Addressing and Undoing Racism and Bias in the Medical School Learning and Work Environment
Leona Hess, PhD, Ann-Gel Palermo, DrPH, and David Muller, MD

Abstract
Racism and bias are American medicine’s fatal flaw. They permeate clinical practice and biomedical research, and their influence on medical education is even more profound because it is through medical education that racism and bias are perpetuated across generations and throughout history. This insidious influence has persisted despite the stated values of the medical profession and well-intentioned efforts to lessen their impact. The authors assert that racism and bias in the learning and work environment of medical school can be mitigated only through a formal change management process that leads to change that is institutionally transformational and individually transformative. The authors describe the sequence of events at one U.S. medical school, beginning in 2016, that led from student activism to an initiative that encompasses every functional sphere within medical education. They also reflect on personal and structural lessons learned during the course of designing and implementing this initiative. Eliminating racism and bias demands that medical educators embrace a change process that is lifelong, people-centered, incremental, and nonlinear. It requires the courage to constantly course correct while never losing sight of the ultimate goal: health care and medical education that are free of racism and bias.

Institutionally oppressing marginalized social groups while elevating dominant social groups is commonplace in America. An invisible web of barriers and pitfalls emerges from institutional policies, practices, structures, mindsets, and values. This web produces inequities for particular groups across race, gender, class, and other social identities, while providing advantages and benefits to members of the already privileged dominant group. The strands of this complex web are adaptive, multifaceted, and self-perpetuating. They create overt and covert discriminatory practices and behaviors that have long-lasting impacts on individuals and groups.

Medical school is no exception. Medicine and biomedical research have been shaped by a legacy of racial injustice, and most medical schools have a history of deemphasizing or simply ignoring this legacy. Students, housestaff, and faculty of color are underrepresented in most medical schools; care is segregated by insurance status (often a proxy for race) in many academic health centers; and many of the traditional means by which medical students are evaluated disproportionately disadvantage students of color. As a result, there is a growing consensus about the need to actively dismantle racism in medical schools.

Logically, the next question is “how do we accomplish this?” At Icahn School of Medicine at Mount Sinai, we have come to believe that dismantling racism in a complex, adaptive, deeply hierarchical and siloed structure built on a foundation of scientific racism demands approaches that are bold, transformational, adaptive, and systemic. In 2015, in response to medical student activism, we launched the Racism and Bias Initiative (RBI). This groundbreaking, institution-wide initiative aimed to center underrepresented voices and experiences, recognize the historical underpinnings of racism and bias in medicine, and explicitly address and undo racism and bias in all functional areas of the medical school. To become a medical school free of racism and bias, we embarked on a process with no finite endpoint, defined by the evolving actions and decisions of people within the institution. We aspired to change that was transformational and continuous, not an isolated event or action.

Transformational Change Strategy
A transformational change strategy is one in which the future state is (1) radically different from the current state; (2) initially unknown; and (3) to be determined by a coalition of individuals who represent the full spectrum of an organization’s constituents through a process of trial, error, and course correction as new information is gathered. This approach is a departure from traditional strategic plans and root cause analyses that address and resolve discrete problems, often through a top-down, stepwise, or linear process. RBI is a multiphased change management process. It is supported by a guiding coalition that continuously gains in-depth understanding of how systems, people, and the culture of an institution function as barriers to, or levers for, effective change toward a collective vision.

This article is devoted to describing the way in which RBI focuses on content, people and process, and lessons we have learned in the early stages of the initiative. The content of the change includes institutional processes, policies, mindsets, behaviors, tools, job roles, performance reviews, reporting structures, professional employee relationships, and resource allocation: what must change in our work and learning environments to actualize our vision.
The people in the change are all of us: members of the school community whose mindsets, emotional reactions, behaviors, degrees of engagement, lived experiences, acceptance, commitment, power, and cultural dynamics will influence, and be influenced by, the content.

We integrated the content and people side of change so that, from the beginning, our process (designing, planning, and implementation) set conditions for the traditional hierarchy to function in concert with a strategic network of individuals who work and learn in the school. The strategic network, described in detail below, continually assesses and reacts with greater agility, speed, and creativity than the traditional hierarchy. The goal, over time, is for the strategic network and the hierarchy to be inseparable, with a constant flow of information, learning, and activity between them—an approach that works in part because those involved in the strategic network all work or learn within the hierarchy.

**Multiphased Change Management Process**

Institutional change is extremely challenging, and transformational social change can trigger both conscious and unconscious anxieties when staff and leadership are required to examine personal and organizational values, norms, behaviors, and perceptions related to racism and bias. Drawing on the field of change management and the literature on social change, we designed RBI to include 4 phases: preparing for change, creating a climate for transformational change, engaging and enabling the school, and implementing and sustaining transformational change. Each phase uses tools that are customized; targeted; system focused; research based; and designed to engage students, faculty, staff, and administrators. RBI focuses on the people side of change, because institutions do not change, people do. Failing to plan for and address the people side of change is often the root cause of failed change initiatives.

**Application of the Change Management Process**

**Phase 1: Preparing for change**

Our process (see Figure 1) began in 2016 with the advocacy of a group of medical students, many of whom self-identified as Black and brown and who have disproportionately experienced the effects of inequities in our learning environment when compared with their White peers. This student group, the Anti-Racism Coalition (ARC), presented data to the deans, senior associate deans, administrators, and hospital president that unearthed the complex web of inequities in our learning environment. Their data illustrated the cumulative effects of inequity in the learning environment: lack of diversity; lack of inclusion and inadequate institutional support for students who are underrepresented in medicine (URiM); superficial and damaging use of race throughout the curriculum; educators being ill-equipped to teach about race; and slow response to contemporary issues related to race, racism, and racial disparities. The data also centered the lived experiences of those most marginalized and URiM. These experiences included being singled out or targeted because of race, mistreatment based on race and racism, being compelled to seek support outside of medical education, and witnessing patients of color being disrespected during clinical encounters.

One of the ARC’s first asks was that we undertake an external review of our medical school by nationally recognized experts in diversity and inclusion. Instead of making the case that we were either (1) already addressing racism and bias by listing all of our accomplishments or (2)
prepared and equipped to address these concerns internally, we chose to believe our students and accept that we had barely scratched the surface when it came to racism and bias. This required a degree of humility, trust, and vulnerability on our part that had previously not been the norm. In 2016, we convened a group of 3 leaders: Fernando S. Mendoza, associate dean, minority advising program at Stanford University School of Medicine; J. Renee Navarro, vice chancellor, diversity and outreach at University of California, San Francisco, School of Medicine; and Marc A. Nivet, then chief diversity officer at the Association of American Medical Colleges. This group spent 2 days meeting with students, faculty, and leadership and created a document that outlined short- and long-term goals for the school, including the following:

- Enhanced mentorship opportunities for students who are URiM
- Recognition of service and good citizenship by students, residents, and faculty who are URiM
- Leadership development for students who are URiM
- Comprehensive education for all students, residents, and faculty on racism and bias
- A comprehensive curriculum review
- Better integration between our diversity unit and the core medical education leadership team
- Enhanced graduate medical education recruitment of students who are URiM
- Resources to support these initiatives
- Accountability for these goals from leadership

Recognizing the scope of the work, we hired a full-time director (L.H.) who would be responsible for developing and implementing an overarching transformational change strategy and process. Through facilitated dialogues, we used systems-thinking tools to determine the type of change that would be required to address and dismantle racism and bias in all areas of the school. We were intentional and explicit about stepping out of our silos to examine the system as a whole, hoping to avoid the mistake of focusing too narrowly and misunderstanding or minimizing what the change would entail. We came to the conclusion that only a transformational change process could fundamentally and irreversibly alter the very nature of our learning and work environments, thereby reorienting the institution to be equitable, inclusive, antiracist, and antibiased. Over the course of a number of these early sessions, we articulated an RBI vision: To become a health system and health professions school with the most diverse workforce, providing health care and education that is free of racism and bias.

As we prepared for the long arc of the change management process, our medical education leadership team continued to respond in real time to events or concerns in the learning environment that perpetuated racism. For example, we reviewed lecture slides for every course in the curriculum and removed language that presented inaccurate and unscientific definitions of race and/or portrayed race as physiological, genetic, and innate. During this phase, we also engaged in personal development, recognizing that change needed to happen from the inside out. Our leadership team participated in a series of trainings to examine how our old ways of thinking and acting, individually and as a team, were perpetuating the very things we insisted must be transformed. We had to learn how to align our daily activities with the change process and increase our self-awareness and knowledge of key concepts related to racism and bias. That learning continues to this day.

### Phase 2: Creating a climate for transformational change

Creating the climate for change required that we uncover the true state of racism and bias in the school and provide an aspirational vision for the future. These steps were accomplished by gathering data and stories from a broad swath of constituents and by creating a sense of urgency for the change. Giving voice to these stories and publicly sharing the data, we began to slowly see a shift in peoples’ perceptions of reality. We raised up members of our community whose lived experiences were historically marginalized, and we made racism and bias part of our daily conversations. We launched “Chats for Change”—a series of monthly activities that spark conversations centered on racism and bias (see Table 1). Students, staff, and faculty began to see a visible commitment to change and the motivation to implement transformational change while continuing to address immediate challenges. We built a website (changenow.icahn.mssm.edu/race-bias) to capture the data, stories, timeline, milestones, and progress at every phase of the process.

It was at this stage that we engaged in a debate about the scope of our work: would we be tackling all of bias or only racism? Or should it be all of bias with a particular focus on racism? We could not in good conscience ignore the many other -isms that are perpetuated in our community and society at large. At the same time, taking on all of bias risked diluting the impact we could have on any one area of concern. It would be like trying to boil the ocean. Despite not reaching consensus, we decided to focus on racism first, recognizing that as a nation we have made the least progress in addressing racism, and that the impact of racism on every aspect of life, the practice of medicine, biomedical research, and medical education has been the most profound.

An important step during this phase was to build a strategic network. As outlined in Table 2, this included forming a Change Management Resource Team, Change Sponsors, and a Diversity, Equity and Inclusion Resource Team, in support of a powerful, influential, and enthusiastic group of people known in change management parlance as the Guiding Coalition. This network is the infrastructure (see Figure 2) that allows the Guiding Coalition to effectively determine what needs to change, identify options for implementation, make decisions about where energy and resources should be directed, and muster buy-in from stakeholders across the school. When determining who should be on the Guiding Coalition, we centered marginalized voices; ensured representation from all functional areas of the school; and considered positional power, social influence, expertise, credibility, and leadership ability. Guiding Coalition members attend monthly meetings; work between meetings to accomplish tasks related to change targets; track progress toward the change targets; and increase their personal awareness, knowledge, and ability to address racism and bias.

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**Table 1:**

<table>
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Table 1
Chats for Change Topic Examples

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
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<tbody>
<tr>
<td>Navigating Biased Patient Behavior</td>
<td>What do you do when a patient degrades or refuses care from you because of your social identities? Join us to learn about communication strategies, appropriate behaviors, and how these matters can be addressed.</td>
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<tr>
<td>History of Race as a Social Construct</td>
<td>Join us for a gallery walk of a timeline of how race was socially constructed and engage in an interactive dialogue.</td>
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<tr>
<td>Racial Identity Explored—Not Ignored</td>
<td>What is racial identity? How does this inform our lived experiences? Join us for an interactive chat to uncover how we develop a racial identity throughout our lifetime.</td>
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<tr>
<td>My Micro-Aggressions: Received and Delivered</td>
<td>What are you experiencing, or causing others to experience? Is anyone else noticing? Join us to help break down microaggressions, analyze the sequence of common occurrences, and identify important ways to intervene.</td>
</tr>
<tr>
<td>White Fragility</td>
<td>What contributes to our individual and collective discomfort and our (in)ability to have meaningful conversations about race?</td>
</tr>
<tr>
<td>Roots of Racism</td>
<td>Why are we so tribal? Explore the development of “us” versus “them.” Are we evolutionarily doomed to be racist?</td>
</tr>
<tr>
<td>Confronting Imposter Syndrome</td>
<td>Afraid of being found out? Join us in a roundtable chat about how imposter syndrome shows up in life and work, as well as tips and tools to overcome imposter syndrome so it doesn’t stop you from being your best.</td>
</tr>
<tr>
<td>In the News</td>
<td>What’s happening? Join us as we critically deconstruct a current event. What is the power of privilege during a pandemic? Join us to explore how privilege impacts work, education, health, housing, finances, access to care, and social distancing during this pandemic and how to talk openly about it with people who are unaware.</td>
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Phase 3: Engaging and enabling the school
Through a series of interactive sessions that used systems thinking to identify patterns and trends, underlying structures, mental models, and cultural and institutional values, we enabled the school to broadly examine our climate and culture. During these sessions, the Change Sponsors and Guiding Coalition confronted questions about our strengths, existing barriers to change, and the best places to leverage small changes that could produce big results over time. Changes to policies, vision, or branding seldom work for transforming culture. Instead, we looked for ordinary, consistent, and repetitive changes that had the potential to make significant differences. For example, we learned to raise questions about equity and inclusion at every medical education committee meeting before making decisions—a small but meaningful change that shifted our priorities and incorporated language into our discussions that helped educate a wide range of faculty and staff.

The Guiding Coalition identified the key functional areas of the school, or spheres, and developed a tactical plan for change targets in each sphere. Each change target functioned as a starting point for implementing change and would have to be responsive to the environment and culture. For example, the Clinical Sphere developed a plan to teach students, housestaff, faculty, and clinical staff in the Department of Pediatrics how to anonymously report racism and bias. These are meaningless in the face of what our colleagues and students of color face every waking moment of their lives. Worse than meaningless, they are unearned, and we have achieved them primarily because every day we are given the titles and publications—all of it. This phase never really ends as the institution continuously adapts to changing internal and external conditions.

Lessons Learned
“Lessons learned” implies that our learning has been accomplished and does not do justice to a process that is lifelong. For those of us who are the White-dominant voice, it requires a complete reframing of how we think of ourselves and others. If undertaken with a genuine desire to change, it is nothing short of transformative. It is a rebirth. Having said that, we can share some personal and structural reflections.

Personal
Humility. It is impossible to embark upon this journey, especially for people who are White, without making an active effort to leave behind who we think we are, what we think we have accomplished, the titles and publications—all of it. These are meaningless in the face of what our colleagues and students of color face every waking moment of their lives. Worse than meaningless, they are unearned, and we have achieved them primarily because every day we are given advantages that others are not based solely on the color of our skin.

Trust. When anyone—but in particular someone we know, work with, teach or learn from—relates a concern about racism and bias that we find hard to believe because it is outside the scope of our own experience, we believe it anyway! We unconditionally accept that what they are describing really happened and needs to be explored, addressed, and resolved. That is not to say that there is...
Guiding Coalition

Students, staff, faculty, and administrators who represent all functional areas of the school and are committed to lifelong learning, teaching, and working through a lens of antiracism/antibias

Team learning and professional development; oversight and leadership of transformational change; developing, implementing, tracking, and course-correcting change targets; leading the people side of change by sustaining critical dialogue

Change Sponsors

Dean for medical education; senior associate deans for student affairs, curricular affairs, admissions, and academic administration; associate dean for undergraduate medical education affairs

Actively and visibly participates throughout all phases of the initiative, communicating and reinforcing the need for change and the urgency

Diversity, Equity, and Inclusion Resource Team

Dean for diversity, policy, programs, and community affairs; associate dean for diversity and inclusion in biomedical education; staff and faculty who have a strong grounding in diversity, equity, and inclusion, and can serve as content experts

Provide information, resources, tools, and frameworks to help the Guiding Coalition engage in critical thinking and reflection grounded in the constructs of diversity, inclusion, equity, and antiracism

Table 2
The Strategic Network Infrastructure of the Racism and Bias Initiative at Icahn School of Medicine at Mount Sinai

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<thead>
<tr>
<th>Network group</th>
<th>Members</th>
<th>Function</th>
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<tbody>
<tr>
<td>Change Management Resource Team</td>
<td>Carefully selected staff, such as project manager, coordinators, and a director of strategy and equity education programs, who have change management training and advanced administrative and organizational skills and a passion for addressing racism and bias</td>
<td>Develops and disseminates change management tools and materials, tracks changes, reinforces feedback loops, and creates conditions for learning and course correcting</td>
</tr>
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<td>Change Sponsors</td>
<td>Dean for medical education; senior associate deans for student affairs, curricular affairs, admissions, and academic administration; associate dean for undergraduate medical education affairs</td>
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<td>Provide information, resources, tools, and frameworks to help the Guiding Coalition engage in critical thinking and reflection grounded in the constructs of diversity, inclusion, equity, and antiracism</td>
</tr>
<tr>
<td>Resource Team</td>
<td>Students, staff, faculty, and administrators who represent all functional areas of the school and are committed to lifelong learning, teaching, and working through a lens of antiracism/antibias</td>
<td>Team learning and professional development; oversight and leadership of transformational change; developing, implementing, tracking, and course-correcting change targets; leading the people side of change by sustaining critical dialogue</td>
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only ever one version of a story. It does mean that someone’s lived experience of racism and bias is all we need to know about its impact on them, whether intended or not. If we are committed to the concept that all human beings equally deserve to be treated with dignity, we must be prepared to trust when we are told that there has been a breach of that dignity. A corollary to the tenet of trust is that authentic trust will always be reciprocated.

Curiosity. Unless we have lived it, there is no way we will ever truly understand it. Therefore, it is our obligation to learn intellectually and emotionally: read, study, watch movies, listen to podcasts, ask questions, engage others in conversation, open ourselves to the lived experiences of others, and practice genuine empathy. Eliminating racism and bias is a full contact sport. It will never happen if we sit around waiting for the transformation, hoping that the knowledge will somehow seep in simply because we work in the same office suite as lots of brown and Black folks. We have to go out there and seek the truth, part of which is accepting that, if we are White, we are a big part of the problem. We are part of the reason that structural racism imprisons and oppresses people of color every day, everywhere they go, and no matter what they do.

Structural

Language matters. Say racist and antiracist. Say White privilege. Say White supremacist culture. Use this language out loud and in public and endeavor to understand what it means. Language matters and language evolves, and without a shared language and the courage to use it, there is no hope of making progress. Without that language, we are at best talking at, not with, each other. Language brings together all the other tenets: it requires humility to accept that words whose definition we thought we knew are actually completely foreign to us, it takes trust to believe that the definitions we are hearing from colleagues or students are how this language is lived and experienced by people for whom it really matters, and it takes curiosity to study these words and terms deeply so that we can use them to create the change we want to see and want to be part of.

Icebergs, not trees. In medicine, our propensity is to always look for the root cause of a problem, be it a near-miss medical error, our inability to recruit and admit medical students of color in proportion to their population in the United States, or a medical student’s unprofessional behavior. We are lulled into the belief that if only we can dig out that root, all will be well and that particular problem will not recur.

An alternative to the root cause approach is the systems thinking iceberg model. This model helps us realize that the problem we are seeing (why are there so few Black men in this year’s entering class?) is just the tip of the proverbial iceberg. As we step back from our narrow view of that event and allow the entire iceberg into our gaze, we discover patterns or trends of similar events (the number of Black men has not budged in decades); underlying structures that influence those patterns (who gets into the best schools, who has access to research and clinical mentors); mental models that determine how we maintain those structures (we like to think we live in a meritocracy, so if someone attends an ivy league college or lands the perfect research opportunity, it must be because they have worked harder than everyone else and deserve it); and institutional culture and values, in essence our worldview, that drive those mental models (Black men do not work as hard, are not as motivated, may actually be intellectually inferior, and therefore do not deserve seats in a medical school class).

This lesson has fundamentally changed the way we address racism and bias. In fact, it is the lens through which we view every major concern that our team confronts. While we continue to try and solve discrete problems the old-fashioned way, we recognize that at our core—as individuals, as a team, and as an institution—we have to do the hard work of looking far more deeply at our culture and values if we want to achieve lasting change.
**Challenges**

**Shifting mindsets**

Change management requires a shift from planned change to emergent change. The type of change we are striving for cannot be linear or top down. We cannot anticipate all the steps and cannot foresee the consequences. Emergent change requires that we embrace the uncertainty and unpredictability of what we have undertaken. There will be unforeseen resistance and unexpected disruptions that emerge over time. We have to remain nimble and accept that much of our work will require course corrections. These corrections do not mean we have failed, they mean we have been paying attention.

**Managing resistance**

Resistance is an inevitable part of any meaningful change. Resistance can be passive (e.g., still no response to my email), active (e.g., “This is a waste of time. We need to focus our energy on the ‘real’ curriculum”), or passive aggressive (e.g., someone who never seems to have time in their schedule to attend RBI meetings). It can be conscious or unconscious, and sometimes is fiercest when it comes from colleagues whose values are aligned but who believe that change management is not the approach we should be taking. Managing resistance requires time, effort, and patience. There are useful tools in the literature, and it is important to know when to cut one’s losses, as there will always be people who never come around. Change will happen despite their resistance. In essence, they will be left behind.

**Working smarter**

Our goal is to thread the work of the RBI into everything we do, so that ultimately it is not seen as another set of tasks and priorities, but part and parcel of how we do business. The challenge is convincing people that instead of burdening them with more work, change management asks them to think and work differently. Getting into the habit of using the RBI lens whenever a question arises or a solution is proposed makes it second nature, in the same way that we always have to consider space or staffing when proposing a change to the curriculum.

**Why Racism and Bias?**

There is no priority in medical education that is more important than addressing and eliminating racism and bias. It determines how we teach and who our teachers are, what we teach, whom we teach, how we support our learners, what opportunities we provide for students to achieve their goals, what careers they can pursue, our scientific understanding and research agenda, and the quality of and access to clinical care that our patients receive. Racism and bias also impact our staff, the backbone of every medical education program, and how they work. We have learned this from our students, whose courage and leadership never ceases to amaze and inspire us, and in whose hands we proudly leave the future of medicine.

**Dedication:** This article is dedicated to the members of the Anti-Racism Coalition.

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**Other disclosures:** None reported.

**Ethical approval:** Reported as not applicable.

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**Figure 2** The strategic network infrastructure of the Racism and Bias Initiative at Icahn School of Medicine at Mount Sinai. See also Table 2.
Learning Environment