

Commentary

Leveraging individual power to improve racial equity in academia[☆]

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ABSTRACT

Academia in the United States continues to grapple with its longstanding history of racial discrimination and its active perpetuation of racial disparities. To this end, universities and academic societies must grow in ways that reduce racial minoritization and foster racial equity. What are the effective and long-lasting approaches we as academics should prioritize to promote racial equity in our academic communities? To address this, the authors held a diversity, equity, and inclusion (DEI) panel during the Society for Behavioral Neuroendocrinology 2022 annual meeting, and in the following commentary synthesize the panelists' recommendations for fostering racial equity in the US academic community.

Introduction

Academia in the United States continues to grapple with its longstanding history of racial discrimination and active perpetuation of racial disparities. Universities and academic societies must grow in ways that reduce *racial minoritization* and foster *racial equity*. What are the effective and long-lasting approaches academics should prioritize to promote racial equity in our communities? To address this, the authors held a diversity, equity, and inclusion (DEI) panel during the Society for Behavioral Neuroendocrinology 2022 annual meeting. In the following commentary, we synthesize the panelists' recommendations for fostering racial equity in US academic communities.

The aim of this commentary is to suggest and contextualize action strategies within academic communities, from the individual to the institutional level (Fig. 1). The recommendations below are not comprehensive solutions to the challenge of a racially inequitable academia. Rather, they are tangible and prompt action points that we have identified as areas of improvement. As academics, our power (Fig. 2) is complex and dynamic, and varies depending on our identities,

privileges, experiences, environments, and titles. We must acknowledge that we each have varying levels of power, rooted in our intersectional identities and social contexts, that will determine both our responsibility to enact change and on which actions to focus. In sharing our recommendations, the authors call on fellow academics at all career stages to reflect on how they can leverage their individual power to help achieve the goal of a racially equitable academia.

The authors identify six action strategies of focus that span spheres of influence. At the individual level, we ask academics to *invest in self-education* and *prioritize inclusive mentorship*. At the collective level, academics must work together to *engage in sponsorship* and *create and respect safe spaces*. And at the structural level, academia itself must *recognize and compensate DEI work* and address the need to *contextualize racial equity beyond academia*. Because it would be impractical to provide comprehensive examples for every context, these action strategies serve as conceptual guides to further explore how to enact change. We emphasize throughout the article the need for self-education, reflection, and awareness of positionality in order to understand what actions are most

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implementable for each reader.

Positionality statement

Many of the authors are panelists from the aforementioned workshop, titled “Leveraging privilege to improve racial equity in academia: insights from the Society for Behavioral Neuroendocrinology (SBN) community”, held in Atlanta, Georgia in 2022. The panelists are women and nonbinary people of color, and among whom identify as queer and differently-abled. They are also graduate students, postdoctoral researchers, and faculty at US institutions. The lead authors are graduate students who are white and white-passing, and among whom identify as mixed-race, nonbinary, queer, and differently-abled. The lead authors are also steering members of the Antiracism Learning and Action in Neuroscience group at the University of Wisconsin-Madison ([Antiracism learning and action in neuroscience, n.d.](#)). All of the authors are fluent English speakers. Regardless of the personal identities of the authors, we acknowledge that all authors in this paper are academics at research-intensive institutions, and thus their perspectives are shaped by positions of privilege and power.

Glossary

Racially minoritized groups in academia

Black, indigenous, and people of color who are or have been denied access to power, opportunities, resources, and safety. They have been historically excluded from academic institutions through entrenched biases, practices, systems, policies, and structures.

Racial equity in academia

The elimination of racial disparities by combating racial minoritization in academia. The goal of racial equity in academia is to improve academic institutions for minoritized people of color across genders, sexual identities, ages, beliefs, socioeconomic classes, and abilities (including neurodivergence status).

Intersectionality

The idea that minoritization is complex and different systems of minoritization interact with one another across identities such as race, gender, sexual identity, age, belief, socioeconomic class, and ability ([Cech, 2022](#)). For example, being a white disabled or queer person does not carry with it the same consequences as being Black and disabled or queer. While we focus on racial equity in this commentary, we

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discuss many axes of identity and recognize the need to consider intersectionality as the bridge between these identities and race.

Power

The multifaceted ability to shape and influence academic environments and communities, such as peers, mentees, lab groups, committees, departments, conferences, or academic societies. Power varies depending on our identities, privileges, experiences, environments, and positions (see [Fig. 2](#)). We can use power at varying levels (individual, collective, structural) to either promote racial equity or perpetuate racial minoritization in academia.

1. Invest in self-education

Academics are no strangers to the continual process of education, independent learning, and intellectual growth. Thus, we are well-equipped to mindfully commit to understanding power in the academic system and improving our skills to promote racial equity. We acknowledge that self-education and reflection require the privilege of significant time and energy. Even so, we emphasize that a career-long commitment to self-education is an essential practice for those with power who desire change. Below we describe useful approaches for self-education and highlight existing training programs that individuals and groups can utilize to further their self-education.

Become adept at independent education. Learn about how your academic discipline and the academic system as a whole has perpetuated discrimination historically, and how it continues to do so today. How has your field, and the people in it, discriminated against people of color in the past and present? How has the knowledge obtained by your field been used to discriminate against people of color? Who is commonly barred from participating in your field and why? Additionally, learn (and continue to learn) about the power you hold in your field of study. If you study social motivation and autism, for example, your responsibility to understand social models of disability is greater because you wield great power in that space. Similarly, researchers

Action strategies to implement within academic communities

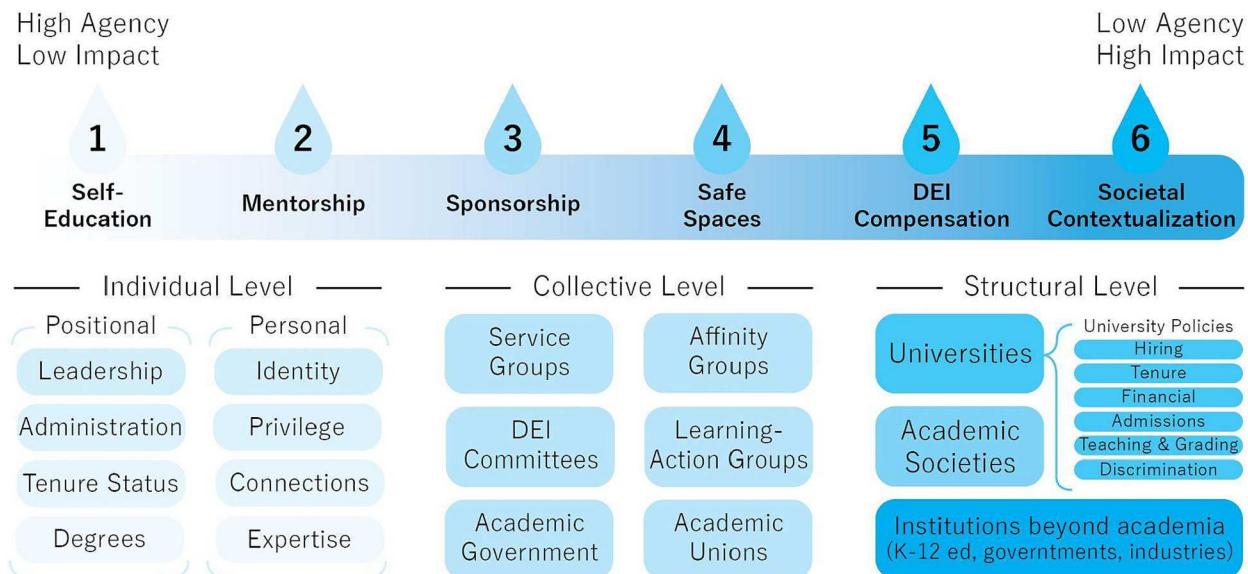


Fig. 1. Alone, an individual has little power to change systemic structures, but they have the important ability to influence the individuals they directly engage with. Collectives serve as a bridge between individual power and structural spheres, whereby individuals can leverage their privilege as a group to promote racial equity. Promoting racial equity at the structural level requires the reformation of institutions, both within and beyond academic institutions. At each of these three levels, the authors identify two action points of focus to improve racial equity.

studying biological phenotypes related to gender and sexuality produce research that can directly impact the lived experiences of LGBTQIA+2S individuals.

Reflect on your power, positionality, and influence. Academia is a system of intersecting layers of stakeholders with varying levels of power (Wallace and York, 2020). Regardless of career stage, self-reflection and awareness of power dynamics is an essential need (Fig. 2). An individual's power can be broken down into positional power and personal power. *Positional power* is the legitimate power conveyed through job title or rank such as tenure status. *Personal power* is the power associated with merit and experience, such as being a domain expert in an academic field (French Jr. and Raven, 1959). Power is also inseparable from identity; both the academic system and society at large actively and passively confer disproportionate power on non-minoritized identities (Yoon, 2016). Positionality is the intersection of power and identity; for example, tenured professors have extensive positional power, but a tenured professor who is a woman of color may have less personal power within the department compared to her white male colleagues, especially if the department is predominantly white and male. Positionality is also dynamic and depends on environmental

and social contexts. A grad student can have great power over undergrads conducting field work, but still be generally in a position of less power in the university.

Diversify intellectual perspectives that inform science. The scientific precedent of excluding people of color has left a wide gap in viewpoints and theoretical understandings that inform our science such that it overwhelmingly has been shaped by cis, white, able-bodied men (Dickens et al., 2020; Amadio et al., 2018; Mhlambi, 2020; Taylor and Rommelfanger, 2022). In recognizing this there is a need to expand knowledge resources especially as it relates to science. For example, if your research is focused on movement or neurological disorders, disability and critical disability literature should inform and ground your research. Another example for those researching racial disparities is to initiate deeper collaborations with your communities of focus.

Training opportunities for these DEI priorities are offered at many academic institutions and are frequently associated with early career development programs. However, every academic, irrespective of career stage, would do well to continue their mentorship, inclusive teaching, safe-space, and anti-bias/harassment training. This training helps academics keep interpersonal skills and awareness sharp while providing

A systems-identity view of individual power in academia

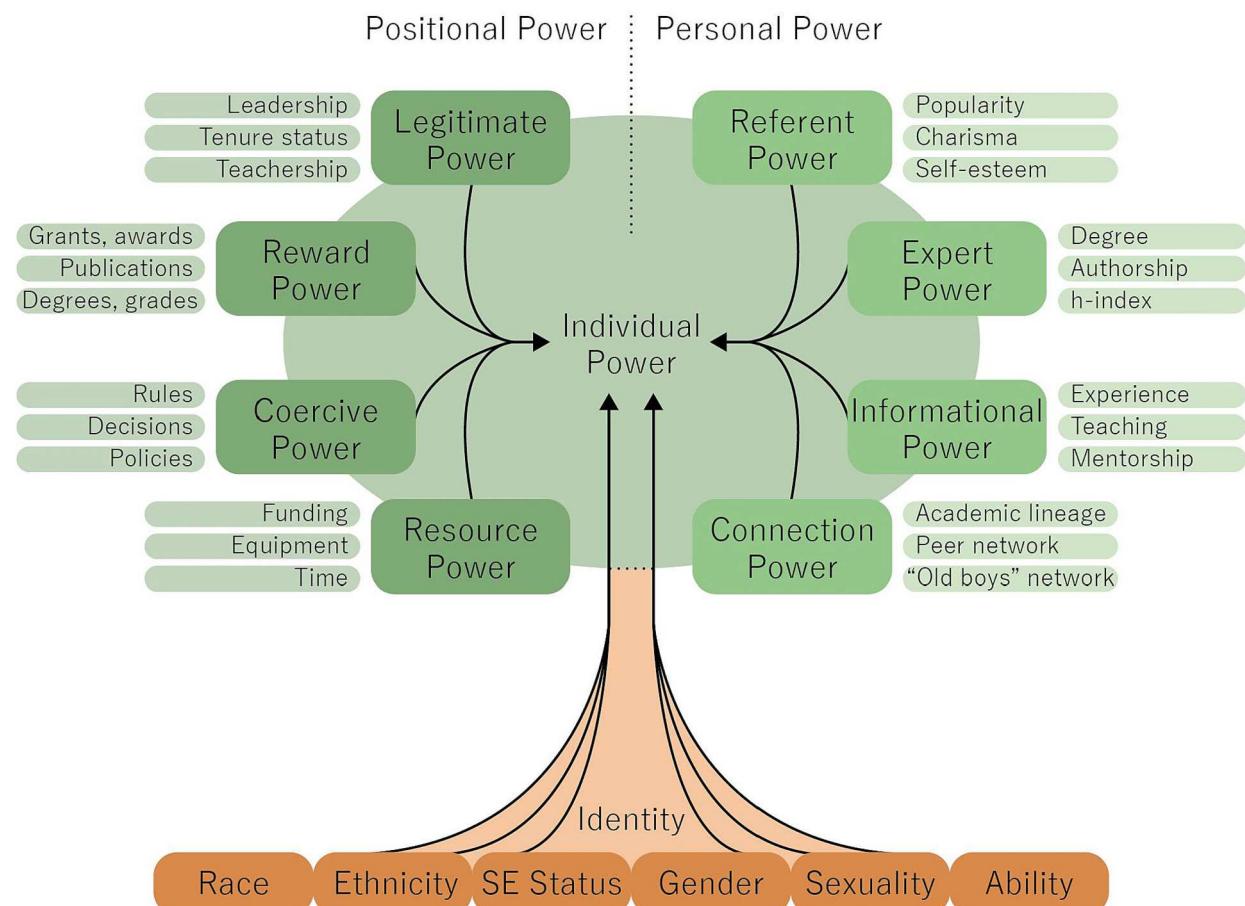


Fig. 2. An individual's power is multi-faceted and identity-dependent. The larger boxes of the tree canopy represent power bases adapted from French & Raven's Bases of Social Power (French Jr. and Raven, 1959; Raven, 2008). The left half of the canopy represents positional power: the power that our status gives us. The right half of the canopy represents personal power: the power we gain through our labor. The smaller boxes are examples of each power base. An individual's power is ultimately influenced by their identities (boxes of the tree trunk), and whether each of those identities has been minoritized or privileged within the academic system and by society at-large.

additional tools for supporting colleagues and other scientists who might be facing difficult situations. We highlight that there are several **online platforms** that offer educational courses that institutions make available to employees under the umbrella of “Responsible Conduct in Research” training. For example, these include a number of elective modules under The Collaborative Institutional Training Initiative (CITI) Program ([Research, Ethics, and Compliance Training | CITI Program, n.d.](#)) or Office for Research Integrity (ORI - [The Office of Research Integrity | ORI - The Office of Research Integrity, n.d.](#)). Additionally, organizations such as the Center for the Improvement of Mentored Experiences in Research ([CIMER – Center for the Improvement of Mentored Experience in Research, n.d.](#)) provide **workshops** on various topics that enhance mentoring skills and awareness of discriminatory practices and implicit biases.

Academics from different career stages can also participate in **community networks** around particular topics (e.g., mentoring) where they can provide creative ideas and discussion for complex challenges. Many of these alliances occur among a trusted group of peers who are either located in a specific institution or a close group of peers who meet periodically online. While these can be extremely valuable resources, it is challenging for someone from ‘out of network’ to seek out and join these groups because these are typically through word-of-mouth.

2. Prioritize inclusive mentorship

Mentorship is an essential component of academic training ([Chao et al., 1992](#); [Ma et al., 2020](#); [Malmgren et al., 2010](#)). Although a formal mentorship status exists between a PI and graduate student in graduate school, we define mentorship here as *any relationship in which the transfer of knowledge from one academic to another may occur that is attentive to the needs and goals of the mentee*, such as a PI to graduate student, graduate student to undergraduate, more experienced lab member to newer lab member regardless of academic title, or a tenured professor to early faculty or post-doctoral scholar. Mentorship is one of the most direct ways to leverage your power as an individual to promote the career of another individual. As an integral part of the academic hierarchy, mentorship is impacted by explicit (e.g., policies), semi-explicit (e.g., power dynamics), and implicit (e.g. individual biases) systems of power ([Wallace and York, 2020](#); [Kania et al., 2018](#)). Mentorship varies significantly in the quality of training depending on the mentor/mentee identities and the systemic contexts of the training ([Brown and Montoya, 2020](#); [Brunsma et al., 2017](#); [Scherer, 2020](#)). Mentorship at all career stages greatly impacts mentee well-being and success ([Malmgren et al., 2010](#); [Li et al., 2019](#); [Liénard et al., 2018](#); [Sekara et al., 2018](#); [Way et al., 2019](#)).

In addition to providing instruction on scientific or career related tasks, the mentor is generally expected to offer constructive criticism that supports and improves the mentee’s research and intellectual growth. This includes advice on how to navigate challenges and integrate into the profession through network development ([Mentoring and Training | NIH Office of Intramural Research, n.d.](#)). Building a strong mentoring relationship is integral for developing a diverse pool of scientists and innovative research. Irrespective of career stage, every academic should mindfully keep up their mentoring skills, be cognizant of their mentoring style, and intentionally diversify the scholars they support and incorporate in their research team. Here, given our audience and needs, we describe strategies for mentors.

Be mindful as a mentor. Mentoring processes are typically customized to each mentee based on their individual backgrounds and goals. Thus, the mentoring relationship is dynamic and dependent on the mentor’s awareness of their mentees’ needs. Becoming an effective mentor requires experience, and what is learned through close mentoring relationships is passed down to the next generation ([Dewey et al., 2015](#)). However, there can be unique challenges associated with each mentee, that depend on their unique experiences. It is important to recognize that there is always more to learn, regardless of the number of

mentees a mentor has previously worked with or backgrounds of those mentees. Every mentee is different; recognizing the mentee as a whole person is a key principle in inclusive teaching and mentorship ([Dewsbury and Brame, 2019](#)). We encourage graduate students to make mentorship training a priority in graduate school and prepare for later-career forms of mentorship. We also encourage faculty to continue their training ([CIMER – Center for the Improvement of Mentored Experience in Research, n.d.](#); [Faculty Diversity, n.d.](#)). Programs such as the NSF-funded Inclusive STEM Teaching project ([Inclusive STEM Teaching Project, n.d.](#)) and the NIH National Research Mentoring Network (NRMN) ([NRMN – National Research Mentoring Network, n.d.](#)) offer training, resources, and networking opportunities for novice and experienced mentors.

Prioritize listening to your mentee(s). Become an active, empathetic listener. Have open and honest conversations about communication styles and academic and emotional needs. Trust that your mentee knows what is best for them. In an effort to relate to any raised concerns or criticisms, some mentors may then respond with stories of their own professional struggles (i.e. “it was worse when I was in grad school...”). Contrasting hardships may lead mentors to believe they are supportive, when in reality these statements are dismissive and can produce more harm. While encouraging communication is important, respect your mentee’s boundaries, personal life, and their needs outside of academia. This helps to foster an environment where a mentee feels comfortable honestly communicating problems or needs.

Use Individual Development Plans (IDPs). An effective way to structure mentorship meetings is to write an IDP with your mentee ([Thompson et al., 2020](#)). IDPs solidify goals and expectations between a mentor and mentee. IDPs can be continually modified as the mentee progresses through their career and recognizes their strengths and weaknesses. Mentors should invest the time necessary to help revise expectations, goals, and responsibilities with their mentee and revise the IDP on a regular basis. At the graduate level, they can be used to set expectations for both the mentor and mentee for the duration of the PhD program. They can also help a new faculty member learn the expectations of their new institution and hear advice from more experienced faculty. Furthermore, they can be community-building opportunities, as junior faculty may consider reviewing an IDP with a senior faculty member or building a network of peers to discuss IDPs together. When building an IDP with a mentee, it is important to remember that this is not an assessment of satisfactory progress, but rather a planning tool for success. An IDP should be developed collaboratively between a trainee and mentor, and should challenge assumptions that the mentor always knows what is best for their mentee.

Encourage mentee professional development outside of the lab. Encourage and allow mentees to attend workshops, trainings, and conferences to advance their skills and professional goals. Ask mentees to create a list of people they want to talk to, and ensure the opportunities are facilitated during conferences. Forward emails when you see opportunities being offered, and clarify that these activities are “work,” not something to be done with their free time. Beyond specific structured events, mentors can introduce mentees to their colleagues, and help them schedule meetings with those outside of their network.

Lastly, we emphasize the importance of supporting mentees (and peers) of all career stages outside of formally established mentorship roles. For example, incorporate professional development opportunities into classes. Offer to meet with undergraduate students to discuss how to enter research, or to postdoctoral researchers to apply for jobs and develop ‘chalk-talks’, or to junior faculty for conversations on tenure. Continue mentorship after your mentees graduate and form genuine relationships with their mentees, so that you can engage in lifelong informal mentorship outside of the specific structure of graduate school. Become involved in peer mentoring programs.

3. Engage in sponsorship

Sponsorship is the intentional practice of advocating for someone as they move forward in their career. Below we highlight three highly relevant vehicles for sponsorship in academic communities: nominations, letters of recommendation, and invitations. While intimately tied to mentorship, sponsorship is distinct in that it does not inherently require a difference in power and may be reciprocal. Effective, sustained sponsorship leads to a stronger, more productive network of collaborators (Gottlieb and Travis, 2018). Sponsorship is most often applied as an extension of mentorship, as it is in a mentor's best interest to help their mentees advance to the next level of their career.

Nominate peers and mentees for awards and opportunities. Share fellowships, scholarship, training, and job solicitations. Support the mentee during the nomination process with financial assistance, professional development events, and opportunities to strengthen their CV such as co-author contributions on manuscripts, grants, or symposia proposals. Grant and fellowship proposal writing is essential for many careers, and including mentees in grant writing can help them build evidence of this skill. As the mentee is writing the application, provide constructive support on drafts and applications.

Learn to write strong letters of recommendation. Letter-writing is a crucial aspect of sponsorship, yet bias in letter-writing is a pervasive issue in academia (Houser and Lemmons, 2018). Learn how to write effective letters, and ensure that the implicit biases you have about your mentee or their demographic do not affect your recommendation. Take the time to connect with your mentee so you can write an excellent letter. We highlight that the topics discussed in an IDP are excellent material for a letter of recommendation. But beyond an IDP, letter-writers should explicitly ask mentees if there are specific topics they would like included in the letter. Letters written for minoritized individuals often highlight their ability to overcome adversity and neglect to emphasize their academic excellence. Ensure that the focus of the letter is on the achievements of the mentee relevant to what the letter is being written for.

Invite minoritized and early career speakers. When designing department seminars or conference symposia, typically “big name” headliners are invited first. We encourage organizers to consider external seminar speaker invitations for minoritized faculty, and/or specifically designating an early career panel such as the SBN Young Investigator Symposium. Importantly, for speakers who conduct DEI work, they should *also* be invited to speak on their research if it is in a different field. Consistently inviting speakers in minoritized groups to talk only about their experiences or DEI efforts, while insightful, diminishes their scholarly contributions and ability to promote their research to academic audiences. Lastly, consider the accessibility of your speaker series, and provide appropriate honorariums, child care support, and travel accommodations.

4. Create and respect safe spaces

Safe spaces in academia are areas that facilitate the security, visibility, and belonging of minoritized community members (Ali, 2017). A safe space may be a literal, physical space. More importantly, however, it is a culturally-minded environment that upholds inclusive norms and expectations. The safety of such a space results from the participation of all members of that space in the guidelines and inclusive norms of the community. Those with more power (Fig. 2) have greater influence over what norms are present and enforced, and have greater responsibility to ensure safety. Exposure to pro-diversity attitudes increases feelings of inclusivity and fosters academic performance (Murrar et al., 2020). We encourage the reader to think about what safe space(s) would be most useful to cultivate in their local academic community. Below are four considerations that should be reflected on when designing a safe space.

Safe spaces should use language that facilitates inclusivity. It is the responsibility of the creator of the space to learn and promote such

language in the safe spaces they are creating. Language is a powerful tool for promoting inclusivity and advocating for change within the academic community (Healy et al., 2022; Scharrón-del Río and Aja, 2020; Stewart, 2017; Volkow et al., 2021). Recognize shortcomings in language use; we all are continuously learning. This requires acknowledging mistakes that happen along the way *and* the harm they caused *and* why the mistake caused harm. Understanding and articulating all aspects of this process is vital to truly apologizing and thus restoring the safety of the space or community.

Safe spaces should be cognizant of non-apparent identities. Certain identities, such as some disabilities, first-generational college status, mental health disorders, and gender and sexual identity, may not always be apparent. Thus, it is important to support and foster these identities with appropriate language and behaviors. It is also important to be aware of and follow the Americans with Disabilities Act guidelines. As we navigate investigations into sensitive topics such as stigmatized disorders and diseases, it is important to be aware of how others may relate to the topic. For instance, an autistic scientist will relate to autism research very differently than a scientist who has no experience with neurodiversity. This idea applies to other identities as well. For example, an individual who studies the negative psychological impacts of racial, gender, or sexuality discrimination will engage with this research differently if they have experienced this discrimination. This demonstrates the need for diverse representation across the spectrum of identities within the sciences. If one is unfamiliar with how to support mentees with specific needs, there are often University-specific resources such as Disability Services, Offices of Diversity Equity and Inclusivity/Engagement, Centers for LGBTQIA+2S services, among others. A mentor cannot force a mentee to disclose a disorder, but creating an environment that fosters open communication is paramount to mentee safety and success.

Safe spaces should counter pressure to assimilate. Within academia in the US, there is immense pressure to conform to social norms around behavior and identity consistent with the expectations of the white supremacist patriarchy (Dickens and Chavez, 2018). Earlier career individuals can seek out and create spaces where they may feel most comfortable being themselves, and allow for others to do the same. This can ease the pressure of constant performance, and help normalize the existence of spaces where performativity is not necessary.

Safe spaces should be serious about equitable change. Make actionable changes within your sphere of influence (Massey and Brodmann, 2014) to reflect your values of inclusivity and equity. Failing to follow-through on virtue signaling with actionable change (i.e. “putting your money where your mouth is”) erodes trust in a community and can be just as harmful as negative statements or harmful actions. To effectively make tangible and long-lasting change, collectives (e.g. DEI committees in an academic society or department at an institution) must listen to the needs and advice of minoritized communities and then must devote resources (financial, time, personnel, media, etc.) to this DEI work.

5. Recognize and compensate DEI work

Academics who conduct racial equity work in academia often belong to minoritized groups (Lerma et al., 2020). But currently, there is no fundamental incentive structure in place in academia for racial equity work whose scholarship does not directly study racial justice, thus punishing those who prioritize DEI work in their academic careers. Even in places where specific recognition exists (e.g. NASEM Ford Foundation (Ford Foundation Fellowship Program, n.d.), NSF PRFB (Postdoctoral Research Fellowships in Biology (PRFB), n.d.), NIH MOSAIC (MOSAIC Program, n.d.)), people of color are less likely to receive acknowledgement for DEI activities relative to white individuals (Chaudhary and Berhe, 2020; Mitchell, 2018; Hirshfield and Joseph, 2012).

Provide monetary incentives for DEI work. We advocate for financial support for DEI work in the same way financial support is

provided for teaching and research, as we believe this will collectively bolster sustainable and broad racial equity initiatives. This entails stipends, prize money, or allocated funds for individuals that create and host DEI workshops, serve on DEI committees, hold DEI-oriented outreach events, facilitate DEI focus groups and discussions, and other DEI-focused work. As mentioned above, provide honorariums for speakers. We encourage the reader to ask themselves if any of the efforts listed above are being conducted at their home institution, and if the *individuals* are currently financially compensated (not the funds to host the events or program, see below).

Recognize DEI efforts during academic career advancement. Beyond financial incentives, awards and requirements are both options for recognizing DEI work. For example, some colleges and universities have made DEI work carry significant weight on hiring rubrics or have asked applicants to write diversity statements demonstrating how they have, and will continue to, tangibly contribute to fostering racial equity in their positions. Some institutions also require diversity statements for faculty promotion packages, although the contribution of these statements is not always clear in the final promotion decisions. Like outstanding research and teaching awards, provide an “outstanding DEI contribution” award in your department, college, or academic society. Lastly, it is vital that *everyone* participate in racial equity efforts. Consider accountable actions like attendance at a certain number of DEI events throughout the semester or rotations of responsibility onto DEI groups or committees.

Fund workshops and events. While it may seem obvious, it is vital to appropriately fund DEI efforts (of note are initiatives such as the NSF funding pathway “Leading Culture Change Through Professional Societies of Biology (BIO-LEAPS)” ([Leading Culture Change Through Professional Societies of Biology \(BIO-LEAPS\) \(nsf22542\) | NSF - National Science Foundation, n.d.](#)) that are mechanisms to support centering professional societies in this work). Institutions and academic societies should institute events that create formalized spaces for improving research relationships and best practices in supporting diverse scientists. These events should be regularly incorporated in the annual budget and annual programs and not have fees associated with participating. The National Science Foundation offers funding for organizing conferences, symposia, and workshops, thus ad hoc proposal development groups should be encouraged to apply for such opportunities. At an individual level, faculty can include conference fees for themselves and their mentees in grant applications. Encourage your eligible mentees to apply for opportunities such as the Welcome Initiative by the SBN, which reduced the cost of membership or conference attendance for scientists belonging to minoritized groups ([Welcome Initiative, n.d.](#)).

6. Contextualize racial equity beyond academia

As academics progress in their careers, the appropriate methods to support racial equity changes. While career stage and social identities influence the power we have to make academia a more equitable space, and importantly we emphasize that *everyone* has the power to improve our academic communities or maintain exclusionary systems. When considering specific identities, we must acknowledge that people who belong to one or more dominant groups (such as being white, male, cis-gender, able-bodied, native speaker, etc.) benefit from the current system, and thus have a responsibility to leverage their privilege to enact positive change and push for equity in academia. While we heartily agree that self-education on these topics is a requirement, we housed this sixth action item in the structural level and not the individual level to emphasize that these systems, not just us as individuals, must change their current practices (Fig. 1).

This commentary centers on how to promote equity within academic spheres, but the challenges of racial minoritization are reflected in other institutions in our communities, states, and countries. Because scientists are people, movements and actions that occur in our communities influence the academic community and vice versa. We must promote

racial equity in all aspects of our lives. Many anti-racism initiatives in academia, including at SBN, have educated their communities on the systemic nature of racial minoritization through readings and discussions. Other communities and initiatives focused on anti-racism in academia include Black Women in Ecology, Evolution, and Marine Science ([Black Women in Ecology, Evolution, and Marine Science, n.d.](#)), Society for Advancing Chicanos/Hispanics & Native Americans in Science ([STEM Education | Diverse Workforce | SACNAS, n.d.](#)), and Annual Biomedical Research Conference for Minority Students ([User, n.d.](#)). For additional examples of other academic societies engaging in DEI work and commentaries like this, see the following references ([Schell et al., 2020](#); [Bailey et al., 2020](#); [Shelton et al., 2021](#); [Massey et al., 2021](#); [Borgan et al., 2022](#)).

Beyond learning both historical and present-day impacts of racism in academic and beyond, recognizing this all-encompassing aspect of racial equity efforts requires us to acknowledge how racial minoritization is a pervasive systemic issue that *structures how we interact with broader society, our communities, and ourselves*. Actively unlearning and challenging social and cultural norms can continuously feel like an uphill battle where there is always more to learn and do. The authors of this commentary acknowledge that the scope of the challenge of racial minoritization can quickly become overwhelming, but the health and relevancy of academia depends on our ability to attract, retain, and advance scientists from diverse backgrounds. Too often equity discussions are sequestered to isolated “diversity days,” rather than being considered real drivers and outcomes of science. The work of promoting racial equity is not separate from science; science and society deeply influence each other ([Carlson et al., 2022](#)).

Conclusion

The authors thank you, the reader, for investing the time and energy to promote racial equity in academia by reading this commentary. We emphasize that you must continue that work by reflecting then practicing the recommendations provided here in your own academic community.

Answering the following questions for yourself is a necessary first step towards identifying what you can do to leverage your privilege to promote racial equity in academia. Ask yourself from this reading:

- Are any of the statements in this commentary surprising to me? Why?
- How do my intersecting identities impact my daily academic life?
- Is there an individual I can sponsor, or ask to be sponsored by?
- Are there individuals or collectives in my local academic community I can engage with to further the action points described here?
- If I feel unable to engage, what are the reasons? (e.g., not enough time, insufficient resources or knowledge, lack of power). With whom at my institution should I have a conversation with to address these barriers?

Staring down the beast that is racial minoritization and strategizing how we plan to dismantle something so intricately woven into our lives is no small task. However, this work is not new, certainly not for minoritized groups who have faced these challenges their whole lives. Previous work has created a legacy of practices that not only challenge oppressive structures but allow for the life of minoritized individuals to be sustained. Prioritizing these efforts and the emotional weight they entail requires being patient, understanding, and gentle with ourselves so that we can continue this work both tomorrow and throughout our academic careers.

Data availability

This commentary does not include original data

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References

Ali, D., 2017. Safe Spaces and Brave Spaces: Historical Context and Recommendations for Student Affairs Professionals. *NASPA Policy and Practice Series*. Issue No. 2. NASPA - Student Affairs Administrators in Higher Education. Oct.

Amadio, J., et al., 2018. Neuroethics questions to guide ethical research in the international brain initiatives. *Neuron* 100 (1), 19–36. Oct. <https://doi.org/10.1016/j.neuron.2018.09.021>. Oct.

Antiracism learning and action in neuroscience, n.d. *Antiracism learning and action in neuroscience*. <https://alaneuro.weebly.com/> (accessed Dec. 29, 2022).

Bailey, K., Morales, N., Newberry, M., 2020. Inclusive conservation requires amplifying experiences of diverse scientists. *Nat. Ecol. Evol.* 4 (10) <https://doi.org/10.1038/s41559-020-01313-y>. Art. no. 10, Oct.

Black Women in Ecology, Evolution, and Marine Science n.d. <https://www.bweems.org/> (accessed Jan. 06, 2023).

Borgan, S.M., Correa, R., Agarwal, M., Eldeiry, L.S., 2022. Diversity, equity, and inclusion in endocrinology: a survey and vision for the future. *Endocr. Pract. Off. J. Am. Coll. Endocrinol. Am. Assoc. Clin. Endocrinol.* 28 (8), 737–743. Aug. <https://doi.org/10.1016/j.eprac.2022.04.005>. Aug.

Brown, N.E., Montoya, C., 2020. Intersectional mentorship: a model for empowerment and transformation. *PS Polit. Sci. Polit.* 53 (4), 784–787. Oct. <https://doi.org/10.1017/S1049096520000463>. Oct.

D. L. Brunsma, D. G. Embrick, and J. H. Shin, “Graduate students of color: race, racism, and mentoring in the white waters of academia,” *Sociol. Race Ethn.*, vol. 3, no. 1, pp. 1–13, Jan. 2017, doi: <https://doi.org/10.1177/2332649216681565>.

Carlson, J., Henn, B.M., Al-Hindi, D.R., Ramachandran, S., 2022. Counter the weaponization of genetics research by extremists. *Nature* 610 (7932), 444–447. Oct. <https://doi.org/10.1038/d41586-022-03252-z>. Oct.

Cech, E.A., 2022. The intersectional privilege of white able-bodied heterosexual men in STEM. *Sci. Adv.* 8 (24), eab01558. Jun. <https://doi.org/10.1126/sciadv.ab01558>. Jun.

Chao, G.T., Walz, P., Gardner, P.D., 1992. Formal and informal mentorships: a comparison on mentoring functions and contrast with nonmentored counterparts. *Pers. Psychol.* 45 (3), 619–636. <https://doi.org/10.1111/j.1744-6570.1992.tb00863.x>.

Chaudhary, V.B., Berhe, A.A., 2020. Ten simple rules for building an antiracist lab. *PLoS Comput. Biol.* 16 (10), e1008210. Oct. <https://doi.org/10.1371/journal.pcbi.1008210>. Oct.

“CIMER – Center for the Improvement of Mentored Experience in Research n.d.” <https://cimerproject.org/> (accessed Mar. 23, 2023).

M. Dewey, S. Placzek, and C. Wester, “The mentoring family tree: how intergenerational concepts can inform and improve our mentoring relationships,” *AALL Spectr.*, vol. 19, no. 9, pp. 25–27, Jul. 2015.

Dewsbury, B., Brame, C.J., 2019. Inclusive teaching. *CBE—Life Sci. Educ.* 18 (2), fe2. Jun. <https://doi.org/10.1187/cbe.19-01-0021>. Jun.

Dickens, D.D., Chavez, E.L., 2018. Navigating the workplace: the costs and benefits of shifting identities at work among early career U.S. Black women. *Sex Roles J. Res.* 78, 760–774. <https://doi.org/10.1007/s11199-017-0844-x>.

Dickens, D., Jones, M., Hall, N., 2020. Being a token black female faculty member in physics: exploring research on gendered racism, identity shifting as a coping strategy, and inclusivity in physics. *Phys. Teach.* 58 (5), 335–337. May. <https://doi.org/10.1119/1.5145529>. May.

“Faculty Diversity n.d.” <https://www.facultydiversity.org/about-us> (accessed Mar. 23, 2023).

“Ford Foundation Fellowship Program n.d.” <https://sites.nationalacademies.org/PGA/FordFellowships/index.htm> (accessed Mar. 28, 2023).

French Jr., J.R.P., Raven, B., 1959. The bases of social power. In: *Studies in Social Power*. Univer. Michigan, Oxford, England, pp. 150–167.

Gottlieb, A.S., Travis, E.L., 2018. Rationale and models for career advancement sponsorship in academic medicine: the time is here; the time is now. *Acad. Med.* 93 (11), 1620. Nov. <https://doi.org/10.1097/ACM.0000000000002342>. Nov.

Healy, M., Richard, A., Kidia, K., 2022. How to reduce stigma and bias in clinical communication: a narrative review. *J. Gen. Intern. Med.* 37 (10), 2533–2540. Aug. <https://doi.org/10.1007/s11606-022-07609-y>. Aug.

Hirshfield, L.E., Joseph, T.D., 2012. ‘We need a woman, we need a black woman’: gender, race, and identity taxation in the academy. *Gend. Educ.* 24 (2), 213–227. Mar. <https://doi.org/10.1080/09540253.2011.606208>. Mar.

Houser, C., Lemmons, K., 2018. Implicit bias in letters of recommendation for an undergraduate research internship. *J. Furth. High. Educ.* 42 (5), 585–595. Jul. <https://doi.org/10.1080/0309877X.2017.1301410>.

“Inclusive STEM Teaching Project, n.d.” <https://www.inclusivestemteaching.org/> (accessed Mar. 23, 2023).

J. Kania, M. Kramer, and P. Senge, “The water of systems change,” Jun. 2018, Accessed: Dec. 29, 2022. [Online]. Available: <https://policycommons.net/artifacts/1847266/the-water-of-systems-change/2593518>.

“Leading Culture Change Through Professional Societies of Biology (BIO-LEAPS) (nsf22542) | NSF - National Science Foundation n.d.” <https://www.nsf.gov/pubs/2022/nsf22542/nsf22542.htm> (accessed Mar. 23, 2023).

Lerma, V., Hamilton, L.T., Nielsen, K., 2020. Racialized equity labor, university appropriation and student resistance. *Soc. Probl.* 67 (2), 286–303. May. <https://doi.org/10.1093/socpro/spz011>. May.

Li, W., Aste, T., Caccioli, F., Livan, G., 2019. Early coauthorship with top scientists predicts success in academic careers. *Nat. Commun.* 10 (1) <https://doi.org/10.1038/s41467-019-13130-4>. Art. no. 1, Nov.

Liénard, J.F., Achakulvisut, T., Acuna, D.E., David, S.V., 2018. Intellectual synthesis in mentorship determines success in academic careers. *Nat. Commun.* 9 (1) <https://doi.org/10.1038/s41467-018-07034-y>. Art. no. 1, Nov.

Y. Ma, S. Mukherjee, and B. Uzzi, “Mentorship and protégé success in STEM fields,” *Proc. Natl. Acad. Sci.*, vol. 117, no. 25, pp. 14077–14083, Jun. 2020, doi: <https://doi.org/10.1073/pnas.1915516117>.

R. D. Malmgren, J. M. Ottino, and L. A. N. Amaral, “The role of mentorship in protégé performance,” *Nature*, vol. 465, no. 7298, p. 622, Jun. 2010, doi: <https://doi.org/10.1038/nature09040>.

Massey, D.S., Brodmann, S., 2014. *Spheres of Influence: The Social Ecology of Racial and Class Inequality*. Russell Sage Foundation.

Massey, M. Duc Bo, Arif, S., Albury, C., Cluney, V.A., 2021. Ecology and evolutionary biology must elevate BIPOC scholars. *Ecol. Lett.* 24 (5), 913–919. <https://doi.org/10.1111/ele.13716>.

“Mentoring & Training | NIH Office of Intramural Research n.d.” <https://oir.nih.gov/sourcebook/mentoring-training> (accessed Dec. 29, 2022).

“From Rationality to Relationality: Ubuntu as an Ethical and Human Rights Framework for Artificial Intelligence Governance n.d.” <https://carcenter.hks.harvard.edu/publications/rationality-relationality-ubuntu-ethical-and-human-rights-framework-ai> (accessed Mar. 23, 2023).

Mitchell, K., 2018. Identifying white mediocrity and know-your-place aggression: a form of self-care. *Afr. Am. Rev.* 51 (4), 253–262. <https://doi.org/10.1353/afa.2018.0045>.

“MOSAIC Program, n.d.” *NIMHD*. <https://www.nimhd.nih.gov/programs/extramural-training-career-dev/mosaic-program.html> (accessed Mar. 28, 2023).

Murrar, S., Campbell, M.R., Brauer, M., 2020. Exposure to peers’ pro-diversity attitudes increases inclusion and reduces the achievement gap. *Nat. Hum. Behav.* 4 (9) <https://doi.org/10.1038/s41562-020-0899-5>. Art. no. 9, Sep.

“NRMN – National Research Mentoring Network n.d.” <https://nrmnet.net/> (accessed Mar. 23, 2023).

“ORI - The Office of Research Integrity | ORI - The Office of Research Integrity n.d.” <https://ori.hhs.gov/> (accessed Mar. 23, 2023).

“Postdoctoral Research Fellowships in Biology (PRFB), n.d.” *NSF - National Science Foundation*, Jul. 28, 2022. <https://beta.nsf.gov/funding/opportunities/postdoctoral-research-fellowships-biology-prfb> (accessed Mar. 28, 2023).

Raven, B.H., 2008. The bases of power and the power/interaction model of interpersonal influence. *Anal. Soc. Issues Public Policy* 8 (1), 1–22. <https://doi.org/10.1111/j.1530-2415.2008.00159.x>.

“Research, Ethics, and Compliance Training | CITI Program, n.d.” <https://about.citiprogram.org/>. <https://about.citiprogram.org/> (accessed Mar. 23, 2023).

Scharrón-del Río, M.R., Aja, A.A., 2020. Latinx: inclusive language as liberation praxis. *J. Latinx Psychol.* 8, 7–20. <https://doi.org/10.1037/lat0000140>.

Schell, C.J., et al., 2020. Recreating Wakanda by promoting black excellence in ecology and evolution. *Nat. Ecol. Evol.* 4 (10) <https://doi.org/10.1038/s41559-020-1266-7>. Art. no. 10, Oct.

Scherer, M.L., 2020. Unequally adrift: how social class and college context shape students’ mentorship experiences. *Sociol. Forum* 35 (3), 744–764. <https://doi.org/10.1111/socf.12626>.

V. Sekara, P. Deville, S. E. Ahnert, A.-L. Barabási, R. Sinatra, and S. Lehmann, “The chaperone effect in scientific publishing,” *Proc. Natl. Acad. Sci.*, vol. 115, no. 50, pp. 12603–12607, Dec. 2018, doi: <https://doi.org/10.1073/pnas.1800471115>.

Shelton, D.S., et al., 2021. Expanding the landscape of opportunity: professional societies support early-career researchers through community programming and peer coaching. *J. Comp. Psychol. Wash. DC* 1983 135 (4), 439–449. Nov. <https://doi.org/10.1037/com0000300>. Nov.

“STEM Education | Diverse Workforce | SACNAS n.d.” <https://www.sacnas.org> (accessed Jan. 06, 2023).

Stewart, D.-L., 2017. Language of appeasement. *Inside Higher Ed* 30. Mar. <https://www.insidehighered.com/views/2017/03/30/colleges-need-language-shift-not-one-you-think-essay>. Mar. (accessed Dec. 29, 2022).

Taylor, L., Rommelfanger, K.S., 2022. Mitigating white Western individualistic bias and creating more inclusive neuroscience. *Nat. Rev. Neurosci.* 23 (7) <https://doi.org/10.1038/s41583-022-00602-8>. Art. no. 7, Jul.

Thompson, H.J., et al., 2020. Use of individual development plans for nurse scientist training. *Nurs. Outlook* 68 (3), 284–292. <https://doi.org/10.1016/j.outlook.2020.01.001>.

S. User, n.d. “Home page,” ABRCMS <https://abrcms.org/> (accessed Jan. 06, 2023).

Volkow, N.D., Gordon, J.A., Koob, G.F., 2021. Choosing appropriate language to reduce the stigma around mental illness and substance use disorders. *Neuropsychopharmacology* 46 (13). <https://doi.org/10.1038/s41386-021-01069-4>. Art. no. 13, Dec.

Wallace, K.J., York, J.M., 2020. A systems change framework for evaluating academic equity and inclusion in an ecology and evolution graduate program. *Ecol. Evol.* 10 (20), 10922–10929. <https://doi.org/10.1002/ece3.6817>.

S. F. Way, A. C. Morgan, D. B. Larremore, and A. Clauset, "Productivity, prominence, and the effects of academic environment," *Proc. Natl. Acad. Sci.*, vol. 116, no. 22, pp. 10729–10733, May 2019, doi: <https://doi.org/10.1073/pnas.1817431116>.

"Welcome Initiative n.d.," *SBN2022-Atlanta*. <https://www.sbn-atlanta.org/welcome-initiative> (accessed Dec. 29, 2022).

Yoon, D.J., 2016. Power that builds others and power that breaks: positional power, personal power, and humility. *Acad. Manag. Proc.* 2016 (1), 14290. Jan. <https://doi.org/10.5465/ambpp.2016.14290abstract>. Jan.