It was early evening in the fall of 1994 as I began my long call. I met the daughter of the next patient I was admitting while she was waiting for her mother to return from interventional radiology. I recall that evening like it was yesterday. I was adorned in a clean, white coat over a green blouse and navy blue slacks. My stethoscope was in one pocket and my medicine manual in the other. After being informed that my patient had returned, I went to her room. Before I could introduce myself as Dr. Hill, she said, ‘Oh, thank goodness you are here. Are you the TV lady? I have been waiting for someone to come up here to collect the money so I can get my TV turned on!’ While I was frozen in place trying to process what I had just heard, her daughter,exasperated and embarrassed, exclaimed, ‘Heavens Mother! That is your doctor!’

That occasion would, unfortunately, not be the last time during my intern year that I would be mistaken for the TV lady, dietary staff, or other non-physician support staff. Each time it occurred, I felt degraded and demoralized. I never shared these feelings with anyone because it seemed too sensitive and painful to articulate. My turmoil was further heightened by the high regard and respect I had for the important role of our support staff in caring for our patients. I was afraid that disclosing my frustration and pain at being assumed to be non-physician staff would alienate me from the individuals who were part of my strongest support system on the wards during my internship. I also could not sort out whether these experiences were occurring due to my race or to my sex.

A 2018 National Academies of Science, Engineering, and Medicine consensus study uncovered the alarming frequency of gender harassment, unwanted sexual attention, and sexual coercion in academic science and medicine (1). More than 50% of women faculty and staff report having been harassed at their academic institutions (1), with gender harassment being the most common form. Women students, trainees, and faculty in academic medical centers experience sexual harassment not only by their peers and supervisors but also, by patients and patients’ families. For women who are underrepresented in medicine (URM), there is the added complexity of intersectionality — wherein both race and gender create overlapping and interdependent systems of discrimination (2).

Though limited research in this area exists, the National Academies report highlights the current literature on intersectionality. Women of color are more likely to feel unsafe in the academic environment because of their race compared to men of color, white men, or white women (2). They are also more likely to experience verbal racial harassment (compared with men of color and white men and women) and equally likely as white women to experience verbal sexual harassment (2). In addition, black women, Asian American women, and Latinas report overall sexual harassment less frequently than white women (3).

The experience of racial and sexual harassment has adverse effects on mental health and job satisfaction in minority women. All women, including women of color, who experience sexual harassment report more symptoms of depression, stress and anxiety, and impaired psychological well-being (1). Among Latina women, sexual harassment was more distressing when occurring simultaneously with other types (e.g., race-based) of harassment in the workplace (4), and more severe harassment was associated with lower job satisfaction; leading to job withdrawal, and increased depressive, anxiety, and somatic symptoms (1). Among black women, race of the perpetrator is a powerful predictor of sexual harassment appraisal, and cross-racial harassment is perceived to be more offensive, frightening, and disturbing than intraracial harassment (5). Additional research is needed to further elucidate the impact of intersectionality on health and job satisfaction and productivity among URM women.

Overall, sexual harassment is perceived by women to be more severe in work and education environments that tolerate sexual, racial, and sexual-racial harassment. So how do we begin to change this dynamic? A key recommendation in the National Academies report is to change climate and culture to prevent and effectively address sexual harassment (1).

The value proposition for diversity across disciplines
As recently reviewed, diverse teams make better decisions and have improved financial performance, as diversity “facilitates friction that enhances deliberation and upends conformity” (6). A diverse healthcare workforce helps to reduce or eliminate health disparities (7). In the education setting, a large-scale study showed that student performance improved most when there was greater management diversity and diversity that more closely reflected the composition of the student population (8), which emphasizes the importance of leadership in setting the tone and allocating resources. Diverse teams are also more productive. A prodiversity climate at a major national U.S. retailer was associated with higher sales production for black and Hispanic employees (6). In the field of science, ethnicity had strongest correlation with the scientific impact of papers, regardless of year of publication, number of authors per paper, and number of collaborations per scientist; ethnic diversity resulted in 10.63% impact gain for papers and 47.67% impact gain for scientists.
(9). From a business perspective, boards with greater gender and racial diversity engaged in less risky investment behavior, fulfilled monitoring responsibilities more often (resulting in higher accounting returns), and had companies with greater innovation and positive return on assets and investments (6). Importantly, diversification must extend beyond tokenism—in one business study, the proportion of women in top management had to exceed 20% for the company to experience an increase in innovation revenues (6).

Status of URM women in academic medicine

There remains a dearth of URM individuals in science and medicine, particularly in the academic setting, with the lowest figures being for URM women. Only 6% of advanced degrees in science and engineering were awarded to URM women (10), and nonwhite women are underrepresented in the biomedical workforce among research project grants (RPG) and R01-equivalent NIH awardees (11). From 2000 to 2010, blacks comprised only 1.5% of the R01 applicant pool (12), and Hispanics and blacks remain underrepresented in academic medicine across more than 15 specialties (13). The pipeline is also shallow—the cumulative percentage of Medical Scientist Training Program students from URM backgrounds from 1975 to 2015 is < 5% (4% Hispanic, 3% Black, 0.3% Native American; and 0.2% Pacific) (14).

A call to action—what we can do

The National Academies report made several recommendations (Table 1), including the critical need for academic institutions to create policies and procedures to promote diverse, inclusive, and respectful environments. We need to foster an open environment that minimizes the negative consequences of frictions that are inevitable with culture change and recognize that progress from diversity is maximized when reflected in top leadership positions and extends beyond tokenism (6). Policy and programmatic interventions at the University of California, San Diego to improve faculty equity, diversity, culture, and climate over a 10-year period resulted in an increase in tenured and tenured-track among women and URMs faculty, a decrease in gender pay disparity, and a decrease in inappropriate behavior by faculty (15). We can also teach our bystander colleagues how to respond to inappropriate racial and gender harassment. The Johns Hopkins Department of Medicine hosted a symposium to assist healthcare providers at all levels in supporting and advocating for colleagues who are victims of patient discrimination; a model that can be extended to other discrimination scenarios (16). Wheeler et al. recommend twelve tips for responding to microaggressions and overt discrimination from patients (17), which women in academic medicine frequently encounter. We must also directly address unconscious biases that perpetuate less diverse environments. The Bias Reduction in Internal Medicine Program at the University of Wisconsin resulted in increased awareness, motivation, self-efficacy, and action for engaging in gender equity promoting activity, more positive departmental climate, and greater gender and race/ethnicity diversity in new hires 2 to 3 years post-intervention (18).

Finally, it is our responsibility to use our collective voice as academic leaders in medicine and science to facilitate increasing URM students, trainees, and faculty in medicine and science. As recommended by past AAP President Dr. John Carethers, we can serve as mentors to URM individuals at any stage of training and invite URM students to participate in our research programs and clinical activities (19). Organized pipeline programs can help to facilitate this type of mentorship from high school through junior faculty level (20–22). The University of Pittsburgh Clinical and Translational Science Award partnered with 5 minority-serving institutions to create an intensive, one-year online training program for junior faculty and post-doctoral trainees to help early-career scientists launch successful biomedical research careers (22). At the end of the curriculum, which requires institutional protected time, participants bring a grant proposal and/or manuscript closer to fruition.

As outlined by Dr. Kieren Marr during her 2019 ASCI presidential address, less that 2% of the ASCI’s membership are URM individuals and very few of these URMs are women. As medicine and science are evolving, it is important that we incorporate a diversity of backgrounds and scientific innovation. The ASCI might benefit from the model of the Robert Wood Johnson Harold Amos Faculty Development Program—a program created in 1983 to increase the number of minority-serving institutions who can achieve senior rank in medicine, dentistry, or nursing (23). Following such an approach or engaging in a partnership could identify and mentor accomplished URM and URM women physician-scientists for future ASCI membership. The majority of our current URM ASCI members are former Harold Amos fellows, and this program has produced...
three recent National Institute of Health Institute Directors, three college/university Presidents, four Deans, and 10 Department Chairs. Finally, engaging URMs and women across the full spectrum of career stages, from student trainees to senior investigators, can help to champion solutions to increasing our diversity and ensuring further enhancements to our already impactful value.

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