



Advancing women in academic medicine: ten strategies to use every day

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Women are well represented in medical schools¹ and increasingly so in academic medicine.² Nevertheless, there remains a significant gap in the representation of women as professors,³ as leaders,^{1,4} on guideline panels,⁵ as conference speakers and chairs,^{6,7} in scholarly publications,⁸ and as grant and award recipients.^{9,10} There is also a significant pay gap between men and women physicians.¹¹ These gender disparities are particularly evident in disciplines such as critical care medicine and in surgical specialties.^{1,5,7}

There are many reasons for gender disparity in medicine, including implicit bias that contributes to stereotypes that associate men with leadership, unequal mentorship and sponsorship,¹² all added to the disproportionately greater familial responsibilities for women.¹³ Sexual and gender harassment of women faculty and trainees is widespread in medicine.^{14,15} All of these challenges may also result in lower retention of women in academia.¹⁶

We suggest ten ways that both men and women can support women faculty and trainees, ensure that women's voices are heard, and reduce the overall gender disparity in academic medicine.

1. Be aware of your implicit bias and check your gender stereotypes

We all have implicit biases, which are unconscious prejudices towards a certain group of people. While implicit gender bias appears to be more prominent in older faculty and in men,¹⁷ both men and women hold stereotypical notions of how a woman physician looks and behaves.¹⁸ Identifying this implicit bias is especially important for leaders and educators.¹⁹ To evaluate your implicit biases, one can self-administer the Implicit Association Test (<https://implicit.harvard.edu/>)²⁰; and consider implicit bias training.²¹

Stereotypical beliefs that revolve around women's intellectual capabilities, ambitions, personality traits, or work-life priorities can influence one's expectations and treatment of female colleagues.²² For example, one should not assume a woman is uninterested in an opportunity because she has young children. Indeed, in younger generations, men seek work-life integration as much as women.^{23,24} While statements such as “women are more compassionate than men” or “women are better communicators” may seem positive, such “benevolent sexism” sets expectations for women's behavior by reinforcing stereotypical beliefs.²⁵ Unlike men, women face expectations of “communal” behavior, including likeability and nurturing, and are penalized for exhibiting “agentic” traits such as assertiveness.²⁶ Consequently, women are assigned disproportionately more of the traditionally uncompensated responsibilities that may adversely impact their academic productivity. Ensure that committee membership, educational responsibilities, and social organizing (e.g., holiday parties) are assigned equally to women and men.

2. Speak up about inequities

Achieving gender equity is a collaborative venture. Regardless of your gender, talk to your colleagues about equity, speak up about unfairness and harassment, and advocate for transparency in hiring, compensation, and

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awards. Committees with broad and diverse representation may decrease inequalities in candidates' selection processes, and ensure that the most qualified and meritorious candidates are selected. If you witness gendered comments, simply stating "I'm not comfortable with what you said" calls out the perpetrator and validates the victim.

3. Be a mentor

Academic faculty who are mentored are more productive,²⁷ have greater career advancement,²⁸ and superior career satisfaction.²⁹ While it is not evident that women are mentored less, women find it challenging to find a mentor that "fits it all" in terms of work-life integration.²⁹ Consequently, women may be less satisfied than men with their mentorship experiences.²⁹

As a potential mentor, seek opportunities to guide junior faculty, regardless of their sex. If you are a man, do not let the #MeToo movement and fears of accusations about harassment prevent you from helping advance a woman's career.^{30,31}

4. Be a sponsor

Sponsorship—distinct from mentoring—is defined as the promotion of a junior colleague by a more senior individual with influence and a network of connections. Sponsorship can increase visibility and is associated with success.³² Women are less likely to be sponsored than men, and less likely to benefit from the associated career advancement.³²

If you are in a position of authority, introduce women to senior people in their scholarly areas, suggest women for committees, for panels, as conference and grand rounds speakers, and nominate women for leadership roles and awards.

5. Ensure women's voices are heard, and use their professional titles

Be generous about echoing women's suggestions, providing attribution, and crediting their viewpoints. "Amplification" is a strategy whereby women's comments are echoed by others, particularly when their voices have not been adequately heard or acknowledged. For example, within President Obama's office, amplification resulted in more women being invited to share their views and increased their contributions to policy-making.³³

Women are interrupted far more often than men—even among supreme court judges!³⁴ Refrain from interrupting women, unless it is primarily to gain clarity on her statements. If the interruption is to opine or to disagree—politely wait your turn. Call out others who interrupt with "Why don't we let her finish her thoughts?"³⁵

Women grand-rounds speakers are less likely than men to be introduced using their professional titles, and are more often introduced by their first names, particularly when introduced by a man.³⁶ Withholding a professional's formal title has been associated with lower recognition of her expertise, lower satisfaction in the workplace, and feelings of alienation.³⁶ Use formal professional titles for women and men in their work environments, particularly around trainees and patients.³⁷

6. Gender balance at conferences and scholarly activities—have a policy

Despite the increasing presence of women in academia, they remain underrepresented as grand-rounds speakers,⁶ on the podium at professional conferences,⁷ as guideline panel members or authors,^{5,38} and on editorial boards.^{39,40} Formalized strategies which incorporate quotas improve gender equity.

If you are on a conference organizing committee, have an equity policy for panels, chairs, and speakers, and aim to achieve better gender balance.⁴¹ Recruit more women on the organizing committee, as this has been shown to improve speaker gender balance.⁴² Publish your gender data; if you fail to meet your quota, have a plan in place to address it.

Consider whether you wish to participate in gender-imbalanced events; some invitees have politely declined to attend unless there is gender equity. To address the perception that women decline invitations more than men, collect data on declinations and their reasons. Consider providing onsite childcare and a family room to support attendance of those with family needs.

7. Support women trainees

Despite similar evaluations early in training, women emergency medicine trainees achieve milestones later than peer men, leading to a gender gap in evaluations.⁴³ Other studies have reported lower evaluation scores for women anesthesia trainees during their critical care rotations⁴⁴; and inferior cardiopulmonary resuscitation performance in women.⁴⁵ Failure to show stereotypical leadership characteristics may explain the perception of lower performance in women, particularly in specialties such as emergency medicine that expect traditionally male-defined behaviors (e.g., independence, assertiveness).^{43,45} Paradoxically, women who assume such leadership characteristics may be penalized for their behaviour.^{46,47} For both women and men trainees, anticipating and adhering to gendered behavioral expectations is stressful and distracts from clinical work. Hold both women and men trainees to the same performance standards and seek equitable and objective evaluation processes.

8. Avoid gendered letters of recommendation

Stereotypical gender expectations impact women through gender-based descriptions of their performance in reference letters. Women applicants are less likely to be described as “bright” than men applicants, or to have their leadership potential addressed. They are also more likely to have physical appearance mentioned, particularly by referee men.^{48,49} Referees are more likely to describe women using communal terms such as compassionate, calm, and delightful.⁵⁰ Avoid stereotypical adjectives when writing reference letters for women, and consider having a women colleague screen your letter.

9. Ensure all scholarly activities are inclusive and safe

Scholarly activities provide important opportunities for education and networking. Junior faculty with young children or those who are single parents may not be able to attend early morning or evening events. Since women generally have disproportionate childcare and eldercare responsibilities, and the partners of men physicians are less likely to work outside the home, this particularly excludes women.¹³ Ensure scholarly activities are inclusive and scheduled in a family-friendly manner to enable all faculty to attend, and avoid social activities which might be primarily attended by men.⁵¹ A code of conduct can help create a safe, harassment-free environment for women and men.

10. Address the gender pay gap

In the United States, women in academia earn less than their men counterparts.⁵² The pay gap results from multiple factors, including implicit gender bias, the perceived impact of familial leave on productivity, and less assertive negotiation by women. If you are in a position of authority, ensure transparency and standardization of compensation based on the job description and responsibilities. Including women and under-represented minorities on the economic committee may help reduce the pay gap. Offer negotiation skills training to all junior faculty.⁵²

Including women in all academic activities enriches our community, and benefits everyone. Achieving gender equity is possible, but only if we all act as allies and champions of change. This means that both men and women need to support and elevate women, notice and call attention to inequities, and propose constructive solutions. These ten strategies can promote systemic change and the success of women in academia. The only way is forward!

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