

AAS Taskforce on Diversity and Inclusion in Graduate Astronomy Education

At the January 2017 AAS meeting in Texas, the AAS Council approved the creation of a Taskforce on Diversity and Inclusion in Graduate Astronomy Education. This document details the charge, goals, membership, structure, and activities of the task force.

Charge. AAS Graduate Education Task Force Official Charge

The final report from this task force to the AAS Board of Trustees should include:

- 1) the consideration of practices in recruiting, admissions, and retention of students into programs that offer astronomy-related Masters degrees and PhDs, with the goal of identifying those practices that promote diversity and inclusion in graduate programs with regard to race and ethnicity, gender, LGBTQ+, disability status, and possibly other areas;
- 2) the building of consensus on evidence-based best practices for recruitment, admissions, mentoring, retention, and (to the extent feasible) curriculum and outcome optimization of a diverse student population in astronomy graduate programs that closely matches the diversity of the US;
- 3) the development of a statement of best practices for potential adoption by the AAS;
- 4) the development of guidelines to help astronomy graduate programs who wish to implement these best practices do so; and
- 5) the development of recommendations for ongoing data collection from graduate programs in astronomy, in order to assess progress in increasing diversity in graduate programs and also in the astronomical field in general.

The final report of this task force, as well as the data that will be collected in the course of the work by the task force, will be shared, utilized, and/or incorporated with the current or subsequent work of a broader AAS task force on graduate education, which the AAS is still working to form, and which will address in greater detail, issues such as curriculum and teaching methods.

The work of the task force will take place from October 2017 to December 2018 and the task force will deliver its report to the AAS Board of Trustees in time for the report to be discussed at the January 2019 Board meeting. During this time interval, we request that the task force provide short monthly progress reports to the Board.

Goals. The goals of the task force will be:

- 1) the strengthening of a consensus on evidence-based best practices for recruitment, admissions, and retention of a diverse student population for US astronomy PhD programs that more closely matches the diversity of the United States;
- 2) the development of a statement of these best practices for adoption by the AAS Board of Trustees;
- 3) taking the work already begun through the “Inclusive Astronomy” process to the next level by documenting existing implementations of these best practices, and gaining firm commitments from other key players to implement some of the AAS

recommendations; and

- 4) the development of recommendations (with selected initial implementations) for ongoing data collection to monitor progress in increasing diversity in astronomy.

The metrics of success will be:

- 1) The adoption of best practices by the AAS Board of Trustees, goal (2), will be taken as clear evidence that goal (1) has been achieved;
- 2) Commitment to implement some of these recommendations by 4-6 key astronomy PhD programs (i.e., thought and reputation leaders) concurrently with our report in January 2019 would constitute a real step forward. We would expect follow-up activities in the next few years to bring that number to 10-15 or more;
- 3) The success of goal (4) will be demonstrated by the number of new relevant statistics that begin to be collected, and the creation of a site where all relevant statistics can easily be accessed by departments and organizations. After a few years, these statistics will serve to measure whether these efforts have had a real impact on diversity in astronomy.

Membership.

Name	Qualifications
Alex Rudolph, Cal Poly Pomona, co-Chair	HSI, senior faculty, director of Cal-Bridge/CAMPARE programs
Gibor Basri, Berkeley, co-Chair	PhD institution, senior faculty, African-American
Marcel Agüeros, Columbia	PhD institution, mid-career faculty, director of Columbia Bridge program, Latino
Keivan Stassun, Vanderbilt	PhD institution, senior faculty, director of Fisk-Vanderbilt Bridge program, Latino
Kim Coble, San Francisco State Univ.	HSI, mid-career faculty, member CSMA, organizing comm. Inclusive Astro, female
Angela Speck, Univ. of Missouri	PhD institution, mid-career faculty, member CSWA, female
Jackie Monkiewicz, ASU	Grad student, member WGAD, female
Ed Bertschinger, MIT	PhD institution, senior faculty, MIT Institute Community and Equity Officer
Megan Donahue, MSU, ex-officio	PhD institution, senior faculty, president-elect AAS, sits on AAS council, female

Structure. The task force consists of three working groups covering the topics of *Recruiting and Admissions*, *Mentoring and Retention*, and *Data Collection and Dissemination*. Issues of curriculum will be considered to the extent that they affected retention.

These working groups will be co-led by 2 task force members, who will report to the entire task force monthly, to allow for oversight and coordination of their work. We will strive to get participation in the working groups from as broad a cross-section of the astronomical community as possible with respect to demographic diversity, seniority, and type of institution.

Each working group has a social science expert as advisor to their work. These advisors are each nationally recognized experts in their field. They are:

- 1) **Recruiting and Admissions: Dr. Julie Posselt**, Assistant Professor of Higher Education in the USC Rossier School of Education. Dr. Posselt is the author of the book *Inside Graduate Admissions: Merit, Diversity, and Faculty Gatekeeping* (2016, Harvard University Press), which is based on an award-winning ethnographic study of faculty judgment in 10 highly ranked doctoral programs in three universities. This research has led to partnerships with departments, graduate schools, and other associations that are re-examining graduate admissions practices, including the University of California, American Physics Society, and Council of Graduate Schools. She has received the 2017 Association for the Study of Higher Education Early Career Award and the 2017 USC Rossier School of Education, Outstanding PhD faculty member award.
- 2) **Mentoring and Retention: Dr. Christine Pfund**, Associate Scientist, Wisconsin Center for Education Research at the University of Wisconsin-Madison. Dr. Pfund's work focuses on developing, implementing, documenting, and studying a seminar to train research mentors across science, technology, engineering, mathematics and medicine (STEMM). She has co-authored a manual for facilitators of this seminar, *Entering Mentoring*, and co-authored several papers documenting the effectiveness of this approach. Currently, Dr. Pfund is co-leading two studies focused on the impact of training on both mentors and mentees and understanding specific factors in mentoring relationships that account for positive student outcomes including the role of culture.
- 3) **Data Collection and Dissemination: Dr. Rachel Ivie**, Director, Statistical Research Center (SRC), American Institute of Physics. The SRC collects, analyzes and disseminates data on education and employment in physics and related fields.

In addition, **Dr. Posselt** will act as overall Senior Advisor and ex-officio member to the task force in both planning our activities and writing our final report.

Meetings, schedule, and activities. The task force will hold 2 two-day in-person meetings: one in March 2018, to create a detailed plan of our work, including milestones towards our goals, and one in November 2018, to write the report to the AAS Board of Trustees. In addition, the task force will meet approximately monthly, via videoconference, to track the work of the working groups and to monitor progress towards our goals and outputs.

The two co-chairs of the task force will attend the astronomy department chairs' meeting in 2018 to present the findings of the task force. This would take place during the regular meeting of the chairs.

The **schedule** for task force activities is as follows:

2017 Apr-Oct	Select task force co-Chairs, members
2017 Nov	First meeting (virtual) of task force to refine charge, plan activities, responsibilities, refine budget request
2017 Dec	Second meeting (virtual) of task force to finalize charge, deliverables, plan for in-person meeting and subsequent activities
2018 Jan	Preliminary meetings of task force and working groups at AAS meeting
2018 Mar 9-10	First in-person meeting of task force to formally plan year's activities
2018 Jun	Special session at AAS meeting in Denver
2018 Mar-Sep	Working group meetings
2018 Mar-Sep	Task force/working groups collect data/information on best practice from PhD programs (with help/advice from advisors)
2018 Mar-Sep	Monthly task force meetings to hear reports and interim results from each working group, provide feedback and direction to the working groups, and provide reports to the AAS Board of Trustees
2018 Sep-Dec	Final task force meeting (in-person) to finalize findings and recommendations, and write report
2018 Nov	Co-chairs attend one day of Department Chairs meeting to make presentations and report to this group for input, buy-in, and possible endorsement (60-90 minutes)
2019 Jan	Presentation to Council including draft official statement from AAS Plenary to present findings to community at AAS meeting in Seattle Other special sessions?