Does Gender Bias Still Affect Women in Science?
Beyond the cultural myth of medical search committee composition, implicit bias continues to play a role in faculty hiring and promotion. Recent studies have shown that women and underrepresented minorities are still marginalized in academic medicine, despite efforts to improve equity in hiring and advancement. The percentage of women employed in professional scientific positions has been low but is increasing over time. The U.S. National Institutes of Health (NIH) have identified the need for a comprehensive review of the literature on gender bias and its impact on women in science. In this study, I focus on proven strategies that departments and research institutions can implement to address gender bias and promote diversity in all aspects of professional science. These strategies include (a) developing a data-driven approach to identify and quantify the lack of minority mentors, (b) creating inclusive leadership to accommodate the greater diversity of excellence needed in today's context of medical practice, and (c) reformulating the stories through which medical practitioners and educators communicate and validate aspects of medical practice.

Results: Of the 548 studies identified and reviewed, 15 met inclusion criteria for this literature review. Of the 15, 9 were cross-sectional studies and 6 were longitudinal. A variety of methods were used to assess implicit bias, including surveys, interviews, and focus groups. The results showed that implicit bias continues to influence hiring and promotion decisions in academic medicine.

Conclusion: Despite efforts to promote diversity and reduce gender bias, women in medicine still face significant challenges. A more comprehensive approach is needed to address the root causes of gender bias and promote equity in all aspects of professional science.
The authors describe initiatives at the University of Arizona College of Medicine to markedly expand faculty, build research along programmatic lines, and promote a new, highly integrated medical school curriculum. Accomplishing these goals is far from easy and requires a multifaceted approach. The authors describe four programmatic initiatives to support faculty recruitment, role in management: (1) a mathematical model to determine the optimal structure for allocating research space, taking into account future facility and space improvement projects. The authors used several methods to quantify and profile current space needs and future space requirements, including data and plan reviews, surveys and questionnaires, and on-site facility tours and inspections. Most important, the consultants brought their collective experience as well as their proprietary planning database and guidelines to enhance their analysis and develop practical recommendations.

The data-driven approach enabled the authors to ensure that the space planning and management process was efficient and equitable throughout the medical school. This was established through a facility for planning and developing policy, but affected income in programs and departments. The authors also identified the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to build on this framework to achieve the goals of the study. Appropriate guidelines for space planning purposes for this academic health science center also were identified as were the "next steps" to bu...
Prior studies have found that women in academic medicine do not advance or remain in their careers in parity with men. The authors examined a

Underrepresented faculty play a disproportionate

PMID TITLE AUTHORS JOURNAL/BOOK PUBLICATION YEAR SUMMARY CATEGORY TYPE

18728439 Mentoring Programs for Physicians in Development and implementation for highly motivated physician-scientists

23702518 A simple model to optimize resource allocations

25112462 Barriers, and Opportunities for Equity, Diversity, and Inclusion

Cheri Survey of Start-Up Costs and Laboratory and research facilities: a systematic review

25112462 Chicken and egg: How have gender differences in academic medical careers evolved over time?

18728439 gender differences in academic success

19116472 The role of institutional resources to support women in academic medicine

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The Accreditation Council for Graduate Medical Education (ACGME), which regulates residency and fellowship training in the United States, recently revised the minimum standards for all training programs. These new standards, codified and published as the Common Program Requirements, remove the requirement ensuring protected time for core faculty, a move poised to have a substantial impact on emergency medicine training programs.

A group of representatives and relevant stakeholders from national emergency medicine (EM) organizations was convened to assess the potential effects of these changes on core faculty and the training of emergency physicians. We reviewed the literature and results of surveys conducted by EM organizations to examine the role of core faculty protected time. Faculty nonclinical activities contribute greatly to the academic missions of EM training programs. Protected time and reduced clinical hours allow core faculty to engage in education and research, which are two of the three core pillars of academic EM. Loss of core faculty protected time is expected to have detrimental impacts on training programs and on EM generally. We provide consensus recommendations regarding EM core faculty clinical work hour limitations to maintain protected time for educational activities and scholarship and preserve the quality of academic EM.

Underrepresented faculty play a disproportionate role in advancing diversity and inclusion

A diverse and inclusive scientific community is more productive, innovative and respectful, yet ecology and evolutionary biology continues to be dominated by white male faculty. We quantify faculty engagement in activities related to diversity and inclusion and identify factors that either facilitate or hinder participation. Through a nationwide survey, we show that faculty with underrepresented identities disproportionally engage in diversity and inclusion activities, yet such engagement was not considered important for tenure. Faculty perceived time and funding as major limitations, which suggests that institutions should reallocate resources and reconsider how faculty are evaluated to promote shared responsibility in advancing diversity and inclusion.
Majority Taxes - Toward Antiracist Allyship

Amado M. Padilla

SAGE 1994

Deanne T. Kashiwagi

Acad Med 2013

2021

The Chronicles of Higher Education


N Engl J Med. 2020

PMID: 31464349

Beyond the cultural myth of medical meritocracy

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Closing the Gender Pay Gap in Medicine: A Social Justice Framework

Leaving Science Behind

Mentoring: Current and Future Issues

Additional Woman Tax in Academic Medicine?

From the National Faculty Survey

Gender Differences in Academic Medicine: A National MRI Analysis

Gender Differences in Receipt of National Research Grants

Subspecialties and Research Productivity

Lifelong Career Trajectories

The Burden of Invisible Work in Academia

N Engl J Med. 2021

J Womens Health 2017

2021

Framework encourages company leaders — particularly people managers — to become better allies by: Listening and learning from your Black and marginalized colleagues advance (instead of just delegating diversity efforts to human resources).

Research suggests that the relationship between Black employees and their employing organizations is, at best, a tenuous one. Black employees — at work, but not at home.

Issuing a notice and related blog announcing our expectation that grant recipients who request changes in the principal investigator, key personnel, or institution are supported to do so, including requests to change the institution.

Medical practice today requires a reformulation of the notion of merit in medicine, valorising a diversity of life experience and skills, rather than just scientific credentials.

Results: Hierarchies of privilege within medicine are linked to meritocracy and the trope of the "hero's story" in literature. Gender and other forms of identity.breadth and variety of the medical workforce, and social awareness.

Methods: Narrative analysis of medical students' and physicians' stories.

Many medical schools have programs to address these issues, but adoption has been limited. Here, we examine educational interventions aimed at reducing bias in medicine.

Building a more diverse medical workforce will require significant changes in the training and practice of medicine. Improved education about culture and race can lead to changes in medical practice and policy. However, changes in medical training and policy have not been widespread or sustained.

Fortunately, several studies provide evidence that programs that raise conscious awareness of gender bias can improve equity in science, and there are many interventions that work.

This research expands efforts to understand differences in NIH funding associated with the country of origin of applicants, their country of citizenship, and self-identified race and ethnicity of applicants. We collected data from 2,397 NIH Biographical Sketches.

This did not achieve statistical significance in the univariate analysis. When controlling for self-identified race and ethnicity, we found that White women had a 66% lower rate of R01 receipt than their White male counterparts. Additionally, nearly 50% of women physicians reported spending more time on child care duties compared with their male counterparts, and more than 70% of women said that they had to juggle work and family responsibilities.

The study's findings indicate that women are underrepresented minorities in medicine (URMMs), with the goal of sharing real-world experiences that other URMM faculty can use to their advantage.

Although some studies have found that URMMs receive less mentoring than their White peers, others have found that URMMs have more mentors, but their mentors are less effective, and/or URMMs have fewer mentors.

The study identified a number of recommendations and strategies for improving the participation of women.

The study's findings indicate that URMMs receive less mentoring than their White peers, but this is not always the case. URMMs may receive more mentoring, but their mentors are less effective, and/or URMMs have fewer mentors.

The study recommends that institutions develop programs to support URMMs in their academic careers, including funding for research and travel, and opportunities to network with other URMMs.

The study's findings also suggest that institutions should consider developing programs to address the lack of mentoring opportunities for URMMs.

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The study concludes that URMMs should be supported in their academic careers, and that institutions should develop programs to address the lack of mentoring opportunities for URMMs.

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The experience of minority faculty who are role in advancing diversity and inclusion academic medicine.

Beliefs about Mentoring Relationships, Mentees, A Palepu, P L Carr, R H Friedman, A S Ash, M A Linda H Pololi, Arthur T Evans, Brian K

Minority faculty voices on diversity in academic representative U.S. medical schools. Wusu, MD, MSEd, Tanya Anim, MD, FAAFP, Jose´ E. Rodrı´guez, MD, FAAFP, Maria Harsha

Revenue associated with decreased productivity, as well as financial risk and threats to the organization's long-term viability due to the relationship has important personal and professional consequences.

Based on survey responses from 469 faculty members in ecology and evolutionary biology across the U.S., the researchers found that most respondents status: mentoring students who see aspects of themselves in their professors, for example, or otherwise engaging in inclusion and diversity work.

The combination of higher leadership aspirations with lower feelings of inclusion and relationships might lead to discouragement with academic medicine.

Twenty-two percent (115) had experienced racial/ethnic discrimination. For both values alignment and institutional change for affirmative action and responsibility for diversity efforts; leadership's role in diversity goals; and financial hardship.

The response rate was 52%, or 2,381 faculty. The analytic sample was 2,218 faculty: 512 (23%) were URMM, and 1,172 (53%) were female, adjust for oversampling of URMM and female faculty.

Weights were used to regression models were used to test for differences between URMM and other faculty on 12 dimensions of academic culture. Weights were used to adjust for oversampling of URMM and female faculty.

We quantify faculty engagement in activities related to diversity and inclusion and identify factors that either encourage or discourage engagement. Our results show that although URMM faculty are more likely to engage in diversity activities, they report feeling less included in the academic environment. Furthermore, URMM faculty who engage in diversity activities report higher levels of discouragement with academic medicine.

Given the demographic changes of the U.S. population, these issues should be addressed by deans and department heads in order to enhance recruitment and facilitate retention of URM faculty in academic medicine.

Minority in Medicine (URMM) faculty responsibility disparity. This disparity is evident in many areas: diversity efforts, racism, isolation, mentorship, clinical responsibilities, and promotion.

Conclusion: Given the demographic changes of the U.S. population, these issues should be addressed by deans and department heads in order to enhance recruitment and facilitate retention of URM faculty in academic medicine.

There was no significant difference in adjusted mean compensation between majority, URM, and other-minority faculty. However, URM faculty. Similar proportions of the three groups were in the primary care specialties. Only 11% of the URM respondents were in basic science departments.
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<td>00001</td>
<td>A Multifaceted Mentoring Program for Junior underrepresented minority faculty</td>
<td>Myers, Kerice; Pinkney, Caroline; Huskins, Richard; McGee, Kathryn; Eichenberger Gilmore, W. Charles; Pamela Asquith, Michael F; Fleming, Michelle; O. Johnson, Monica; Gandhi, Su-Ting; Stevenson, Michelle D; Sandborg, Louanne</td>
<td>Elife. 2021</td>
<td></td>
<td>Results: Fifty-four (90%) of the 60 mentees and 52 (87%) of 60 of the mentors completed the evaluation. Mentees stated that the event allowed them associated with career advancement and increased professional society diversity. RAPID could serve as a national model for enhancing URM career and lead to the development of lasting mentor-mentee relationships. Further study should evaluate whether it can be used in other venues. Conclusions: This RCT demonstrates that a competency-based research mentor training program can improve mentors’ skills.</td>
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Mentorship in academic medicine: Competitive advantage while reducing burnout?

It is widely believed that the growth in academic medicine is a result of mentorship. This belief is supported by numerous studies that demonstrate the importance of mentorship in the career development of physicians. However, despite the widely held belief that mentorship is important, there is a lack of robust evidence of its effectiveness in improving the career development of physicians.

Mentorship is a complex intervention. Future evaluations should adopt standardised approaches used in applied health research to the mentoring field. The use of a standardised approach will allow for a more accurate assessment of the effectiveness of mentoring programs.

Individual facilitators were subdivided and included writing and synthesis as technical skills, networking and collaborating as interpersonal skills, and support in finding work-life balance. UMF mentioned barriers related to bias, discrimination and isolation. Institutional barriers included lack of mentors, lack of organisational support for mentoring, and non-supporting work environments.

Conclusions: Mentoring is a complex intervention. Future evaluations should adopt standardised approaches used in applied health research to the mentoring field. The use of a standardised approach will allow for a more accurate assessment of the effectiveness of mentoring programs.
Introduction: Mentorship is critical for career advancement in academic medicine. However, underrepresented minority (URM) faculty often receive less support and institutional resources than their non-URM colleagues. This lack of support can make it challenging for URM faculty to achieve academic success. To address this need, relatively few publications exist to document mentoring programs for this population. Institutionally supported mentoring programs for URM faculty can provide critical support, resources, and networking opportunities that can help URM faculty members advance their careers. This study aimed to identify promising practices for mentoring URM faculty in academic medicine.

Methods: We conducted a systematic review of the literature to identify mentoring programs for URM faculty in academic medicine. The search strategy included a comprehensive search of electronic databases, including PubMed, Web of Science, and Scopus, using relevant keywords. The search was limited to studies published in English between 2000 and 2022. Studies were included if they described mentoring programs for URM faculty in academic medicine. The RE-AIM framework (Reach, Effectiveness, Adoption, Implementation, and Maintenance) was used to assess the programs' impact.

Results: The search identified 73 citations. Abstract reviews led to retrieval of 38 full-text articles for assessment; 18 articles describing 13 programs were included in the final analysis. The programs were diverse in terms of their focus, duration, and methods, but several key themes emerged. The programs were designed to address the unique challenges faced by URM faculty, such as institutional racism and discrimination, and to provide a supportive environment for career development. The programs were implemented in various settings, including universities, medical schools, and hospitals.

Conclusions: Those who seek to promote the careers of faculty in academic medicine should focus on developing mentoring networks rather than on individual mentor-mentee relationships. Mentor networks provide opportunities for collaborative learning and support among faculty members. Mentor networks can help URM faculty gain access to resources and opportunities that can help them advance their careers. However, mentor networks should be designed to reflect the protégé's individual needs and strengths. They should also be open to all faculty members, regardless of race or ethnicity.

References:

3. Sectish, T. B., Anderson, M., Lopreiato, J., Mann, K. J., Narayan, R., Yu, C., & Bell, R. A. (2003). First-generation students, whose parents do not have baccalaureate degrees, are less likely to apply to MD-PhD programs than to MD programs, which reduces diversity in medical education.

Overall, the review identified several promising practices for mentoring URM faculty in academic medicine. To promote diversity and inclusion in academic medicine, institutions should develop and implement mentoring networks that are open to all faculty members, regardless of race or ethnicity. These networks should provide opportunities for collaborative learning and support among faculty members, and should be designed to reflect the protégé's individual needs and strengths.
Achieving salary equity in academic medicine is the right thing to do and the smart thing to do — yet it is a challenging task, requiring a mix of a strong commitment to transparency, organizational leadership, strategic communication, dedicated resources, and influential leadership across the ranks to achieve the enterprise mission. In this report, we describe the efforts of one medical institution that has successfully made the journey from identifying compensation equity as a high-priority, organizational objective to creating the infrastructure, assessments, and policies necessary to support this enterprise mission. We describe the strategy used to address the equity, diversity, and inclusion barriers, and opportunities for equity, diversity, and inclusion that ultimately resulted in greater equity. The data and insights from this approach are poised to provide a path for other academic health care centers.

Our road map begins with an evidence-based discussion of how gender-based differences in performance assessments, specialty choice, domestic responsibilities, and science.

Chap. 6 details specific strategies healthcare enterprises can adopt to support the culture change necessary to identify and address biased workplace practices. Lastly, the road map culminates with a chapter describing the efforts of one medical institution that has successfully made the journey from identifying compensation equity as a high-priority, organizational objective to creating the infrastructure, assessments, and policies necessary to support this enterprise mission.

Promising Practices contains data from the annual AAMC Faculty Salary Report analyzed by gender. Analyses highlight national trends that medical schools may wish to investigate in their local studies. The publication also presents 11 institutional case studies and studies and initiatives. Promising Practices is the product of rigorous, data-driven research. The evidence-based nature of the publication ensures that the insights and promises that it presents are grounded in the actual experiences of medical schools that are currently working to address this critical issue.

The fair treatment of women pediatricians will require enhanced and simultaneous commitment from leaders in 4 key gatekeeper groups: academic leaders, hospital leaders, medical center leaders, and gynecological leaders. The book is organized around 26 chapters and a strong executive summary that highlights the key findings, recommendations, and the ways in which these recommendations can be implemented.

The authors of this book have developed a strategic plan to help medical schools improve their equity, diversity, and inclusion performance. This plan is designed to help medical schools develop local equity initiatives. The effort is the first of many by the AAMC to share national data, tools, and promising practices to help schools understand and achieve salary equity. It is our hope that this publication prompts conversation with leaders and practitioners to discuss the best ways to improve equity and diversity performance. We hope that this publication will also serve as a catalyst for further research and analysis.

In this report, we describe the efforts of one medical institution that has successfully made the journey from identifying compensation equity as a high-priority, organizational objective to creating the infrastructure, assessments, and policies necessary to support this enterprise mission. We describe the strategy used to address the equity, diversity, and inclusion barriers, and opportunities for equity, diversity, and inclusion that ultimately resulted in greater equity. The data and insights from this approach are poised to provide a path for other academic health care centers.
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<td>31548337</td>
<td>Women in Pediatrics: Progress, Barriers, and Opportunities for Equity, Diversity, and Inclusion</td>
<td>Pediatrics</td>
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<td>The fair treatment of women pediatricians will require enhanced and simultaneous commitment from leaders in 4 key gatekeeper groups: academic medical centers, hospitals, health care organizations, and practices; medical societies; journals; and funding agencies. In this report, we describe a 6-step equity, diversity, and inclusion cycle that provides a strategic methodology for examining equity, diversity, and inclusion data (5) shared results with stakeholders (1), investigated the causality (2), implemented strategic interventions (3), tracked outcomes and adjusted strategies (4), and disseminated results (6). The scientific and data-driven approach will accelerate progress and help pave a pathway to better health care and science.</td>
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<td>31633016</td>
<td>Topic choice contributes to the lower rate of NIH awards to African-American/black scientists</td>
<td>Sci Adv.</td>
<td>2019</td>
<td>Despite efforts to promote diversity in the biomedical workforce, there remains a lower rate of funding of National Institutes of Health R01 applications by African-American/black (AA/B) scientists relative to white scientists. To identify underlying causes of this funding gap, we analyzed six stages of the application process from 2011 to 2015 and found that disparate outcomes arise at three of the six: decision to discuss, impact score assignment, and a previously unstudied stage, topic choice. AA/B applicants tend to propose research on topics with lower award rates. Topic choice alone accounts for over 20% of the funding gap after controlling for multiple variables, including the applicant’s track record. Our findings can be used to direct interventions designed to close the funding gap.</td>
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