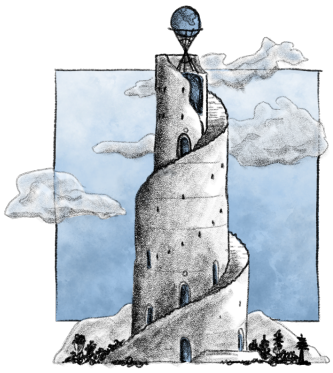

Summary of recommendations related to

Global Challenges

The Problem: Astronomy is a global enterprise, with large international collaborations driving innovation and enabling next-generation telescopes and data-intensive science. However, barriers to full participation are not experienced equally worldwide. Gendered access to primary, secondary, and tertiary education remains uneven, and even in countries where women earn a majority of postgraduate degrees, they are still underrepresented among researchers (defined broadly). Travel, whether short term for conferences or long term for jobs, pose additional challenges for scientists from countries with weaker passports, and there is evidence that female scientists are less likely to receive technical work visas than men. Cultural differences further complicate international job searches, as implicit expectations vary between countries. Once in research positions, gender bias can be compounded by regional affiliation: telescope proposals led by women–regardless of country–are less likely to be accepted than comparable proposals led by men, and grants awarded to women are, on average, smaller. For scientists working in countries with limited research funding, this can make covering publication page charges or article-processing fees particularly difficult. Service expectations can also be amplified when public engagement requires translating research from English into local languages, adding additional uncompensated work.

Recommendations:

- **Reduce visa-related barriers.** Conference organizers should select accessible conference locations where possible, issue invitation letters early, and provide structured visa-application support. Departments and institutions should help shoulder both the administrative and financial burdens of visa processing.
- **Support non-native English speakers.** Collaborations and research groups should offer proofreading and presentation support, and journals should provide in-house or subsidized language editing so that publication does not depend on personal financial resources.
- **Work toward more equitable publishing models.** The current system places the burden on authors to negotiate fee waivers. Where feasible, researchers and institutions should prioritize publishing in fully open-access (diamond) journals that do not charge authors or readers, and advocate for broader structural reform.
- **Share outreach and translation resources.** Public repositories containing astronomy glossaries and translated research summaries can reduce duplicated effort and help distribute the service load associated with multilingual outreach.

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