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The Long Shadow: A Historical Perspective on Racism in Medical Education

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Abstract

To dismantle racism in U.S. medical education, people must understand how the history of Christian Europe, Enlightenment-era racial science, colonization, slavery, and racism shaped modern American medicine. Beginning with the coalescence of Christian European identity and empire, the authors trace European racial reasoning through the racial science of the Enlightenment into the White supremacist and anti-Black ideology behind Europe's global system of racialized colonization and enslavement. The authors then follow this racist ideology as it becomes an organizing principle of Euro-American medicine and examine how it manifests in medical education in the United States today. Within this historical context, the authors expose the histories of violence underlying contemporary terms such as implicit bias and microaggressions. Through this history, they also gain a deeper appreciation of why racism is so prevalent in medical education and how it affects admissions, assessments, faculty and trainee diversity, retention, racial climate, and the physical environment. The authors then recommend 6 historically informed steps for confronting racism in medical education: (1) incorporate the history of racism into

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medical education and unmask institutional histories of racism, (2) create centralized reporting mechanisms and implement systematic reviews of bias in educational and clinical activities, (3) adopt mastery-based assessment in medical education, (4) embrace holistic review and expand its possibilities in admissions, (5) increase faculty diversity by using holistic review principles in hiring and promotions, and (6) leverage accreditation to combat bias in medical education. These strategies will help academic medicine begin to acknowledge the harms propagated throughout the history of racism in medicine and start taking meaningful steps to address them. Although the authors have focused on racism in this paper, they recognize there are many forms of bias that impact medical education and intersect with racism, each with its particular history, that deserve their own telling and redress.

Racism impacts people of color throughout their medical careers. Trainees of color experience significantly more microaggressions, discrimination, and mistreatment than their White colleagues.[1,2] Non-White medical students and residents consistently receive lower clinical performance scores than White peers.[3–5] And, in 2021, 75% of full professors at medical schools were White and 60% of medical school department chairs were White and male.[6]

Racism in contemporary medical education is a direct consequence of American medicine's historical roots in European ideologies of White racial superiority, colonization, and slavery. When addressing racial bias in medical education, we are not simply resisting individual implicit bias, we are fighting centuries of historical events and political efforts that shaped American medicine into a space that is most welcoming to White men. Therefore, we cannot meaningfully dismantle racial bias in medical education today without confronting its historic origins.

In this paper, we explore the history of European racial science and medicine's relationship to colonization and slavery. We then examine how this history impacts today's medical learning environment and propose structural solutions for addressing racism in medical education.

History of Racial Science in Medicine

Many historical narratives place the birth of "modern" science and medicine in the 17th-18th century era known as the Enlightenment, often represented as the moment science triumphed over religion. However, recent scholarship has shown that Enlightenment science, especially its construction of race and preoccupation with hierarchies of racial difference, was deeply influenced by medieval Christian thought.[7]

Defining difference: Christian European identity and hierarchical ethnic reasoning

From its beginnings in the first century CE, Christian identity has been defined through difference.[7–9] Theologically, early Christianity distinguished itself from Judaism through the concepts of *supersessionism* and *universalism*. Supersessionism claimed Christianity was a more evolved religion that superseded older Jewish faith.[7] Universalism declared Christianity as the one true religion that could be universally adopted regardless of ethnic identity, and cast those who rejected it as spiritually inferior.[9] Crucially, in differentiating

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themselves from Jews who followed the Old Testament faith, early Christians defined themselves as both members of a new religion, and also a new people, ethnicity, or race [*genos*].[7,9]

Armed with the doctrine of universalism, Christianity spread out of Jerusalem. It expanded across Europe as the Roman Empire's official religion and then deeply influenced the identity of the Germanic empires of medieval Europe.[8] As these empires spent centuries fighting wars of territory and religion—battling Islamic empires over the Christian "Holy Land" and clashing internally with Jews—adversarial ethno-religious distinctions became central to European Christians' self-definition.[8] Demarcations between Euro-Christians and non-Christians (such as Muslims and Jews) expanded to include differences in bodily function, appearance, sexuality, intelligence, and even medical conditions.[7–10] Gradually, the concepts of European and Christian coalesced into a single ethno-religious identity.[8,10] Powerful clerics began to interpret the Christian doctrines of supersessionism and universalism as specifically applicable to Europeans as an *ethnic* group, proclaiming that Europeans superseded all others as God's favored people and the ideal embodiment of human-ness.[9,10] Europeans called their empires "Christendom," which they believed rightfully extended over the whole earth such that "the boundaries of Christendom, civilization, and humanity [came] close to merging."[8]

Thus, *hierarchical ethnic reasoning* based on divinely ordained superiority became the organizing principle of Europe's understanding of itself and its relationship to the world.[8,10] This ethno-religious superiority was used to justify the conquest, enslavement, and massacre of non-Euro-Christians,[11] and became the scaffold for the secular racial science of the Enlightenment era, also called the Age of Reason.[10]

Exploration, the Enlightenment, and racial science

Enlightenment thought, particularly around race, was an adaptation of—not a radical break from—medieval Euro-Christian intellectual traditions. Enlightenment scientists transmuted Christian beliefs of Eurocentric supersessionism and universalism into the idea that European reason superseded all other knowledge and that European conceptions of natural law were universal truths.[7,12] As African American Studies scholar Terence Keel observed: during the Enlightenment, "racial science reoccupie[d] the epistemic authority on the question of race and human origins that was once enjoyed explicitly by Christian theology."[7]

Thus, Enlightenment science was structured on hierarchical ethnic reasoning derived from medieval Euro-Christian thought. As with Christianity, reason became the sole province of Europeans, the sign of true humanity, and the demarcation of European superiority over other races. As they encountered new people across the globe, European scientists made empirical discernment of racial hierarchies a central endeavor and produced theories of human origin that situated European man as the pinnacle of evolution, a *natural* master of other races.[12] Through "the scientific appropriation of Christian ideas about non-Christian others,"[7] Enlightenment scientists, and later physicians, developed biological concepts of race that justified White supremacy and the dehumanization of people who were not White.

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This was the lasting innovation of racial science in the Enlightenment: the creation of biological race and scientific racial hierarchies that supported race-based systems of colonization and slavery that shaped a global racial order that endures today.[11,12]

The birth of American medicine: Doctors and slavery

With their Christianizing mission and scientific theories of natural superiority, Europeans conducted a barbaric global campaign of colonization, genocide, mass enslavement of Africans, and the establishment of slave societies in the Americas.

Although widespread in the European colonial enterprise, physicians were especially indispensable to the slave trade. Doctors worked on slave ships, examined slaves at auction, treated enslaved people on plantations, and became slavers themselves.[12–15] Just as wars catalyze medical innovation, White physicians exploited the unprecedented scale and severity of the illness and suffering of enslaved Africans to advance their medical knowledge.[11,13–15] Many “fathers” of American medicine experimented on enslaved people, medical schools trafficked in Black cadavers,[14] and doctors propagated theories of biological racial difference (Figure 1), often with fatal consequences for Black people.[11,13,14] For example, during Philadelphia’s 1793 yellow fever outbreak, Dr. Benjamin Rush sent Black health care workers to tend the sick because he believed they were less susceptible to yellow fever than Whites (Figure 2). Consequently, it was mostly Black volunteers, rather than White nurses and doctors, who died caring for victims of yellow fever.[15]

Euro-American racial science continued to flourish after the abolition of slavery and through the turn of the century. British and American scientists and physicians founded the field of eugenics, which used genetics and Darwinist theories to support White supremacist policies,[12,14] such as forced sterilization, to “give the more suitable races … a better chance of prevailing speedily over the less suitable.”[12] Well into the 20th century, physicians and scientists attributed racial health disparities to biological difference rather than structural racism, and enshrined the doctrine of biological race in medical practice, literature, and education in ways that persist today.[12,14]

This history reveals that racism is not an incidental quality of American medicine—racism is the crucible where it was forged, an animating principle of its practice, and one of its chief contributions to society. Racism influences the questions doctors ask, where they look for answers, and who they include in their ranks. It therefore stands to reason that medical institutions, which helped establish and enforce a White supremacist racial hierarchy, would be inherently resistant to dismantling that hierarchy and hostile to those who try.

“Negroe doctor or Conjurer”[13]: Erasing Black medical knowledge and labor

Besides participating in the enslavement and brutalization of Black people, White doctors have a long history of committing epistemic injustice against Black people by exploiting, excluding, and suppressing their abilities as healers and knowers (Figure 3).[13,14] White physicians capitalized on Black women’s medical labor, relied on enslaved Black assistants, and appropriated Black medical knowledge by reward or coercion.[13,14] White doctors supported laws criminalizing Black and Indigenous healers and publicly characterized them as ignorant and dangerous because they viewed them as economic rivals and threats to White

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medical authority.[13,14] For example, White doctors who were employed to increase enslaved women's reproductive output, accused Black healers of disseminating knowledge about abortifacients.[13] As historian Sharla Fett wrote, "White southerners wrote slave remedies into their private recipe books even as they wrote laws curtailing the practice of enslaved doctors."[13]

Even today, Black medical trainees report that faculty, patients, and peers make assumptions about their intelligence and devalue their ideas and contributions because of their race.[16–19] Thus, the erasure of Black medical knowledge and skill that was encoded into the formative culture of White medicine still lingers.

"A sacred brotherhood"[20]: Keeping medicine White and male

Although White American physicians disparaged and excluded Black healers from their profession for centuries, the American Medical Association (AMA) formally "consolidated the social identity of medicine as White and male based on the subordination of Blacks as well as women."[20] From its foundation in 1847 as the official organization of mainstream medicine, the AMA actively promoted racist ideas. For instance, its 1850 meeting highlighted Samuel Morton's *Crania America*, which claimed that skull measurements proved Black intellectual deficiency relative to Whites as biologically distinct groups.[20] Amidst pre-Civil War debate about slavery, the AMA emphasized that bonds between White "professional brethren" superseded "political dissensions" about slavery.[20] Ignoring demands for abolition in order to retain delegates from slave-holding states, the AMA set a lasting precedent of prioritizing the professional unity of White doctors over racial justice and equity.[20]

After the Civil War, the AMA continued to exclude women and Black doctors, focusing instead on fostering harmony between Northern and Southern delegates by reinforcing medicine's antebellum identity as a White fraternity.[20] However, integrated medical schools such as Howard University College of Medicine challenged the all-White AMA.[20,21] Therefore, in 1874, the AMA effectively barred Black physicians from membership by announcing that delegates would be determined exclusively by state medical societies, knowing those societies openly excluded Black doctors. Therefore, "formal exclusionary policies at the national level were not needed to maintain near total segregation."[21] Because of this staggering act of commitment to racial segregation, the AMA remained almost entirely White at the turn of the century.

Flexner report: Institutionalizing Whiteness in medical education

In 1910, the AMA's Council on Medical Education (CME) asked the Carnegie Foundation to sponsor an audit of medical schools, to hasten the closure of institutions that did not meet the AMA's accreditation standards.[21] Popularly known as The Flexner Report, after its author Abraham Flexner, the audit findings were explicitly racist. Flexner recommended closing most Black medical schools, saying that Black physicians were only necessary for treating Black patients as a means of White "self-protection" from Black people, whom Flexner deemed a "source of infection and contagion."[22] Flexner also recommended that Black physicians train in "hygiene rather than surgery" to act as sanitarians and "civilize"

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Black patients. Here Flexner reflects a racialized segregation of physician responsibilities: limit Black doctors' education to disease prevention in Black communities and leave scientific innovation and the attendant resources to White physicians.

This racial bias in accreditation shaped the modern landscape of U.S. medical education. Within 15 years of the Flexner report, 5 of the 7 Black medical schools in the U.S. closed, causing enduring setbacks for racial diversity in medicine.[21]

The Legacy of Racism in Medical Education Today

Scholars Ruha Benjamin and Beth Coleman have described race as a technology, an algorithm formulated in the Enlightenment and embedded "deep into the operating system" of society that continuously upgrades itself to accomplish the work of racism.[23] This aptly describes how racism shaped medicine and continues to operate in medical education today.

Interpersonal discrimination, microaggressions, and bias

One way this legacy of racism manifests today is through interpersonal racism. An Asian resident who is interrogated about their ethnic origins is experiencing the perpetuation of their colonial treatment as exotic curiosities.[10] A Black resident's hair being called "unprofessional" is connected to centuries of White physicians pathologizing Black phenotypes.[14] Such experiences create hostile learning environments for trainees who are not White.

Analyses of 2016 and 2017 Association of American Medical Colleges (AAMC) Graduation Questionnaires (GQ) found that medical students who identified as underrepresented minorities, Asian, or multiracial, faced higher rates of mistreatment and racially/ethnically offensive remarks, and were more likely to endure two or more types of mistreatment compared to White students.[2] In another study, Black residents reported being mistaken for janitors or having their hair grabbed without consent.[17] Among 232 internal medicine residents, *all* Asian residents experienced inquiries into their ethnic origins, and Black or Latinx residents were nearly twice as likely to have patients refuse care or request a different physician compared to White residents.[16] Several studies show that trainees with multiple marginalized identities, such as Black women, endure the highest frequency of microaggressions.[1,2,24]

Weathering this persistent racism has severe consequences. A study of surgery residents found non-White residents were more likely to experience discrimination, and that residents who faced discrimination reported higher rates of burnout and thoughts of attrition, and were almost twice as likely to endorse suicidal thoughts, versus those who did not encounter discrimination.[18] Medical students of color have reported more exhaustion and burnout than White students.[24] Increased microaggression exposure has been associated with a dose-dependent increase in positive depression screenings in medical students.[1] Racism may also contribute to higher attrition rates for trainees of color. One study found that Black (OR 2.71, 95% CI 1.85–4.02), Asian (OR 1.89, 95% CI 1.27–2.82), and multiracial (OR 1.72, 95% CI 1.03–2.91) medical students were most likely to face one or more microaggressions weekly, and that if students experienced at least one microaggression weekly, they were

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nearly 4 times more likely to consider medical school withdrawal or transfer than students with lower microaggression exposure.[1] This accords with findings that underrepresented in medicine (URiM, referring to African American, Black, Hispanic/Latino, American Indians, Alaska Natives, Native Hawaiians, Pacific Islander)[25] medical students are between 2 (Hispanic and Black/African American) and 5 times (American Indian/Alaska Native, Native Hawaiian/Pacific Islander) more likely to withdraw or be dismissed from medical school than non-Hispanic White students.[26]

Bias in assessments, opportunities, and recognition

In a profession that defined itself by derogating the intelligence and legitimacy of Black and Indigenous healers, Black, Latinx, and other non-White trainees still struggle for fair assessment and recognition. Medical students of color are less likely than White students to be described as "outstanding" or "best" in clerkship evaluations or medical school performance evaluation (MSPE) letters, and are less likely to receive honors in clerkships or be in honor societies like Alpha Omega Alpha (AOA).[4,5] A 13-year study of Yale medical student thesis awards found URiM students were less likely to be nominated or receive honors, and only 1.1% of URiM students received highest honors versus 5.7% of non-URiM students.[27] Research has also shown that URiM residents received lower milestone scores than non-URiMs.[3,28] Black, Hispanic, and Asian surgical residents were more likely to endorse experiencing different standards of evaluation (38%, 10.8%, and 14.2% respectively) than White residents (2.9%), and being denied opportunities (Black 16.1%, Hispanic 5.6%, Asian 6.1%) than White colleagues (2.0%).[18] In the competitive setting of medical training, even small racial disparities in assessments can culminate in significant differences in overall achievement and career opportunities, thereby concentrating Whiteness in the upper echelons of academic medicine.[5,6]

Bias in admissions

Today, many academic medical institutions disavow racial discrimination in admissions, but stop short of dismantling the structural racism that systematically disadvantages URiM applicants.[29] Despite overhauling the Medical College Admissions Test (MCAT) in 2015, racial and socioeconomic score disparities remained unchanged—compared to White students, score gaps for Black/African American, Hispanic, and American Indian/Alaska Native students, and students from lower-resource schools, were similar in 2013 and 2017.[30] Studies have shown racial biases in other medical school admission metrics as well, such as clinal experiences, interviews, and among admissions officers.[25]

Racism also affects residency admissions. In 2018–2021, even adjusted for United States Medical Licensing Examination (USMLE) Step 2 scores, odds of not placing into residency were higher for Black men (OR 1.9, 95% CI 1.49–2.43), Hispanic men (OR 1.62, 95% CI 1.28–2.05) and women (OR 1.34, 95% CI 1.03–1.73), Asian men (OR 1.22, 95% CI 1.02–1.45), low-income URiM men (1.47, 95% CI 117–1.85), and low-income URiM women (OR 1.39, 95% CI 1.12–1.72) versus White men.[31] Emphasizing USMLE Step 1 scores or AOA membership has been associated with lower likelihoods of URiM applicants being interviewed or considered for residency admission.[32] Although many hope making USMLE Step 1 pass/fail will improve equity in admissions, URiM

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residency applicants are systemically disadvantaged across clerkship grades, letters of recommendation (LORs), honor societies, MSPE letters, and other measurements of achievement used in admissions.[4,25] Consequently, admissions processes function as bottlenecks where racism's effects accumulate to advantage White applicants and perpetuate underrepresentation of historically oppressed groups.[25,29]

"It's definitely unwelcoming"[33]: Racism and the environment

Medicine's racist past also lives on in institutional portraiture. Given their histories as primarily White institutions, many academic medical centers display commemorative images of almost exclusively White men that alienate many trainees of color.[33] Reacting to the mostly White, male portraits at Yale School of Medicine (YSM), one student said, "I feel like the old [portraits] are probably more representative of what YSM actually is. So like, old white men commanding everything, which I feel is, like, still true."[33]

Recommendations to Confront Racism in Medical Education

1. Unmask the history

We recommend that academic medical institutions integrate the history of racism and medicine into educational curricula and institutional awareness. Instead of the ahistorical and blameless language of implicit bias or microaggressions, racial bias should be consistently framed as a direct consequence of European colonization, enslavement, and persecution of Black people and other people of color. This task of re-imagining discussions of racial bias in medicine should include historians, education specialists, race theory scholars, and activists to develop content, trauma-informed pedagogies, and intersectional frameworks for implementing these changes.[19]

Academic medical centers must expose their relationships to European colonization and slavery. Confronting this history is necessary to rupture medicine's collusion in the "racial contract" to maintain White ignorance, which sustains White people's claims to be "unable to understand the world they themselves have made"[34] and thereby avoid accountability for atrocities they have committed. For example, the Harvard & the Legacy of Slavery Initiative's 2022 report described Harvard University's profits from slavery and people enslaved by Harvard faculty and staff.[35] Harvard then pledged $100 million to implement the report's reparative recommendations, such as endowed funding for supporting descendants of those enslaved.[35]

Institutions burying their racist pasts "allows for more and more racist violence to be less and less discernable."[23] Therefore, to address racism in medicine, American medical schools and hospitals—many of which are sites of racial violence and exploitation—must take accountability for their histories.[14]

2. Centralize assessment of racial climate

We recommend that bias reporting systems be redesigned to improve racial climate and not just as mechanisms for punitive measures. Academic medical centers should also implement centralized processes to regularly evaluate bias in educational content and assessments.

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Hospitals and medical schools should centralize and simplify bias reporting systems to make them less onerous for trainees and to prevent reports from having to ascend a chain of supervisors before reaching the relevant authority. Central oversight committees should route concerns to appropriate offices, track responses, and analyze institution-wide trends.[36,37] This is a clear opportunity for improvement, as research shows trainees rarely report experiences of discrimination, citing lack of confidentiality, ineffective responses, backlash, burdensome processes, and insufficient familiarity with reporting systems.[1,16,17] Administrators should collaborate with Title IX and human resources to facilitate accountability for discriminatory behavior. However, even reports that do not meet legal standards for discrimination or mistreatment may have profound effects on racial climate for trainees, and reporting systems should be designed to capture, track, and respond to those experiences as well.[1,36]

Research on centralized reporting systems shows mixed results, but there are indications they can improve learning environments.[37] A questionnaire for graduating residents helped one institution identify and respond to department-specific mistreatment.[36] When the David Geffen School of Medicine at the University of California, Los Angeles issued an anti-discrimination statement and opened an Ombuds Office in 1998, incidence of mistreatment dropped from 75% to an average of 57% from 1999–2008.[37] After Stony Brook University School of Medicine implemented a program including centralized reporting, review, and accountability mechanisms, reported mistreatment on clerkships decreased and more students reported never having experienced mistreatment.[37]

In addition, educational content, assessments, promotions, and other metrics should be regularly reviewed for bias, such as disparities in exam results, stigmatizing language in lectures, and inequitable clerkship grading.[4] For example, the UCSF School of Medicine in San Francisco used educational continuous quality improvement to determine if URiM status affected clinical grades and AOA membership.[5]

3. Move to mastery-based assessments

We recommend that academic medical centers adopt mastery-based assessments to mitigate racial bias. Mastery-based assessments are *not* pass-fail. Passing standards of mastery indicate the learner is *well prepared to succeed*, which is markedly different from minimally competent pass/fail thresholds.[38]

The focus on *variation* is what makes conventional assessments vulnerable to bias.[5] For example, even if all medical students pass a test, score variation above passing determines students' rankings or grades. Mastery learning, however, aims for all learners to obtain *uniform results* that indicate mastery, leaving less room for biased grade variation.[38] Mastery assessment requires highly specific mastery standards that undergo iterative validation, which can also reduce bias. Educators should practice culturally informed mastery learning, which considers critical race theory, historical context, and equity when determining mastery standards.

We also recommend removing "professionalism" from trainee assessments. Often poorly defined, "professionalism" is frequently weaponized against URiM and minoritized trainees

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to perpetuate White normativity in medicine.[17,39] As one trainee recounted, "Someone who's had an Afro for the last 2 years who finally got their hair flat ironed once, and you're like 'Oh, your hair looks so professional!'"[17] Black trainees and other trainees of color have recounted feeling their racial/ethnic identities were considered inherently unprofessional in medicine and should be concealed at work.[17,19] The critique of being "unprofessional" has also been used to chastise physicians—especially Black physicians and trainees—for participating in racial justice activism.[40,41] And studies of resident milestone scores consistently found that URiM residents receive the lowest professionalism scores compared to White and non-URiM residents of color.[3,28] Given this evidence, trainee assessments should replace "professionalism" with more specific standards of conduct.

4. Embrace and expand holistic review as a historically informed approach to admissions

We recommend that academic medical centers embrace holistic review as a historically informed approach to admissions, share their institutional holistic review protocols, and introduce new admissions interventions.

The AAMC describes holistic review as consideration of the "whole" applicant and their potential contributions to the program and to medicine.[42] Holistic review is also characterized as a way to address racial health disparities by increasing physician workforce diversity.[32,42,43] We propose that holistic review also be conceptualized as a historically informed admissions framework that considers the impacts of European colonization, slavery, and structural racism in disadvantaging URiM applicants (among others).[21,32]

Compared to traditional admissions, holistic review has increased interviews, acceptance, ranked status, and matriculation for URiM applicants.[32,43] Most programs reported no significant changes in matriculating classes' mean grade point average or MCAT or USMLE Step 1 scores after implementing holistic review.[43] The AAMC and others have clear guidelines for conducting holistic review, including articulating program values, identifying and ranking desired applicant qualities, providing clear examples for identifying those qualities in candidates, performing checks for interrater reliability, audits for bias, and training for screeners and interviewers.[32,42]

But the potential for harnessing admissions to fight racism in medicine extends further. As noted above, existing admissions metrics, such as honor society membership and LORs, are subject to racial bias and do not capture the qualities that matter most in holistic review. Therefore, we recommend implementing admissions interventions that give URiM and minoritized applicants more opportunities to demonstrate their strengths by evaluating applicants' structural competency, racial attitudes/awareness, and readiness to interact with diverse colleagues and patients.[44] Examples from our prior work include surveys on racial attitudes/structural competency with questions adapted from validated scales or peer-reviewed studies.[44] Secondary application essays, structured interviews, or multiple mini-interviews could also be designed to assess these qualities. Furthermore, we recommend that applicants be interviewed by local community members from historically marginalized groups who would be well-positioned to appraise candidates' biases and their readiness to work with diverse patients, with the added benefit of giving minoritized patients a voice in admissions.

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Many of these proposals have been implemented since we first proposed them. Some programs have introduced secondary application essays and racial attitudes/structural competency surveys. At Temple University's Lewis Katz School of Medicine, community members now conduct admissions interviews "that plumbed the prospective students' interpersonal skills, their ability to learn from and work with communities suffering disparities, and even if they would feel comfortable with the applicants providing medical care for themselves or their families."[45]

Traditionally, academic medicine has valued criteria that "predicted" success in medical training.[29] Holistic review requires a paradigm shift from identifying candidates who are best designed to succeed in a racist medical system shaped by White supremacy and focusing instead on applicants who exemplify the *changes* we want in medicine.

5. Diversify the halls and the walls: Holistic hiring and environmental inclusion

We recommend that academic medical centers increase faculty diversity by using holistic review to address systemic racial bias in hiring and promotions.[25,46]

Academic medical faculty are overwhelmingly White,[6] and evidence suggests strained relationships between faculty and trainees of color, which can have significant repercussions. A study of 4,079 pediatric residents found Asian and URiM residents were less likely to report satisfaction with faculty support than White residents (Asian OR 0.74, 95% CI 0.60–0.90, $P = .003$; Black OR = 0.75, 95% CI 0.61–0.94, $P = .01$), and dissatisfaction with faculty support was significantly associated with lower milestone scores throughout residency.[28] Faculty are also cited as perpetrators of race-based microaggressions and discrimination.[1,2,17] Trainees of color have frequently voiced that more racially diverse faculty would reduce their sense of isolation, help them feel supported and understood, and serve as role models and mentors.[17,19]

Although faculty of color often enjoy supporting minoritized trainees, their efforts are rarely compensated or valued in promotions.[19,47] Incorporating holistic review into hiring and promotions may increase faculty diversity by rewarding this labor—or "minority tax" —by faculty of color.[47] Instead of emphasizing biased metrics, such as publications and grant funding, holistic hiring and promotions could include equitable weighting of different scholarly disciplines. It could incorporate assessment of mentorship, community-building, and advocacy; it could also consider "distance traveled," such as educational debt.[19,46,47] As with trainee admissions, we recommend that hiring and promotions include assessments of structural competency and racial attitudes.[44]

Diversifying faculty in academic medicine will require significant financial commitment and policy interventions.[19,47] Research shows minoritized faculty often experience racially hostile work environments, so hiring URiM and other faculty of color must include *longitudinal* financial, social, and career support.[19] Incentivizing policies should be enacted above the level of academic department or school, such as linking grant funding or departmental chairs' financial compensation to faculty diversity metrics.[19,48]

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Once hired, minoritized faculty should not be held responsible for solving bias in the learning environment. All faculty have enormous influence on the culture of clinical teams and should be trained to support trainees and colleagues of color.[19] Restructuring clinical teams to include two faculty leaders could embolden them to intervene when discrimination arises by having each serve as a “check” and a “cheerleader” for the other. This would also give trainees a choice of faculty to approach if they witnessed or experienced biased behavior. Organizational changes like this must accompany training and education for faculty (particularly White faculty) to become meaningful allies to minority trainees and peers.

Representation in the physical environment also matters. Many medical schools are removing White-dominated portrait displays, re-evaluating their curation of shared spaces, and commissioning new art to honor Black alumni and enslaved people connected to their institutions.[33,35] These changes are meaningful to minoritized learners, as reflected in a Yale medical student’s response to portraits of Black professors and alumni: “The new portraits. I feel I see more people who look like me on there…. It’s like seeing a visual celebration of our efforts.”[33]

6. Leverage the accreditation process

Accreditation standards should be aggressively leveraged to combat racism in medical education. In fact, they might be the best way to enforce many of our recommendations above. As illustrated by the Flexner report, accreditation bodies have the authority and social responsibility to ensure equity in medical education, both internally and in service to society.

An effective use of accreditation authority was the 2009 implementation of diversity standards by the Liaison Committee on Medical Education (LCME), which explicitly charged medical schools with diversifying their pool of qualified applicants and recruiting and retaining more diverse students, faculty, staff, and other members of their academic communities.[49] These standards led to increased matriculation of female students and students of color, and prompted medical schools to invest in diversity initiatives to develop targeted recruitment pathways, admissions processes, and hiring programs.[49]

Although the LCME and Accreditation Council for Graduate Medical Education have tried to tie diversity advances to accreditation, bias and discrimination standards in accreditation language remain vague. In the LCME’s history, when language used in accreditation standards is more clear and explicit, more citations and actions are taken compared to when the language is vague.[50] Therefore, accrediting bodies should make their standards on diversity and equity stronger and more specific to catalyze action by academic medical centers.

Conclusion

Racism in academic medicine today is part of the legacy of Euro-Christian conceptions of ethnic difference and Enlightenment racial science that functioned as ideological engines for Europe’s bloody campaign of colonization and slavery. It is also a result of sustained efforts to establish White hegemony in medical training, research, and clinical practice. We are only

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beginning to understand how this history of racism harms trainees of color, but it is clear that the effects are severe, not only for medical students and residents who experience it directly, but also for patients and health care as a profession.

To solve any problem, one must understand its root cause. Therefore, though we may feel pressure to omit the inconvenient history of racism in medicine, it is vital that we confront it unflinchingly if we want effective, long-lasting solutions to racism in medical education today.

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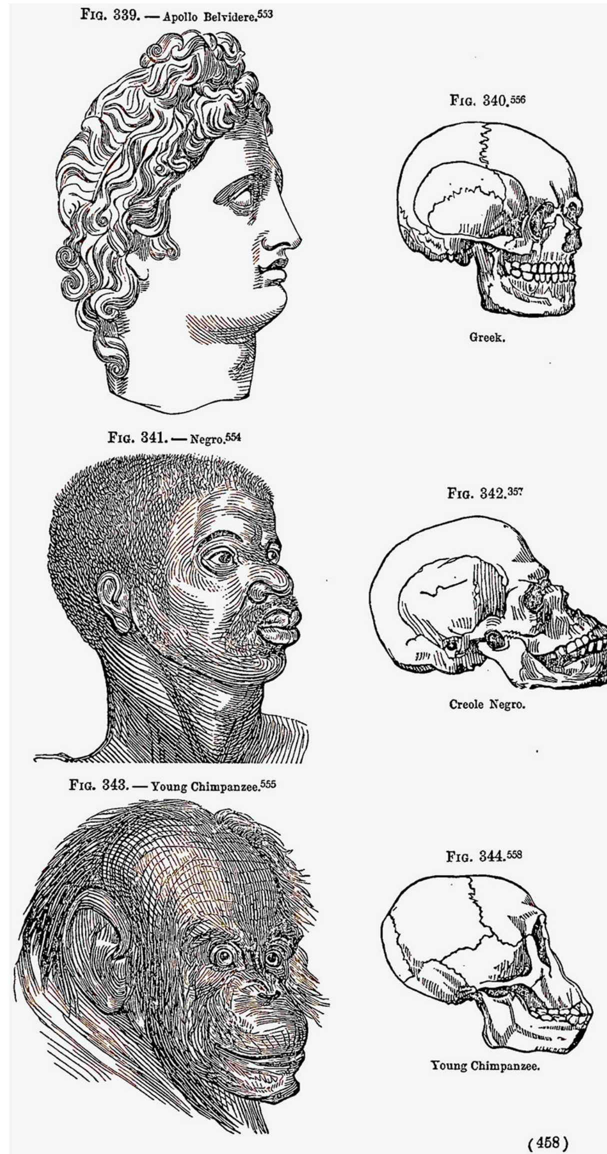

Figure 1.

This illustration from *Types of mankind: or, Ethnological researches, based upon the ancient monuments, paintings, sculptures, and crania of races*, written by Dr. Josiah Clark Nott, presents images of Apollo Belvedere, “the perfect type of manly beauty,” a Black man, and a chimpanzee, each paired with a corresponding skull, as scientific evidence of the inferiority of Black people compared to Whites. Nott was an influential physician and an enslaver who received his MD from the University of Pennsylvania. Many physicians such as Nott promulgated medical and scientific theories of White superiority, particularly with regard to qualities like intelligence. Source: Nott JC, Gliddon GR. *Types of mankind: or, Ethnological researches based upon the ancient monuments, paintings, sculptures, and crania of races, and upon their natural, geographical, philological and Biblical history: illustrated by selections from the inedited papers of Samuel George Morton and by additional contributions from L. Agassiz, W. Usher, and H.S. Patterson*. Philadelphia, PA: J.B. Lippincott, Grambo &

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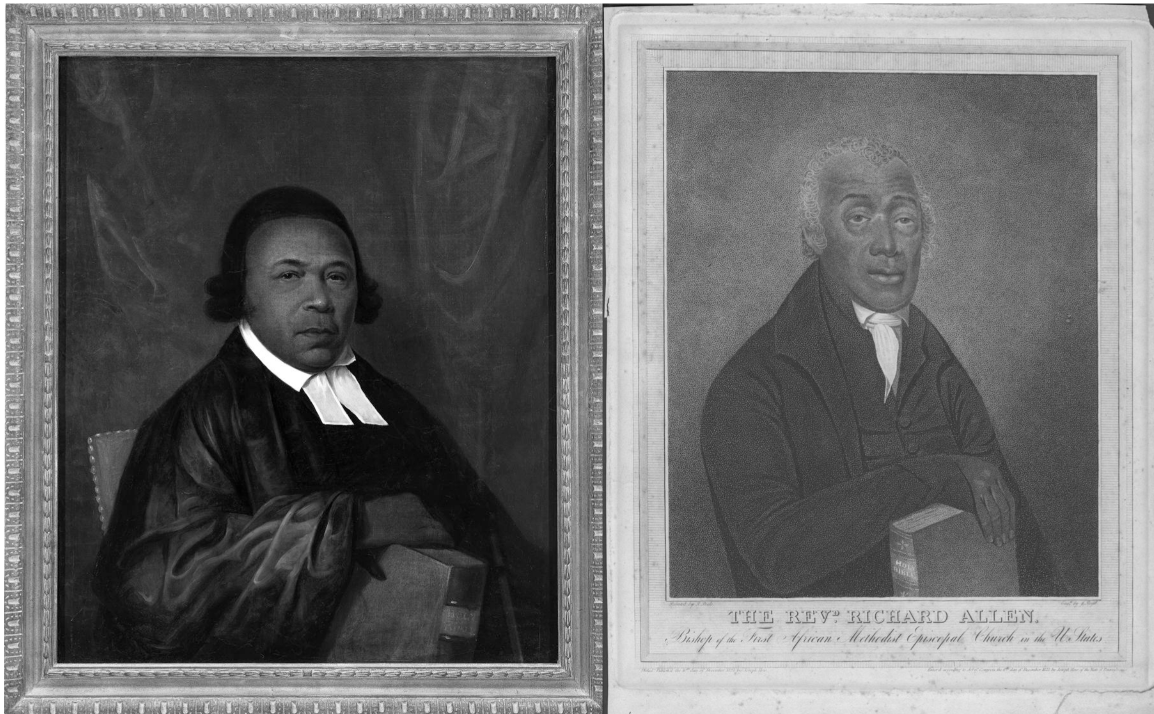

Figure 2.
Rev. Absalom Jones (left) and Rev. Richard Allen (right), were both born into enslavement and later became leaders of the free Black community in Philadelphia. During Philadelphia's yellow fever epidemic of 1793, Dr. Benjamin Rush, a prominent physician in Philadelphia, called upon Rev. Allen and Rev. Jones to recruit Black volunteers to tend to the sick. Rush based his plea on the racist notion that Black people would be less imperiled in caretaking roles because they were innately less susceptible to yellow fever than Whites. As a result, Black volunteers were conscripted to tend the sick and many died while ministering to the victims of yellow fever. Allen himself caught yellow fever and nearly died. Sources: (Left) Peale, Raphaelle. *Absalom Jones*. 1810. Oil on paper mounted to board, 30 × 25 inches; frame, 34 1/2 × 29 1/4 inches. Delaware Art Museum, Gift of Absalom Jones School, www.delart.org. Reproduced with permission. (Right) Boyd, John. *The Rev. Richard Allen, Bishop of the First African Methodist Episcopal Church, in the U. States*. 1823. Print, stipple engraving (based on a painting by Raphaelle Peale). The Library Company of Philadelphia, www.librarycompany.org.

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Figure 3.
This etching by Vermont-born artist Thomas Waterman Wood shows a Black man self-administering his own medical care with blankets, wraps/bandages, teas, and medications. The print illustrates the fact that Black people were known to have their own medical knowledge and practices, often preferring them to the ministrations of White physicians. Source: Wood, TW. *His own doctor*. 1883. Etching, tinted. Harvey Cushing/John Hay Whitney Medical Library, Yale University Library, https://hdl.handle.net/10079/digcoll/5240881.