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 that 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)
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

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

Almost 70% of students are students of color

More female students

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

CSU 2021 Fact Book

<table>
<thead>
<tr>
<th>BY ETHNICITY</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>19,645</td>
<td>4.0%</td>
</tr>
<tr>
<td>American Indian</td>
<td>987</td>
<td>0.2%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>76,509</td>
<td>15.8%</td>
</tr>
<tr>
<td>Hispanic/Latinx</td>
<td>217,232</td>
<td>44.7%</td>
</tr>
<tr>
<td>White</td>
<td>106,603</td>
<td>22.0%</td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>17,464</td>
<td>3.6%</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>20,798</td>
<td>4.3%</td>
</tr>
<tr>
<td>Non-Resident Alien</td>
<td>26,312</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BY GENDER</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>206,198</td>
<td>42.5%</td>
</tr>
<tr>
<td>Women</td>
<td>279,352</td>
<td>57.5%</td>
</tr>
</tbody>
</table>
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.


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.


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

**Evidence-Based Strategies for Improving Diversity and Inclusion in Undergraduate Research Labs**
Afra Saeed Ahmad\(^{10}\), Isaac Sabat\(^{16}\), Rachel Trump-Steele\(^{3}\) and Eden King\(^{3}\)

**Attracting Diverse Students to Field Experiences Requires Adequate Pay, Flexibility, and Inclusion**
Alex J. Jensen\(^{\circ}\), Sara R Bombaci, Laura C. Gigliotti, Stephen N. Harris, Courtney J. Marneweck, Mike S. Muthersbaugh, 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

**Structure Matters: Twenty-One Teaching Strategies to Promote Student Engagement and Cultivate Classroom Equity**
Kimberly D. Tanner
Department of Biology, San Francisco State University, San Francisco, CA 94132

**Without inclusion, diversity initiatives may not be enough**
By Chandler Purrity\(^{15}\), Lynette R. Strickland\(^{9}\), Fanas Alla\(^{6}\), Benjamin Blonder\(^{6}\), Emily Klein\(^{6}\), Michel T. Kohl\(^{6}\), Earyn McGee\(^{6}\), Maclovia Quintana\(^{6}\), Robyn E. Ridley\(^{6}\), Beth Tellman\(^{6}\), Leah R. Gerber\(^{6}\)

Focus on minority experiences in STEM, not just numbers

By Chandler Purrity\(^{15}\), Lynette R. Strickland\(^{9}\), Fanas Alla\(^{6}\), Benjamin Blonder\(^{6}\), Emily Klein\(^{6}\), Michel T. Kohl\(^{6}\), Earyn McGee\(^{6}\), Maclovia Quintana\(^{6}\), Robyn E. Ridley\(^{6}\), Beth Tellman\(^{6}\), Leah R. Gerber\(^{6}\)

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

**How Field Courses Propel Inclusion and Collective Excellence**
Erika S. Zavaleta\(^{1,2,\ast,\dagger}\), Roxanne S. Beltran\(^{1,\ast}\) and Abraham L. Borker\(^{1,\dagger}\)

**Improving Underrepresented Minority Student Persistence in STEM**
Mica Estrada\(^{10}\), Myra Burnett\(^{7}\), Andrew G. Campbell\(^{3}\), Patricia B. Campbell\(^{4}\), Wilfred F. Denetclaw\(^{6}\), Carlos G. Gutiérrez\(^{7}\), Sylvia Hurtado\(^{7}\), Gilbert H. John\(^{3}\), John Matsui\(^{9}\), Richard McGee\(^{10}\), Camellia Moses Okpodu\(^{11}\), T. Joan Robinson\(^{12}\), Michael F. Summers\(^{11,14}\), Maggie Werner-Washburne\(^{10}\) and Maria Elena Zavala\(^{16}\)

**A CRT-Informed Model to Enhance Experiences and Outcomes of Racially Minoritized Students**
Candice Powell, Cynthia Demetriou, Terrell R. Morton, James M. Ellis

**Anti-racist interventions to transform ecology, evolution and conservation biology departments**
Why implicit bias and microagression 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.