

Annual Report on the Committee on the Status of Women in Astronomy (CSWA) 2020-2021

By Nicolle Zellner (nzellner@albion.edu) and the CSWA

The members of the 2020-2021 CSWA were:

Jeremy Bailin (University of Alabama)
Sukanya Chakrabarti (Rochester Institute of Technology)
Katie Eckert (in her personal capacity)
Heather Flewelling (Canada-France-Hawaii Telescope)
Eric Hopper (University of Wisconsin)
Regina Jorgensen (Maria Mitchell Observatory)
Stella Kafka (American Association of Variable Star Observers)
James Tuttle Keane (CalTech)
JoEllen McBride (in her personal capacity)
Jessica Mink (Harvard-Smithsonian Center for Astrophysics)
Maria Patterson (High Alpha)
Gregory Rudnick (University of Kansas)
Tiffany Stone Wolbrecht (Ward Beecher Planetarium at Youngstown State University)
Amber Stuver (Villanova University)
Nicolle Zellner (Albion College), Chair

Board Liaison

Hannan Jang-Condell (University of Wyoming, NASA HQ)

People rotating off of CSWA or otherwise leaving their positions are:

Katie Eckert (in her personal capacity)
JoEllen McBride (in her personal capacity)

Overview

The Committee on the Status of Women in Astronomy was established in 1979 with the charge to recommend to the Council practical measures that the AAS can take to improve the status of women in astronomy and encourage their entry into this field. Herein, we define “women” to mean people who identify as female, including trans women, genderqueer women, and nonbinary people who are significantly female-identified, and includes women with multiple, intersectional identities, including race, ethnicity, class, disability, and more. This Annual Report will focus on CSWA activity from June 16, 2020 to June 15th, 2021.

Communications/Publications

In the News

In Fall 2020, Nicolle Zellner, Chair, was contacted by a journalist from zippia.com to provide answers on job market trends in the field of Astronomy. Input from the entire committee was solicited, resulting in two on-line articles, which together have been viewed over 1000 times:

- [Experts Weigh in on Current Job Market Trends](#)
- [Predicting the Future of the Job Market](#)

In March 2021, the Blog Team published the first interview of its “Women of Arecibo” series, which caught the attention of editors at *Physics Today*. This [series was promoted](#) in the “New books & media” section of the magazine’s May issue.

Women in Astronomy Blogspot

As noted above, the CSWA maintains a blog, [Women in Astronomy](#). Over the past year, we published 104 blog posts, 38 with original content, in addition to cross-posts from other sources and the weekly *AASWomen* newsletter. Our viewership has increased slightly during the pandemic, compared to 2019 (Figure 1a), reaching over 3.03 million viewers in its lifetime. The blog averaged around 20,000 views per month (Figure 1b), with spikes in viewership in February, March, and April of 2021. During the year we saw spikes in viewership on various dates although a correlation with specific blog posts was not identified.

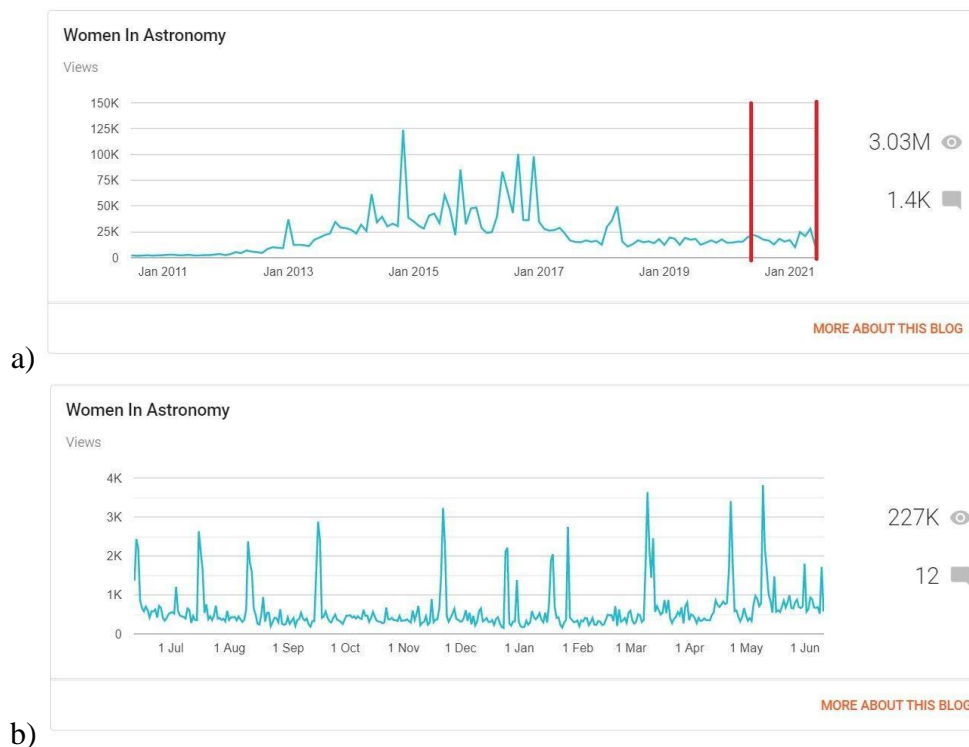


Figure 1. Yearly (a) and monthly (b) views of the Women in Astronomy blog. The reporting period falls between the two red lines in (a).

JoEllen McBride, the Blogger-in-Chief during 2020-2021, solicited many original items from authors outside of the CSWA. She also restarted the “Career Profiles” series and the “Meet Your CSWA” series with varied success. JoEllen solicited applications from members of the Astronomy community to join a newly established [blog team](#); Bryné Hadnott (Carnegie Earth and Planetary Lab), Natalia Lewandowski (Haverford College), Amanpreet Kaur (Penn State), and Katrina Miller (University of Chicago) joined in March of 2021. Together, they have helped kick-start our “Women of Arecibo” series, which has had great success and was [profiled](#) in the “New books & media” section of the May issue of *Physics Today*. They are also posting profiles and interviews with many astronomers and physicists of color.

Figure 2 shows the most popular posts this past year. Many of our older posts are still bringing traffic to the site. These posts mostly cover the topics of harassment (both gender and sexual), sexism, and gender identities. We do not know, however, how much of this traffic is driven by spammers leaving comments on the site. The Blogger-in-Chief reports anywhere from 2-10 comments a day as spam. Most of our traffic comes from Google, Twitter, and Facebook, highlighting the importance of promoting our posts on social media (Figure 3). We started adding photos to the blog posts so that a picture shows up on the automatic Facebook post. The cover photo increases the likelihood of interaction with the Facebook post and reads for the article. Our website is one of the top results in Google searches for ‘women in astronomy’ and ‘women in astronomy blog’, which shows the relevance of the blog.

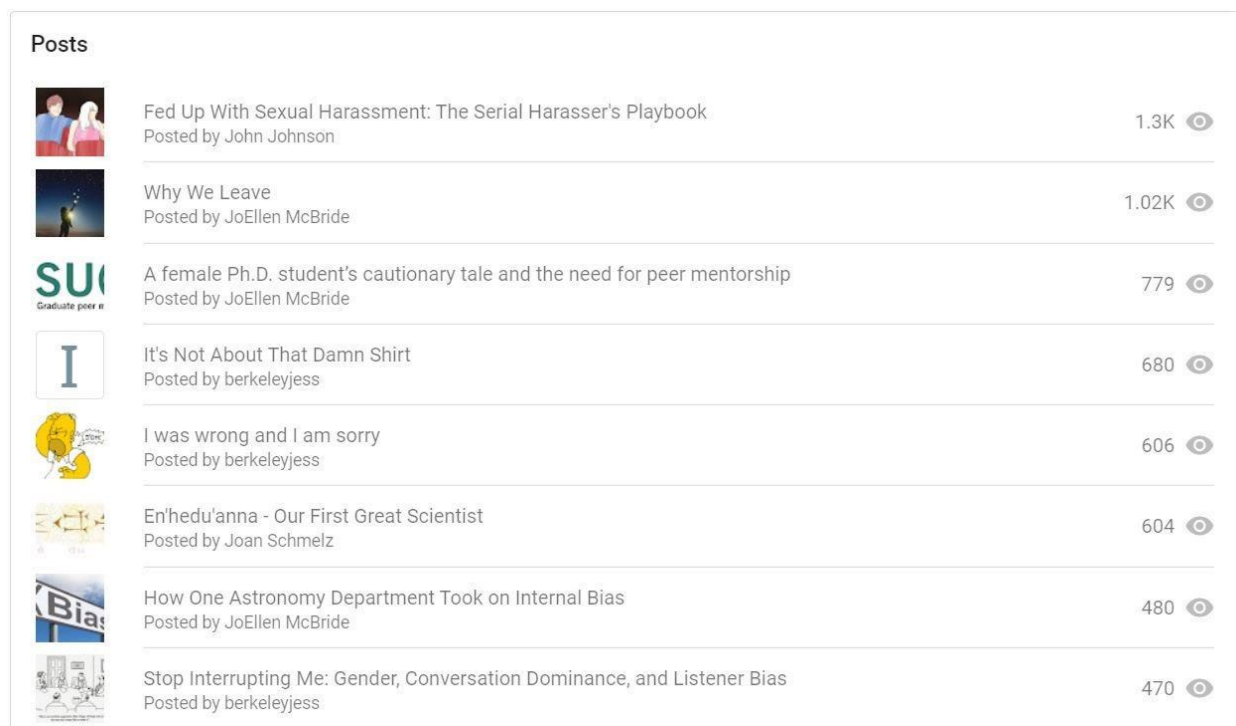


Figure 2. The most popular articles on the Women in Astronomy blog site.

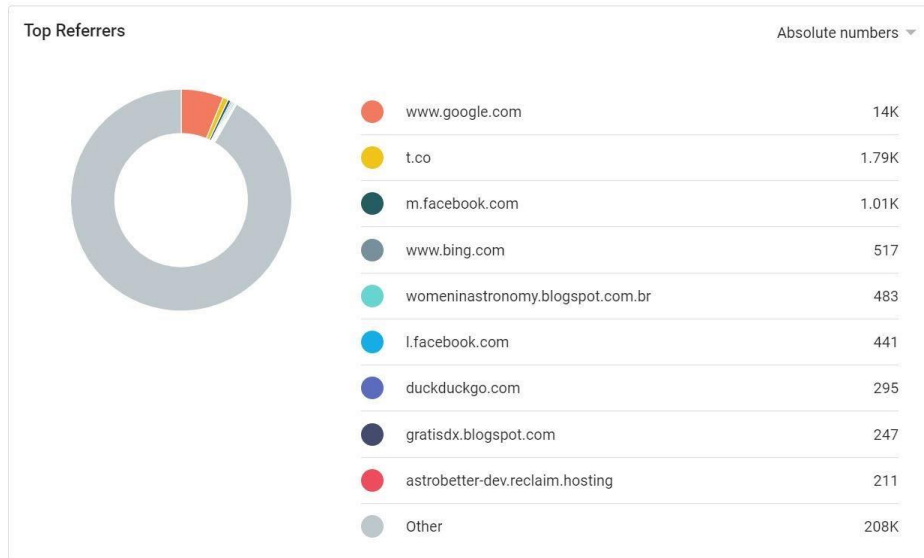


Figure 3. Break-down of sources of traffic to the Women in Astronomy blog site.

Our audience is mostly US-based but we see traffic from Russia, Canada, UK, Germany, and France, which shows that our topics are resonating with astronomers worldwide (Figure 4). The blogging team will continue promoting posts on diversity and inclusion, to directly direct topics in focus areas of the CSWA’s Strategic Plan. In coordination with the AAS Employment Committee, the team will also continue highlighting astronomers and other scientists from underrepresented groups through our Career Profiles series. Astronomers will also be highlighted in the 2-body problem series and other posts. Upon AAS Board approval, incoming member Bryn  Hadnott will take over as Blogger-in-Chief.

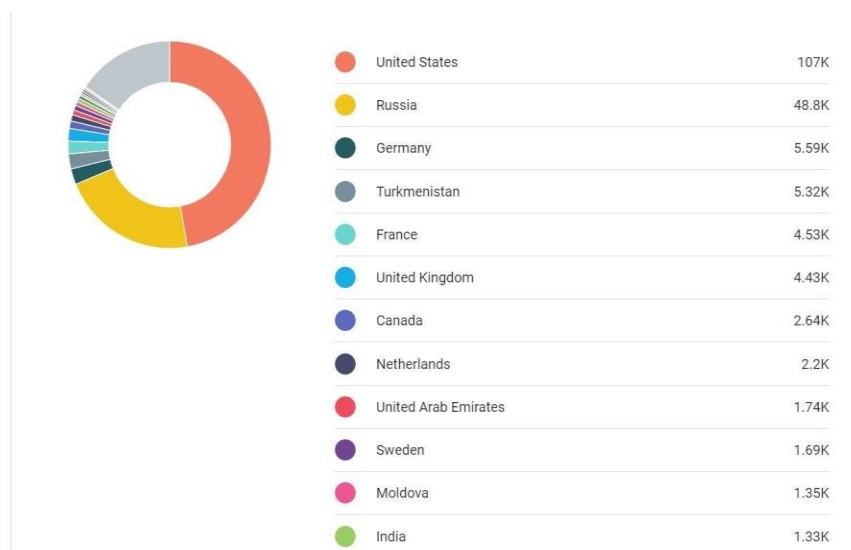


Figure 4. Break-down of countries of viewers of the Women in Astronomy blog site. Viewers are additionally located in Spain, Indonesia, Australia, Japan, and other countries.

AASWomen Newsletter

Since at least 1999, the CSWA has published a weekly email newsletter called *AASWomen*. In 2020-2021, the regular editors were Heather Flewelling (Lead, CSWA member), Maria Patterson (CSWA member), Jeremy Bailin (CSWA member), and Alessandra Aloisi (community member). Nicolle Zellner (CSWA Chair) put together the newsletter a few times during the year.

A typical *AASWomen* newsletter issue contains cross-posts of commentaries at the CSWA's blog, [Women in Astronomy](#), and information about AAS special sessions, including CSWA events at AAS meetings. It also contains contributions from the community, including requests for and responses to information and/or advice; links to news items about women in science; announcements of honors and awards given to women in science; information about upcoming programs and meetings; and links to internship and job opportunities.

The newsletter is cross-posted on the Women in Astronomy blog site as well as on the CSWA Facebook page and Twitter. As of June 2020, *AASWomen* increased its readership to 1675, growing by about 3% since May 2020.

The archive of the newsletter can be found [here](#). Since May 2020, Heather Flewelling has been the Lead Editor and is responsible for setting the weekly editing schedule and addressing any issues that arise.

CSWA Webpages

Since the upgrade to the AAS website in 2019, the CSWA website has been a subpage on the site rather than an independent page. Updates, including recovery from the transition, continue at a modest pace.

We thank AAS Director of Communications & Marketing Hua Liu for obtaining a Google Analytics report, the first since 2015, on our pages. They received more than 6,100 visits during the period June 3, 2020 to June 2, 2021, up from about 5,660 in 2015. The most-visited pages were, in order: the CSWA home page, the *AASWomen* archive, the main resources page, the resource pages on a career break and diversity, the page of links, and the resource pages on mentoring, unconscious bias, and harassment. During the year, the number of visits to the resource pages ranged from 100 to 330 each.

Other than the USA, the country originating the most visits to our homepage was China, with more than 250 visits. Canada, the Netherlands, the UK, and India, among others, each provided visits ranging from 50 to 70 in number. Nancy Morrison continues to manage the CSWA webpages.

Facebook

As of 15 June 2021, the CSWA Facebook account, [Committee on the Status of Women in Astronomy](#), has 1958 followers. The posts on Facebook are primarily crossposts between the *Women in Astronomy* blogspot and the CSWA Newsletter. Manual posts are made as needed for announcements of interests, e.g. an invitation reminding followers of a public splinter session. Posts to the Facebook page average over 1000 impressions a month. Member Amber Stuver manages the Facebook page.

Twitter

As of 11 June 2021, the CSWA Twitter account, @AAS_Women, has 2,367 followers, an increase of ~7.5% over the previous year. Most tweets are shares of links to news articles and related career opportunities, including those mentioned in *AASWomen*. Member Tiffany Stone-Wolbrecht manages the twitter account.

Projects

Strategic Plan

With the publication of the CSWA's [Strategic Plan](#), project implementation is underway. In order to manage the progress of each project and to provide a venue for discussions and brainstorming, member Greg Rudnick has organized monthly meetings of the Project Leads. Projects currently in some stage of development and/or implementation are

- Finalizing a paper of recommended actions for the AAS, its committees (including the CSWA), and its divisions, to consider (based on the 2019 CSWA Community Survey). This paper will be submitted to *BAAS* for publication. Focus Area 1: Harassment and Bullying, Lead: Pat Knezek
- Demographic Survey of PhD-granting Astronomy Departments. Focus Area 2: Creating Inclusive Environments for an Ethical Workplace, Lead: Sukanya Chakrabarti
- Demographic Survey of Participants in AAS Meeting Press Conferences. Focus Area 3: Professional Development, Lead: Nicolle Zellner
- Understanding the AAS Journal Review Process, including effects of dual-anonymous peer review. Focus Area 3: Professional Development, Lead: Eric Hooper
- Improving communications and collaborations among AAS inclusion committees, various projects. Focus Area 4: CSWA Operations and Interactions, Leads: Jessica Mink, Amber Stuver, Maria Patterson

Activities

AAS Meeting Participation

The CSWA participated in both the Winter (237) and Summer (238) meetings of the AAS. Virtual panel discussions and booths at the Graduate School Fairs provided the basis of the participation. Though not the same as face-to-face interactions, the CSWA booths saw a fair amount of traffic, clicks, and downloads (Table 1). The Meet-and-Greet virtual panels were popular and provided information related to the CSWA's Strategic Plan (Winter Meeting, "CSWA Meet & Greet: A Strategic Plan for the Next 10 Years") and experiences of early career astronomers (Summer Meeting, "Meet and Greet: Current State of the Profession: Perspectives of Early Career Astronomers Through the Lenses of Diversity, Work-Life Balance, and Mentoring"). The panel at the summer meeting served to address Focus Area 4 in the Strategic Plan, to increase collaboration and activities with members of the AAS' inclusion committees. Panelists represented CSWA, SGMA, WGAD, and the DPS PCCS.

Table 1. Statistics of AAS attendee visits to CSWA events.

Meeting	Booth Visits (total/unique)	Document Views	Tabs Clicked	Panel Attendance
Winter	89/56	76	10	60+
Summer	118/35	36	4	50+

Other Meeting Participation

For the first time, members of the CSWA attended the meeting of the National Society of Black Physicists and the SACNAS meeting of Chicano/Hispanics and Native Americans, both with AAS Board sponsorship. Working together with members of the AAS inclusion committees, we provided information to attendees about the AAS in general and our committees in particular. It is not clear how effective we were in this endeavor but we're hopeful that in-person attendance at future meetings would be supported by the AAS Board and would be more impactful.

CSWA Banner, Logo, and Letterhead

This past year, the CSWA embarked on a rebranding strategy, motivated by having to insert images into the virtual booths at the AAS Graduate School Fair. A banner (Figure 5) was designed by member Regina Jorgenson and pays homage to the Andromeda Galaxy, using an image from photographic plates archived at the Maria Mitchell Observatory. It will soon be uploaded to the AAS's CSWA webpage as well as to the CSWA Facebook page.

Why have just one image? Working with an AAS-approved graphic artist, the CSWA evaluated about a dozen logos and letterheads for use in official business. The approved logos are shown in Figure 6 and the approved letterheads are shown in Figure 7. A CSWA-approved policy states that "The use of the CSWA logo and letterhead is reserved for members of the CSWA for official business and approved communications."



Figure 5. CSWA banner.



Figure 6. Approved CSWA logos.



Figure 7. Approved CSWA letterhead.

Responses to Community Concerns

Two hot-button issues raised by community members prompted the CSWA to write letters to the editors of the high-profile journals, *Nature Communications* and *Astronomy & Astrophysics*. The members of the CSWA worked quickly and collaboratively to come to agreement on evidence-based statements that were intended to provide support to members of the Astronomy community who may have been harmed by the messages in the journal publications.

The first letter (December 2020) was in response to a publication in *Nature Communications* that reported that female advisors hinder career trajectories (among other findings that were harmful to women). The publication was fraught with misinformation and lacked acknowledgement of biases against women in the datasets used by the authors. The CSWA desired approval by the AAS Board so that the letter could be an official CSWA communication. After a lengthy delay, the letter was approved and sent, though long after the editors had already publicly responded and retracted the article.

The experience of this sequence of delayed events resulted in a revised strategy for future action: to implement a two-pronged approach that includes an immediate blog post followed-up by an AAS-Board-approved letter. This strategy is documented in our Working Rules (attached).

The second letter (June 2021) was in response to a series of tweets by a community member who reported that they were not allowed by the journal to submit a name change to an electronic

publication. The CSWA immediately reacted, again coming together to work quickly and collaboratively in [a statement of support](#), with the message that the ability to change names is a fundamental right of authors. We cited the AAS policy in this statement. The statement, in revised form, is now under consideration for approval by the AAS Board so that the CSWA can send this to the editor of *Astronomy & Astrophysics*.

Responses to Inquiries by Individuals

As the Chair of the CSWA, Nicolle Zellner often fields “one-off” inquiries. This past year, she met again with a graduate student seeking advice on how to report being harassed and discriminated against by her advisor; talked to a senior member of the community who wanted advice about how to evaluate professional activities of a known harasser in the field; forwarded to the AAS President the concerns of a graduate student about authorship of a known harasser in the field; and had two meetings with a journalist who is seeking information for an article she is writing about early career women astronomers.

CSWA Endorsements

As a committee, we again agreed to endorse the Maria Mitchell Women of Science Symposium, to be held in September 2021. Member Stella Kafka is a panelist.

Crossovers and Collaborations

In the past year, we have reduced our emphasis on finding people who would serve on the CSWA and also as liaisons to the AAS inclusion committee. Everyone is already very busy and finding yet another meeting time can be challenging. Instead, we are intentionally collaborating with members of the AAS inclusion committees (Strategic Plan Focus Area 4) in activities, such as CSWA panel participation; cross-posting articles on the blog and in *AASWomen*; and highlighting careers paths of astronomers who identify along axes represented by members of SGMA, CSMA, and WGAD. Most recently, members of the AAS inclusion committees and the DPS PCCS participated as panelists at the 238 AAS Meeting CSWA event, “Current State of the Profession: Perspectives of Early Career Astronomers Through the Lenses of Diversity, Work-Life Balance, and Mentoring”.

Physics & Astronomy SEA Change Working Group

The CSWA continues to represent the AAS in the STEM Equity Achievement (SEA) Change initiative sponsored by the American Association for the Advancement of Science (AAAS). This past year, member Stella Kafka participated in the regular meetings and reported back to the CSWA and AAS Board progress and milestones.

Site Visit Oversight Committee

Member James Tuttle Keane serves on this committee in the capacity of CSWA liaison.

Path Forward in 2021-2022

With the CSWA Strategic Plan in place and active development of projects in all of the focus areas; a detailed set of Working Rules that guide committee activities and communications; an active social media team; a dedicated editorial staff for *AASWomen*; and committed committee members, the CSWA will continue to promote and advocate for best practices that improve the status of women in Astronomy and encourage their entry into this field. We thank the AAS Board and the AAS members in general for supporting our efforts.