

## Toward realizing diversity in academic medicine

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### Viewpoint

Physician-scientists and trainees who are underrepresented minorities in medicine (URiMs) have navigated a daunting path to achieve the level they have reached, and face additional obstacles as they move forward in their careers. Their professional development is impacted by conscious and unconscious biases that create multiple hurdles to advancement, and even as progress is made, URiM achievements are not necessarily recognized in an equivalent manner to non-URiMs (1–4). Biases based on schemas and embedded stereotypes may prevent an opportunity, for example, to interview for a residency, fellow, or faculty position despite having a sound record of achievement, or may result in unfair evaluations that may affect future opportunities (5). Some preconceptions of ability are derived from the person's racial or ethnic background, whereas others stem from past experiences of URiMs that were shaped by systemic structures of racism (socioeconomic status, job availability, etc.), which determined where they lived or the schools they attended (6, 7). For many URiMs, these biases, even small ones, accrue disadvantages over time and have a significant impact on future opportunity. URiMs either tolerate the structures and culture to achieve some level of growth in academic medicine or become overwhelmed and simply give up (1–3, 7, 8). Certainly, the numbers of URiMs in the pipeline for medical school, residency and fellowship, and academic faculty are adversely [...]

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Physician-scientists and trainees who are underrepresented minorities in medicine (URiMs) have navigated a daunting path to achieve the level they have reached, and face additional obstacles as they move forward in their careers. Their professional development is impacted by conscious and unconscious biases that create multiple hurdles to advancement, and even as progress is made, URiM achievements are not necessarily recognized in an equivalent manner to non-URiMs (1–4). Biases based on schemas and embedded stereotypes may prevent an opportunity, for example, to interview for a residency, fellow, or faculty position despite having a sound record of achievement, or may result in unfair evaluations that may affect future opportunities (5). Some preconceptions of ability are derived from the person's racial or ethnic background, whereas others stem from past experiences of URiMs that were shaped by systemic structures of racism (socioeconomic status, job availability, etc.), which determined where they lived or the schools they attended (6, 7). For many URiMs, these biases, even small ones, accrue disadvantages over time and have a significant impact on future opportunity. URiMs either tolerate the structures and culture to achieve some level of growth in academic medicine or become overwhelmed and simply give up (1–3, 7, 8). Certainly, the numbers of URiMs in the pipeline for medical school, residency and fellowship, and academic faculty are adversely affected by current processes (5, 6, 9).

## Challenges to the advancement of URiMs

All trainees at the resident and fellowship level want to learn and excel in their specialty to become independent practitioners, and URiM trainees are no different. Some URiMs and non-URiMs want

to care for a diverse set of patients during their training to gain medical expertise across the entire scope of race and ethnicities (9); this aspect may drive match-list choice to avoid programs not perceived as providing care for a diverse patient population. URiM trainees may also experience direct patient biases particularly if a patient is not from the same racial or ethnic background (6, 7, 9). In most programs, there may be only one or a few trainees who are URiMs in the entire program, which can generate feelings of loneliness and isolation if there is no support network. URiMs are more likely to encounter microaggressions as a result of their race or ethnic background, some recognized and some not fully recognized initially by the trainee, that may affect performance (10). URiMs may not have role models with relatable experiences due to the dearth of URiMs among faculty.

URiM faculty members face similar challenges to those of trainees, with some additional barriers. Like URiM trainees, many physician-scientists want to take care of a diverse set of patients in their academic clinical practice and may face patient biases from those whose backgrounds are different. And like trainees, there are often very limited numbers of URiMs on a large faculty. As a young URiM faculty member, they may lack representative role models and mentors to help them mature (1, 6, 9). New challenges occur, such as being asked repeatedly to be representative on committees (the “minority faculty tax”) because there are so few URiMs on faculty — the intention of the institution might be sound for diverse representation, but incessant service undermines their clinical and research development maturation for future success and promotion (5, 6). As one of few URiMs on the faculty, they are expected to be the representative for any URiM student who comes through

their unit; while the intention is good, this responsibility would be manageable if there were more URiM mentors to serve in this role (6). If the URiM faculty member is research oriented, they have a higher challenge (about 10% lower chance) in obtaining an NIH research project grant, a key piece of currency for promotion (11). As with trainees, microaggressions from colleagues and staff may occur, potentially undermining confidence and progress.

It is remarkable for URiM trainees and physician-scientists to complete and excel at their levels despite the additional challenges they may face. Seeing a URiM faculty member who has achieved full professor rank is unfortunately relatively rare, due to the systemic challenges and biased academic hurdles. In reality, more attention needs to be paid to URiM trainees and faculty to help them overcome challenges, and to succeed and fully contribute to trainee and faculty academic life. Socioeconomic inequities, student debt, family care and obligations, lack of role models, and lack of mentorship are disproportionately higher among URiMs (1, 5). In academia and elsewhere, diverse teams outperform homogeneous teams (12), and diverse research teams result in higher manuscript citations and impact over homogeneous teams (13). Most academic institutions strive for diversity to grow innovation; however, it has been very challenging to achieve high diversity with current constructs and processes.

## Effective strategies for institutions to promote diversity

How can a department and institution promote diversity among its trainees and faculty? First, the institution and department must have the will to address diversity: leadership involvement and persistence is a key component. Without significant leadership backing, efforts often falter due to lack of support. Second, the institution and department need to assess where they are with diversity. This assessment

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**Table 1. Strategies to promote diversity in a department of medicine**

Administration	<ul style="list-style-type: none"> <li>•Organize a diversity, equity, and inclusion office with leadership at the departmental level to maintain constant focus on diversity, with appropriate resourcing</li> <li>•Develop and highlight useful standards and disseminate best practices for deployment to encourage diversity</li> <li>•Partner with institutional initiatives for diversity</li> <li>•Integrate partnership between departmental offices across divisions of the department</li> <li>•Publicly state and support focus on diversity issues through regular and transparent communication</li> <li>•Departmental leadership fully committed to diversity</li> <li>•Implement institutional antiracism efforts</li> </ul>
Trainees	<ul style="list-style-type: none"> <li>•In-person unconscious bias training at beginning of training</li> <li>•Incorporate cultural competency into training curriculum, including all quality reviews, morbidity and mortality reviews, divisional and departmental grand rounds</li> </ul>
Faculty and Staff	<ul style="list-style-type: none"> <li>•In-person unconscious bias training for all faculty and staff, with renewal every 2–3 years</li> <li>•Annual evaluative processes include diversity initiatives</li> <li>•Standardized evaluation processes to eliminate bias on performance evaluations</li> </ul>
Leadership	<ul style="list-style-type: none"> <li>•Enhanced unconscious bias training for departmental leadership, division chiefs, fellowship and residency leadership, with renewal every 2–3 years</li> <li>•Term reviews for leadership positions, creating opportunity for renewal or replacement</li> <li>•Open call among faculty for replacement leadership positions</li> <li>•Annual 360-degree evaluations from subordinates for leaders</li> <li>•Actively advertise and recruit from diversified schools and programs for potential future trainees and faculty</li> <li>•Review all aspects of applicants to training programs, not just examination scores; interview broad representation of applicants</li> <li>•Have (standardized) recruitment evaluative processes that may enhance diversity</li> <li>•Faculty recruitment evaluations have job-specific relevant criteria that value diversity and excellence at all stages</li> <li>•Inculcate diversity and health disparities as a permanent part of group discussions such as morbidity and mortality conferences</li> <li>•Encourage evaluation of diversity issues at the scientific and clinical levels as a possible career track</li> <li>•Create dashboards that monitor diversity of trainees interviewed, number of diverse trainees and faculty and staff, diversity of speakers at internal major conferences, etc., with tactics to enhance equity if falling short of goals</li> </ul>

can include demographic data as well as surveys of the faculty and trainees on the diversity culture. Third, task forces, committees, and leadership should craft a vision and mission statement on the importance of actively addressing diversity and subsequently develop a strategic plan informed by their earlier assessment. Fourth, the strategic plan must be implemented with clear communication, integrating the plan within divisions of the department and across departmental structures, to achieve lasting improvements in diversity.

Such a strategic plan, which is often led by someone highly committed to diversity, is typically a marathon rather than a sprint and requires continuous focus for broad execution. Contents of a diverse strategic plan will address culture and climate, inclusiveness (14), and approaches to recruitment (15). Tactics from the strategy can be developed to help execute the plan, and will include metrics in which to set goals for targets and can be part of an ongoing leadership dashboard, such as the percentage of diverse presenters at weekly grand round talks (16), which provides representation and potential role models for URiM trainees and faculty members.

Such a strategic plan will likely take multiple “small” steps that accumulate, slowly changing culture and approaches to achieve improved diversity. Some steps will be easy, others may be very complex and hard. The commitment must be there if the department and institution want to succeed at diversity in all of their missions.

A diversity strategic plan needs to permeate through the department and institution. Administrative leadership, faculty, staff, and trainees affect the culture and thus must be involved in promoting a diverse culture. At my own institution and department, we commenced several years ago, providing in-person unconscious bias training for all trainees, staff, and faculty. Leaders responsible for recruitment at the faculty and trainee level underwent an enhanced and longer version of unconscious bias training. We added diversity components to our residency and fellowship core curricula. We added meaningful and actionable metrics to our leadership dashboard. We modified our evaluation processes of leaders and faculty to include diversity issues. Later, we created a diversity office overseen by a vice chair of the department, resourced with personnel and funds to disseminate best practices regard-

ing diversity and to continuously obtain feedback for improvement. We encouraged and continually made adjustments to the trainee applicant processes. Several of these strategies and other items that we implemented regarding diversity are listed in Table 1.

Overcoming racial biases and micro-aggressions — changing the culture — takes focus, stamina, and continued will. In the era of coronavirus disease 2019 (COVID-19), which has disproportionately impacted minority racial and ethnic groups (17), subsequent societal consequences may provide new opportunities for recruitment of URiMs. Because of COVID-19-induced travel restrictions and avoidance of large gatherings, trainee recruitment will be conducted through virtual technologies for the near future. Academic departments can take this opportunity to broaden and increase the diversity of their interviews, as applicants are not limited by the financial costs of travel to specific programs.

## Conclusions

We in academic medicine have worked hard for over 100 years to fulfill our stated tripartite mission of research, education, and clinical care. For academic medicine

departments to continually improve upon those missions, I propose a fourth mission of diversity. The effort we put into the classic tripartite objectives involve mentorship, role models, training researchers and clinicians, encouragement for careers, and the provision of resources for success. The exact same items and hard work are needed for this fourth mission of diversity — as diversity will enhance the other three missions, enhance innovation, and increase scientific impact (13). Tailored mentorship is a critical piece to achieve diversity, and special attention to URiM trainees and faculty in this regard needs to be front and center for a department if they are to be successful (1, 3, 6, 8).

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