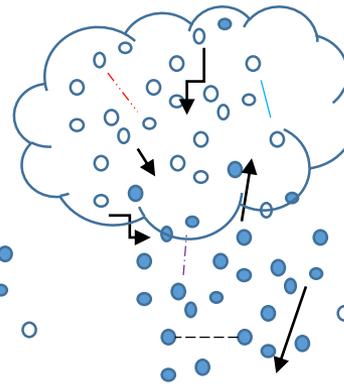
Simple



Complicated



Complex



- Transparent
- Static Content
- Stable or No Interactions
- Homogeneous Content
- Evenly Distributed
- Closed System

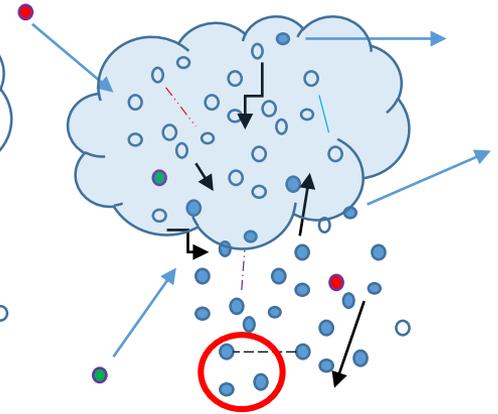
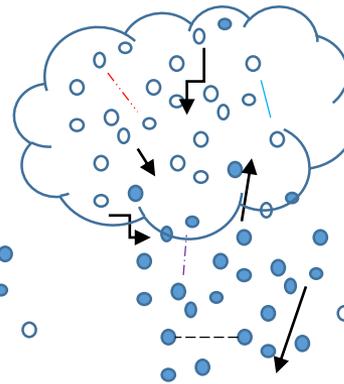
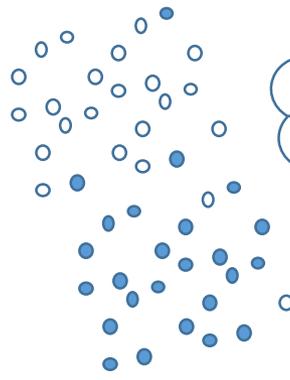
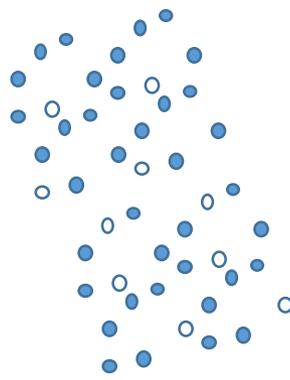
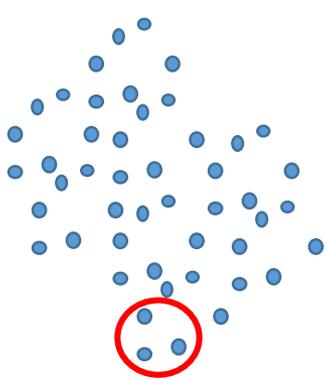
- Not Transparent
- Dynamic Content
- Unstable Interactions
- Heterogeneous Content
- Mal-distributed
- Open System

Systems Display a Spectrum of Complexity

Simple

Complicated

Complex



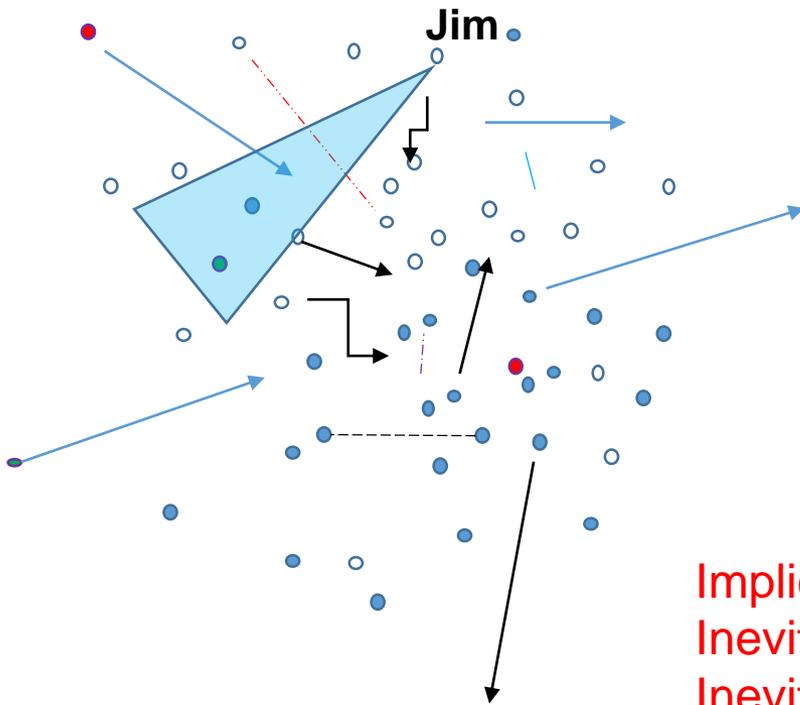
Odds Ratio of X
with $p < 0.05$

**SAMPLING becomes
problematic with complexity**

Odds Ratio of X
with $p < 0.05$

In Complex Systems, one can have only partial truths...

Complex System



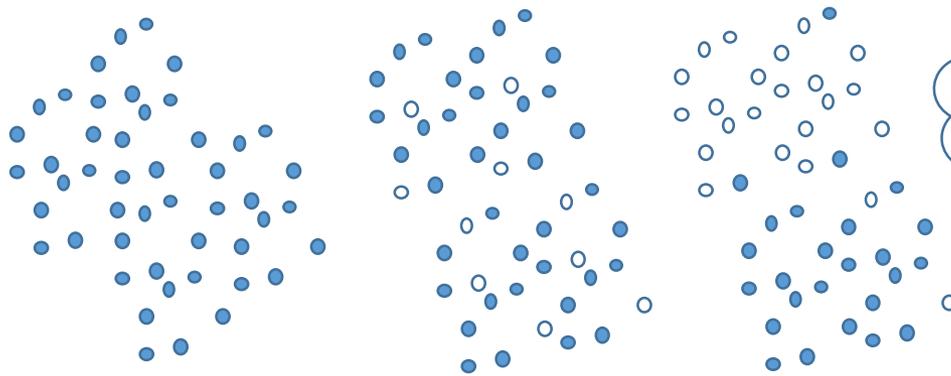
- Jim's knowledge of the complex system is never complete
- Jim can never perform "perfectly" (fixed mindset)
- The best that Jim can do is grow (growth mindset)
- Jim's main focus should be on how best to grow (learn)

Implicit Biases
Inevitable Assumptions
Inevitable Stereotypes

Humility

High Complexity Requires Different Problem Solving Strategies

Knowledge (Rules)

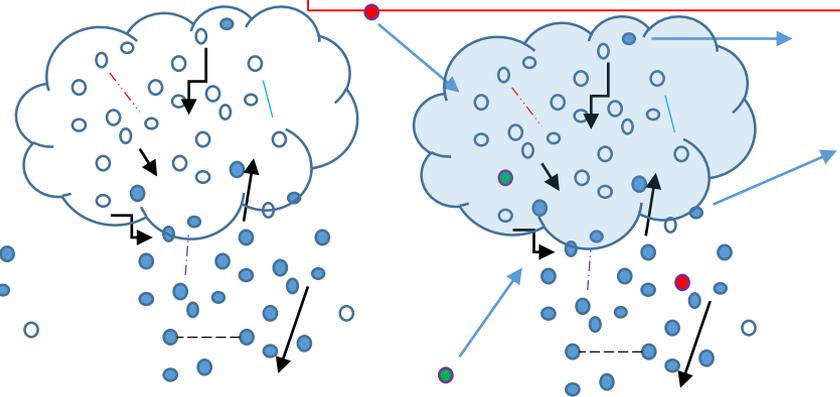


- Transparent
- Static Content
- Stable or No Interactions
- Homogeneous Content
- Evenly Distributed
- Closed System

Woodruff JN. Accounting for complexity in medical education: a model of adaptive behaviour in medicine. *Medical Education*. 2019 Sep;53(9):861-73.

Woodruff JN. Solutionism: A study of rigour in complex systems. *Medical Education*. 2021 Jan;55(1):12-5.

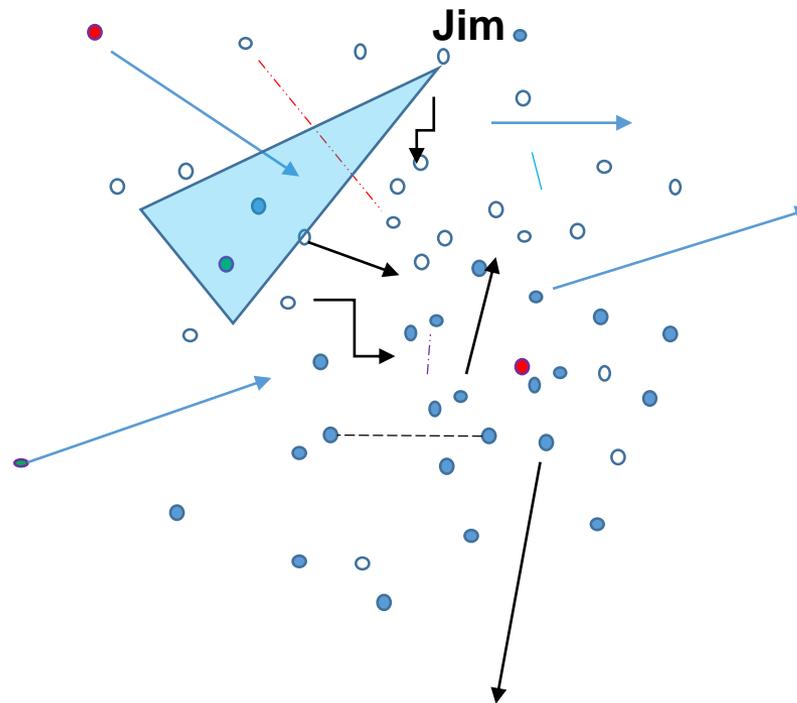
Knowledge / Adaptive Behavior / Values



- Not Transparent
- Dynamic Content
- Unstable Interactions
- Heterogeneous Content
- Mal-distributed
- Open System

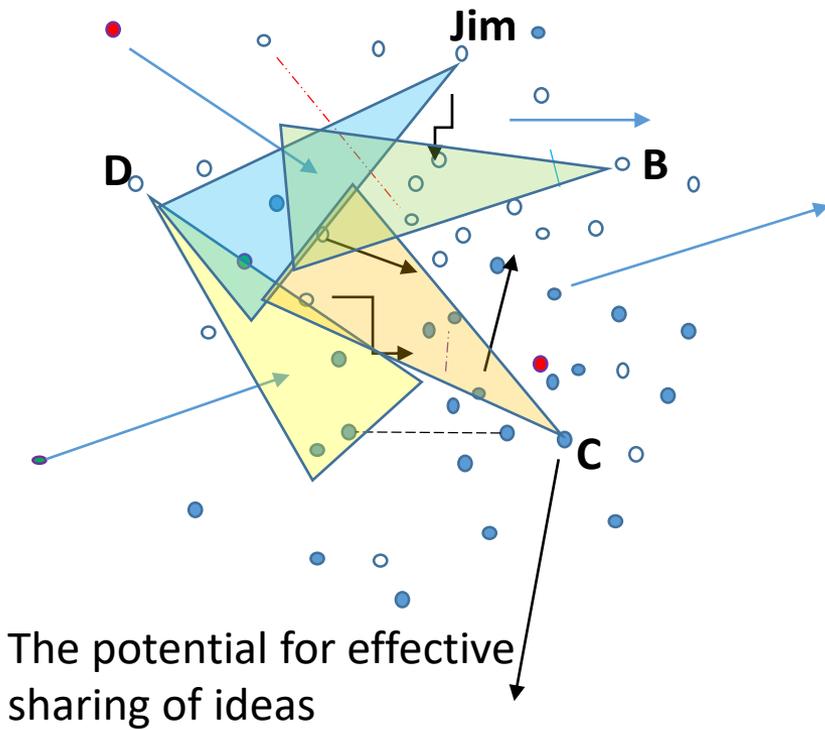
Adaptive Behavior: Teams, Diversity & Discourse

Complex System

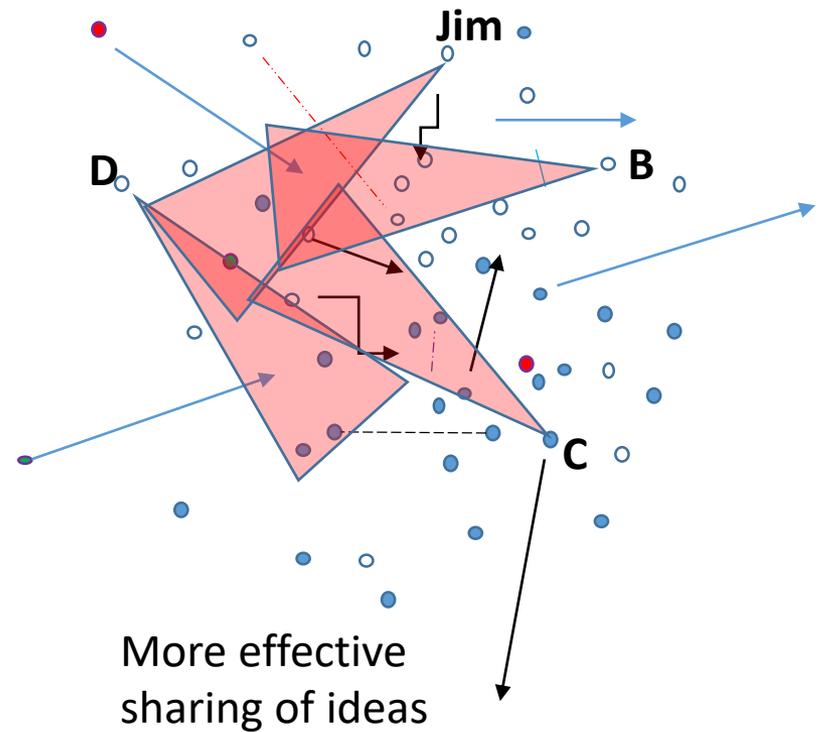


Adaptive Behavior: Teams, Diversity & Discourse

Structural Diversity



Structural Diversity & Inclusion



The Diversity Bonus...

- In complex systems, diverse & inclusive predictive teams will always be more accurate than their average member.
- The amount by which the team outperforms its average member depends upon diversity & inclusion: the more diverse & inclusive the group is, the “smarter” the group is.
- In complex problem solving (discovery, real world application of discoveries, and education), it is differences that predict enhanced team performance, not similarities...
- .. as long as the team is inclusive.

Page SE. The diversity bonus: How great teams pay off in the knowledge economy. Princeton University Press; 2017. (The Andrew W. Mellon Foundation)

Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2017



“The lesson of my field, behavioral economics, is that we need to understand the ways in which we differ from the rational human assumed in standard economic theory.”

- Robert Thaler
- University of Chicago
Booth School of
Business
- Paradigm bridging
work in economics
and psychology
- Assumptions of each
individual field
insufficient
- New Field: *Behavioral
Economics*

Contributions of Complexity Science to Our Work

Complex problem Solving:

- Medical error
- Quality improvement
- Value of care
- Market share
- Cost containment
- Discovery
- Innovation
- Prediction
- Education
- Health disparities

Teamwork /Diversity

Communication / Discourse / Inclusion

Values / Culture

Learning Organizations

Continuous Quality Improvement

Succeeding in Complexity: the Socio-Political View (with secular translation)

- DEI Platform (Diversity & Inclusion)
- Health Equity / Social Justice (Diversity & Inclusion)
- Structural Competency and Advocacy Training
(Inclusion)
- Bias Reporting (Inclusion)

The University of Chicago Pritzker School of Medicine (PSOM) Identity & Inclusion Initiative (I2I)

Woodruff JN, Vela MB, Zayyad Z, Johnson TA, Kyalwazi B, Amegashie C, Silverman R, Levinson D, Blythe K, Lee WW, Thomas S. Supporting Inclusive Learning Environments and Professional Development in Medical Education Through an Identity and Inclusion Initiative. *Academic Medicine*. 2020 Dec 1;95(12S):S51-7.



U of C i2i: Background / Timeline of Platform

Fall, 2015:	Mizzou and Yale Protests
November, 2015:	Concerns re: Upcoming Election
December, 2015:	Development of Climate Survey
January, 2016:	First Town Hall Meeting
February, 2016:	Constitution of i2i Steering Committee

i2i Steering Committee Charge

The Identity and Inclusion Committee will be responsible for **providing ongoing direction for programs and/or curricula at Pritzker that support an inclusive learning environment and promote respectful and effective communication with diverse patients and colleagues around issues of identity** (examples include but are not limited to: socioeconomic status, race, religion, gender, etc.). The committee is expected to accomplish this charge through both collaborative and independent means and should be responsive to feedback on Pritzker's learning climate and on established programming.

I2i Steering Committee: Key Operating Principles

- Representation of all stake-holders
- Regular feedback and input
- Engage all areas of the school
- Partnerships
- Emphasis in civil discourse

Connections: teamwork, community, relationships, shared or overlapping purpose

Selected i2i Interventions

- I2i Steering Committee
- Climate survey
- Town hall meetings
- Ground rules
- Civil discourse events
- i2i workshops
- I2i Arts, books, poetry events
- i2i grants
- Partnerships and collaborations

i2i Steering Committee

Class Representatives:

MS1: Gabriela Betancourt, Sumiko Maristany
MS2: Diana Li, Leslie McCauley
MS3: Courtney Amegashie, Victoria Oladipo
MS4: Beverly Kyalwazi, Maya Rhine
MSTP: Zaina Zayyad

Pritzker Chiefs: Gena Lenti, Jamila Picart, Madison Wilson

Faculty: Monica Vela, MD, Jim Woodruff, MD, Wei Wei Lee, MD

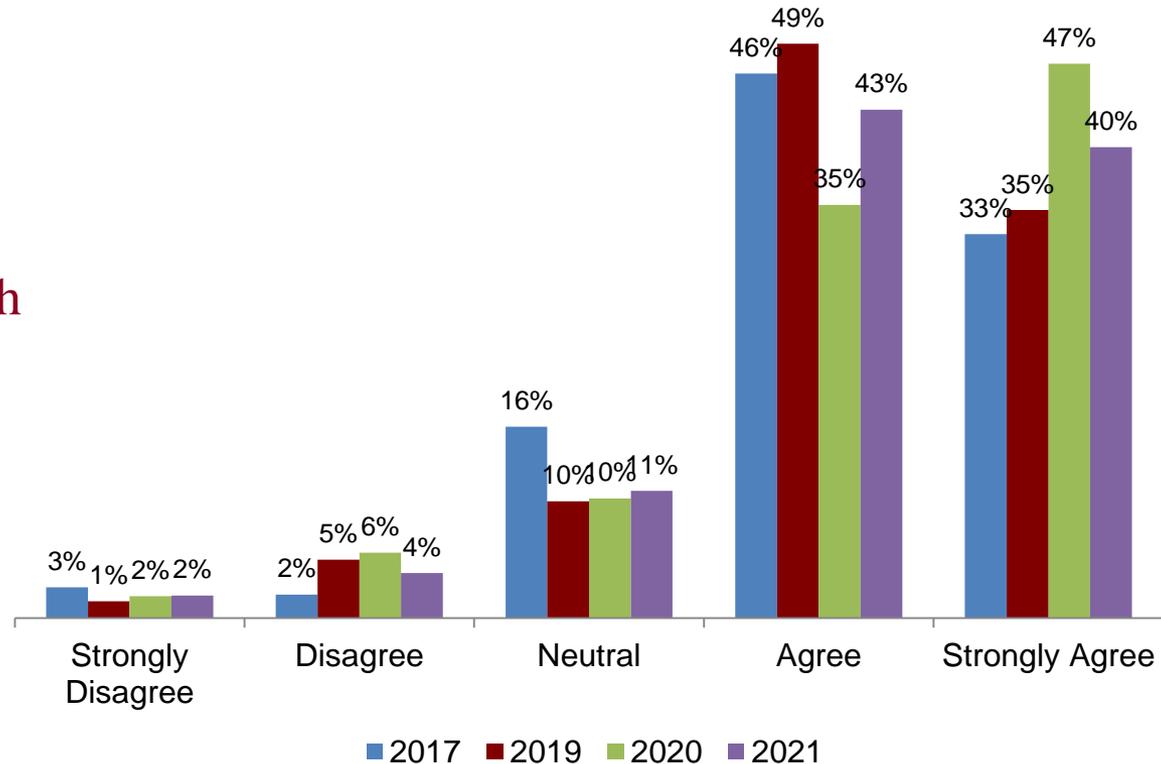
Staff: Kate Blythe, Adam Eickmeyer, Tyler Lockman

Representatives from the following Committees: Curriculum, Dean's Council, Wellness

Representatives from Pritzker Affinity Groups

Sample Question I2I Climate Survey

“I find it beneficial to engage in conversations with classmates about identity-related topics.”



“Is diversity of identity important to discuss among all medical students and why?”

“**No** - what is important is simply to encourage civility and respect of individuals. Breaking everyone down into various ‘identities’ is a way of further dividing people. **As long as people treat each other with respect, that is all that is needed.**”

“...I find it frustrating because **I have felt that I cannot join in solidarity with my minority classmates because I am automatically labeled as ‘not understanding’ because I am white.**”

“**Absolutely!** I think it goes without saying that as students and future physicians, **we will all need to have a high level of tolerance,** understanding, and acceptance for our classmates and future patients.”

“**Maybe, but it already is discussed in classes like Disparities,** and I don't think it needs to be formally discussed more. We students will have informal discussions about it either way.”

Ground Rules for Discussion

Seek Meaningful Discourse

- a. Listen carefully
- b. Speak respectfully
- c. Invite different perspectives
- d. Trust intent
- e. Be true to self and generous to others

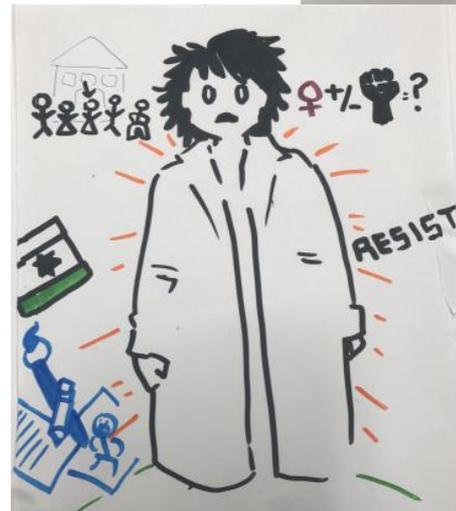
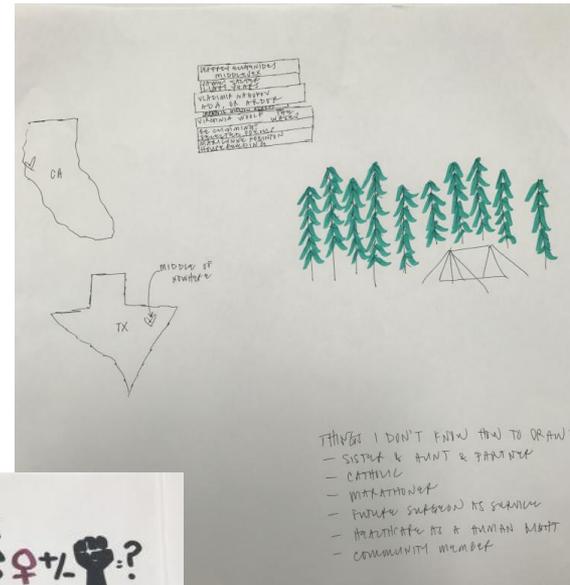
I2i Art Exhibits



I2i Poetry Events

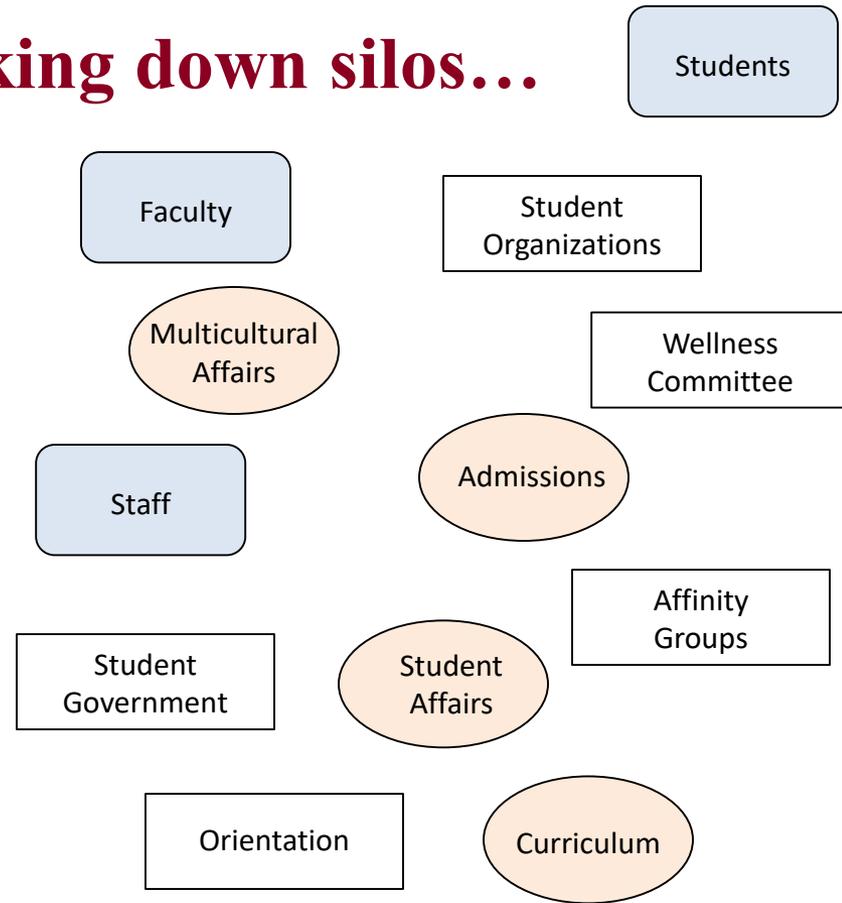


I2i Audience Activities

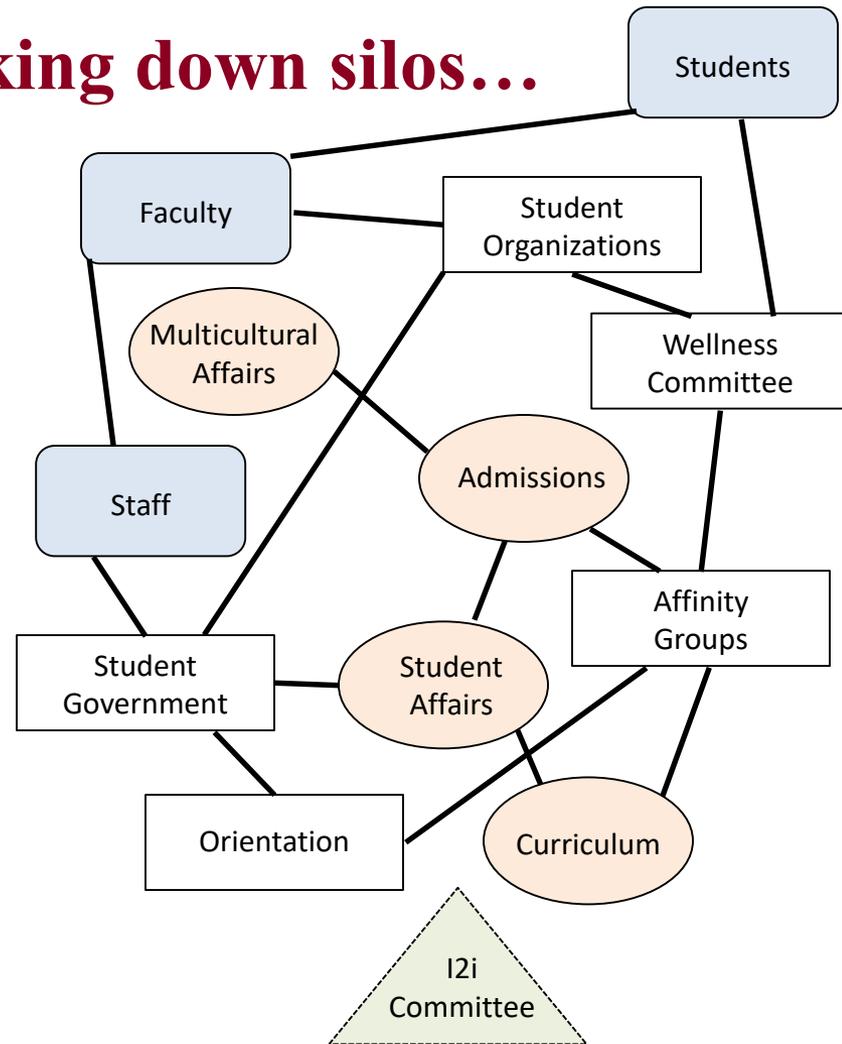


Intersections: Partnerships and Collaboration

An Ecosystem Approach: breaking down silos...



An Ecosystem Approach: breaking down silos...



An Ecosystem Approach: breaking down silos...

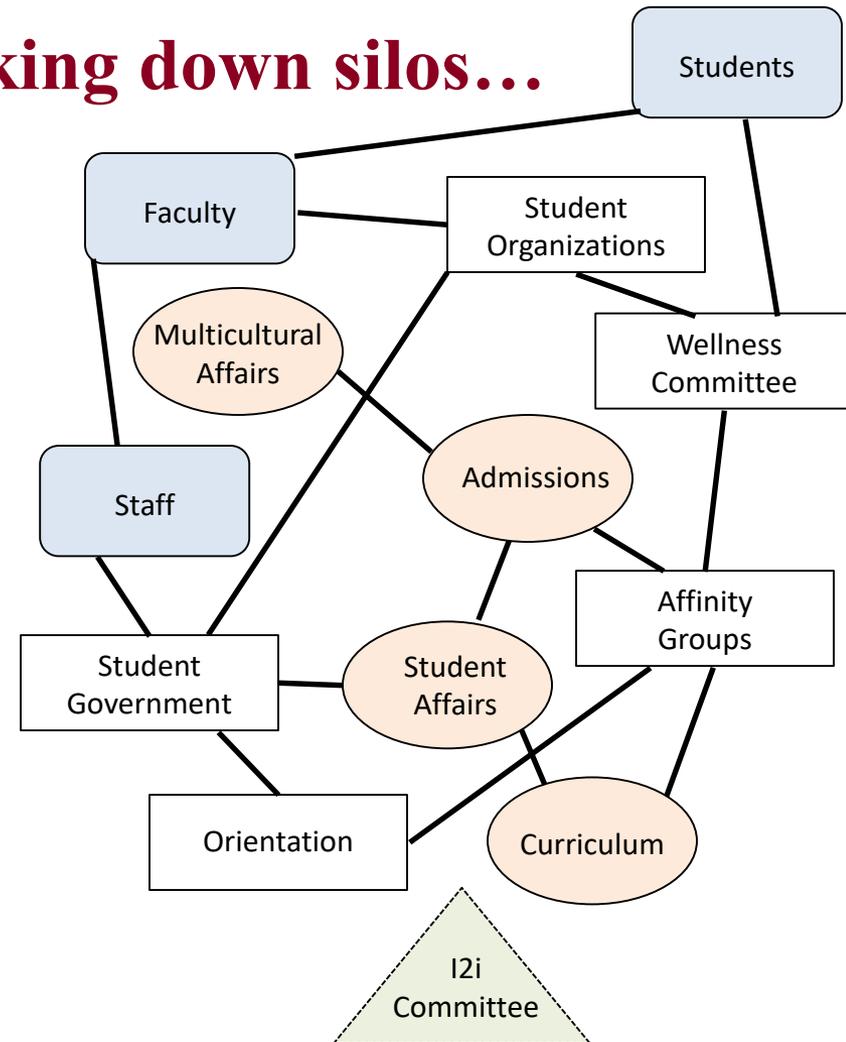
i2i Steering Committee
(students, staff and faculty)

I2i Townhall Meetings
(student, staff and faculty)

i2i Lectures on Civil Discourse
(curriculum, MCA, stud affairs)

i2i Book Clubs, i2i Arts
(student org , affinity groups, faculty)

i2i Civil Discourse Events
(students, staff, faculty)



Bias Reporting

Bias and Mistreatment Reporting in the Learning Organization

Unintentional Bias

Unprofessional Behavior / Microaggressions

- Bias reporting system
- Teaching evaluations
- Deans, Chiefs,
Clerkship Directors,
- Ombudspersons

IMPROVEMENT /
FEEDBACK / MONITORING

Mistreatment

Abuse & Bias with Malicious Intent

- Mistreatment
reporting system
- Deans, Chiefs,
Clerkship Directors,
Ombudspersons

CESSATION OF BEHAVIOR /
REMOVAL FROM ENVIRONMENT

Selected Outcomes

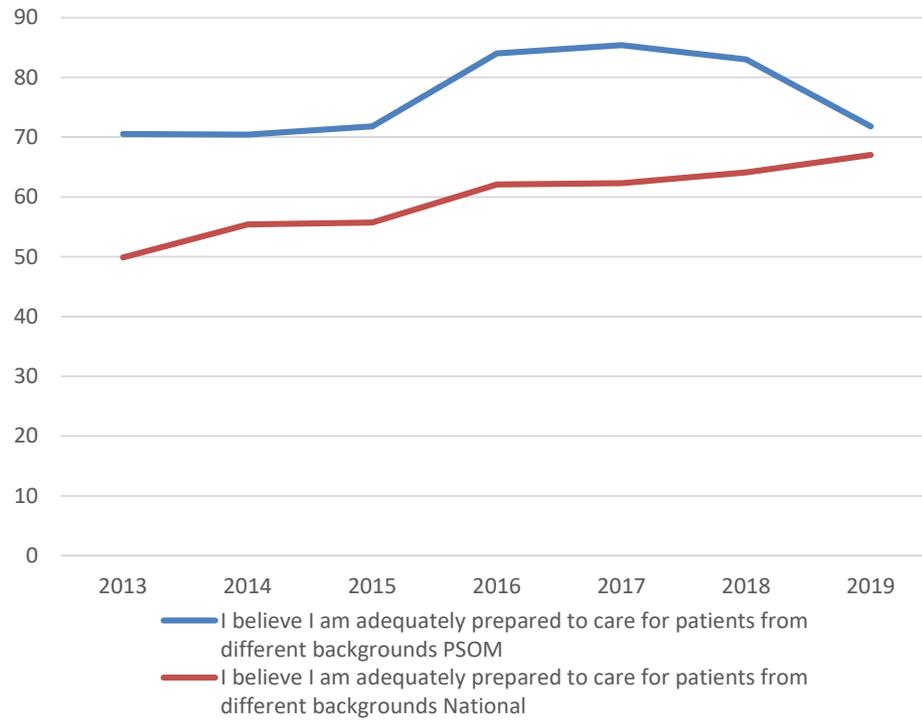


Pritzker School MS4 AAMC Graduation Surveys

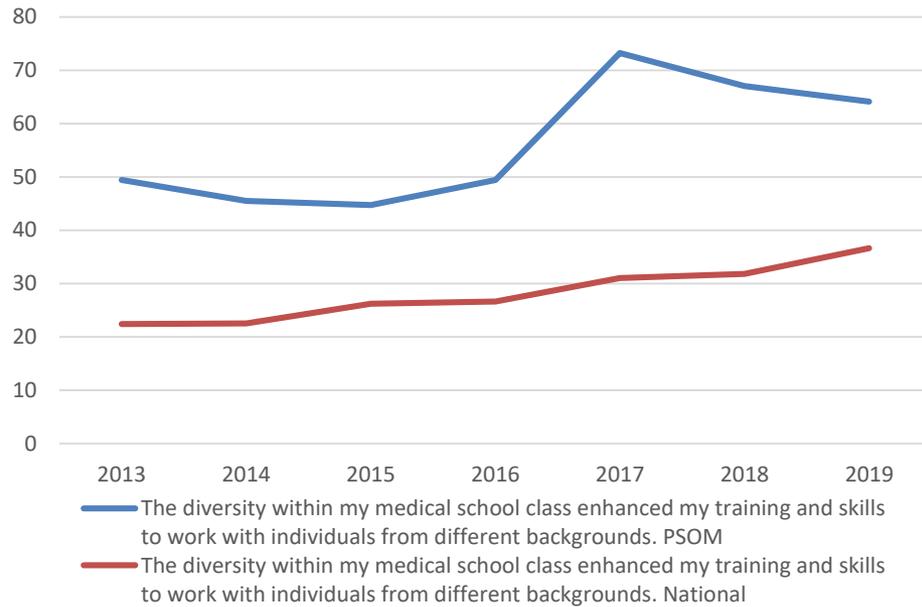
- 2013 - 2019

Woodruff JN, Vela MB, Zayyad Z, Johnson TA, Kyalwazi B, Amegashie C, Silverman R, Levinson D, Blythe K, Lee WW, Thomas S. Supporting Inclusive Learning Environments and Professional Development in Medical Education Through an Identity and Inclusion Initiative. *Academic Medicine*. 2020 Dec 1;95(12S):S51-7.

Preparation to Care for Patient from Different Backgrounds (Strongly Agree)

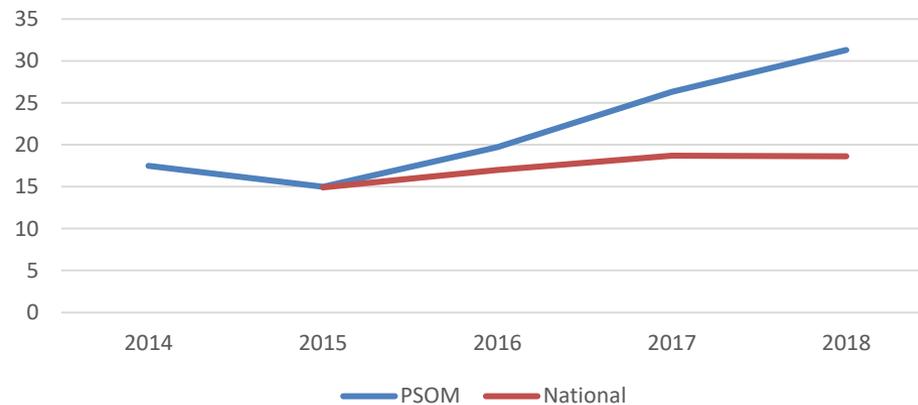


Diversity in School Enhanced Training (Strongly Agree)



Pritzker School Y2Q AAMC Surveys

Tools for Interacting with People of Different Identity Groups
(% Strongly Agree)



Benefits of Diversity and Inclusion

Patient Care: Improved decision making

Research: Enhanced discovery

Education: More rigorous education

AND

A more equitable care and education for all...



Mission Statement

At the University of Chicago, in an atmosphere of interdisciplinary scholarship and discovery, the Pritzker School of Medicine is dedicated to inspiring diverse students of exceptional promise to become leaders and innovators in science and medicine for the betterment of humanity.

