



*AGU Advances*

Peer Review History of

**Counteracting Systemic Bias in the Lab, Field, and Classroom**

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Original Version of Manuscript (2020AV000353)

First Revision of Manuscript [Accepted] (2020AV000353R)

Author Response to Peer Review Comments

**Peer Review Comments on 2020AV000353**

**Reviewer #1**

My review is in the attached document with recommendation to publish with minor revisions.

David Mogk

*Please see attachment that begins on the following page.*

## Reviewer #2

This important paper identifies some of the ways systemic bias is manifested in the lab, field and classroom and presents concise ways faculty and scientists in leadership positions can implement in these three learning settings. The text and table outline practical strategies and provide references to important resources that will be useful for the geoscience community and beyond. I expect it will be downloaded often and cited well.

A focus of the recommendations for action, given the examples used, seems to be aimed at improving climate for students or trainees, it would be helpful to indicate this in the abstract and introduction. While many of the recommendations are generalizable, others would differ, for example, if addressing bias in faculty hire and promotion process.

One of the challenges (not an excuse, but nonetheless a challenge) with adoption of many of the techniques proposed by the authors is the way our current academic and professional reward systems are structured. Those in leadership positions this paper addresses can also play an important role in changing institutional policies and culture to address current problems in the (mis)placement of professional incentives and penalties. The authors may consider addressing this in the conclusion.

In the abstract consider adding a reference to (mention or, not citation) power differentials or academic and scientific hierarchies that make it especially important that people in positions of leadership take action

I. 12: replace "fix it" with "fix them" (subject is plural)

I. 34: The use of "problems" here "While this power imbalance is often the source of problems" is quite vague. This sentence could be more specific about what types of problems the authors would like to call attention to here.

L. 35: Some important institutional changes that need to happen do require committees or other governance processes (for example, tenure and promotion processes). It may be useful to recognize there are different levels of changes that can occur, and highlight the paper's goal to identify those that can be implemented by individuals. It may be helpful to distinguish between individual behavioral change, organizational change and institutional (societal institutions) change.

L. 50: The problem is broader, as most PIs receive no formal training in any kind of mentoring (culturally aware or not) or group management

The authors may consider including a reference to the new 2020 GEO REU Handbook doi:10.5065/ycba-qw42. which has very useful resources that the readers would find helpful.

Additional suggestions to consider for the classroom: use of inclusive language (for example, use of pronouns). Agree with the other reviewer's suggestion of adding reference to importance of course syllabi in signaling attention to making the classroom inclusive, including diversifying readings lists.

Signed: E. Marin-Spiotta