

Implicit Bias and Microaggression Workshop for Graduate Students*

September 17, 2021



*and others!

Who's attending today's workshop?

CSU COAST graduate students

- Biology, ecology, environmental science, geology, marine science, natural resource science, public health

Larger CSU community

- Faculty members and staff
- Engineering, ethnic and Native American studies, geography, music, philosophy, psychology, theater and dance

Why?

- Learn more about how to practice and promote antiracism in my professional and personal life.
- Help my peers feel safer.
- Be more proactive in creating a safe, comfortable, and collaborative space for people from all backgrounds.
- Become more aware of the biases that I may face while working in the field and how to address them in a productive manner.
- Be more aware of my biases and learn more about these topics so I can be a better mentor to the undergraduates I work with.
- Be a better educator, colleague, and person as I pursue a career in academia.
- Improve my ability to be an ally to historically underrepresented people in science.
- Operate more justly in my interpersonal interactions and relationships.

Today's workshop provides tools that can be applied to ANY GROUP that is marginalized or minoritized.

- Race
- Gender
- Ethnicity, culture, country of origin
- Socioeconomic status
- First-generation
- Sexual/gender orientation and identity
- Rural vs. urban
- Veteran status
- Religion
- Disabled

Anyone who does not have equal access to power, wealth, and resources compared to a dominant group (majority group) based on cultural and physical differences.

Why include all these groups?

Diversity leads to better outcomes.

- Firms with women and POC in leadership and management roles have higher profit margins and more patents.
- Scientific papers written by ethnically diverse teams had higher impact factors than papers written by people from same ethnic group.
- Women and non-White scholars introduce more novelty.
 - Rate of adoption is lower than for White men, indicating novelty is discounted.

[Opinion: Gender diversity leads to better science](#) Mathias Wullum Nielsen et al. | PNAS (2017)

[The preeminence of ethnic diversity in scientific collaboration](#) Bedoor ALShebli et al. | Nature Communications (2018)

[How Diversity Makes Us Smarter](#) Katherine W. Phillips | Scientific American (2014)

[Why Diverse Teams Are Smarter](#) David Rock and Heidi Grant | Harvard Business Review (2016)

[The Diversity–Innovation Paradox in Science](#) Bas Hofstra et al. | PNAS (2020)

No progress on diversity in 40 years

Ethnic and racial diversity are extremely low among United States citizens and permanent residents who earned doctorates in earth, atmospheric and ocean sciences. Worse, there has been little to no improvement over the past four decades.

Rachel E. Bernard and Emily H. G. Cooperdock

Persistent gender bias in marine science and conservation calls for action to achieve equity

Sylvaine Giakoumi ^{a,b,*}, Cristina Pita ^{c,d}, Marta Coll ^e, Simonetta Fraschetti ^{f,g,h}, Elena Gissi ^{i,j,n,o}, Isidora Katara ^k, Elena Lloret-Lloret ^e, Francesca Rossi ^b, Michelle Portman ^l, Vanessa Stelzenmüller ^m, Fiorenza Micheli ^{n,o}

Race and racism in the geosciences

Geoscientists in the United States are predominantly White. Progress towards diversification can only come with a concerted shift in mindsets and a deeper understanding of the complexities of race.

Kuheli Dutt

Why are there so few ethnic minorities in ecology and evolutionary biology? Challenges to inclusion and the role of sense of belonging

Laurie T. O'Brien¹  · Henry L. Bart² · Donna M. Garcia³

Hostile climates are barriers to diversifying the geosciences

Erika Marín-Spiotta¹, Rebecca T. Barnes², Asmeret Asefaw Berhe³, Meredith G. Hastings⁴, Allison Mattheis⁵, Blair Schneider⁶, and Billy M. Williams⁷

Largest and most ethnically and economically diverse four-year public university

CSU 2021 Fact Book

Almost 70% of students are students of color

More female students

BY ETHNICITY		
African American	19,645	4.0%
American Indian	987	0.2%
Asian/Pacific Islander	76,509	15.8%
Hispanic/Latinx	217,232	44.7%
White	106,603	22.0%
Other/Unknown	17,464	3.6%
Two or More Races	20,798	4.3%
Non-Resident Alien	26,312	5.4%
BY GENDER		
Men	206,198	42.5%
Women	279,352	57.5%

How do we get people from historically underrepresented groups to the table, and how do we meaningfully include them?

Diversity and inclusion cannot exist without a sense of belonging. We need to acknowledge people's identities for them to feel included. Focusing on diversity without inclusion makes marginalized groups feel that they merely serve as a diversity statistic, and that in reality their voices and experiences do not count.

Kuheli Dutt, 2020. *Race and racism in the geosciences*.
Nature Geosciences 13: p. 2-3

Simply admitting an URM student is not enough if that student feels unwelcome, unheard, and unvalued...Until URM students and researchers can bring their whole selves to their science, no amount of diversity will yield inclusion.

Puritty et al., 2017. *Without inclusion, diversity initiatives may not be enough*. Science 357 (6356): p. 1101-02

Celebrating diversity and taking a multicultural, identity-affirming approach is more beneficial than taking a color-blind approach in which one ignores identity-based differences.

Ahmad et al., 2019. *Evidence-based Strategies for Improving Diversity and Inclusion in Undergraduate Research Labs*.
Frontiers in Psychology 10: p. 1-6

Professionals must give equal attention to factors contributing to positive outcomes for students of Color...including visibly celebrating the stories of minoritized students and their contributions to the university community in ways that do not exceptionalize their successes

Powell et al., 2020. *A CRT-Informed Model to Enhance Experiences and Outcomes of Racially Minoritized Students*. Journal of Student Affairs Research and Practice: p. 1-13

Evidence-Based Strategies for Improving Diversity and Inclusion in Undergraduate Research Labs

Afra Saeed Ahmad^{1*}, Isaac Sabat^{2*}, Rachel Trump-Steele³ and Eden King³

Structure Matters: Twenty-One Teaching Strategies to Promote Student Engagement and Cultivate Classroom Equity

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Attracting Diverse Students to Field Experiences Requires Adequate Pay, Flexibility, and Inclusion

ALEX J. JENSEN[Ⓞ], SARA P. BOMBACI, LAURA C. GIGLIOTTI, STEPHEN N. HARRIS, COURTNEY J. MARNEWECK, MIKE S. MOTHERSBAUGH, BLAISE A. NEWMAN, SHARI L. RODRIGUEZ, ELIZABETH A. SALDO, KYLE E. SHUTE, KEIFER L. TITUS, AMANDA L. WILLIAMS, SZE WING YU, AND DAVID S. JACHOWSKI

How Field Courses Propel Inclusion and Collective Excellence

Erika S. Zavaleta,^{1,2,*,@}
Roxanne S. Beltran,^{1,@} and
Abraham L. Borker^{1,@}

DIVERSITY IN SCIENCE

Without inclusion, diversity initiatives may not be enough

Focus on minority experiences in STEM, not just numbers

By Chandler Puritty,^{1*} Lynette R. Strickland,^{2*} Eanas Alia,³ Benjamin Blonder,⁴ Emily Klein,⁵ Michel T. Kohl,⁶ Earyn McGee,⁷ Maclovía Quintana,⁸ Robyn E. Ridley,¹ Beth Tellman,⁹ Leah R. Gerber⁹

Why is progress so limited (6, 7)? We see a widespread and underacknowledged disconnect between initiatives aimed at increasing diversity in academic and professional institutions and the experience of URM students

A CRT-Informed Model to Enhance Experiences and Outcomes of Racially Minoritized Students

Candice Powell, Cynthia Demetriou, Terrell R. Morton, James M. Ellis

Improving Underrepresented Minority Student Persistence in STEM

Mica Estrada,^{1*} Myra Burnett,² Andrew G. Campbell,³ Patricia B. Campbell,⁴ Wilfred F. Denetclaw,⁵ Carlos G. Gutiérrez,⁶ Sylvia Hurtado,⁷ Gilbert H. John,⁸ John Matsui,⁹ Richard McGee,¹⁰ Camellia Moses Okpodu,¹¹ T. Joan Robinson,¹² Michael F. Summers,^{13,14} Maggie Werner-Washburne,¹⁵ and MariaElena Zavala¹⁶

Anti-racist interventions to transform ecology, evolution and conservation biology departments

Melissa R. Cronin[Ⓜ], Suzanne H. Alonzo, Stephanie K. Adamczak, D. Nevé Baker[Ⓜ], Roxanne S. Beltran, Abraham L. Borker, Arina B. Favilla, Remy Gatins, Laura C. Goetz[Ⓜ], Nicole Hack, Julia G. Harenčár[Ⓜ], Elizabeth A. Howard, Matthew C. Kustra[Ⓜ], Rossana Maguiña, Lourdes Martinez-Estevez, Rita S. Mehta, Ingrid M. Parker, Kyle Reid, May B. Roberts, Sabrina B. Shirazi, Theresa-Anne M. Tatom-Naecker, Kelley M. Voss[Ⓜ], Ellen Willis-Norton, Bee Vadakan, Ana M. Valenzuela-Toro[Ⓜ] and Erika S. Zavaleta

Why implicit bias and microaggression training?

- Individual, institutional/structural, systemic (embedded in our society)
- Essential first step toward better understanding and dismantling power structures
- **DEI-related training needs to be on par with other types of scientific and technical training**
 - Search committees, RTP committees, interactions with grad and ug students

COAST Anti-Racism and Inclusive Diversity Resources

https://www.calstate.edu/impact-of-the-csu/research/coast/Pages/Anti-Racism_Inclusive_Diversity_Resources.aspx

- Curated and dynamic list of books, articles, podcasts, websites and other media to help understand systemic racism in the US and what we can do about it.
- COAST-ADVANCEGeo **Active Bystander Intervention Workshop**
 - October 22, 2021, 10 am-2 pm PDT
 - Help participants recognize sexual harassment, bullying, and other hostile behaviors and learn how to effectively intervene. Will include a discussion of fieldwork.
 - COAST faculty/students/staff/administrators prioritized but will open up CSU-wide on 10/12 if there is room.