

Astro2020 must issue actionable recommendations regarding diversity, inclusion, and harassment

A state of the profession consideration for the Astro2020 Decadal

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Key Issue:

Astro2020 must issue actionable recommendations about diversity, inclusion, and harassment.

Context:

The 2010 Decadal survey failed to issue any recommendations on diversity and inclusion. Astro2020 cannot make the same mistake. Findings can be ignored by funding agencies; recommendations cannot. In the past decade, multiple groups have assembled detailed action plans to fix a broken climate within our profession [1, 2, 3]. Astro2020 should play a key role, by synthesizing this work to produce actionable recommendations to support diversity and inclusion and stop harassment within our profession.

Impact on the Field:

The cumulative effects of sexism, systemic racism, ableism, anti LGBT-bias, and a professional culture that protects powerful harassers at the expense of their more junior victims, have together negatively impacted our field. Studies within our own field have highlighted the harmful effects of harassment on the safety and well-being of minorities within astronomy [4,5].

The problems are well known, and have multiple, intertwined, compounding impacts. Funding agencies have given millions of dollars in grants to serial sexual harassers. Funding agencies rely on university Title IX offices to investigate complaints, though Title IX offices have an inherent conflict-of-interest. Funding agencies report low rates of non-male principal investigators. The largest proposals --- those for space-flight missions --- show even less diversity: 10% of PI-led mission proposals across NASA's Science Mission Directorate have names with an inferred female gender.¹ Of the 30 mission proposals with PIs that have inferred female names, 26 of them were submitted to the Planetary Science Division [6]. Only 2.1% of astronomers identify as Black or African-American, 3.2% as Hispanic, Latinx, or of Spanish origin, and extremely few are Native or Indigenous [7]. The percentage of these astronomers from historically underrepresented communities who are not cis men indicates that intersectionality² has a specific impact on the lives of women and nonbinary people in astronomy [9]. There is little data available on persons with disabilities in astronomy; the first surveys of LGBTIQ+ physicists and astronomers indicates that many experience hostile work environments [10]. These climate issues have a huge impact on our field.

In addition, astronomy's professional culture has protected harassers and bullies. As a result, untold numbers of our colleagues who were harassed have had their scientific careers slowed, stalled, or ended as a result of the harassment they experienced or the reaction of our community to their harassment. The impact on our field is incalculable. We remind the Astro2020 Decadal committee that as they assess the state of the profession, important voices are missing from the conversation. **We notice their absence.**

¹ NASA does not ask for nor track demographic characteristics upon proposal submission.

² Intersectionality is a term coined by Black legal scholar Kimberlé Crenshaw [8], to describe the multiplication and overlap of -isms and -phobias that multiply minoritized people experience.

Strategic Plan:

We urge the Astro2020 Decadal to issue concrete, actionable recommendations to funding agencies on how to support diversity and inclusion within our profession, how to stop harassment of all kinds, and how to respond as a community to those who have committed acts of harassment or discrimination. The nature of the specific recommendations should be developed by the Decadal in response to the white papers submitted on these topics and the recommendations of Inclusive Astronomy 2015 [1], and should be intersectional. The Decadal should demand, to quote the Inclusive Astronomy 2015 recommendations, that progress on diversity and inclusion “be pursued with the same zeal as other strategic scientific goals.” Concrete recommendations to fix the broken climate will accelerate the pace of scientific discovery.

References:

- [1] The Nashville Recommendations from Inclusive Astronomy 2015,
<https://docs.google.com/document/d/1JipEb7xz7kAh8SH4wsG59CHEaAJSJTAWRfVA1MfYGM8/edit>
- [2] Ackerman et al., LGBT+ Inclusivity in Physics and Astronomy: A Best Practices Guide, 2018,
<https://arxiv.org/abs/1804.08406>
- [3] Zellner, Findings and Recommendations from the American Astronomical Society (AAS) Committee on the Status of Women in Astronomy: Towards Eliminating Harassment in Astronomy, 2019, Astro2020 APC whitepaper
- [4] Kathryn Clancy, Katharine Lee, Erica Rodgers, & Christina Richey, “Double jeopardy in astronomy and planetary science: Women of color face greater risks of gendered and racial harassment”, *Journal of Geophysical Research Planets*, 122, 7, 1610-1623, 2017,
<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2017JE005256>
- [5] Christina Richey, Katherine Lee, Erica Rodgers, & Kathryn Clancy, “Gender and sexual minorities in astronomy and planetary science face increased risks of harassment and assault”, *Bulletin of the American Astronomical Society* (in review), 2019.
- [6] Michael New, "Diversity and Inclusion", NASA Astrophysics Advisory Committee, April 2018
https://smd-prod.s3.amazonaws.com/science-pink/s3fs-public/atoms/files/New_Diversity%26Inclusion_APAC_April2018.pdf
- [7] Rachel Ivie, Garrett Anderson, & Susan White, "AIP Focus on African Americans & Hispanics among Physics & Astronomy Faculty", AIP Statistical Research Center, July 2014
<http://www.aip.org/sites/default/files/statistics/faculty/africanhisp-fac-pa-123.pdf>
- [8] Kimberlé Crenshaw, “Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics”, 1989, *University of Chicago Legal Forum*, Vol. 1989, Issue 1, article 8,
<https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1052&context=ucf>

[9] Anne Marie Porter and Rachel Ivie, Women in Physics and Astronomy Report 2019", AIP,
<https://www.aip.org/statistics/reports/women-physics-and-astronomy-2019>

[10] LGBT Climate in Physics: Building an Inclusive Community; American Physical Society, 2016,
<https://www.aps.org/programs/lgbt/upload/LGBTClimateinPhysicsReport.pdf>