



SUMMARY OF RECOMMENDATIONS RELATED TO GLOBAL CHALLENGES

The Problem: Astronomy is a global enterprise, with large international collaborations driving current innovation and absolutely critical for next-generation telescopes and computing. However, there are significant challenges that impact astronomers from different countries to varying degrees. Gendered access to primary, secondary, and tertiary education is inconsistent globally, and even in countries where women receive a majority of postgraduate degrees, they do not hold researcher positions (defined broadly) in the same proportion. Short and long term travel, as for conferences and positions respectively, pose problems for scientists from countries with weaker passports, and there is some evidence that female scientists are less likely to receive technical work visas than their male counterparts. Cultural differences can be a barrier to international job searches, with the implicit expectations differing between countries. Once in research positions, female scientists must deal with gender bias compounded by regional affiliation. For instance, telescope proposals led by women – regardless of host country – are less likely to be accepted than comparable proposals led by men. Grants awarded to women are also smaller on average than those awarded to men, which may cause additional issues covering page charges or article processing charges for scientific publications for scientists from countries with less research funding in general. Service and outreach expectations are also compounded when engagement with local communities requires the additional administrative work of translation of science from English to local languages.

Recommendations:

- Conference organizers should be thoughtful in choosing conference locations and should offer early invitation letters and visa support for international scholars. Departments should help with both administrative and financial burdens of the visa process.
- Collaborations and research groups should support non-native English speakers by offering proofreading and help with conference presentations. Journals should offer in-house or subsidized editing to authors to avoid international scholars having to incur financial penalties.
- Ideally, academic publishing would move away from a system where author are independently negotiating fee waivers. Individuals can push for structural change by submitting primarily to fully (diamond) open access journals.
- Public repositories containing astronomy glossaries and research summaries translated to different languages can help distribute some of the service work of outreach and public engagement preventing duplicated effort.

Picture an Astronomer: Best Practices for Retaining Talent in Astrophysics

<https://arxiv.org/abs/2512.24465>

<https://pictureanastronomer.github.io/whitepaper>