

# The Crucial Work of the AWM Policy and Advocacy Committee

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**Abstract** This article is a behind-the-scenes look at the work of the Association for Women in Mathematics Policy and Advocacy Committee as seen through the eyes of two recent chairs, the authors of this article, whose time on the committee spans the decade between 2010 and 2020. Major undertakings during our terms included creating and revisiting statements on welcoming environment and harassment, responding to the President’s Council of Advisors on Science and Technology report *Engage to Excel*, initiating Capitol Hill Visits, and crafting a Diversity and Inclusion Statement. We end with a discussion of some of the future challenges the committee might face.

**Key words:** gender, STEM, advocacy, gender discrimination, sexual harassment, diversity

## Introduction

The Association for Women in Mathematics (henceforth denoted by AWM) is the preeminent professional society supporting women and girls in mathematics in the United States and abroad. The Policy and Advocacy Committee (abbreviated by P&A below) is the AWM committee responsible for creating official AWM statements and policies, as well as responding to events that affect the lives of women and others pursuing mathematics. In many ways, P&A serves as the moral conscience of the organization, figuring out the best way to address thorny concerns and difficult situations. However, the work of P&A isn’t always glamorous—in fact, it rarely is. Instead, there are details that must be completed, conflicting perspectives that need to be navigated, complicated processes that have to be evaluated to see if they are suitable for the AWM, and questions that might require legal advice. On top of this, some events require a timely response in order to be at all effective. This article is a behind-the-scenes look at the work of P&A as seen through the eyes of two recent chairs, the authors of this article, whose time on the committee spans the decade between 2010 and 2020.

The main body of this article consists of two sections labelled “My Years on the P&A Committee”, one by each of the authors. Marie’s section spans 2010 to 2016 and Gail’s 2016 to 2020. These sections discuss the major undertakings of P&A during each of our terms on the committee, with an emphasis on the years when we chaired the committee. One of the most important accomplishments of P&A during our tenures was the creation and refinement of statements on welcoming environment and harassment, which were in response to the systemic, recurring problem of sexual harassment and a sometimes hostile environment for women in STEM. In 2013, AWM became the first mathematics society to adopt a statement on harassment. Other major initiatives during our terms included responding to the President’s Council of Advisors on Science and Technology (PCAST) report *Engage to Excel*, initiating Capitol Hill visits, and crafting the Statement on Diversity and Inclusion. In the “Future Challenges” section at the end of this article, we describe three major issues that the committee might face.

The Policy & Advocacy Committee, which came into existence in 2006 following a two-year strategic planning process, reports to the Executive Committee (EC) of AWM and the president of AWM. (The EC is the Board of Directors of AWM, according to AWM’s corporate bylaws.) The strategic plan laid out the vision that P&A would “identify issues in policy and/or advocacy” affecting women in mathematics and “develop and implement strategies and actions” to address these issues. In this article, we repeatedly illustrate the realization of the strategic plan’s vision. Indeed, many of

P&A's accomplishments can be viewed as pursuing policy via the creation and dissemination of statements that address a variety of concerns. Some of these concerns arose in the context of specific instances of gender discrimination and stereotyping (see for example Marie's section on "Controversies Surrounding the Putnam Exam and *Rites of Love and Math*" and Gail's section on "Support for our LGBTQ+ colleagues"). Other policy statements addressed systemic, continual problems such as increasing the representation and recognition of marginalized populations within mathematics (see Gail's section on "Diversity and Inclusion"). Advocacy has also been a constant theme for P&A. During its early years, the committee channeled advocacy efforts via the publication of educational statements in the *AWM Newsletter* on legislation worth supporting. In 2015, AWM started a major new advocacy initiative consisting of Capitol Hill visits in which AWM volunteers meet with Representatives and Senators to discuss issues of importance to the organization. Details of P&A's role in turning AWM Capitol Hill visits into a regular program is discussed in depth in this article (see "The Early Days of Capitol Hill Visits" in Marie's section and "Capitol Hill Visits" in Gail's section).

From the very beginning, P&A was frequently asked to endorse statements, resolutions, and policies of other organizations. Since the EC meets every other month and AWM presidents are sometimes unavailable, for example, while traveling, if an issue is time-sensitive, P&A might not be able to act on the issue as a committee or on behalf of AWM. However, some members of the committee might act as individuals or as a committee but not as the AWM. We will see instances of this throughout this article. In 2017, under Gail Letzter's tenure as chair of P&A, a formal "Process for Endorsements and Public Policy Statements" was approved. The AWM president must approve all endorsements recommended by P&A with the exception of routine endorsements of Coalition for National Science Funding (CNSF) requests; the full EC must still approve policy statements.

One of the seemingly mundane responsibilities of P&A (and this usually falls on the chair) is to monitor and keep up-to-date the Policy and Advocacy portion of the AWM website. As the online world has evolved, P&A has adapted and learned to take advantage of other social media platforms such as the AWM Facebook and Twitter pages. Marie's section "From P&A to Publicity: Wikipedia, the AWM Website, and Social Media" describes her efforts to make AWM's use of the broader social media environment more effective. In addition to being active in the AWM Task Force on Media and Web Presence, Marie was instrumental in the 2018 revamping of the AWM website. The Policy and Advocacy pages of the AWM website (and we certainly expect this to remain true for future iterations) prominently feature both archived and more recent endorsements and response statements as well as policy statements.

The organization of the remainder of this article is straightforward. As mentioned above, the main part of the article consists of two sections, each written by one of the authors. In the first section, Marie Vitulli describes the major accomplishments of her time on P&A. This is followed by a similar section authored by Gail Letzter. In these sections, we write in the first person to convey our own remembrances and impressions of our service on the committee. At the end of the article, the two of us present our combined thoughts on future challenges.

As you turn the page and delve more deeply into the article, you will see just how many disparate views and details need to be addressed by the AWM P&A in developing policies, statements, and programs for AWM. Nevertheless, we hope the takeaway will be the importance and value of the work done by P&A. Looking forward, we hope this article will inspire readers to consider following us in refining and updating our efforts and taking on new challenges as future members of the AWM P&A and as leaders of AWM.

## **My Years on the P&A Committee: Marie Vitulli**

I joined P&A in 2010 when I was elected to the EC; Sarah Greenwald was then chair of the committee. I became chair in February of 2012 and remained as chair until February 2016 when Gail took over.

Between 2010 and 2012, P&A discussed and took action on several noteworthy issues. In 2011, we also reviewed various resolutions from the 1990s and updated a few; they all appear on the Policy and Advocacy webpages of the AWM website. The committee worked on extensive updates to the P&A webpage. We wanted a unified home for AWM endorsements, responses, and policy statements. I spearheaded this initiative with the assistance of the full committee.

The original AWM website (AWM Website, 1998) went live on March 19, 1998. Later a team from Google helped Web Editor Holly Gaff and her crew create an improved and expanded site (AWM Website, 2010), which launched in late 2010. With the kickoff of the Google site, the *AWM Newsletter* also made its first appearance online with the November–December 2010 issue. The Policy and Advocacy Committee created its own webpage, which appeared early in 2011; at that time the P&A page was a subpage of the Resources page. In 2012, we started a substantial revision of

the P&A page and by late 2014 the page had moved out of Resources into a prominent position on the AWM home page just under the link to the *AWM Newsletter*.

### **Controversies Surrounding the Putnam Exam and *Rites of Love and Math***

In 2010, P&A talked about the pros and cons of indicating gender on Putnam Exam envelopes. The William Lowell Putnam Mathematical Competition, familiarly called the Putnam Exam, is the preeminent mathematics competition for undergraduate students in both the United States and Canada and is a program of the Mathematical Association of America (MAA). The Putnam Exam involves individual and team competitions. Winning individuals receive up to \$2500 in cash prizes and winning teams up to \$25,000.

Beginning in 2010, women were asked to self-identify by putting a red dot on the exam envelope to indicate their gender. We objected to that procedure, especially on the Putnam Exam, because studies by psychologists consistently found that asking test-takers to identify themselves as women or as members of underrepresented minorities just before taking an exam lowered their performance. Social psychologist Claude Steele and psychologists Steven Spencer and Diane Quinn were early expositors on stereotype threat (Spencer, Steele, and Quinn, 1999). One possible reason to add the red dot was to qualify for the Elizabeth Lowell Putnam Prize, named after William Lowell Putnam's wife; this award, initiated in 1992, is to be "awarded periodically to a woman whose performance on the Competition has been deemed particularly meritorious" and carries a cash prize of \$1,000 in addition to any other prize the winner might be eligible for. This possibility didn't outweigh the negative consequences we considered. In December of 2010, AWM President Georgia Benkart sent a letter to the Putnam Exam Committee summarizing our concerns and urging that gender information needed to award the Elizabeth Lowell Putnam Prize be gathered when participants pre-register for the exam or after the exam is taken for walk-in test-takers. In March of 2011, P&A sent the AWM Statement on Fairness in Testing to the Executive Committee and the EC endorsed this statement (AWM Statement on Fairness in Testing, 2011). Although there wasn't an immediate change in the practices of the Putnam Exam committee, we are happy to report that in 2017 the practice of using red dots to identify gender ended when Dan Ullman became director of the competition. The system now in place is that there is a small box on the outside lower right corner of the afternoon envelope; there is no explanation for the box. When the competition is over, the supervisor reads an instruction to check this box if you are a woman and you wish to be eligible for the Elizabeth Lowell Prize. The year 2020 will be a singularity due to the COVID-19 pandemic; in 2021, the MAA will probably bring back pre-registration and will ask women who want to be considered for the Elizabeth Lowell Putnam Prize to check a box during that time.

Another contentious issue we discussed in 2010 was Berkeley mathematics professor Edward Frenkel's suggestive film *Rites of Love and Math*, in which a tattoo of the "mathematical formula for love" was imprinted on the body of a naked woman (Donohue, 2010; Ness, 2010). This film by Frenkel and French filmmaker Reine Graves was inspired by Japanese filmmaker Yukio Mishima's film *Rites of Love and Death*. The mathematician in *Rites of Love and Math*, played by Frenkel, was concerned that the precious love formula might be harnessed by powers of evil, so to preserve it he etched the formula on his lover's stomach. On November 10, 2010, an announcement about an upcoming screening was sent to Friends of the Mathematical Sciences Research Institute (MSRI) in Berkeley, California. Shortly after, MSRI posted information about the screening of the 26-minute film with a link to a two-minute trailer, and announced the new video was to be shown with Mishima's original film. Early in the week of November 22, MSRI Director Robert Bryant began receiving emails from "distressed and upset colleagues who had viewed the trailer and found it disturbing, offensive, and/or insulting to women" (Bryant, 2010). "They reported seeing the trailer as 'depicting a male fantasy of sexual domination of women' and 'sending a message that men do mathematics while women are reduced to passive sex objects.'" Due partly to time constraints, P&A decided not to react to the situation as a committee, but various members wrote to Bryant expressing their concern about how women were depicted. On November 28, 2010, Bryant withdrew MSRI's support for the December 1 screening of the films of Mishima and Frenkel/Graves and posted a letter explaining his stance on the MSRI website. He announced that there were ongoing plans for a discussion forum and/or an event at MSRI that would focus on the issue of women in mathematics (Bryant, 2010). A quick look at the MSRI website will convince the reader that MSRI has created many programs and amenities to support women and gender-expansive individuals since 2010. The Media Column of the May–June 2011 *AWM Newsletter* has a review of the full film by Julie Rehmeyer (Rehmeyer, 2011) and comments about the controversy surrounding the film by Sarah Greenwald (Greenwald, 2011), who was chair of P&A during this controversy.

## Understanding Current Causes of Women's Underrepresentation in Science

In 2011 former AWM President Cathy Kessel and I co-authored a critique of the article “Understanding current causes of women’s underrepresentation in science” (Ceci and Williams, 2011) by Cornell psychology professors Stephen Ceci and Wendy Williams. The article, which appeared in the prestigious journal *Proceedings of the National Academy of Sciences of the United States of America*, left some of us with more questions than answers. After conducting a review of the literature, the authors concluded that overt discrimination in publishing and hiring was no longer a deterrent. Other scientists pointed out statistical errors, gaps in reasoning, and omission of relevant research. Instead of discrimination, Ceci and Williams proposed three factors to explain the underrepresentation of women in “math-intensive” fields: fertility/lifestyle choices, career preferences, and mathematics ability. The critique appears on the Policy and Advocacy page of the 2020 AWM website, and the Association for Women in Science (AWIS) mentioned it in *AWIS in Action*, its electronic advocacy and public policy newsletter. Cathy wasn’t an official member of P&A but she was a consultant on this and many other issues that we considered. This was another instance where a response was needed before the full committee and the EC could act. Ceci and Williams have co-authored several articles and a book entitled *Mathematics of Sex: How Biology and Society Conspire to Limit Talented Women and Girls* with their explanations for the scarcity of women in science. At present, a Google search turns up many articles by mathematicians and other scientists criticizing the work of Ceci and Williams.

The remainder of the major initiatives I will discuss are from my time as chair of P&A. The two most important and time-consuming were the AWM response to the report *Engage to Excel* by the President’s Council of Advisors on Science and Technology (PCAST) and the development of a Welcoming Environment Statement. I will treat these issues in chronological order in separate sections to follow.

## Response to the PCAST Report *Engage to Excel*

The first major undertaking of P&A during my term as chair was our response to the report *Engage to Excel: Producing One Million Additional College Graduates With Degrees in Science, Technology, Engineering, and Mathematics*. This report was a product of the President’s Council of Advisors on Science and Technology (PCAST) and was published online on February 7, 2012 during Barack Obama’s presidency (PCAST, 2012). The report claimed that the mathematics community had not adequately developed methods of effective undergraduate teaching and called for the teaching of undergraduate mathematics courses by faculty in other disciplines.

AWM learned about this report when P&A member and Coalition for National Science Funding (CNSF) representative Rebecca Goldin emailed AWM President Jill Pipher on February 24, 2012. Jill asked P&A to draft a statement of concern and submit it to the EC for approval. AWM was deeply concerned about the effect the report might have on federal funding for mathematics; this concern was shared by many other mathematics societies.

We were dismayed to discover that not a single mathematician was on the Council and were deeply troubled by two parts of the report. The first asserted:

Discipline-based education on effective undergraduate mathematics teaching also appears less developed when compared with other STEM fields. (p. 27)

The second was a pair of recommended actions.

- (3) college mathematics teaching and curricula developed and taught by faculty from mathematics-intensive disciplines other than mathematics, including physics, engineering, and computer science; and
- (4) a new pathway for producing K–12 mathematics teachers from undergraduate and graduate programs in mathematics-intensive fields other than mathematics. (p. 29)

Rebecca spoke at length to Deborah Stine, the Executive Director of PCAST, to learn about the process that led to the report and the involvement of mathematicians in the process. Stine objected to our contention that not a single mathematician was on the Council and pointed out that the co-chair, Eric Lander, who is a systems biologist, got his PhD in mathematics from Oxford. Stine advised Rebecca that giving public comment and handing out a document summarizing our concerns to PCAST members would be our most effective course of action. Subsequently, Rebecca requested a two-minute time slot to present public comment at the next meeting of PCAST, which was on March 9, 2012.

With Cathy Kessel's help, we drafted a statement for Rebecca to present during the public comment period. Cathy, who was very familiar with the mathematics education research, helped us refute the statement about discipline-based education on effective mathematics teaching and provided us with a long list of references on teaching methods and ways to measure their effectiveness. During the week preceding Rebecca's public comments Jill Pipher was out of the country and we didn't have ample time to get EC approval for our statement. The entire Policy and Advocacy Committee and Cathy Kessel approved and were named as authors of the final statement that Rebecca handed out during the March 9th PCAST meeting. Rebecca reported that AWIS also handed out a statement at that meeting.

After Jill was back in touch with our committee, we sent the statement we prepared to the Executive Committee for consideration at their March meeting. I also contacted the Mathematical Association of American (MAA), the Association for Women in Science (AWIS), and the American Mathematical Society (AMS) to advise them about our activities in response to the report and to ask them if they wanted to collaborate on a joint response to the report. We were persuaded by several parties to make our response to *Engage to Excel* more positive and we did so. Policy and Advocacy worked with Cathy Kessel and Tara Holm, who chaired the AMS Education Committee at the time, to edit the statement yet again. After sixteen versions, the EC approved the final version of our statement in March 2012, posted it on the P&A webpage, and notified MAA and AWIS that the final version was available. Tara Holm kept AMS in the loop. In the end, the other societies wrote their own responses and agreed to link to our response. Our response was announced in the July–August 2012 *AWM Newsletter*. A link to the final statement as well as to the responses of other organizations to *Engage to Excel* appear on the Policy and Advocacy page on the AWM website.

### ***Sexual Harassment and the Welcoming Environment Statement***

The earliest AWM Statement on Sexual Harassment was drafted by the EC (before the Policy and Advocacy Committee was formed) and appeared in the November–December 1993 *AWM Newsletter*. The statement included eight main points: sexual harassment is extremely serious; sexual harassment has many forms; sexual harassment must be taken seriously; sexual harassment must be dealt with promptly; sexual harassment charges must be dealt with fairly; sexual harassment must be dealt with effectively; and sexual harassment must not be tolerated. This early statement provided guidelines for institutions to deal with sexual harassment. The statement was updated by the Policy and Advocacy Committee and approved by the EC in July of 2011. Once again, Cathy Kessel assisted us in writing. The policy appeared in the September–October 2011 *AWM Newsletter*, which can be found in the online archive (AWM Statement on Sexual Harassment, 2011). At that time we endorsed the guidelines of the American Association of University Professors (AAUP) for academic institutions, "Sexual Harassment: Suggested Policy and Procedures for Handling Complaints" (AAUP, 1990).

In the fall of 2012, the P&A Committee (Rebecca Goldin, Sarah Greenwald, Anne Leggett, and Marie Vitulli) started discussions about a significant update to the AWM policy. Various members of AWM, including President Jill Pipher, had been notified about incidents of sexual harassment at conferences, workshops, and institutes. These incidents caused great distress to the alleged victims. Moreover, some people who reported incidents to conference organizers got icy responses from those organizers. Frankly, we were shocked by some of the stories that were shared with us. We were asked to urge conference organizers to adopt anti-harassment policies and train permanent staff on how to deal with these situations. We were informed that there was already a push to make this happen in tech conferences. There was a suggestion that AWM create a repository of formal complaints.

The final product of our deliberations was approved by the EC in May of 2013 and appeared in the September–October 2013 *AWM Newsletter*. The 2013 Welcoming Environment Statement had five sections: an opening paragraph stating the policy emphasizing that "all participants in AWM activities will enjoy a welcoming environment that is free from all sorts of discrimination, harassment, and retaliation"; a section "Sexual Harassment" defining sexual harassment; a section "Other Types of Harassment" with descriptions of other forms of harassment; a section "Scope of Policy" that explained who was covered by the policy; and a section entitled "Further Resources." The latter contained a link to a page I created that listed references and provided links to relevant documents including: Title VII of the Civil Rights Act of 1964, which prohibits workplace discrimination; Title IX of the Education Amendments of 1972, which prohibits discrimination in schools; and helpful pointers for those who experience harassment. In order to showcase the challenges that P&A sometimes faced, I want to share the details of the incredibly arduous process that led to this final policy statement.

During the early discussions in 2012, we contacted the American Association of University Professors (AAUP), the Joint Committee on Women in the Mathematical Sciences (JCW), and the National Science Foundation (NSF). We asked JCW to conduct a survey to see how many constituents of its nine member organizations had been victims of or had witnessed sexual harassment at a mathematics conference or workshop and what the nature of the alleged harassment was. I spoke to a former AAUP General Counsel about AAUP's policies. This person thought our best bet was to have associations adopt sexual harassment policies that cover workshops and conferences. She saw no problem with organizations keeping files of complaints. She made other suggestions that I related to the full committee.

Members of the P&A Committee were asked to talk to their institutions' Affirmative Action Offices and review online documents to learn the details of their sexual harassment policies. None of the written policies included off-campus behavior at events such as conferences and workshops.

A member of the JCW contacted a program officer at NSF and was told the following via email.

The NSF policy on sexual harassment (at conferences or otherwise) is to follow Federal law. If a complaint were made by an individual against an NSF-funded PI [Principal Investigator], the matter would be referred immediately to the NSF Office of the Inspector General [IG], which would conduct an investigation and recommend any punitive actions. The latter might involve reporting the case to the Department of Justice for possible criminal prosecution. We Program Officers are told to stay clear of such matters beyond reporting them to the IG.

I made inquiries at NSF as well and was largely unsuccessful in getting a timely reply or much useful information from them.

By December of 2012 the P&A Committee unanimously recommended that AWM adopt its own Sexual Harassment Policy that would govern all AWM activities. On advice from AWIS, we reviewed the American Astronomical Society (AAS) policy on Sexual Harassment created by the AAS Committee on the Status of Women. We reviewed the Modern Language Association (MLA) Policy, which was brief and primarily referred to the behavior of employees of the MLA.

We were impressed by the scope and thoroughness of the AAS policy and decided to use it as a model for the AWM statement (AAS Policy, 2017). We came up with a first draft policy and discussed it at our December 2012 meeting. The initial draft was a "Statement of Anti-Discrimination Policy." The 2011 update to the original 1993 policy was called "Statement on Sexual Harassment," so the title for the 2012 statement followed what had been approved previously. This initial draft called for a complaint form to be placed on the Policy and Advocacy webpage and for alleged victims to use that form to report incidents. The policy covered all AWM events. Some of the language in the AAS Policy was replaced by language from the Equal Rights Advocates website (EqualRights, 2011). We made many edits to the initial draft and then sent it to the full EC for discussion at the January 2013 meeting at the Joint Mathematics Meetings (JMM) in San Diego.

The JCW was also meeting in San Diego at JMM so the MAA Representative to JMM, Jerry Porter, used the AAS Policy to draft something that he took to the JCW meeting with the hope that JCW would send a policy draft to all of its member societies and ask them to adopt their own policies. Jerry also sent a copy of his "Anti-Harassment Policy" draft to leadership at MAA. It was my preference that Jerry wait for the EC to approve our policy draft but he wanted to have something specific to discuss at the 2013 JMM meeting. I was in contact with Carol Wood, a former AWM President and then chair of the newly formed AMS Committee on Women in Mathematics (CoWIM); AWM Treasurer Ellen Kirkman was also on that committee and was interested in pursuing a policy statement. I was invited by Cathy Kessel to attend the MAA Committee on the Participation of Women (CPW) meeting at JMM to discuss AWM's work on a policy; I attended the meeting and was given an opportunity to speak.

When AWM leadership reviewed our policy draft before the January EC Meeting they were concerned that if AWM instituted a complaint process then it would put AWM at some legal risk. The original statement advised that AWM would report an alleged incident of harassment to the alleged perpetrator's home institution. Mary Gray, the first AWM president, who also holds a law degree, had a problem with this because it assumes harassment without any chance for the accused to defend themselves. Mary said she had helped draft a similar policy for Amnesty International several years before. She thought reporting to an institution that a complaint was made could lead to legal liability for AWM. After discussion at the January EC meeting and email from Mary Gray, the statement went back to the P&A Committee for edits.

Mary Gray expressed additional concerns about our initial statement, particularly the part that said we would help an alleged victim investigate the complaint process at his or her home institution. Mary pointed out that an institution wouldn't be able to investigate an incident that occurred off campus. AWM personnel might not be able to access the faculty handbook or other personnel material from an email address off campus. If the home institution doesn't investigate but places a letter in the alleged harasser's file and that letter is brought up down the road in a tenure, promotion, or merit raise review, the alleged harasser may sue the institution and AWM for their role in having the

letter placed in the alleged harasser's file. Mary shared my feeling that AWM should make investigations of complaints part of our policy and suggested that we might create a pool of volunteer ombudspersons, one designated for each AWM event. The ombudsperson would decide whether to refer the complainant to the management of the venue or to the police if they felt the incident was potentially criminal, or to investigate the complaint further themselves.

By late February 2013, it looked doubtful that AWM leadership and the EC would approve a policy that included a complaint process. We thought that if we adopted a policy that didn't include a complaint process that it would be best to adopt a welcoming environment statement of expected behavior at AWM events. I contacted Joan T. Schmelz, chair of the AAS Committee on the Status of Women (CSWA). AAS was the only scientific organization that had a policy dealing with harassment at activities sponsored by the organization. Joan told me that their policy was drafted by CSWA and approved by the AAS Council at its January 2008 meeting. She couldn't share any information about complaints filed and actions taken because that information was confidential. She did make the following remark.

The AWM should not be in this alone. The professional organization running the meeting should be doing the heavy lifting.

The EC held a special meeting in April of 2013 to discuss the new proposal that was endorsed by the P&A Committee. It did not include a complaint process or mention of AWM helping an alleged victim file a complaint with their home institution. The EC felt that we should develop a statement rather than a policy. In late April, P&A unanimously approved a Statement of Non-Discrimination at AWM Activities and on May 1, 2013 it was sent to AWM President Ruth Charney and Executive Director Magnhild Lien for a vote by the EC. At the May 2013 EC Meeting the amended AWM Statement on Non-Discrimination was approved subject to Mary Gray's approval. Mary still had some concerns and some minor edits were made. I went back and forth with Mary a few times and on June 24, 2013 I sent Ruth a yet again revised "Statement of Non-Discrimination at AWM Activities." Ruth thought it looked excellent and we didn't need to go back to the EC for approval. She also said we could post the statement on the Policy and Advocacy webpage. The statement appeared online in late June of 2013. I also developed a detailed page of resources for dealing with sexual or other forms of harassment for the Policy and Advocacy webpage.

As soon as the AWM statement was posted I notified the other societies and provided them with a link to the policy. We urged AMS to adopt and support a full-blown policy that included complaint and investigation processes more on the lines of the AAS policy and linked to that policy in the email. We suggested to JCW that they recommend that the other professional mathematics societies adopt either a non-discrimination statement or a full blown policy if resources permitted this. JCW co-chair Tanya Leise replied that they had sent a similar statement, which they called a "Welcoming Environment Policy," to the boards of each society involved in JCW. They promised to press for action on this by the other societies and advised me that someone would get back to me after JCW's annual meeting in September.

Susanna Epp, the AWM representative to JCW reported back to me after their September meeting with the following welcome news.

NCTM [National Council of Teachers of Mathematics] is reviewing all policies and may have a policy in place soon. AMS Council on Profession is discussing this issue. ASA [American Statistical Association] is working on it, may tweak [it] somewhat. AMATYC [American Mathematical Association of Two-Year Colleges] has adopted. MAA is reviewing its personnel manual and this may be part of that effort; issue has been forwarded to the MAA Council on Meetings. IMS [Institute for Mathematical Statistics] has discussed it and drafted its own policy but would like to see what other societies are doing before sending back to council for approval (they want the document to be more explicit). IMS says incidents should be reported to Executive Committee.

At the January 2014 EC meeting at JMM, I announced that the nondiscrimination statement had been edited and was posted on the P&A webpage. We decided that AWM would not respond to specific complaints. We would send our statement to conference organizers who were requesting "In Cooperation" status. We came up with a briefer statement that was suitable for including on conference handouts. This appeared in the AWM program for JMM 2014. I advised the EC about the actions JCW had taken on this issue and what the other societies were doing. At the 2014 JMM the MAA Council on the Profession, chaired by Amy Cohen, passed a resolution to MAA leadership asking them to adopt a statement. The AMS Council gave the task of drafting their statement to a subcommittee. Mary Gray announced that ASA approved a statement and would let us know when it was posted on their website.

In February of 2014, Policy and Advocacy gained three new members: Tara Holm, Bryna Kra, and Katrin Wehrheim. In that month AMATYC approved a Welcoming Environment Statement, which appeared as an attachment to their board minutes and later was posted online. JCW posted a Welcoming Environment page with a link to the statements and policies of AWM and AMATYC as well as a link to the AAS Policy (JCW, 2014).

The ASA Conduct Policy would soon be posted on their website. Today their policy includes the following paragraph.

Violations should be reported to the organizer of the activity. In ASA's sole discretion, unacceptable behavior may result in removal or denial of access to meeting facilities or activities, and other penalties, without refund of any applicable registration fees or costs. In addition, violations may be reported to the individual's employer. Repeat offenders may be banned from future ASA activities.

The AMATYC Policy on a Welcoming Environment includes the following sentences.

Violations of this policy should be reported to the President of AMATYC. Individuals violating these standards may be asked to leave the activity without refund of registration fees and may have their behavior reported to their employer. Repeat offenders may be banned from future AMATYC activities. Retaliation against individuals who file a complaint will not be tolerated and will be treated in a manner similar to harassment.

In March 2014, AMS produced a draft of a policy that was shorter but much in the same spirit as the policy proposed by JCW with one major difference; AMS proposed a reporting option involving an 800 number, so that the person lodging the complaint would have as much anonymity as possible and AMS could act quickly. The AMS lawyers were vetting the policy draft. A joint subcommittee with members from CoWIM, CoPROF, and COMC came up with the draft proposal. The policy was ready to go to AMS Council by November 2014 and was to be discussed at their January 2015 meeting at JMM. It was approved by the AMS Council in January 2015 and they were working on its implementation.

In May 2014 a resolution on "Welcoming Environment" was presented to the MAA Executive Committee. By January 2015 MAA had a brief statement on Welcoming Environment on their website on the page containing the MAA Code of Ethics and the Whistleblower Protection Policy. The MAA Executive Committee discussed the longer welcoming environment statement/resolution and decided to modify their Code of Ethics to cover the Welcoming Environment statement. They reported that they were working on an update to what was posted. I went back and forth with MAA about what was posted. Today the statement on Welcoming Environment includes the following sentences.

Violations may be reported directly to the Executive Director or the Compliance Officer (Vice President). For immediate concerns at a meeting, proceed to the registration area or hotel/convention center security office.

It is a huge disappointment to me that both the AWM statement passed in 2013 and the updated statement fail to mention reporting violations or a complaint process. On the current webpage containing the Statement of Welcoming Environment, under the toggle "What to Do If You Experience Sexual Harassment," the following sentences appear.

If you experience harassment or are aware of harassment incidents at an AWM event, you are welcome to reach out to AWM organizers of the event and/or other AWM members for advice on how to proceed. AWM members can help guide you to an appropriate venue for filing a complaint. You are not expected to discuss details of the harassment, but if you choose to do so, the AWM members you speak to will keep this information confidential to the extent that is legally possible.

AWM was the first mathematics society to adopt a welcoming environment statement; when the statement was adopted it was agreed that we would revisit it in two years. In June of 2016, under Gail Letzter's leadership, the P&A committee began their review of the policy; I attended an early meeting as a guest. In 2017, I was informed that the National Academies of Science had formed a committee to examine "Sexual Harassment in Academia," and had begun holding public educational meetings that could be attended (remotely, via webcast) for free. AWM currently sends a liaison to the Societies Consortium on Harassment in STEMM. My own interest in sexual harassment in academia continues to this day; I have a page on Sexual Harassment in STEM on my personal Women in Math Project website, which is an archive of articles and studies on sexual harassment in the sciences (Women In Math, 1997).

### **The Early Days of Capitol Hill Visits**

I would be remiss if I didn't mention the beginning of AWM's program of Capitol Hill Visits. The first AWM Hill Visit took place on April 13, 2015, following the AWM Research Symposium at the University of Maryland, College Park. Talitha Washington and AWM President Kristin Lauter visited Senate and Congressional offices to "make known AWM's existence and mission and to argue for legislation to increase STEM outreach funding" (Lauter, 2015). Shortly after this initial foray, a second visit occurred during the MAA MathFest, which was held in Washington, DC, from August 5–8, 2015. This was a larger visit, including AWM presidents and leaders as well as both undergraduate and graduate students. Karen Saxe, formerly an AMS/AAAS Congressional Science & Engineering Fellow in Senator Al Franken's DC office, prepped the volunteers on how to talk to Senators, Representatives and their staff and prepared documents to leave behind with members of Congress (see (Kelley, 2015)). Towards the end of my term in late 2015, we began the process of figuring out how best to support these visits. Should we join forces with other organizations



such as Association for Women in Science (AWIS)? Should we support specific legislation? Should we advocate for mathematics in general or make this effort more focused on issues affecting women? For the last question, the committee decided that it is more important to advocate for women in mathematics (or more generally, for women in STEM) than to advocate for mathematics in general. Discussions concerning this last question, along with the other two, were continued and the program was formalized during Gail's term as P&A chair, as you can read in her section of this article on Capitol Hill Visits.

### ***From P&A to Publicity: Wikipedia, the AWM Website, and Social Media***

During my years on P&A it became clear to me that we needed to better highlight both the work of AWM and of women mathematicians. Two ways to do this were to increase the presence of women mathematicians on Wikipedia and to highlight the work of AWM and issues of concern to women in mathematics on social media.

I became a Wikipedia editor in 2013 after I attended an Edit-a-thon at the University of Oregon led by Sarah Stierch, a prominent member of the Wikipedia community. My goal was to increase the quantity and quality of articles on women mathematicians. At that time there was a scarcity of both women editors and pages on women mathematicians on Wikipedia. According to WikiProject Women in Red, only 16.36% of the biographies in English Wikipedia were about women as of August 7, 2016. The goal of WikiProject Women in Red is to turn red links (people mentioned on Wikipedia without Wikipedia pages) to blue links (people mentioned on Wikipedia who have Wikipedia pages). In August of 2016 the percentage of US women mathematicians on Wikipedia was about 17%. In contrast, we know that 29% of the PhDs awarded by US mathematics departments between 1991 and 2015 were awarded to women.

The first Wikipedia page that I created was on 2012 AWM-AMS Noether Lecturer Susan Montgomery. Almost immediately after the page went live it was proposed for deletion by a novice editor who made this remark:

It is proposed that this article be deleted because of the following concern: This looks like a case of shameless (self) promotion. Hey, look at me: I teach math and I want my CV on Wikipedia.

Stierch responded to the novice editor by saying the biography was in fact a good faith article by a new editor (not the subject of the article) and removed the proposed for deletion tag.

Since then I have created several more pages on women mathematicians and have updated and expanded numerous pages. I wrote articles for the *AWM Newsletter* and the *Notices of the AMS* on Writing Women in Mathematics into Wikipedia. AWM partnered with the Wiki Education Foundation to create the AWM-Wikipedia Visiting Scholars Program. At the 2017 AWM Research Symposium at UCLA, Ursula Whitcher organized the very first Wikipedia Edit-a-thon held during an AWM event; I assisted Ursula as did Jami Mathewson of the Wiki Education Foundation. Several AWM members, including the 2020 AWM Media Coordinator, Denise Rangel Tracy, and AWM member Sean Sather-Wagstaff, participated in the Wikipedia Fellows Programs in which the participants attended a series of weekly online lectures to learn the fine points of creating pages on Wikipedia. There were three different cohorts of Wikipedia Fellows in the summer of 2018: Communicating Science, General Cohort, and Women in Science. There was again a cohort for Women in Science in fall of 2018. Denise organized AWM Edit-a-thons at the 2019 AWM Research Symposium and the 2020 JMM in Denver; I assisted at the latter as did Sean Sather-Wagstaff. At Sean's invitation, I organized an Edit-a-thon at Clemson University in January of 2019 at which he assisted. Denise and Sean have submitted a grant proposal to lead several more Edit-a-thons. I am happy to report that today there are many more pages on women mathematicians on Wikipedia and that we have trained several new editors.

To highlight the work of AWM on social media, I became active with the AWM Task Force on Media and Web Presence, which was formed after discussions at JMM 2015. President Kristin Lauter wanted to greatly increase our web and media presence and set up the task force to do so. After a few months the task force morphed into the AWM Media Committee. AWM had a Facebook page as early as January 2011 and a Twitter account was created by Anna Haensch in March of 2015. In 2016 the AWM Bylaws were amended and the Web Editor position was replaced by the Media Coordinator position; the person who held this position was a member of the EC. After informally acting as AWM Media Coordinator for several months, I formally took over this role early in 2019. Shortly after JMM 2019 in Baltimore, Kim Ayers created an Instagram account for us, which I linked to our Facebook page. I have made almost daily Facebook posts announcing both AWM events and things I think would be of interest to the AWM community since 2015. I linked our Twitter account to our Facebook account so that posts made on Facebook would automatically push to Twitter. Unfortunately, Facebook no longer allows pushing of Facebook posts to Twitter accounts but posts on

our Instagram account can still push to our Facebook page. Denise Rangel Tracy became an active poster on Facebook in 2019. There is also an AWM Group on LinkedIn, which Karen Saxe created in July 2015.

Beginning in the spring of 2018, we worked on totally revamping the AWM website. Our old Google website, created in 2010, seemed dated and was cumbersome to maintain. We were without a Web Editor for several years after Holly Gaff resigned in 2012. I chaired a committee to find a new Web Editor in 2014. At that time we also were exploring the idea of a new website. In early 2015 Adriana Salerno took over as our new Web Editor. Adriana was succeeded by Joanna Wares, who became Media Coordinator in 2017. Our current website is a Wordpress website and is much more modern with many photos and graphics. It is also much easier to maintain than the old Google website. I joined the website team in the fall of 2018 and helped launch the new site in December of 2018. I maintained the site until the end of my term as AWM Media Coordinator in March 2020. In April 2020, Denise Rangel Tracy took over as AWM Media Coordinator and Michelle Snider, who was involved in creating the new website, took over as the Web Editor. I still make frequent posts to the AWM Facebook page.

## **My Years on the P&A Committee: Gail Letzter**

When the AWM nominating committee approached me in 2015 about running to be a Member-at-Large on the EC, I was told that I would spend the first two years on one of the major committees and then spend the final two years of my term as committee chair. This sounded great to me. It would give me a chance to get to know well one of the important AWM committees first before taking on a leadership role. I remember looking at the committees and thinking, should I join the Membership Committee? Would I be better suited for the Meetings Committee? And then AWM President Kristin Lauter took me aside and convinced me to both join and serve as chair of one of the committees I hadn't even considered, the AWM P&A. I ended up serving as P&A chair for three years, from February 2016 to February 2019 and stayed on as a P&A committee member for one additional year.

Shortly after the 2016 January AWM EC meeting at the JMM, I met individually with Kristin and she provided me with an overview of P&A and some of her vision for new projects we could pursue. One of her central goals was to formalize the new AWM Capitol Hill Visits program she had started and she asked that P&A oversee and expand this new initiative. Kristin was also keen on getting student chapters involved in any way possible. After speaking with Kristin, I reached out to the outgoing P&A chair and co-author of this article, Marie Vitulli, to get her perspective on the committee. In her view, the two most pressing items were the new Hill Visit initiatives and reviewing and updating the AWM Welcoming Environment/Non-Discrimination Statement.

So I began my term as chair of P&A with two major items on the agenda: Hill Visits and Welcoming Environment review; both dominated during my time as P&A chair. While I was chair, P&A also devoted a lot of energy to a third major item: diversity and inclusion. These three major concerns are described in detail in the three subsections of my part of the article.

During my time on the committee, P&A delved into all sorts of issues affecting the mathematics community. Sometimes, we brainstormed about various topics of concern related to gender identity, racial diversity, awards, childcare, and more and passed on recommendations to the Executive Committee and/or the AWM President. Other times, the discussions became more focused as we worked on creating official AWM statements in response to troubling national and international events. Taking a stand in support of AWM's values was something that was incredibly important to P&A Committee members. This was also strongly encouraged by AWM leadership and we often worked closely with the AWM President in writing such statements. In the course of just two years—the latter two of my time as chair—P&A wrote a response to the 2017 US travel ban, endorsed the 2017 March for Science, protested Turkey's arrest of a prominent mathematician, posted a statement on the AWM Facebook page condemning degrading remarks about women in physics made at an international conference, expressed concern for Transgender Civil Rights in light of US proposals to "narrow the definition of gender", submitted comments in regards to proposed changes for Title IX rules, and sent a letter to the ICM organizers about safety concerns in regards to the location choice.

Some of these statements were not easy to write. The "correct response" wasn't always crystal clear and there were often competing perspectives. We also frequently found ourselves writing AWM responses to similar—but still different—events, which often compounded the difficulty of finding just the right points to include in the statements. For the remainder of this introductory section, I focus on one of these recurring topics—support to our LGBTQ colleagues— which illustrates well the work of the committee and how we addressed some of the challenges in hitting the right tone for AWM's statements.

## **Support for our LGBTQ+ colleagues**

In 2018, the International Mathematics Union announced the next location for the International Congress of Mathematicians: Saint Petersburg, Russia in 2022. Moreover, George Poltavchenko, co-chair of the 2022 ICM Executive Organizing Committee and former governor of Saint Petersburg, was responsible for the city's 2012 anti-gay legislation banning "homosexual propaganda." Similar legislation was passed on the national level the following year and these bills have led to discrimination and violence against members of the LGBTQ community. Spectra, the Association of LGBT Mathematicians, reached out to AWM President Ami Radunskaya about making a formal response to the choice of ICM location and co-chair.

In formulating a response, we discussed a number of possibilities. Should we encourage AWM members to boycott the event? Should we take the opposite tack and show our support of our fellow LGBTQ mathematicians by arranging for a special reception at the ICM? We decided against both these approaches. Some of us on the committee felt uncomfortable about boycotts especially since trends in the US might lead to members of other countries boycotting meetings held in this country. A reception initially sounded good, but could attract negative attention and put the people we were trying to protect as well as their allies at even greater risk. Ultimately, we settled on a letter to the ICM Organizing Committee expressing our concerns about the choices for the 2022 ICM.

As often happens in cases like this, the issues might appear to be completely clear-cut and yet, there can still be subtleties. A number of people mentioned how it was difficult to be Russian in the US given the current political climate. Somehow, in this letter of protest, we needed to convey support for our Russian colleagues here and abroad. Thus, after an initial paragraph with a brief overview of our concerns, the next paragraph acknowledges Russian mathematical contributions: "Russia has a long, distinguished history of mathematics and we applaud Russian mathematicians' contributions to the existing mathematical canon." The rest of the letter focuses on the dangerous consequences of the anti-gay bills of 2012 and 2013 for the LGBTQ community. This letter, signed by AWM President Ami Radunskaya, implores the IMU to take "safety and inclusion of every mathematician wishing to attend the ICM" when in the future "determining the venue for such an important gathering". AWM further urged the organizing committee to reconsider the choice of location for the 2022 and, if unable to do so, "publish information specifically addressing the particular dangers" facing LGBTQ participants so that they could be prepared and the organizers of the ICM could better protect them.

A few short months after completing the AWM letter, it was pointed out that AWM had its own similar problem with the upcoming 2019 AWM Research Symposium. The venue was Rice University in Houston, Texas. California has a law that prohibits state-funded travel to states that have passed anti-LGBTQ legislation and Texas was on their list. AWM's initial response, offering help in finding other sources of travel money for Californian mathematicians who wished to come to the symposium, yielded cries that AWM was attempting to get around California law. As we sorted out how to respond, committee member and Texas resident Julie Sutton pointed out that, in contrast to the state level, Texas universities were extremely sensitive to LGBTQ rights. So, we did our best to address the issue without taking a hard line that would potentially commit AWM to not hold meetings in states with anti-LGBTQ legislation—even if the local university was inclusive. Ultimately, our response attempted to take the middle road, acknowledging the "complexities of the issue" and included AWM's promise to make a donation to a specific Houston organization that "supported LGBT individuals and their families".

## ***Capitol Hill Visits***

The first major item on the agenda for the 2016 P&A Committee was formalizing the new AWM Hill Visit program. As described in Marie's section, this was a new initiative started by AWM President Kristin Lauter. During AWM Hill Visits, AWM participants travel to Capitol Hill and meet with various members of Congress in order to bring to their attention issues important to the mission of AWM. Two visits had already occurred while Marie was chair of the committee and the AWM participants came away energized from these day-long events. It was clear that Hill Visits opened up a new way for AWM members to impact the mathematical lives of women and girls. P&A's charge was to build on these initial trips and figure out how to turn AWM Hill Visits into regularly occurring events. In this subsection, we describe how we set up this new program. Of course, the fun all lies in the participation and we encourage the reader to look at Michelle Snider's article in this volume, which so beautifully captures this excitement. Nevertheless,

we hope the reader will find some of the preparation and planning necessary to regularly pull-off this kind of AWM activity interesting and enlightening.

Whenever one sets up a new program, perhaps the first natural question is: what is the goal? Or, put another way, what did we hope to accomplish? It had already been decided that it was important for AWM to advocate for women in mathematics and more generally, for women in STEM. What else? Should we advocate or even lobby for specific legislation? In our discussions, the committee was realistic about what AWM could actually accomplish. AWM is a great but small professional society. Even with a group of enthusiastic volunteers, AWM is not big enough to become an effective lobbying force with constant calls to members of Congress in order to influence passage of specific bills nor can AWM lobby extensively without endangering its tax status. Instead, we approached the Hill Visit initiative as a way to offer AWM services as a resource so that members of Congress know that they can turn to us for information on issues of importance to women and girls in math and related fields.

We also discussed joining forces with other professional societies, a possibility raised by P&A under Marie's leadership. We quickly decided not to pursue this option with the gut feeling that AWM would be most effective and, perhaps even more important, more visible as an organization if AWM went solo on these Hill Visits. Looking back now at the regular and impressively large AWM Hill Visits, and all the follow-up questions and requests we get from members of Congress concerning legislation and initiatives related to our mission, it is clear to me that P&A made the right decision.

We turned next to the natural question: when should the Hill Visits take place? It was clear we needed to take into consideration what schedule works best for AWM members, especially if we wanted non-local AWM leaders involved. Kristin Lauter proposed coordinating Hill Visits with CBMS (Conference Board of the Mathematical Sciences) twice-a-year meetings in Washington, DC. This would permit the AWM President, who typically attends the CBMS meetings, to participate in the Hill Visits. We discussed other possible times and Karen Saxe gave P&A a brief lesson on Congress's schedule including when they are in the office, when they make budget decisions, and when they are on the campaign trail. Ultimately, we decided that Hill Visits scheduled around CBMS meetings so that AWM leadership could participate was the best choice.

With a purpose to guide us and schedule to follow, we set about taking care of other details. The first task of the committee was to prepare documents for AWM Hill Visit volunteers to bring with them and leave behind. In addition to a standard brochure on AWM's mission and activities, we wanted something that laid out issues of importance to AWM. Building on the initial one-page sheet highlighting AWM's legislative priorities prepared by Karen Saxe, the P&A Committee wrote a one-pager that focused on broad themes, instead of actual bills, so that it could be used as is over the years without the need for updates. We settled on the following four issues.

- **Expand STEM educational opportunities** Help us ensure access for girls and minorities to classes devoted to STEM subjects.
- **Support research funding** Research funding is essential for creating a vibrant research program. Please support funding the National Science Foundation at the highest possible level. These funds provide basic research grants as well as programs, such as NSF's ADVANCE Grants, that specifically benefit women.
- **Help Americans achieve a healthier work/life balance** Finding an effective work-life balance is a challenge, especially for women. Please support legislation that expands childcare and family leave options.
- **Create a welcoming environment** Support legislation and initiatives that aim to create an environment free from all forms of discrimination and harassment so researchers can thrive regardless of gender, gender identity or expression, race, color, national or ethnic origin, religious belief, age, sexual orientation, immigration status, disabilities, or any other reason not related to scientific merit.

A fifth theme which was centered around finding solutions to the fact that "many elite groups, such as fellows within professional societies, have very few female members" was ultimately dropped because Congress could not really address this problem through initiatives or bills.

And so we were set and officially ready to kick off the AWM Hill Visit program as a regular twice a year AWM event. In fact, we had just put the finishing touches on the one-pager and laid the groundwork for record keeping, when we realized that the 2016 May Hill trip was just a short time away. We ended up with a small group for that visit: AWM President Kristin Lauter along with two Executive Committee members, Talithia Williams and Talitha Washington. But even though this was a small group, it was a dynamite one. An article Karen Saxe and Talitha co-authored (Saxe and Washington, 2016) for the July–August 2016 *AWM Newsletter* summed up the trip well:

Talitha, Talithia, and Kristin met with several Senate and House members and discussed everything from Title IX implementation, to equal pay issues, to the new Computer Science for All initiative recently unveiled by the White House.

Upon reading the article, a number of local DC AWM Members contacted Executive Director Magnhild Lien and put their name on the AWM Hill Visit volunteer list. One of the people who responded, Michelle Snider, has since become a central player in the AWM Hill Visit enterprise.

For the next visit, scheduled in December 2016, we had time to attract a much larger AWM contingent, and, moreover, realize Kristin's vision of involving AWM student chapters. In August, I sent out invites to a slew of local AWM mathematicians. Perhaps, the most exciting response came from Beth Malmskog, faculty advisor for Villanova University's new AWM student chapter: yes, she and the student chapter would participate! In addition to the Villanova contingent of nine students, we assembled a great team of ten faculty and industry mathematicians.

In many ways, it was this December 2016 visit that really kicked off Hill Visits as a large, regularly occurring AWM event. Anybody who has planned a program knows that there is a lot of behind-the-scenes organization needed in order to achieve success. AWM Hill Visits with many participants are no exception! The December 2016 Hill Visit involved significant advance preparation. First, the group of volunteers needed to be divided into small teams and each team then needed to be assigned members of Congress to visit. The division was based on information concerning home state senators and home district representatives so as to ensure that each team included a constituent for each office they visited. After the teams and their assigned members of Congress were set, both the scheduling of appointments and the logistics for the day were left to the group of volunteers. Originally, it was suggested that the students take the lead in making the appointments. But that turned out to be very difficult—the students were being put on frustratingly long holds. Fortunately, the professional mathematicians stepped forward and finished the calls, putting together an amazing schedule that included visits to more than twenty congressional offices.

On top of logistics, the group of participants needed to be prepped appropriately. Karen Saxe had prepared a basic instruction sheet with instructions such as “dress for a business meeting” and “show up five minutes early and expect fifteen to thirty minutes for your visit.” Based on input from Karen on the importance of making things personal when connecting to members of Congress, I urged both the professional mathematicians and the students to consider sharing stories of their own mathematical journeys and to include anything that harks back to a member of Congress's home district and/or state.

Wrap-up afterwards included writing thank-you notes from participants to congressional offices, counting the number of volunteer hours spent on the visit for AWM tax forms, and writing records of offices visited and issues discussed and other similar items. Beth Malmskog wrote a wonderful AMS blog entitled “DC or Bust: AWM and Villanova Visit Capitol Hill” that captured the excitement of the day. Her closing remarks in this blog summed up not only what the trip meant to her, but the impact it had on the students:

This trip was a meaningful experience for me as well. Not only did I get to talk to legislators and make my voice heard on issues I care deeply about, but I met so many awesome math women and had the chance to see my students really shine as awesome math women (and one awesome math man) themselves. I was proud of them, and also glad that they wouldn't have to wait as long as I did to realize that a trip like this was possible. They will carry this knowledge with them into whatever they decide to do.

With the December 2016 visit over, I knew that planning the next trip, scheduled for May, would have to begin soon. I sent the first letters to faculty advisors of potential AWM student chapter participants the week after the December 2016 trip. Thus a regular cycle of AWM Hill Visits was officially launched. The AWM Hood College student chapter participated in the May 2017 AWM Hill Visit. A combined group of students from AWM chapters at George Mason University and Trinity College took part in the December 2017 AWM Hill Visit. The impact was immediately clear as members of Congress and their staff reached out to the AWM for endorsements of various bills and initiatives. The AWM was becoming a known quantity on the Hill and other math societies were looking to us on how to approach similar efforts. I was incredibly pleased when Karen Saxe held up the AWM Hill Visits as a model for advocacy with respect to Congress during the AMS Committee on Science Policy Panel Discussion at the 2018 Joint Mathematics Meetings.

Though P&A now had a much better grasp of the arrangements for visits, it was clear that each trip required a significant amount of work. As chair, I knew that something had to be done in order to keep the AWM Hill Visit program going without overburdening P&A and its chairs, both current and future. Thus I decided it was time to form a new committee, the AWM Government Advocacy Committee (GAC), responsible for AWM Hill Visits and other AWM advocacy efforts on the local and state level. The chair of the committee would be a regular member of P&A and P&A would provide oversight for the GAC. The formation of the GAC was developed by P&A and then approved by the AWM Executive Committee in early 2018. The first GAC chair was Michelle Snider, an active AWM Hill volunteer. She has done a tremendous job in continuing the AWM Hill Visit initiative and I refer the reader to her article in this volume about the amazing visits she has organized.

## ***Welcoming Environment Review and Exploring Complaint Processes***

The environment surrounding sexual harassment had evolved quite a bit since AWM first started working on the 2013 Welcoming Environment Statement. AWM was the first professional math society and one of the few professional societies within STEM fields to develop such a policy at that time. In contrast, by 2018, the major mathematics societies, some mathematics departments, and many mathematics research institutes had official anti-discrimination/harassment policies. The external environment continued to evolve in other ways over the course of our review. When we began, NSF still had in place a policy that placed all responsibility for addressing harassment complaints with the host institution. In 2017, the #MeToo movement exploded into national view. A year later, NSF and other federal grant-making institutions such as NIH, decided to put processes in place to deal directly with harassment that involved funded investigators. NSF's 2018 announcement of these processes is a stark contrast to the reply JCW received from the NSF just a few years earlier (see Marie's section on "Sexual Harassment and the Welcoming Environment Statement"). Starting in 2018, NSF required "awardee organizations to notify the agency of any findings . . . that an NSF-funded principal investigator or co-principal investigator committed harassment, including sexual harassment or sexual assault." Moreover,

NSF will consult with the awardee organization, and determine what action is necessary under NSF's authority. NSF actions may include substituting or removing principal investigators or co-principal investigators, reducing award funding, and—where neither of those options is available or adequate—suspending or terminating awards.

We did our best to update the policy even as approaches to addressing sexual harassment in the larger academic community continued to change. Ultimately, the P&A and the AWM leadership view this as part of an ongoing process and a topic that AWM will need to revisit (see the "Future Challenges" section below).

In June 2016, Marie attended the P&A meeting and gave us an overview of the Welcoming Environment Statement, its original motivation, and some of the difficulties in developing this especially in regards to establishing a complaint process. Marie further explained that the anti-harassment/anti-discrimination/welcoming environment statements of other math societies were in part inspired by the AWM version. But a number of them had some sort of complaint process—something that the P&A wanted but was unable to accomplish in the 2013 version. From that point forward, every discussion on how to update the Welcoming Environment Statement included a lot of back and forth about setting up a complaint process. The committee was torn about this. On the one hand, without a complaint process, the document had no "teeth." On the other hand, the legal and resource issues were substantial. And even if we could take complaints, it was unclear we could follow-up with any action, punitive or otherwise. In August 2017, when we began in earnest to work on updates, the P&A decided on a two track approach:

- Update the document without a complaint process, but including better pointers and advice for someone who experiences harassment.
- Explore complaint processes in depth and find out more about different possibilities, with the aim of eventually implementing some sort of reporting system.

### **Updating the statement**

Before the last P&A Committee meeting of 2017, I sent around two proposed revisions for the committee to consider. The first included only minor tweaks to the original statement while the second contained two new sections: "What to do if you experience harassment" and "Filing a complaint" that were designed to give more advice to victims of harassment. The committee preferred the second option. Much of the content for these new sections was taken directly from the 2013 Welcoming Environment Statement web subpage entitled "Further Resources." The resource page was in turn made shorter so that it really was just a link to resources.

Perhaps the biggest change to the updated document was an attempt to provide something personal beyond advice and pointers on a website and/or document. So the P&A introduced a new paragraph that advised someone who experiences harassment at an AWM sponsored event "to reach out to AWM organizers of the event and/or other AWM members for advice on how to proceed." We were careful here so as to avoid concerns raised by Mary Gray with respect to the 2013 statement (as described by Marie above). Indeed, we stated that "AWM members can help guide [a victim of harassment] to an appropriate venue for filing a complaint" but did not commit AWM members to helping an alleged victim with the actual complaint process and/or investigation. This paragraph, included in the new section "What to do if you experience harassment" and quoted in full in Marie Vitulli's section above, has a hesitant aspect to it and

this is because of legal issues. In particular, it ends with the assertion that if someone confides in an AWM member, they “will keep this information confidential to the extent that is legally possible.” I cannot emphasize enough the legal minefields behind all of this. If an incident resulted in a formal investigation, an AWM member could find themselves in the awkward position of having to testify and thus reveal private confidences. Some of the same problems came up in discussions regarding an official AWM ombudsman (see below). And there were even more difficulties for issues at universities that fell under Title IX rules. At one point, we wanted to suggest that students who experience harassment at AWM student chapter events turn to their faculty advisors. It turns out that any such discussion would immediately trigger reporting requirements under Title IX regulations for the faculty member and confidentiality would be thrown out the window. For these reasons, the final statement, approved by the AWM EC in March 2018, did not include this suggestion.

### **Exploring complaint processes**

The first complaint process we looked at was the one adopted by AMS. AMS used a phone number and website for confidential anonymous reporting of incidents. The underlying system for recording complaints with the AMS is called EthicsPoint and is provided by the company NAVEX Global. In our August 2017 meeting, Karen Saxe, who was now the AMS Associate Executive Director and Head of the Government Relations Division in the Washington DC office, described AMS’s complaint process using EthicsPoint in detail for the committee. She explained that the costs included an initial startup fee as well as ongoing annual fees. Karen also noted that several AMS staff were involved in the initial setup of the system and a number of AMS staff are in charge of following up on the complaints.

After listening to Karen’s introduction to the AMS complaint process, members of the committee expressed doubts as to whether AWM had the funds and personnel to support a similar reporting system. Nevertheless, we decided to talk directly to NAVEX to find out more information. AWM Executive Director Karoline Pershell, AWM President Ami Radunskaya, and I participated in a NAVEX conference call where we learned that NAVEX could store and compile data from calls, but AWM would be responsible for responding to and deciding on actions with regards to complaints. This reinforced our concerns about personnel requirements—the system would definitely require dedicated AWM staff. In addition, even though all calls would be anonymous, there could still be privacy and legal issues related to the details of a complaint and AWM, not NAVEX, would be responsible for addressing them. After hearing the details of costs both in terms of money and personnel, and the potential privacy and legal issues, we were not at all convinced that AWM was large enough to support such a service. Other reporting mechanisms, such as the newer Callisto system—an online system for reporting harassment adopted by some universities (see for example (Holley, 2018))—posed similar problems: too expensive in terms of cost and personnel to oversee the process.

We also discussed the option of appointing a dedicated AWM person, perhaps officially an ombudsman, to handle complaints as suggested by Marie and discussed in the context of setting up the earlier 2013 policy. Indeed, MAA has such a position called a Compliance Officer as delineated in their Welcoming Environment, Code of Ethics, and Whistleblower Policy:

The MAA’s Compliance Officer is responsible for ensuring that all reported complaints and allegations concerning violations of the Code of Ethics have been properly investigated and resolved and, at his or her discretion, shall advise the Executive Director and/or the Audit Committee.

Again, we were hesitant. Such a person could end up caught up in a complicated process and possibly face legal challenges.

Although I ended my term as chair of the AWM Policy and Advocacy Committee without a complaint process in place, I am hopeful that this issue will be resolved in the near future. Despite the legal, financial and personnel issues involved, there are many external motivating forces at play and there are serious efforts among professional societies to band together to create tools, including formal complaint processes, that address harassment and the environment that permits it. Indeed, in June 2018, the National Academies of Science published its seminal study on sexual harassment of women in academic STEM fields (National Academies of Sciences, 2018). In response to this report, a group of professional societies came together to form a new consortium, the Societies Consortium for Sexual Harassment in STEMM (science, technology, engineering, mathematics and medicine) (Societies Consortium on Sexual Harassment in STEMM, 2019), set up to address sexual harassment. AWM leaders, especially AWM Executive Director Karoline Pershell and AWM President Ami Radunskaya, were there from the start of establishing this new consortium and, as a result, AWM is one of the inaugural members and a member of its Leadership Council. As can be seen from the June 2019 AWM E-Communication, this consortium is committed to developing tools for its member societies:

This consortium's work will focus on (1) creating model policies, guidance and practical tools to address short-term needs of societies and their fields (2) advancing key strategic foundations for mid- and long-term change in conduct, climate and culture that is critical for meaningful impact. The foundational goals include building communities of peers in STEMM societies and their fields—and building bridges among societies, their members and home institutions—to collectively embrace a climate and culture actively intolerant of sexual harassment and other unethical conduct, and committed to inclusion of all talent for excellence. AWM intends to serve as a conduit for information that can be adopted and adapted by our members' many institutions.

## *Diversity and Inclusion*

The conversation about achieving diversity in the mathematical profession and more generally in the workplace has evolved over time. I remember the push for affirmative action to increase participation by women and the other underrepresented groups using special targeted hiring. But there was less talk of supporting people beyond the initial hire. In other words, hiring a diverse workforce was considered enough to achieve—or at least to attempt to achieve—diversity. The realization that one needs to worry beyond the initial hiring and talk about inclusion and belonging is more recent.

Of course, professional societies are not in the business of hiring, but they do play a critical role in career development and the professional lives of scholars. Recently, many societies have taken diversity and inclusion of underrepresented groups, especially in STEM fields, more seriously. In her article with Vernon Morris “The Role of Professional Societies in STEM Diversity” (Morris and Washington, 2018), EC member Talitha Washington points out the important role that professional societies such as AWM play in career development and discusses ways that “professional societies can directly impact the broadening of participation as well as the persistence of racial groups in the STEM fields.”

Around the time that her article appeared, Talitha requested that the P&A develop a policy that would “advocate racial and ethnic diversity” for AWM committees, speakers, and prize winners. This request was put on the agenda for the August 2017 meeting. Thus began the P&A's focus on diversity and inclusion, a topic that would remain central to the committee's activities for rest of my time on the committee and beyond.

Shortly before the August 2017 meeting, P&A member Karoline Pershell had another request also related to diversity and inclusion. Karoline asked the P&A our thoughts on AWM participation in the University of Michigan's STEM Inclusion Study with plans to “examine the experience of women, racial and ethnic minorities, person with disabilities, and lesbian, gay, bisexual, transgender and queer individuals working in the science technology, engineering and math workforce.” One of the nice things about the study was that the investigators planned to issue separate reports for each participating organization (Cech and Waidzunus, 2018). This was an easy agenda item. We all agreed participation was a great idea, passed our recommendation on to the EC, the EC approved, and AWM members participated in the study.

The P&A's discussions took on even greater urgency after controversy emerged surrounding AWM's announcement of its inaugural class of AWM fellows in the fall, 2017. The initial AWM fellows were drawn from the following groups: “Past Presidents of the AWM, AWM Lifetime Service Award winners, and AWM Humphreys Award winners” (AMS Notices Jan, 2018). Unfortunately, these criteria did not yield much in terms of diversity. Immediately following the announcement, a number of AWM members expressed to AWM leadership their deep disappointment that the inaugural class did not include fellows from underrepresented racial/ethnic groups. Moreover, it was pointed out that this was part of a larger systemic problem with AWM awards going to very few minorities. This led to soul-searching by the AWM Executive Committee that culminated in the decision to make the criteria more inclusive with a focus on “mathematicians who have shown an unwavering support to promoting women in mathematics” and, at the same time, expand the official inaugural class (AMS Notices Feb, 2018).

The situation regarding AWM fellows also made it abundantly clear that AWM had to do more to address issues of diversity and inclusion. AWM President Ami Radunskaya, with the full backing of the Executive Committee, established an Inclusion Task Force whose main job was to prepare a report with recommendations for promoting inclusivity. Moreover, Ami urged each of the major committees to come up with methods of increasing representation of traditionally marginalized populations in all aspects of AWM life, including prominent roles such as awardees, speakers, officers, and committee members. Ami brought these diversity issues to the entire membership in her heartfelt President's report of January–February 2018 (Radunskaya, 2018):

[We] live in a complicated society that has historically disadvantaged certain groups. It makes sense that challenges faced by a gender in the minority are experienced differently, more acutely, by members who also belong to other underrepresented groups. Awareness of this intersectionality can help us develop more equitable programs that promote inclusion. Shifting our attention from diversity



to inclusion means acknowledging the dynamics of difference in our jobs, labs and classrooms. In the past months, the AWM has renewed its commitment to creating a more inclusive community, and we continue to push for positive change.

This broader attention by AWM leaders on diversity and inclusion certainly had an impact on the nascent efforts just started by the P&A. Our work took on both greater meaning and sharper focus. For the remainder of my tenure as chair of P&A, diversity and inclusion topics became a high priority on meeting agendas. In December 2017, the committee prepared a list of suggested actions, including providing more oversight to the award and honor selection process, which I passed on to AWM President Ami Radunskaya. Change, even for a small and primarily volunteer organization like AWM, can be frustratingly slow. Two years later, there is finally some movement along these lines as AWM President Ruth Haas, along with EC member Pam Harris, Past President Ami Radunskaya, and Executive Director Karoline Pershell, have “started the process of change” by taking “concrete step[s] . . . to provide much more guidance and oversight to all AWM individual selection committees” (Haas, 2020).

The P&A decided to formulate an official AWM diversity and inclusion statement. Many professional organizations already had such statements. Some were broad commitments to diversity; others were more narrow with a focus on awards and honors. The P&A decided on a broad statement, viewing it as a way to express diversity and inclusion as essential AWM values. It should be noted that this committee was in no way naive. As a group, we certainly understood that putting out a public diversity and inclusion statement was not going to directly fix inclusivity issues within the AWM. Nevertheless, we felt it was important to create such a value statement, posting it to our website for all to see, both as a big step in setting the right tone for the organization and as a small baby step in moving the organization in the right direction.

Over the next few months, the P&A crafted the new diversity and inclusion statement. Early on in the process, the University of Michigan STEM Inclusion Study was completed and a few months later, the AWM’s Inclusion Task Force finished its report. We received copies of both reports and pored over their conclusions and recommendations. Both studies emphasized the need to address inclusion of ethnic/racial minorities as well as other marginalized subgroups. Our discussions on these reports helped us focus in on important issues as we developed AWM’s Diversity and Inclusion Statement.

In creating the AWM statement, we used as a guide diversity statements from the American Meteorological Society, the Association for Women in Science (AWIS), and the Institute for Computational and Experimental Research in Mathematics (ICERM). The overall format was based on the AWIS document which has an opening paragraph followed by a list of “guiding principles.” The final version of the opening paragraph of AWM’s new statement harkens back to that of the AWM Welcoming Environment Statement. Both start with a commitment to the kind of environment AWM aims to create and each end with a list of sub-populations that are marginalized in the mathematical world. But the message of the two statements are different. The Welcoming Environment Statement emphasizes an environment free of harassment and/or discrimination for all AWM participants regardless of their different identities whereas the Diversity and Inclusion Statement celebrates and recognizes these different identities within the mathematical community.

The motivation for the Diversity and Inclusion Statement was the very low numbers of ethnic and racial minorities among AWM award and prize winners. So it was extremely important to the committee that the new AWM diversity statement specifically called attention to historically underrepresented ethnic/racial groups. To achieve this, the AWM Diversity and Inclusion Statement includes an endorsement of the NSF’s goal of increasing “participation from underrepresented groups” in mathematics along with a link to NSF’s description of these groups. The committee also wanted to strongly convey that all mathematicians should care about “diversity.” To get this message across, we decided on the following sentence as part of the opening paragraph:

Any type of underrepresentation is a problem for the entire mathematical community: it inevitably leads to missed opportunities and the loss of mathematical talent.

In crafting the guiding principles, the committee decided to focus on a number of themes. First, we wanted to reiterate AWM’s dedication to increasing the representation of underrepresented groups within AWM and in the wider mathematics community. The first and third principles directly address this:

- ▶ *The AWM is committed to promoting equal opportunity and equal treatment of women, and more broadly, all underrepresented minorities in the mathematical sciences.*
- ▶ *The AWM is committed to actively encouraging the representation of underrepresented groups in all facets of the organization, including membership, awards, prizes, conference speakers, committee members, and leadership.*

Second, we wanted to strike a balance between being as inclusive as possible and, at the same time, state clearly our commitment to programs that support women and girls in mathematics. The second guiding principle reiterates the mission of AWM in a way that emphasizes this commitment:

- ▶ *The AWM is committed to creating, recognizing, publicizing, and advancing programs aimed at supporting and increasing the representation of women and girls in the mathematical sciences.*

Viewing the guiding principles as a statement of AWM's values, we used the fourth principle to reaffirm our support for a welcoming, inclusive, discrimination-free environment:

- ▶ *The AWM is committed to creating a welcoming, inclusive environment that is free of discrimination and harassment.*

Finally, we felt it very important to proclaim that AWM, an organization promoting and supporting women and girls in math, embraced all self-identified women and, more generally, created a supportive environment for all gender identities. This is captured in the final guiding principle:

- ▶ *The AWM is committed to providing a supportive community for all self-identified cis- or transgender women and, more generally, for non-binary or gender non-conforming individuals.*

A full copy of AWM's Diversity and Inclusion Statement can be found at the P&A webpage.

## Future Challenges

The issues the AWM P&A Committee has addressed over the years—and continues to address—are hard, complex, and ongoing. They often can't be solved by creating a new policy or by issuing a statement, even though these steps are very, very important. Going forward, policies have to be maintained and updated. In addition, the P&A Committee needs to be constantly prepared in order to respond in a timely fashion to “events of interest.”

In this section, three major issues that AWM will face and will likely need to be addressed by the P&A are highlighted. The first two are items that build on previous work described earlier in this article: updating and expanding AWM's policies concerning sexual harassment and addressing diversity and inclusion issues that are still problematic for the AWM. The third issue is bullying on social media. Often called cyberbullying, this kind of bullying takes advantage of the rapid propagation of posts that quickly spread misinformation and hurtful attacks on individuals and organizations. Attacks against members of the mathematics community have come up repeatedly in the past few years. This issue is discussed in the final part of this section.

## *Policies and Processes for Addressing Sexual Harassment*

Unfortunately, sexual harassment is still a problem in the academy, in general, and in science, technology, engineering, mathematics and medicine (STEMM), in particular. This is a stubborn problem that has recently gained a lot of attention in the larger society via the #MeToo movement. In 2018, the National Academy of Sciences issued its report *Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine* (National Academies of Sciences, 2018) making it abundantly clear that sexual harassment remains a significant problem for women in STEMM fields.

It is important that as the environment evolves and new approaches are developed to address harassment that the AWM P&A Committee periodically revisits and updates the AWM Welcoming Environment Statement. More importantly, AWM needs to continue to explore ways of implementing a complaint process to accompany our Welcoming Environment/Anti-Harassment Policy. It might not be possible for a small organization to devote the resources to develop such a process but perhaps we could join with other societies to pool the financial and personnel resources necessary. JCW was involved when we first announced a policy in 2013. They are in a good position to bring together various societies to do this.

As of June 12, 2020 the Societies Consortium on Sexual Harassment in STEMM (Societies Consortium on Sexual Harassment in STEMM, 2019) had 127 members including AMS, ASA, AWIS, AWM, Caucus for Women in Statistics, MAA, and SIAM. The Societies Consortium, which was launched in February 2019, aims to advance full participation

and excellence in STEM and prevent and respond to sexual and gender harassment in STEM communities. AWM was an inaugural member and is currently part of the eight member Leadership Council for the Consortium. There is a plethora of information on their website some of which is only available to members via a login process. In May of 2020 the Consortium released a new resource “Roadmap Towards Excellence & Integrity in STEM,” which provides a three-phase approach to supporting efforts to create a more inclusive STEM field; the resource is intended for members of the Consortium. From the 2020 Work Plan Priorities of the Consortium “How to investigate incidents and conduct concerns” is a high priority of the Consortium as are a matrix regarding misconduct and traditional and alternative/restorative remedies and a society survey instrument for collecting data focusing on the type/frequency of harassment experienced by members and participants at events.” The Resources now available include a Model Ethics Conduct Guide, an Ethics Conduct Participant Guide, and a Model Investigation, Resolution, and Consequences Policy Guide. These model guides are very detailed and should be very helpful if AWM decides to pursue a complaint process. They include customizable policy statements to assist member societies implement their own policies. The Consortium also has model Meeting Policies for both face-to-face and virtual meetings.

Some professional societies have been pursuing award and honorific revocation in the recent past. For example, in December of 2018, the National Academy of Sciences Council approved a Code of Conduct for NAS members, and a process for reviewing allegations that a member has violated the code (NASCode, 2018). In June 2019, the members of the National Academy of Sciences approved a Bylaw Amendment (NASBylaws, 2019) to permit rescinding membership for “the most egregious violations of a new Code of Conduct, including for proven cases of sexual harassment”. As of October 4, 2020, the handful of members of the National Academies who have been found guilty of sexual misconduct and have resigned from their home institutions are still members of the National Academies. Complaints have been filed but we do not know the outcome of those complaints.

In a similar vein, the American Association for the Advancement of Science (AAAS) adopted a fellow revocation policy on September 15, 2018. Starting on October 2018, AAAS fellows who have been proved to have violated professional ethics including sexual harassment may be stripped of the fellow designation (AAAS, 2018). As of October 4, 2020, none of the AAAS fellows who have been found guilty of sexual misconduct have been removed as AAAS fellows.

The AWM P&A may wish to get involved in the call for invoking these policies and revoking honorifics for scientists found guilty of sexual misconduct. This could be in collaboration with the AWM Awards Committee, which is working on a Prize Revocation Policy as of the time of writing. It might also be appropriate to visit this problem together with other professional organizations in the context of the greater STEM community.

### ***Increasing Diversity and Inclusion Efforts***

Both the University of Michigan STEM Inclusion Study (Cech and Waidzunus, 2018) and the report from AWM’s own Inclusion Task Force came up with specific recommendations for how AWM can improve its inclusion efforts. But, these issues are not going to go away overnight. It is clear that AWM has a lot more to do on this front and the P&A can and should continue to play an important role in terms of timely responses to current events, developing long term policies, and gathering resources.

During the writing of this article, protests began in response to systemic racism in the United States that came in the aftermath of the killing of George Floyd by a police officer in Minneapolis. The P&A Committee was called to duty again to formulate the official AWM response in the form of the statement “Solidarity with the National Association of Mathematicians (6/1/20)” in which they announced that AWM stands “in solidarity with those protesting systemic racism in the United States, racism that includes police brutality and killing that disproportionately affects Black Americans” posted to various social media channels of AWM (Facebook, Twitter, Instagram, and our website). In addition, in order to take a small positive concrete step, Marie and the Social Media Committee posted a sequence of biographies of Black women mathematicians on the AWM Facebook page. We tweeted shorter versions of the bios and linked to lengthier bios on the websites Mathematically Gifted and Black and Wikipedia. These bios were well received with over 1400 views each and the posts were shared and the tweets were retweeted by many people.

Despite these statements of support and small positive steps, AWM still has serious issues in regards to diversity and inclusion. Representation of ethnic/racial minorities and other marginalized populations in AWM awards and honors remains very low. As mentioned earlier, AWM and the Awards Committee instituted new procedures aimed at addressing this issue. But AWM as an organization needs to remain vigilant in this regard and continue to monitor

the representation of ethnic and racial (and perhaps, sexual) minorities on our committees and among the winners of our prizes, awards, and named lectures. What role should the P&A play in this effort? Are there natural policies that the P&A could develop to help here? One possibility, as suggested by Talitha Washington when she initially reached out to the P&A, is to create a Best Practices for Awards Policy along the lines of what AMS has adopted (AMSBestPractices, 2014). In developing such a policy, the P&A might also think of how best to vet award winners so as to avoid cancellations as happened with the 2021 Noether Lecture (see (Castelvecchi, 2020) and the AWM News item “Re: 2021 Noether Lecture” (AWMNoether, 2020)). Shortly after the statement “Solidarity with the National Association of Mathematicians (6/1/20)” was issued, AWM made an announcement that Andrea Bertozzi was to be the 2021 Noether lecturer. Immediately after the announcement there was a plethora of critical posts on social media because of Bertozzi’s work on predictive policing, which some say proliferates racial profiling. A mutual decision was made by AWM and Bertozzi to cancel the lecture. Another avenue for the P&A Committee to explore is the collection of resources for unconscious bias training along with a policy requiring some training along these lines for AWM leaders and committee members so that the organization as a whole can become more sensitive to inclusivity issues.

## *Cyberbullying*

According to the US government website [stopbullying.gov](http://stopbullying.gov),

Cyberbullying is bullying that takes place over digital devices like cell phones, computers, and tablets. Cyberbullying can occur through SMS, Text, and apps, or online in social media, forums, or gaming where people can view, participate in, or share content. Cyberbullying includes sending, posting, or sharing negative, harmful, false, or mean content about someone else. It can include sharing personal or private information about someone else causing embarrassment or humiliation. Some cyberbullying crosses the line into unlawful or criminal behavior.

There is no federal law prohibiting this sort of bullying, but individual states have enacted legislation; you can see if your own state has enacted legislation at [stopbullying.com](http://stopbullying.com). This sort of bullying existed before the web and before the internet became popular. In the late sixties and early seventies what we now call chat rooms were being developed at Xerox Parc in Palo Alto, California. The developers realized that they needed moderators for these virtual rooms after someone reported a virtual rape, that is, a sexually explicit encounter in the virtual room.

In the past, AWM’s Facebook page has been bombarded by hateful comments after a contentious post. We can exclude some of the comments by creating a list of prohibited words. Our Facebook Engagement Policy is as follows.

We, the Association for Women in Mathematics (AWM), will do our best to ensure that the posts on our page are in line with the mission of AWM, viewed in a broad sense. Our intention is to inform and to facilitate respectful interaction. We welcome comments and feedback but we reserve the right to remove content unrelated to the mission of the AWM, viewed in a broad sense.

The views and opinions expressed in the comments that users submit are solely those of the author and do not necessarily reflect those of the Association for Women in Mathematics. User comments are not edited for accuracy or safety. However to ensure a positive experience for our community, we may report or remove content unrelated to the mission of the AWM or containing spam, profanity, or otherwise objectionable or prohibited material subject to the Facebook Code of Conduct and Terms of Use. We may also block posters of such content.

It is also possible to make a post to the Community section of our Facebook page. These posts must be approved by an administrator of our page before they appear in the Community section. Thus there is a moderator for these posts.

In 2017 AWM President Ami Radunskaya requested that the P&A consider whether or not to issue a statement of support for a math educator who was the subject of cyberbullying. There was a second incident of a mathematician being cyberbullied in 2017. After articles that appeared in the online publication *Campus Reform* were picked up by Fox News, numerous hate messages appeared on social media. In that year P&A decided against a public statement but suggested that it might be wise to develop an anti-bullying framework that would help deal with similar situations in the future. This came up again in 2018 but the P&A did not have time to work on a policy. The 2018 P&A Report stated that:

Responding to these attacks and supporting the victims often requires a very quick response and also care so that the AWM does not become a target for attacks as well (i.e., it might be necessary to close down or simply not allow comments for a Facebook posting). Although there were no incidents of this kind of bullying that came to the committee’s attention in 2018, it is likely to happen again. Developing a well-thought out process on how to address incidents in a timely manner is something for the AWM P&A Committee to consider doing.

The question of a Statement Opposing Cyberbullying did not come up in the 2019 annual P&A report. As of October 2020, P&A has not revisited this topic. We hope that there will be time to work on this in the future.

## Epilogue

After reading this article, we hope the reader now has a better idea of what the AWM P&A has done in the past and what the committee might take up in the future. We shared many of the details of what we felt were the more important undertakings of the committee during our tenures to give the reader a better sense of what is involved in getting a significant new policy, statement, or program approved. The work of P&A is time-consuming and at times frustrating, but we both feel that we accomplished many important goals and we were glad we served on the AWM P&A. We hope we have inspired some of our readers to take on the crucial work of the AWM Policy and Advocacy Committee as future members of the committee and leaders of the AWM.

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