Diversity, Equity, Inclusion, and Justice

Mentoring First-Generation and Underrepresented in Medicine Physician-Scientists by Expanding Conversations

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Physician-scientist training is built on continuous dyadic conversations between a mentee and a mentor.[1] Mentees have always learned through such conversations about prioritization, professionalism, ethics, and the navigation of a productive career.[2] Previous work on mentorship focused on broadly defining "good mentoring" for *all* mentees, overlooking the additional barriers first-generation and underrepresented in medicine (UiM) trainees encounter—the minority tax, the gratitude tax, tokenism, and the intersectionality of diverse individuals—and the specific mentorship needed to overcome them.[3,4] As medicine strives to better integrate and support first-generation and UiM mentees as early-career physician-scientists, we suggest there are additional conversations mentors and mentees should initiate to help first-generation and UiM early-career physician-scientists mitigate and overcome barriers they often encounter in academic medicine.[5-8] Consider 4 examples of common scenarios encountered by first-generation and UiM trainees and potential solutions.

Example 1

Jamal is a UiM fellow who just finished his initial meeting with his new research mentor. They discussed the research idea, plan, and timeline. As time passes, his mentor is frustrated that Jamal is not advancing on his project as quickly as he had envisioned. Unbeknownst to his mentor, Jamal has significant college and medical school loans he is repaying and is sending money to his parents to help them make ends meet. Not only is he working on his research, but he is also moonlighting at a local community hospital. Jamal and his mentor never discussed the financial hardships he was experiencing.

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Theme 1: Illuminating Hidden Challenges and Resources

First-generation and UiM trainees are disproportionately likely to be providing financial support to their families, rather than receiving it from them.[5] While it's possible that some trainees and junior faculty may choose to moonlight to fund a flashy car or overseas ski vacation, a more common reason for first-generation and UiM trainees to moonlight might be to pay for a parent's immigration lawyer or uninsured sibling's insulin.

This reality has 2 implications for trainees and mentors. The first is the importance of open exploration of motivations. In academic medicine, there is a clear but often unstated expectation—in the early training period, extreme focus on research is the norm. This pragmatically entails minimizing moonlighting and distractions from one's research. Deviation from this expectation, especially when it affects research productivity, can be interpreted as evidence the mentee is not invested in an academic career. Clear discussions about the motivations for moonlighting (and other non-research tasks) can clarify, permitting open discussion of a path forward, and potentially lead to the identification of additional resources (TABLE).

The second is recognizing that some trainees are not aware of the support that professional jobs routinely provide but that lower-wage jobs do not. Some training programs are able to fund a trainee's personal computer and the costs of travel to conferences.[9] Other trainees may not know that some programs can pay off their medical school debt if they are conducting research (eg, National Institutes of Health's Loan Repayment Program). Mentors or training programs may want to provide guidance to all mentees on free resources such as financial counselors as well as clearly share what mentees can expect to be covered during their research time (TABLE).

TABLE
Examples of Potential Conversation Starters for Mentors

Theme	Conversation Starters
Illuminating hidden resources	"Staying in research can sometimes feel financially challenging. I wanted to share some programs that may help with student loans." "Let me share an example of XXX, so you have something to base your expectations on."
Gratitude tax	"I notice that you have been participating in many of the recruitment events. How are you doing?"
Networking	"XXX conference is 6 months away. Let's discuss who you should meet and strategize how to prepare for those meetings."
Intersectionality	"There are some peer mentoring networks at (our institution/professional society). Are you aware of them? Let's identify 1 or 2 to which I could make introductions."

Example 2

Lucinda is an aspiring early-career physician-scientist. She was recently awarded her first National Institutes of Health fellowship award, an F32. When she receives her promotion letter from her university, she excitedly signs the letter. She does not negotiate for a higher salary or start-up package for fear of being viewed as ungrateful. Shortly after starting, she is asked to participate in 2 different committees by senior members in her division who have supported her throughout her career. She feels obliged to say yes and must now use her protected research time for these service roles. As time passes, she discovers a colleague was awarded a higher salary, benefited from a larger start-up package, and does not participate in any committees.

Theme 2: Gratitude Tax Conflated With Imposter Syndrome

First-generation physician-scientists have encountered numerous hardships throughout their careers. Reflecting on these hardships often results in feeling "lucky," "fortunate," or "blessed" in their achievements, and consequently feeling indebted to all who help them succeed, which has been termed the gratitude tax.[10] If they are UiM, this sense of indebtedness may be exacerbated by the minority tax[11]—extra responsibilities placed on UiM physician-scientists to improve diversity efforts—and imposter syndrome. Thus, first-generation physician-scientists may shy away from ever asking for more, while concomitantly often being asked to do more for the institution; therefore, a proactive mentor's guidance can be a great asset.

Mentors can focus on helping mentees change the internal narrative from "you were lucky" to "you earned this," guiding them on academic etiquette (eg, negotiating salary and protected time is normal), and helping mentees identify times when no is an appropriate answer in order for them to say yes later. Mentors can also highlight, share, and guide their mentees on when they may want to consider negotiating (eg, promotions or starting new jobs). If there are lab groups, mentors can foster and encourage other mentees to share their challenges with negotiations.

Example 3

Hanna is a second-year fellow completing her first research year. She is excited to be invited to present her work at a large national conference. She has never attended a national meeting and is not sure what to expect. Hanna's mentor emphasizes the importance of networking at the meeting, but she is not sure what exactly "networking" means and how to begin the process. Not knowing what to do, she decides to stick with her co-fellows the entire conference and does not meet with anyone outside of her institution.

Theme 3: Demystifying How to "Network"

While some drawn to the life of a physician-scientist naturally thrive in novel social situations where they know no one, other physician-scientists may find such situations challenging. This may be particularly true for first-generation or UiM physician-scientists, who do not "see" themselves in these organizations and have not yet determined strategies of how to move into and feel comfortable in such spaces.[5]

Thus, after asking Hanna about networking challenges and brainstorming strategies, the mentor could help Hanna develop a clear action plan for the next conference. Together, they could identify 2 to 4 high-status colleagues and 2 promising peers at other institutions. In advance of the conference, the mentor could help her reach out to them to schedule 30-minute coffee meetups. As the conference approached, they could practice her 2-minute "elevator pitch" and a few follow-up questions in case she was introduced to someone else on the spot. So prepared,

Hanna would have a concrete plan to allow her to begin building collaborative networks and feel more welcomed and connected in her professional societies.

Example 4

Marianna is a third-year resident. She was born in South America but moved to the United States when she was young. As a resident, she overhears patients and colleagues commenting on how well she speaks English, or how "lucky" she was to have affirmative action help her succeed in life. On the rare occasion that she does not wear her white coat, she is often confused for patient transport or janitorial services. She shares these experiences with her mentor, an older White man. He is a bit stunned to hear this and unsure how to help.

Theme 4: Intersectionality

We all have multiple identities that influence how we interact with the world and how the world interacts with us. First-generation physician-scientists may have additional identities that may not be the lived experiences of their mentors.[5] Indeed, it is well-known that success requires a portfolio of mentors, in addition to a primary dedicated mentor.[4] Thus, a mentor should not only be intentional about helping mentees build networks but also actively engage in reflecting on their own lived experiences and implicit biases. While this is true for all mentees, it may require additional intentionality for first-generation and UiM physician-scientists where there may be less overlap in some aspects of identity with typical colleagues.

Conclusion

While the scenarios discussed are not exhaustive and may not be applicable to all first-generation and UiM physician-scientists, they hopefully will spark initial conversations to openly discuss their unique challenges and barriers. As we work to build a more diverse workforce of physician-scientists, diversifying and broadening the content and knowledge shared between the mentor and the mentee will be critical in sustaining a diverse workforce.

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