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Promoting the success of women and minority physician-scientists in academic medicine: a dean's perspective

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Viewpoint

"The mission of the American Society for Clinical Investigation (ASCI) is to support the scientific efforts, educational needs, and clinical aspirations of physician-scientists to improve the health of all people"(1). For leaders in academic medicine, the development of physician-scientists is among our most important charges. If we perform this task well, all our trainees and faculty can reach their full potential to make discoveries and to improve health. In reality, however, we can do better in advancing the academic careers of women and those traditionally underrepresented in medicine (URiM). While the proportion of women among medical students first exceeded 50% in 2003, the proportions of associate professors and professors who are women today are 37% and 25%, respectively. Only 11% of full-time US medical school faculty identify as URiM. This Viewpoint focuses on the challenges still facing women and minority faculty and trainees in academic medicine and provides a reflection on how leaders in academic medicine can promote diversity, equity, and inclusion to enhance their success. Obstacles facing women and minority physician-scientists Developing a career as a physician-scientist is difficult and time consuming. As the NIH Physician-Scientist Workforce Working Group (PSWG) noted in 2014, aspiring academicians face staggering education debt, prolonged periods of clinical training, and uncertainty regarding future funding (2). Success in academia requires mentorship, persistence, resilience, and the […]

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Obstacles facing women and minority physician-scientists

Developing a career as a physician-scientist is difficult and time consuming. As the NIH Physician-Scientist Workforce Working Group (PSWG) noted in 2014, aspiring academicians face staggering education debt, prolonged periods of clinical training, and uncertainty regarding future funding (2). Success in academia requires mentorship, persistence, resilience, and the emergence of self-confidence. Factors that promote doubt or that compete for the attention of faculty can stall a career. For women and minority faculty and trainees, such factors may include overt sexism or racism or more subtle biases and microaggressions, but also may include feelings of isolation, inadequacy, and distractions related to institutional expectations of citizenship (the "minority tax"), competing family commitments, financial concerns, and stress regarding personal safety or the safety of loved ones (3, 4). These factors are compounded when there is a lack of role models.

Fundamentally, faculty and trainees must feel safe and respected to succeed. Unfortunately, sexual harassment and racism still derail the careers of some of our faculty. In 2018, the National Academies of Sciences, Engineering, and Medicine published a landmark report, *Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine* (5). In 2020, the national dialogue on violence against African Americans and other minorities has led us to look inward to confront overt and structural racism within academic institutions.

Addressing sexual harassment and racism in academia

To address behaviors such as sexual harassment and racism, leaders in academic medicine must hold people accountable, regardless of rank or position. Systems for reporting and for investigation of cases of sexual harassment or racism must be in place a priori, and alleged cases must be investigated confidentially, expeditiously, and fairly. Because many of our faculty members and trainees experience sexism or racism in the clinical setting, these efforts must be coordinated across the academic and clinical enterprise. When thorough investigations take time, leaders must ensure a safe environment in the interim. In the evaluation of individual complaints, we must follow due process. These procedures not only ensure the rights of the accused, but also avoid unintended consequences for women and minorities who have the courage to speak up.

Women and those URiM may not report events when they perceive there will be inaction or even tolerance. Our "free-agent" model of recruiting and retaining faculty members in academia has fostered the perception of tolerance of egregious conduct. As in entertainment and professional sports, this free-agent model values "stars" and promotes narcissism. For this reason, it is paramount that, as leaders, we prioritize and reward appropriate behavior as well as productivity. In the long run, this commitment will increase the creativity and productivity of all as well as diversity in academic medicine.

Accountability also requires that we select value-driven leaders and that we provide them with training and tools to hold others accountable. Leadership training for section chiefs and department chairs, center or institute directors, and medical directors should include training in "the difficult conversation" and documentation of expectations as well as an introduction to institutional resources to support leaders in holding others accountable, including legal assistance, coaching, and counseling resources.

Harder to address than overt sexism or racism are insidious verbal and nonverbal behaviors that convey, in the words of the National Academies report on sexual harassment, "hostility, objectification, exclusion, or second-class status"(5). Here, it takes a village. Through dialogue and for-

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mal conversations about unconscious bias, sexism, and racism, we can create a community in which witnesses of bad behavior feel comfortable naming the behavior and, when appropriate, intervening. All of us can serve as allies. Because inappropriate behavior may be subtle or even unintended, we must also create mechanisms for women and those URiM to express discomfort and to seek advice. Such processes should include opportunities for confidential reporting with coordinated tracking of reports and for tiered interventions based on the consistency and severity of concerns. A single inappropriate comment that is not egregious might lead to a conversation, whereas a pattern of repetitive comments should trigger a guided intervention or disciplinary action.

Fostering a culture of success

Eliminating sexism and racism in the environment is not enough to promote the success of women and minority faculty and trainees, however. To address the challenges facing women and URiM faculty and trainees, we must take a holistic approach in which we actively identify, mentor, and sponsor individual trainees and faculty. In the past, we have focused entirely too much on recruitment of women and URiM and paid inadequate attention to nurturing and retaining those already in our midst. Today, approximately 50% of Yale medical students are women and 28% identify as URiM, for example. We have an extraordinary opportunity to mentor proactively our talented women and minority students and trainees, exposing them to successful physician-scientists, nurturing their curiosity, making them aware of career resources, and instilling in them self-confidence.

To do this, we must focus on the training of mentors (6) and leverage institutional programs to support physician-scientist development during the transition from fellowship to independence. The elements of such successful programs include a required departmental commitment of adequate protected time and resources, oversight of mentorship with individual development plans, and participation in activities such as grant-writing workshops, internal study sections, and career development seminars (7). The seminar serves to create a network of talented investigators and to demystify the promotion process. These activities foster resilience among our junior faculty, dramatically increase funding success, and promote the retention of physician-scientists, particularly women and minorities.

Such institutional physician-scientist development programs are effectively enhanced by specialized groups that focus on the unique challenges faced by women and URiM faculty and trainees. At Vanderbilt, Women on Track (WOT), a program created by five tenure-track women returning from an Association of American Medical Colleges (AAMC) women faculty leadership program, addresses challenges faced by women. At Yale, the Minority Organization for Retention and Expansion (MORE) was organized by a group of junior and senior faculty members in August 2007 in response to disproportionate attrition among newly recruited URiM faculty. These organizations provide faculty members with a community and a space for safe conversation. They enable informal mentoring and provide a forum for pragmatic advice. For example, a conversation regarding the importance of networking in a women's group may turn to a discussion of how to travel to national meetings with young children. A URiM faculty member may receive advice on how to decline an invitation to serve on a committee. These organizations, formed by grass roots initiatives on the part of faculty, receive some programmatic support from their schools. Importantly, such organizations can also escalate issues that must be addressed at an institutional level.

Several outstanding national programs focus on the needs of women and minority faculty and trainees. These programs include AAMC Early and Mid-Career Women Faculty Leadership Development programs, the AAMC Minority Faculty Leadership Development Seminar, the Harold Amos Medical Faculty Development Program of The Robert Wood Johnson Foundation for those from historically disadvantaged backgrounds (8), and the Executive Leadership Program in Academic Medicine (ELAM) for women (9). Actively sponsoring faculty to attend these programs conveys an institutional investment in their success. Engaging the graduates of these programs in leadership opportunities at home after the completion of the activity amplifies the return on investment.

Tracking diversity progress in academia

It is important that we track the progress we are making. Ten years ago, I started reporting the percentages of women and URiM faculty by rank and by year during my tenure as the chair of the Department of Medicine at the Vanderbilt University School of Medicine. I have begun to share the same information in the annual State-of-the-School address in my capacity as the dean of the Yale School of Medicine. I always begin with the caveat that diversity is not just about numbers, but over the years, I have learned a tremendous amount from reviewing the data and detecting patterns, and I have been surprised by the appreciation expressed by faculty members for this simple transparency. Representation among faculty is a lagging indicator and takes time to change. We can also measure leading indicators, such as the number of women or those URiM interviewed for positions, the proportion of women or URiM speakers at conferences, the extent to which we have increased the visibility of women and URiM faculty at national meetings, and the number we have nominated for review committees and national honors. Similarly, we should analyze salaries and allocated resources to ensure parity across groups.

With intentionality, we can promote the success of women and URiM faculty members and trainees.

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