

## Introduction

The 2014 Women in Astronomy Workshop was held by the Women in Astronomy chapter of the Astronomical Society of Australia at the Australian National University on the 28th and 29th of August 2014. It was a great success, with more than 160 participants and 18 speakers present, and representation at the highest levels from most of the national astronomy departments. Prof. Matthew Colless (Director of the Research School of Astronomy and Astrophysics, ANU) led a session called “Top 5 Things to Change in the Australian Astronomy Community” where participants were asked to split into groups of 6-8 and list the things they saw as the most pressing issues in astronomy today, and to propose possible solutions.

We have collated the results below for discussion by the community. For clarity, we have organised the suggestions into three main categories: actions that can be undertaken at a (1) community level, (2) workplace level, and (3) personal level.

## Your Community

### *Inclusion*

- **Ensure policies are inclusive of not only women and members of racial/ethnic minorities, but also people with disabilities and mental health issues;**
- Broaden discussion to include not only astronomers but also other members of the Australian Astronomy Community e.g. instrumentation scientist and engineers, technical and administrative staff;
  - **Apply the same focus on diversity in the research community to astronomy instrumentation/software/engineering.**

### *Awareness*

- Create open, supportive workplaces that allow for the sharing of concerns and fears, especially in the context of impostor syndrome;
- Use quantitative arguments and present data to communicate issues to scientific and technically-oriented crowds;
- Encourage or require men to take a more active role in awareness of gender issues;
- **Build profiles and prominently display on websites**, showing men who have taken time off for parental duties, women who have re-entered the workplace, employees who have taken time off to deal with a variety of personal issues including family, disability, mental health, etc.

### *Culture:*

- **Change how success is measured: Relative to Opportunity.** Assess how years taken off for family, health, or other reasons can be accounted for.
- Change how quality is measured: track record vs. quality of research vs. number of papers.

### *Gender representation*

- Set targets for Speakers, Prizes, Committees, Invited Speakers, and Distinguished Visitors. The community should “raise hell” if zero women are nominated;
- **Committees members should be recognised and compensated for their time** - the increase in workload due to committee membership is non-trivial and women, being under-represented as employees, are (individually) required to serve more than men;
- **Require that nominations for ASA prizes have at least one woman from each university.** Do not give out prize if not enough women are nominated;
- Have more visible female role models and teachers to encourage more girls to stay in STEM fields.

### *Leadership*

- Increase number of women at the top :
  - As of August 2014, most directors of Australian Astronomy departments are men (source: [Australian Astronomy Limited](#))
- **Penalise department that don't meet targets set by the community.** Carrot and stick approach where a department that meets targets gets \$\$ and a department that doesn't meet the targets misses out.
  - E.g. The Athena-SWAN Charter ([link](#)). The Australian Academy of Science is in discussion about implementing a similar scheme here.
- Senior men should promote and sponsor promising females.
  - Succession Planning: At the moment there are mainly men at the top, but these men should be picking out bright and promising successors and mentoring them, and increasing how many accomplished females have access to this kind of championship.

## **Your Workplace**

### *Travel*

- Support for travel and conferences - either from workplace or from SOC/LOC;
- Encourage online participation/streaming of conferences, using good quality audio and video equipment;

- Provide childcare at conferences;
- **Access to funds for family travel/emergency day care. Use ARC funds to assist.** Issue: fringe benefit tax on funding provided to staff.

#### *Flexibility:*

- Make flexible working arrangements available to both men and women, and encourage employees to take it up.
- Allowances should be made for employees who need to take time off in order to deal with family commitments, personal emergencies, and mental illness and disability.
- **Flexible contract lengths** to allow for time taken off for pregnancy and parental leave
- **Maternity Leave for PhD Students** (Local and International). Local students under APA or similar get time off, International students need support for Visa and leave.

#### *Childcare:*

- Access to on-site/local childcare.
- Support for carers to re-enter/re-ignite research career.

#### *Recruitment and Hiring*

- **Make more permanent positions available with a part-time option;**
- Make criteria more general and less typical of white male leaders;
- **Publish applicant gender ratios so that the community can discuss;**
- Create a body that allows people who are not affiliated with a research institution to apply for grants by using it as their affiliation. This was proposed as a possible solution to the two-body problem, and the Centre for Planetary Research in Boulder was cited as an example.
- Selection criteria need to be more qualitative, not quantitative. Panel chairs need to be well trained in gender issues and implicit and unconscious biases.
  - For example, the STRIDE Committee at the University of Michigan ([link](#)) and their Candidate Evaluation Tool.
- **A round of women-only professorial positions.** Has been implemented successfully in the past at the ANU.
  - Disadvantage: some very qualified women won't apply because of the perception that being the best candidate in this reduced pool is non-ideal.
  - Possible solution: rather than a set list of criteria for a very specific job, the university/organisation should advertise such positions broadly to the community asking for all *excellent* candidates in each field to apply.

### *Contract duration*

- **Increase length of postdoc** (funding: 3 to 5 years)
- **Network of universities so job offer made at one university can be taken up and job performed from other university.**

### *Mentoring/sponsoring*

- Nomination for prizes
- **Shadow program e.g. CSIRO** (give opportunity for junior staff to shadow senior staff).
- The ASA WiA website should have profiles on successful, inspirational women, perhaps have a list of people who are willing to be contacted for comment or help, and facilitate open conversations.

## You

- **Entrenchment of the Ideal Worker model needs to be challenged:**
  - The “ideal” worker is perpetually available, has no outside responsibilities or interests, rarely gets sick, and prioritises work above all else ([source](#)).
  - It is very hard to men and women to subscribe to this without sacrificing work-home balance.

### *Lead by Example:*

- Leaders and supervisors should share stories of insecurities and set-backs so junior staff know they are not alone. It is useful to hear of similar stories and feelings from your peer group.
  - For example, Bryan Gaensler on gender equality on the [Women in Science Australia website](#).

### *Training:*

- Compulsory training on gender equity for all employees, especially committee members on recruitment and promotion panels;
- Young researchers need to get the right skills for a tenure job. This should be part of professional training available at every institution. Encourage employees to take part (maybe even require them to).