

# Making the Voices of Female Trainees Heard

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Female physicians are significantly less likely to become full professors and are paid lower salaries than their male colleagues (1). Many current trainees and faculty recognize this but assume that wide disparities during residency training are relics of the workplaces of generations past. Although the authors of this article experienced or observed minor discrimination in our training and workplace, we presumed that when contributors to gender-based disparities arose in our programs or among our colleagues, they would be obvious and thus quickly eliminated. Our experience shows that this is hardly the case.

Recently, we were surprised to uncover an unrecognized gender disparity in our own presumably forward-thinking residency program. Women account for 47% of our internal medicine residency class (similar to the national average) and more than 50% of program leadership. Our graduates frequently pursue academic careers and publish widely in the lay and scientific literature during training. This tradition of publishing spurred a practice of informal e-mail "shout-outs" from the residency program director for recent publications. For example, one such e-mail read, "See [X]'s important editorial, attached. Congratulations!" These announcements celebrating residents' publishing successes were sent in an ad hoc fashion. If the program director became aware of a publication, a congratulatory e-mail was sent to the entire residency, core faculty, and interested alumni.

The disparities in these e-mails struck 1 of the authors (L.S.R.). Although she knew her female colleagues were publishing, including in widely read popular outlets and prestigious journals, their names were rarely mentioned. In addition, their work was not being discussed in informal daily conversations among residents. With some digging, we found that these disparities had long been the subject of private discussions among female residents seeking to strategize how to elevate their female peers' work or encouraging each other despite their work's perceived invisibility.

When L.S.R. brought up these perceived disparities to both male and female program leadership, they were initially skeptical. However, after reflecting on how they found out about resident accomplishments and retrospectively tracking e-mails they received from residents, they were not. It was male residents who stopped them in the hallway to tell them about their latest written work. The e-mails they received alerting them to new publications, submissions, or accomplishments were overwhelmingly from male residents. They were more likely to find out about the accomplishments of female residents from other residents, and not nearly as quickly.

In response, the residency program has adopted a systematic process that we believe will eliminate this

important and unconscious source of bias. Our administrative support personnel systematically search for resident publications each month via a structured query of PubMed and our hospital's compilation of lay press articles by affiliates. We also developed an online form that residents can use to notify us of publications. Our program director then e-mails results to all residents each month. Although a small minority of previous shout-outs were for publications by female authors (for example, 1 out of 6 e-mails [16.7%] sent from June 2017 to January 2018), the proportions of female and male publications identified through systematic searches better reflect the residency program's gender balance (42% of 64 resident publications from January to May 2018 were by female authors). Women are publishing in every field, including clinical research, basic science, and opinion, although less in the popular press.

The feedback on our effort to systematically publicize resident publishing, which was gathered at a noon conference discussing the initiative and through informal conversation, has been encouraging, with trainees of both genders, and particularly female trainees, expressing emotions ranging from gratitude to relief. Reflections on how particular trainees justified their not being featured in shout-outs (for example, with hypotheses of the relative lack of merit of their work) have also been informative.

We believe that the lessons from our program's experience have wide applicability. They may seem intuitive, but as shown by our experience, they are worth relearning regularly.

First, differences in awareness and recognition of accomplishment that may contribute to gender-based disparities in pay and promotions start early and insidiously. Although it is hard to quantify the effect of this phenomenon on a decades-long career, recognition of one's work and contributions to a field are key metrics by which promotions are determined and collaborations are fostered in academic medicine.

Second, self-promotion—and the differential engagement of male trainees in this practice—emerged as a dominant theme. As noted earlier, self-promotion was a regular component of program leadership's interactions with male residents that left them disproportionately aware of this group's accomplishments. Self-promotion is a central expectation of academic medicine and is necessary for academic advancement (2). However, women are less likely to advocate for themselves and their talents (3), have poorer self-assessments of their work (4) and lower self-citation rates (5), and are even less likely to ask questions at scientific conferences (6). From a programmatic perspective, we aim to increase our efforts to teach and encourage self-promotion techniques, with a focus on female trainees. However, a key part of encouraging self-

promotion will undoubtedly involve dampening the well-known biases against women who engage in professional self-promotion (7).

Third, diverse leadership and a culture of improvement made a difference in the situation described. The ability to have an open conversation with faculty committed to advancement of female physicians facilitated both objective identification of a problem and development of a solution.

Finally, perhaps the biggest and most intuitive lesson from our experience is the value of systematization and intentionality in promoting equity. Although our current approach to recognizing trainee publications requires greater effort and organization than our previous ad hoc approach, it has uncovered contributors who would not otherwise have been recognized and has shown that an ad hoc approach is not nearly equitable enough. Of note, our effort at systematizing recognition in the publishing realm has spurred conversations about the diverse areas of trainee contribution—from teaching to humanism—for which systematic efforts at recognition may be helpful. Although resources and time are finite, these conversations are worth having if we truly value ending gender disparities in medicine.

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