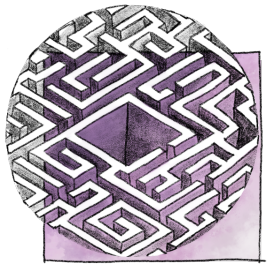

Summary of recommendations related to

Bias and Perception

The Problem: Bias, whether implicit or explicit, conscious or unconscious, is not simply a matter of perception, but also one of how stereotypes and beliefs are made manifest in social and professional interactions. Ideas about who can do – or typically does – science shape who participates in the field and color hiring and award decisions: in astrophysics, men prefer male co-authors, TACs rate proposals with female PIs lower than those with male PIs (an effect that disappears when reviewers cannot see the gender of the proposer), and papers led by men are cited more than comparable papers led by women. In academia more broadly, tightly controlled experiments show that female researchers are rated as less competent, offered less compensation, and are less likely to be hired than a man with an identical profile, and female instructors are subject to harsher evaluations that focus more frequently on aspects of their personality and appearance.

Recommendations:

- In hiring: standardized rubrics should be used for all candidates to ensure that selection criteria are applied evenly. Candidates should be evaluated on their own merit before the letters of recommendation are considered, and efforts should be made to exclude career interruptions and potentially biased metrics like 'time to degree' from hiring and award decisions.
- Departments should offer – and incentivize attendance at – in-person trainings that cover identifying and effectively addressing bias. Similarly, department members should be encouraged to receive formal instruction in teaching and mentorship.
- Clear scientific communication should be prioritized, and the assumption that avoiding jargon is evidence of lack of expertise should be challenged. Making explicit expectations for department members – in research, service, and teaching – and rewarding effort can help challenge stereotypes of brilliance and competence.
- Service work disproportionately falls to women in academia. Departments and institutions can avoid overburdening individual faculty by eliminating policies that require demographic representation on committees. Committee and service work should be assigned first come, first served so that volunteers are rewarded with preferred roles. Service loads should be tracked and moderated so that work is equitably distributed.

Picture an Astronomer: Best Practices for Retaining Talent in Astrophysics
https://arxiv.org/abs/2512.24465
https://pictureanastronomer.github.io/whitepaper