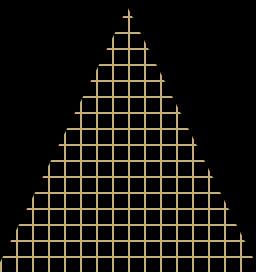


# A Reflection-Based Health Equity Toolkit for Reducing Bias in Curricular Materials

LAUREN HEERY, MICHAEL LEVY, ASHLEY YOUNG (UTSW),  
ANDY BRADFORD, TAI LOCKSPEISER, SHANTA ZIMMER

3/4/21 • AME-EDUCATION AND INNOVATION WEEK



# Background

- Race, ethnicity, and other identities are social constructs which have biological consequences
- Health disparities are one of the ways these consequences manifest and worsen
- Medical education has a role in perpetuating physician bias and health disparities (1)

*The NEW ENGLAND JOURNAL of MEDICINE*

**MEDICINE AND SOCIETY**

Debra Malina, Ph.D., *Editor*

## **Misrepresenting Race — The Role of Medical Schools in Propagating Physician Bias**

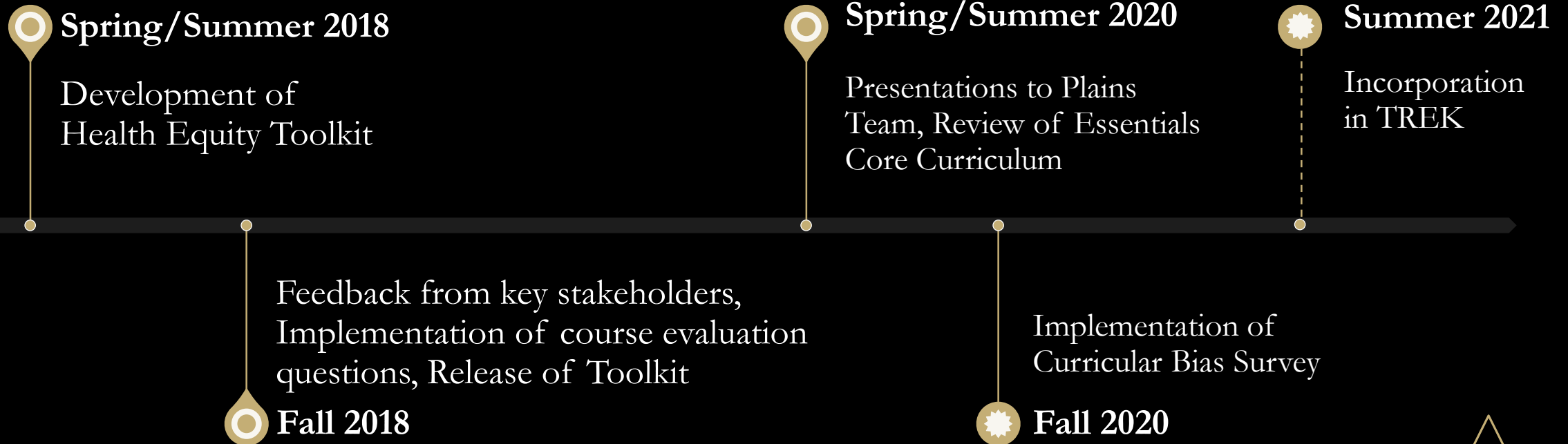
Christina Amutah, B.A.,\* Kaliya Greenidge,\* Adjoa Mante, A.B.,\* Michelle Munyikwa, Ph.D.,\*  
Sanjna L. Surya, B.A.,\* Eve Higginbotham, M.D., David S. Jones, M.D., Ph.D.,  
Risa Lavizzo-Mourey, M.D., M.B.A., Dorothy Roberts, J.D., Jennifer Tsai, M.D., M.Ed.,  
and Jaya Aysola, M.D., D.T.M.H., M.P.H.

# Background at CUSOM

- CSTAHR work on bias in the PBL curriculum
- Meeting with block directors and Dr. Bradford to discuss isolated incidents
- Curriculum reform and continuous quality improvement process as opportunities to address these issues



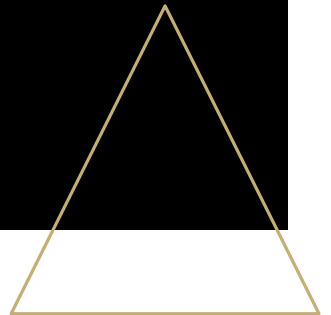
# Overview of Toolkit Development & Implementation





# Rationale for Developing Toolkit

- Developing a habit of awareness about our biases starting with pre-clinical training
- Acknowledging health disparities by calling attention to how differences in disease patterns arise (biological vs. social)
- Bringing awareness of how what is taught might impact our patients and our classmates





- Curriculum Ambassador Program
- Researched existing bias guidelines
  - Columbia, Sadker (2,3)
- Drafted Toolkit
- Received feedback from student groups and Essentials Core Block Directors



# Designing the Equity Toolkit



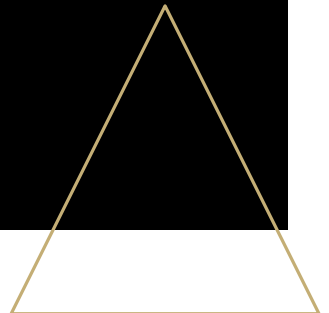
# The Guiding Principles

- Nine key principles that seem to be representative of issues that we have seen in the preclinical curriculum.
- Designed to promote reflective opportunities for anyone engaging with the curriculum.

**Use people-first language to avoid identifying patients by only one characteristic, especially when that identifier reinforces stereotypes**

*Reflection: Are patients, in practice or theory, being identified by only one characteristic? Is that one characteristic the disease or condition for which they are being treated? Are patients' identities beyond their disease or condition being acknowledged?*

- Example: A case study has the opening stem: “A 22yo schizophrenic presents...”
- Adjustment: Replace with “A 22yo engineering student who has schizophrenia presents...” This implies that the patient is not just their schizophrenia, but someone with interests that are being recognized as well. This presents them as more than just their disease. It is never a bad idea to humanize characters in questions or cases, as this is more similar to real-life patients.



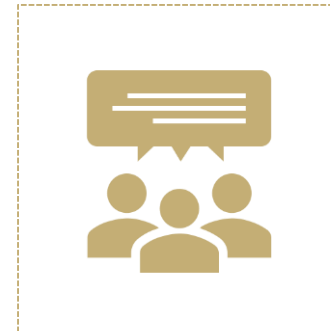
# Evaluating the Equity Toolkit (and the curriculum)



Course Evaluations



Course Materials  
Review by Dr. Bradford



Bias Survey



Block Director  
Interviews





## End-of-Course Evaluations

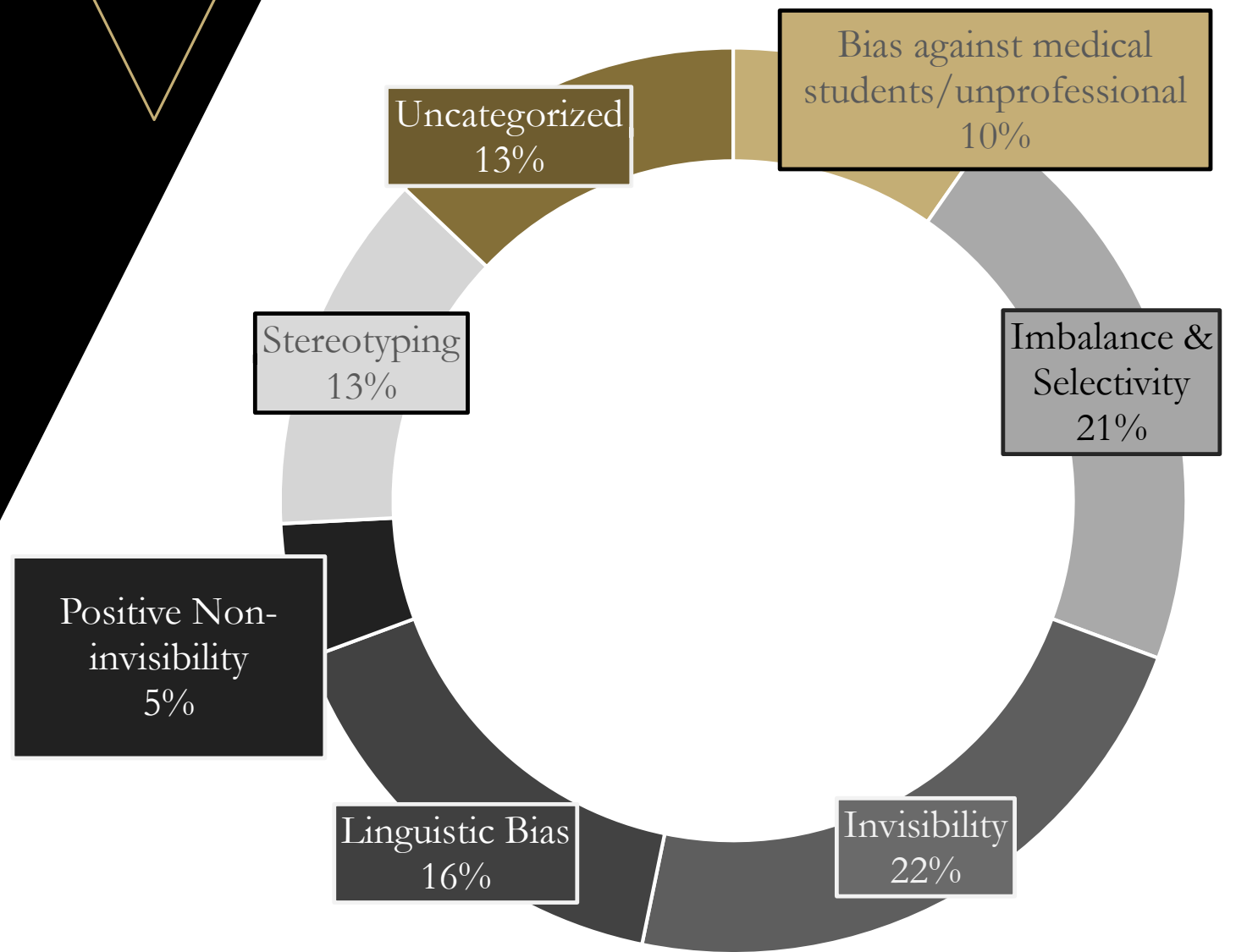
“Comment on any aspects of bias that occurred during this course. For instance, failure to include a crucial topic or repeated use of identifiers that might reinforce stereotypes in case or test materials.”

## Lecturer/Small Group Facilitator Evaluations

“Consider both lecturer/facilitator behavior and session content. Comment on any instance involving a harmful generalization or assumption about a particular group.”

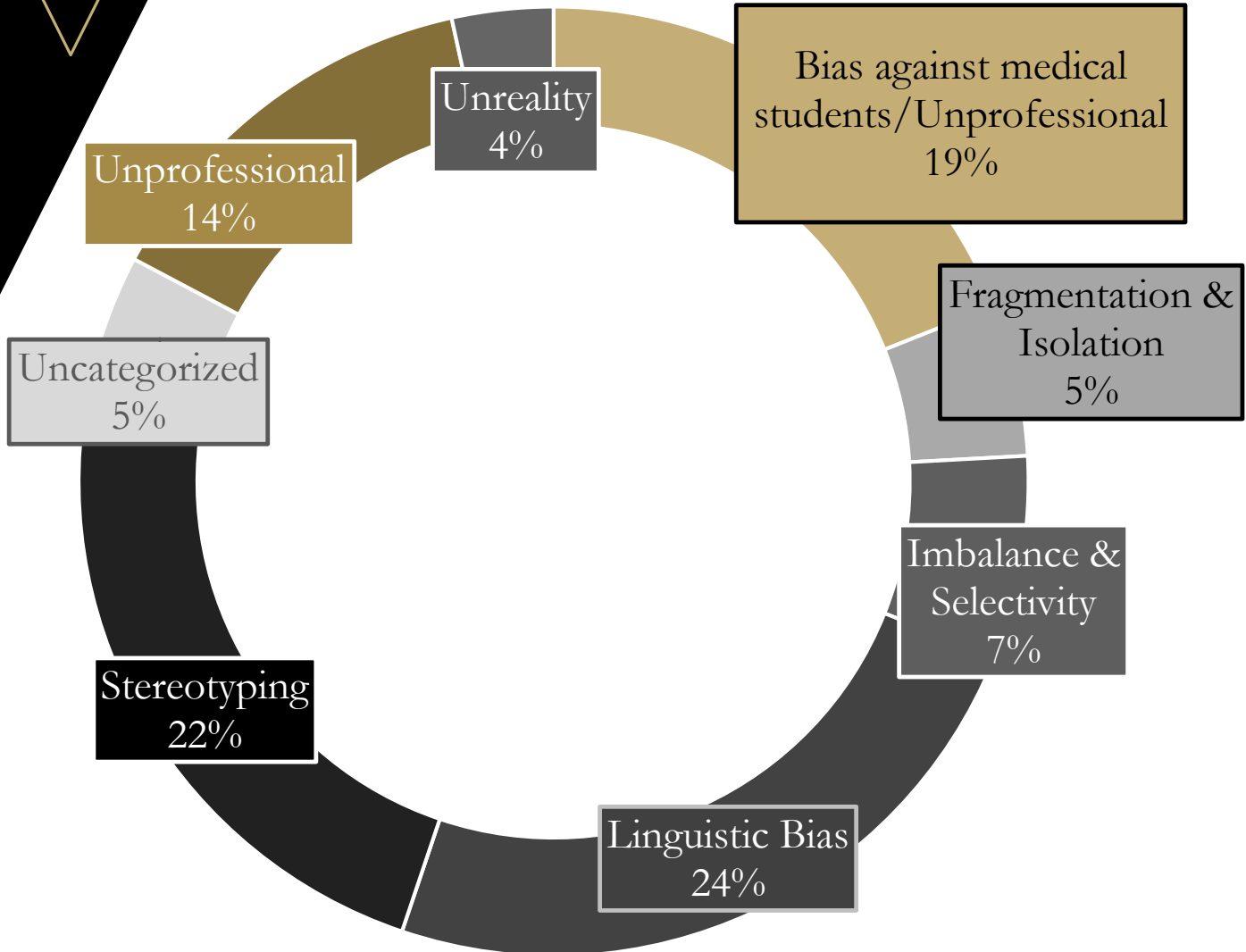
# End of Course Evaluation Data (AY 19-20)

## Course Evaluation Comments (n = 62, 13 from FDC)



# Lecturer and Small Group Facilitator Data (AY 19-20)

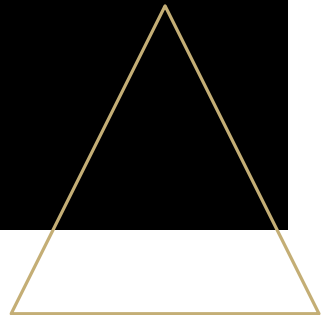
## Lecturer/Small Group Facilitator Evaluation Comments (n = 58, 16 from FDC)





# Improving Curricular Bias Reporting Process

- Centralized, real-time reporting process was part of our original goal
- End-of-course evaluation responses often conflated with general feedback (particularly in AY 18-19)
- Feedback provided months after the course has ended
  - Students never see improvements
  - Loss of learning opportunity for faculty and students



# Implementation of the Curricular Bias Survey



University of Colorado  
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Your participation in this survey is completely voluntary. Best efforts will be made to maintain the security and confidentiality of the information collected. Risks exist when information is collected online and can be intercepted, corrupted, lost, destroyed, arrive late or be incomplete. If you choose to share any health-related or other information, including sensitive student or employee data, measures have been put in place to ensure confidentiality and minimize risks. If the information you provide requires a response, your identity will be verified before discussion of any potentially sensitive information, specifically including your health-related information. By continuing with this survey, you understand and accept these risks associated with disclosure of your information.

This form is designed for you to report instances of both curricular bias and bias experienced from a specific faculty member. By completing this form, your response will be reviewed by the Associate Dean of Diversity and Inclusion. This will allow leadership to address these issues in real-time. Please note that this form is confidential and identifiable data will only be accessed by the Office of Assessment, Evaluation, and Outcomes (AEO) and the Office of Diversity and Inclusion.

If you are completing this form based on curricular bias, please consider the seven (7) forms of curricular bias: invisibility, stereotyping, imbalance/selectivity, unreality, fragmentation/isolation, linguistic bias, and cosmetic bias. See this link for more information about each: [Some Practical Ideas for Confronting Curricular Bias](#)

I am completing this form based on an experience with bias regarding:

A Faculty Member

The Curriculum

Comment on any aspects of faculty bias that you experienced/witnessed. For instance was there an instance involving harmful generalization or assumption about a particular group? Please be as specific as possible.

Comment on any aspect(s) of bias that occurred during this course as it relates to the curriculum. For instance, failure to include a crucial topic or repeated use of identifiers that might reinforce stereotypes in cases or test materials. Please be as specific as possible.

Since its implementation in October, Dr. Zimmer has received and responded to **36 comments** in collaboration with block directors and students.

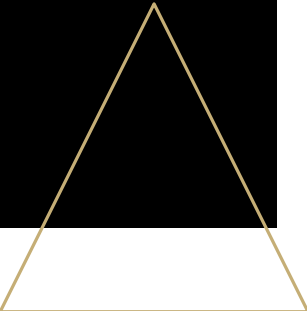
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# Interviews with Block Directors



Structured interviews with Essentials Core Block Directors (interviews grouped by block)

- What did you find when reviewing your course for evidence of bias?
    - If you've made changes, what motivated you to make those changes?
  - What is your plan to reduce/screen for biased content in your block moving forward?
    - What are the barriers to finding and addressing biased content in your curriculum?
  - What is your familiarity with the Equity Toolkit?
    - Have you used the Equity Toolkit in the past?
  - How important do you think this work is?
- 

# Interview Themes



## PEOPLE

- Importance of student input
- “And we asked you to tell us, and we're open to that. And if I'm taken aback by it, then that's my problem. But, you know, we have out there 180 sensors telling us, what doesn't work what's not good. So we encourage you. So the medical students need to jump in there.”

## PROCESS

- Imperfect Process for Review
- “We've been asking students to find out to us we have conversations with our course reps. You know, we've been trying to, you know, watch out for it as well. And, you know, we kind of reviewed it with the faculty, and we're definitely conscious of it. And occasionally, we miss some things...things slip by historic handouts that have been, like, unaltered for a few years and things have moved on”

# Interview Themes



## DETAILS ON TOOLKIT

- **Next steps for and use of toolkit**
- “I think that when you're working with block directors, they're all busy people that are the ones doing several things at the same time. And the easier you can make it, like the more visual and like one page, everything that is relevant, you need to condense in one page.”

## IMPACT/OUTCOMES

- **Importance of broader skillset modeled**
- “But the principle that we're teaching, I think, is way more important than the details...we're giving people a skill set, where, you know, they can navigate these health impacts, and science and belief and opinion, and all these other things, and bias, implicit, and everything else.”



# Future Directions

**Interview Analysis**

**Sharing Best Practices  
Among Block Directors**

**Updating Equity Toolkit**

**Incorporation into TREK  
(Plains)**

**Expansion into Clinical  
Curriculum**

**Student Focus Groups**

# Acknowledgements

- Essentials Core Block Directors Committee
- Student Leaders: WC4BL, SNMA, LMSA, Disability Dialogues, MSC, CSTAHR
- Curriculum Ambassadors Program and the Dean's Office
- Office of Diversity and Inclusion
- Assessment, Evaluation, and Outcomes Office
- Columbia University Bias Task Force (Laura Benoit, Dr. Christopher Travis)
- Erin McKay, OME, AME



# Questions? Interested in collaborating?



## Email

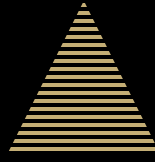
lauren.heery@cuanschutz.edu



## Zoom link for post-presentation discussion

<https://ucdenver.zoom.us/j/93788154725>





# References

1. Amutah C, Greenidge K, Mante A, et al. Misrepresenting Race - The Role of Medical Schools in Propagating Physician Bias [published online ahead of print, 2021 Jan 6]. *N Engl J Med.* 2021;10.1056/NEJMms2025768. doi:10.1056/NEJMms2025768
2. Benoit LJ, Travis C, Swan Sein A, Quiah SC, Amiel J, Gowda D. Toward a Bias- Free and Inclusive Medical Curriculum: Development and Implementation of Student-Initiated Guidelines and Monitoring Mechanisms at One Institution. *Acad Med.* 2020;95:S145-S149.
3. Sadker D. Seven Forms of Bias in Instructional Materials. Some Practical Ideas for Confronting Curricular Bias. <https://www.sadker.org/curricularbias.html>. Accessed January 4, 2021.

