Towards a Fully Inclusive Mathematics Profession—One Year Later

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Introduction
During the tumultuous summer of 2020, George Floyd, an unarmed African American man, was killed by policemen in Minneapolis. The tragic death of Mr. Floyd generated national outrage and brought into plain sight the discrimination and the obstacles faced by African Americans in many spheres of life in our country. The mathematics profession has not been an exception. Following this event, AMS President Jill Pipher appointed us to serve on the AMS Task Force on Understanding and Documenting the Historical Role of the AMS in Racial Discrimination, co-chaired by Kasso Okoudjou and Francis Su. The creation of the Task Force (as we shall henceforth call it) was endorsed by the AMS Council in June 2020 with this charge:

(1) To help the mathematical community understand the historical role of the AMS in racial discrimination; (2) To consider and recommend actions addressing the impact of such discrimination to the AMS Council and Board of Trustees.

Given the nature of the work, the two co-chairs, after consultations with the AMS President, chose as members of the Task Force a group of racially diverse mathematicians at a variety of institutions, who had leadership experience (including several current or past members of the AMS Council) and who would be able to conduct interviews with the sensitivity required.

The Task Force reviewed AMS archives, talked with AMS staff, interviewed mathematician colleagues, and sought direct input from the wider mathematics community. Our work was assisted by math historian Michael Barany and by AMS staff, especially Abbe Herzig and Andrea Williams. We produced the report Towards a Fully Inclusive Mathematics Profession, released in March 2021, that documented AMS policies, practices, and actions that have had discriminatory impact and described ways that the mathematics profession remains unwelcoming, especially to mathematicians of color. We also cataloged more recent efforts by many in the profession and the AMS to become more welcoming, and we made several recommendations for ways the AMS can improve how it fulfills the part of its mission that advocates for “the full participation of all individuals.”

Since the report’s release, we’ve heard a number of reactions from mathematician colleagues through direct conversation as well as on social media. These reflect the diversity of viewpoints within the ranks of the Society. Some feel the report does not go far enough to castigate...
the AMS for its role in the lack of racial diversity in the profession. Others felt the exact opposite and suggested that the AMS is moving away from its core mission of research and scholarship. But it is clear to us that there is no contradiction for the AMS to “further the interests of mathematical research and scholarship, serve the national and international community through its publications, meetings, advocacy and other programs” as well as to make the profession more inclusive. Most would agree that there is a lack of diversity in the profession. Where disagreements begin is when questions of “why” and “what to do about it” are asked. Our report made several recommendations to try to address these issues.

You can see a partial list of actions taken on the Task Force recommendations and the Executive Summary of findings and recommendations from the report at the end of this article.

The full report is available for download from the Task Force website at [https://www.ams.org/understanding-ams-history](https://www.ams.org/understanding-ams-history). If you do not have time to read it all, we encourage you to read Chapter 1, which gives context for each of the findings and recommendations in the Executive Summary.

Below, we reflect on what we took away from the experience, what we found surprising, what might be missing from our report, and how the work can be used by math departments. We’ve ordered the reflections in a way that may make the most sense given what each of us chose to discuss, since some introduce events to which others later make reference.

Irina Mitrea

In a very challenging year from so many perspectives, including historic, academic, and personal ones, the work on the AMS Task Force was an incredible roller coaster of experiences that is difficult to describe. Being asked to serve on this group is without a doubt the most significant AMS assignment I have ever been part of, counting here a previous three-year term on the AMS Council. While engaged in the work on the report, I always had on my mind the weight of the responsibility of the Task Force’s charge, the burden of the immense loss of talent due to lack of diversity and inclusion in mathematics, the vastness of the relevant directions that had to be considered, the very painful personal and professional experiences revealed in the process, the insight and incredible generosity of the mathematicians who have agreed to be interviewed, the unabated commitment of my Task Force colleagues, the genuine team camaraderie that has ensued, the heightened hope for change, and the dispiriting thought that our work might simply end up shelved and ignored. Time will tell, but meanwhile I am very grateful for everything I learned along the way.

Dylan Thurston

For me personally, one aspect of the Task Force work that hit home hard was learning about the involvement of my father, William Thurston, in these issues around diversity and inclusion many years ago. This was most obvious in reading through the report from a 1996 task force, which he was a member of. It also came through in interviews. Multiple people mentioned him as a positive force, especially in his role as director of MSRI. For instance, in 1995 MSRI hosted the first Conference for African-American Researchers in the Mathematical Sciences (CAARMS), while my father was director there. It was bittersweet to learn about his work, while being unable to ask him about it.

The other thing that stands out to me is the importance of listening to voices that have so often been shut out. We must learn from them and work to fix the issues, and reflect on our own actions that have had negative influences. Are we really listening to our graduate students? What is their conference experience really like? Do you know? There is always more to learn!

It should be clear that the report is not a solution; it will only lead to positive change as far as people take these lessons to heart. After the 1996 report, many people worked hard at implementing these suggestions, but ultimately many of those efforts fell short, and I very much do not want that to happen again. Read the report; share it among your department, your mathematical circles, and your friends; discuss it; and then, most importantly, look for ways to implement solutions all around you. I guarantee you will find some way to improve things!

Tasha Inniss

Participating on the AMS Task Force to understand and document the historical role of AMS in racial discrimination was a very rewarding experience. We were all sincere in our desire to make our professional community one that is welcoming and supportive of all mathematicians. It would be good if departments agreed to read the report and then collaboratively develop strategies they feel would work best for their context, needs, and goals.

Our time was very limited, but if we had more time, I think developing an action plan with proposed strategies for implementation would have been incredibly useful for those departments who are serious about being inclusive. It may also have been good to do a survey of math department chairs to see if any are working on diversity initiatives and implementing equitable practices to support all math undergraduate and graduate students. Hearing from them about their goals and processes related to diversity, equity, and inclusion may have been illuminating.

I appreciate working with a great group of people who helped to create a safe space for us to complete our task and report. It was a pleasure working with each of them!
COMMUNICATION

Adriana Salerno

First of all, the experience itself was much more emotional than I thought it was going to be (and I thought it was going to be plenty emotional from the offset). I have grown to really love and respect the other members of the Task Force. We brought different strengths, experiences, and perspectives to the table.

It was also emotional because we were interviewing dozens of mathematicians, many of whom recounted some hard and painful experiences caused by their profession and professional society. It was hard to even ask, because the process itself felt extractive—“give us your stories, and we hope someone out there develops some more empathy because of it.” I can only hope that the community and the AMS understand that there is a moral imperative to change. I am well aware that many in our profession don’t believe that racism is a problem that mathematicians have to contend with, and some even go as far as to say that there is not racism in mathematics. I was surprised to see the reactions of some mathematicians (mainly in our surveys) saying that dealing with this problem was bad for mathematics. Some said that if the AMS cares more about humans, then we will value research less. Some said that “we will basically become the MAA.” This false dichotomy has always been there, but it felt so much more callous because there are humans literally saying “you are hurting me, and that makes my math worse.” For some, the takeaway after reading the report was “OK, so Claytor was treated poorly, but the real reason that there are not that many Black mathematicians is that white people are better at math,” and in the same breath, call themselves not racist.

Another thing that really struck me was our discovery of a 1996 report, a report written by a task force much like ours, composed to deal with the issues of racism in mathematics. We read it, and many of the recommendations they made in that report were similar to the recommendations we were writing up. And the kicker: very little had changed since 1996. For me, that was a gut punch. I suddenly saw myself in the “20 years later” flash forward at the end of the movie, in which another task force is formed, in space I presume, and that they are charged to detail the racist history of the AMS, and that our report surfaces and people ask “whatever happened to that? Why has nothing changed?” We were all shocked, and a little depressed, when we found this older report.

But this actually presented an opportunity — the opportunity to say to the AMS, the membership, the leadership, and mathematicians more generally, that a task force and a document on their own do nothing. That if there’s no accountability, and no commitment to change things, the world will stay how it is, for the most part. I really hope that, in 20 years, people look back at this document and say that it was the start of something good.

Jim Lewis

A surprise was that the Task Force worked so well together. Producing a report on such an important and sensitive subject in six months was a major ask. (I served on one AMS Task Force that took seven years to write its report.) Starting July 1, 2020, we met almost every week for six months. In addition, there were lots of interviews to gather information, reports on interviews to write, etc., and eventually there was our report to write. So the time demand was significant. One thing that stood out to me was that we really listened to each other during our meetings. Another is that we really focused on identifying steps the AMS could take that have the potential to make a meaningful difference over the next 5–10 years. However, one aspect we did not look at was an analysis of who gets a PhD in mathematics that focuses on US citizens and permanent residents—I suspect it would reveal just how little progress we have made with respect to increasing the number of underrepresented people of color who earn a PhD in mathematics. Because mathematicians respond to data, that might increase our collective sense of urgency that we must do more.

Discovering the 1996 Task Force Report was another surprise. It had a big impact on our Task Force. I am convinced that the AMS (especially the professional staff) really tried to implement the 1996 recommendations. But ultimately, the impact of the report was limited for reasons discussed in the report. To make things different this time will take sustained effort from the AMS leadership.

But I am optimistic that real change is possible this time. It is significant that about 80% of the AMS leadership (Council + Board of Trustees) who responded to our survey said they viewed racism as a concern in mathematics and 90% said that the AMS has a role in addressing racism in the profession.

While our report focused on what the AMS should do as an organization, real change must come in our academic institutions. My department has created a Diversity Committee (in Fall 2020) and my Department Chair appointed me to chair the committee. I sense that the time is right to make changes with respect to an inclusive approach to teaching undergraduates, recruiting, and mentoring graduate students, and recruiting faculty. For certain we will try.

Francis Su

Some have asked about our work: “why look back and dig up the problems of the past? Can’t we just let it go and try to move forward in an inclusive way?”

Being on the Task Force—reading through the historical record and interviewing Black mathematicians about their current experiences—has helped me draw the connection between the two. When I read that the AMS Council passed a non-discrimination motion in 1951, and yet that AMS meetings technically avoided running afoul of that by not having official social events (yet still holding informal ones
to which Black mathematicians were not welcome), and I see a Notices ad for a 1958 meeting list a “colored” option for hotels, I could not help but feel that good intentions are not enough. When I read how the AMS missed several opportunities throughout the 1960’s to the 1990’s to improve the climate for mathematicians of color, it helps me see that the misguided desire of some AMS members to “think of only the math” is actually harming our Black colleagues’ ability to think of only the math. When I hear about the current climate for mathematicians of color from our interviews and the slights they continually face in doing their work, I think to myself: the AMS (which exists to promote mathematical research) is actually seeing less research done because some of our colleagues cannot do their research without dealing with this other stuff.

In our report is this remarkable statistic: Historically Black Colleges and Universities (HBCUs) produce nearly half of all mathematics bachelor’s degrees earned by African-Americans in the United States, even though they represent just 3% of all colleges and universities in this country. Think about that. This statistic not only shows that HBCUs can be credited with producing many African-American mathematicians, but it also reveals the extent to which mathematics departments at non-HBCUs are failing African-Americans and not fulfilling their missions to educate all students.

I felt that I learned a lot in our work on the Task Force, which will personally help me think about what being inclusive means. Research mathematicians are, first and foremost, human beings. The practice of doing research involves choices about whom to collaborate with, whom to invite to give talks, whom we talk with at social events where informal research discussions happen. We are failing our colleagues if we continue to practice business as usual.

I hope many will read our report and take action. Being welcoming and inclusive should not be an add-on. It should be integral to everything we do in our roles as researchers and as mathematical educators.

Kasso Okoudjou

Working on the Task Force would have been a daunting undertaking in normal circumstances, but was even more so in the middle of a pandemic. It was both emotionally draining and time consuming. Today I view it as both a rewarding experience as well as a big leap of faith. Faith in our capacity to seize the moment and act so as to make the profession truly inclusive of all. However, part of me is worried that the sense of urgency we all felt during the summer of 2020 will gradually dissipate and we will revert to reactivity or will continue to make modest changes without ever touching the main issues. The events since the release of the Task Force report seem to support both that sense of optimism but also that worry. It is apparent that despite some stumbles, the AMS is trying to make Equity, Diversity, and Inclusion a central component of all its other activities. I hope the fear of making mistakes or being criticized will neither inhibit nor slow down the Society’s ongoing efforts to make the profession more welcoming.

I hope the Society can lead the profession to set bold goals in increasing the participation of historically underrepresented groups in the mathematical sciences. Those goals should come with policy actions and benchmarks to access progress. We could look for a model developed by our colleagues in Physics and Astronomy who wrote a data-driven report setting such goals for increasing African-American participation in their profession.

I also hope that the newfound attention and appreciation by the AMS and the profession to the outsized role the HBCUs are continuously playing in educating, mentoring, and nurturing generations of African Americans in the mathematical sciences will not be ephemeral. Finally, as I reflect on the Task Force work and its report, I regret that some voices were not not heard through our reports. These include people we tried to connect with but could not for some reasons, or people we simply did not think of reaching out to.

Postscript

Since the release of our report, several actions have already been taken on our recommendations. Many of our recommendations address changing AMS structures and practices, which may not sound exciting but are actually very important in improving the climate for mathematicians of color. For instance, the Board of Trustees approved the creation of an AMS staff position on Equity, Diversity, and Inclusion, as we recommended, and the position has been filled. Other Task Force recommendations are currently being considered or implemented by appropriate AMS entities. For accountability purposes, the newly formed AMS Committee on Equity, Diversity, and Inclusion (CoEDI) will ensure that our recommendations do not fall by the wayside and are properly considered.

We are heartened by this response, but we must not be naive and think that continuing the work of making our profession more inclusive will be easy. The AMS can provide leadership, but in fact, it is beyond the AMS’s power to make our profession fully inclusive. Change must begin with us, the people of the profession in mathematics departments across the country, as we rethink the practices of our departments: how we teach mathematics, how we communicate mathematics, what mathematics we value, and whom we consider to be a mathematician. We hope our report will assist you in these efforts.

A partial list of actions taken on Task Force recommendations as of the writing of this article include:

- As a temporary measure, AMS President Ruth Charney will assign a current Vice President to serve on the Committee on Equity, Diversity, and Inclusion.
• In January 2022, the AMS hired Dr. Leona Harris as Director of Equity, Diversity, and Inclusion.
• AMS Ballot prompts have been modified to allow for the inclusion of a broader range of professional activities, effective with the 2022 election.
• Through wider outreach by the Committee on Committees and Nominating Committee, the AMS has renewed efforts to seek a diverse pool of candidates for committee appointments and roles in governance. The AMS Council has approved adding a statement to the charges of these committees and the Editorial Boards Committee to remind them to keep diversity of all kinds in mind when selecting candidates.
• In 2021, the AMS established the Claytor-Gilmer Fellowship, an annual award supporting the research and scholarship of mid-career Black mathematicians. Mohamed Omar (2021) and Ryan Hynd (2022) were the first recipients.
• The AMS Programs that Make a Difference Award, which recognizes work that brings more people from underrepresented backgrounds into the profession, was elevated from being a policy committee award to being an award of the Society, starting in 2022.
• Several recent AMS publications highlight the work of mathematicians of color. For instance, in 2021, the AMS published the book Testimonios: Stories of Latinx and Hispanic Mathematicians, and in 2022, the Notices of the AMS published the piece “Dr. Raymond L. Johnson: A Mathematical Journey and Some Reflections on African Americans in Graduate Mathematical Sciences Programs in the US.” In addition, in 2023, the Notices will publish memorial articles on Gloria Ford Gilmer, Bob Moses, and Shirley M. McBay.
• The AMS Committee on Equity, Diversity, and Inclusion will provide annual updates on Task Force recommendations to Council beginning in April 2022.

Towards a Fully Inclusive Mathematics Profession
Report of The Task Force on Understanding and Documenting the Historical Role of the AMS in Racial Discrimination
March 22, 2021

Executive Summary

Findings
• Racism is a concern of many mathematicians and leaders of the Society, and the AMS has a role in addressing racism in the profession.
• The effects of blatant discrimination in the mathematics community (and in the AMS) since its inception continue to have repercussions today in the development of Black mathematicians, the visibility and perceptions of their work, and the lack of recognition that further hinders their professional advancement.
• The AMS has missed several opportunities to improve the professional climate for mathematicians of color.
• Black mathematicians suffer from a lack of professional respect and endure microaggressions, even today.
• There is a profound lack of trust from Black mathematicians that the AMS represents them, speaks to them, hears them, and includes them in its decision making.
• Historically Black Colleges and Universities have an outsized influence on the production and the support of Black mathematicians, and providing outstanding models of successful mentoring.
• The history of the AMS has shown that sustained attention to problems has resulted in positive outcomes. Implementing sustainable change is challenging and requires intentionality and continual vigilance.

Recommendations

Governance-Related Recommendations
1. Establish a Vice President for Equity, Diversity, and Inclusion.
2. Create a high-level staff position on Equity, Diversity, and Inclusion, with an Office/Division of Minority Affairs under its purview.
3. Reform election procedures.
4. Reform appointment procedures.

Program-Related Recommendations
5. Develop and implement an engagement plan to welcome the participation of Black mathematicians in the AMS.
6. Create and support programs to further the career development of mathematicians of color.
7. Include equity, diversity, and inclusion in the AMS’s professional development offerings.
8. Publicize the expertise of mathematicians of color.

Accountability-Related Recommendations
9. Request that the AMS provide annual updates on the status of these report recommendations.
10. Accept responsibility for not fulfilling the AMS’s own commitment to increasing the participation of mathematicians of color in the profession, including Black mathematicians.

Full report available at www.ams.org/understanding-ams-history