



AMERICAN  
PSYCHOLOGICAL  
ASSOCIATION

April 7, 2021

Francis S. Collins, M.D., Ph.D.  
Director, National Institutes of Health

Re: Request for Information NOT-OD-21-066 (Fostering Innovative Research to Improve Mental Health Outcomes Among Minority and Health Disparities Populations)

Submitted electronically at: <https://rfi.grants.nih.gov/?s=601d737cb50a0000740038a2>

Dear Dr. Collins:

On behalf of the American Psychological Association (APA), the leading scientific and professional organization representing psychology in the United States, with more than 122,000 researchers, educators, clinicians, consultants and students as its members and affiliates, I am pleased to provide our comments in response to this Request for Information (RFI). The recommendations come from various divisions, boards, and committees across the organization whose psychologist members have expertise in mental health and underserved populations, including APA's Board of Scientific Affairs. Calling attention to the specific needs of children and youth, our letter has also been reviewed, added to and endorsed by the current President and Interim Executive Director of the Society for Research in Child Development (SRCD), a scientific organization of over 5,000 child development scientists that was created by the National Academy of Sciences in 1933.

We are grateful for the National Institutes of Health's (NIH) increased focus on health equity and expanding the diversity of the scientific workforce to ameliorate longstanding racial and ethnic disparities—including, but not limited to, disparities in grant funding—through initiatives such as UNITE.

In the words of our sister social science organizations in their response to this RFI, “the current public health crisis has illuminated the role that structural racism plays in health and developmental outcomes” (Population Association of America, 2021). Long-standing systemic health and social inequities put underserved communities at an increased risk of contracting COVID-19 and experiencing severe illness, which in turn multiplies the disease burden on these already marginalized populations (Louis-Jean et. al., 2020). As the public health and economic impact of the pandemic continues to unfold, APA's frontline psychologist members know first-hand how the pandemic's mental and behavioral health toll is disproportionately affecting communities of color. Losses experienced by adults in communities of color are having multigenerational

750 First Street, NE  
Washington, DC 20002-4242  
(202) 336-5800  
(202) 336-6123 TDD

Web: [www.apa.org](http://www.apa.org)

implications, with children and youth not only experiencing disrupted schooling and social contacts but also bearing a disproportionate burden in terms of grieving, housing instability and food insecurity. The fact that these disparities continue to exist demonstrates that implicit and explicit biases cannot simply be “trained out of” individuals, and further emphasizes the necessity to focus on the underlying systemic factors that limit opportunities and threaten the health and well-being of communities of color (Paluck & Green, 2009).

This RFI asks for input on how the NIH can leverage its resources and scientific knowledge to combat these systemic inequalities through its workforce and grantees to help the nation better understand the extent of these health disparities and provide evidence-based tools to combat them. This is a conversation that we highly commend as NIH’s effort to jumpstart targeted actions to “invert the lens”—to study racism operating at multiple levels in society by examining its roots in social and health inequities, as well as examining NIH’s dual roles as a workplace and influencer of scientific institutions and culture to affect needed change. Only by taking this approach can NIH achieve better outcomes for all patients from all communities. Efforts to eradicate structural racism and promote health equity are a long-term effort and we hope the NIH will commit to sustained efforts to change the status quo.

*I. We urge NIH to clarify the term “biomedical” to consistently include contextual markers such as “behavioral,” “social,” or “cultural.”*

As an initial step, we urge NIH and its constituent institutes to consider expanding and clarifying their reliance on the term “biomedical” to consistently include contextual markers such as “behavioral,” “social,” or “cultural” in their study of the topics covered by this RFI, as well as how they describe the research they fund. While “biomedicine” and “biomedical” research serves a critical function in understanding how biological processes are affected by multiple contextual variables, the standalone term runs the risk of inviting a reductionist view of science that excludes the critically important contributions of race, culture, and other environmental inputs that are often transactionally linked to biology and biomedicine. The critical role of considering social and behavioral factors in health has been underscored by the need to understand acceptance and adherence to such practices as vaccinations, wearing of masks, and social distancing not only in public and in workspaces, but also in schools. Disparities in social and behavioral health are especially apparent in the increasing rates of suicide amongst Black youth (Congressional Black Caucus, 2019).

Broadening this research label invites a broader inclusion of the experiences of scholars from diverse backgrounds, lowering barriers to attract and retain a diverse behavioral health workforce. Additionally, some guidelines from NIH about the use of the terms “race” and “racism” in scientific research would be useful to understand the nature of the issue under review. “Race” is a social and historical construct that often refers to groups of individuals with diverse genetic and environmental variations as a monolithic whole, and yet some research still falsely assumes fundamental biological differences between racial groups.

*II. Rather than assuming uniform predispositions to certain negative health impacts, we suggest a focus on variation in the effects of racism and distinguishing among internalized, interpersonal, institutional, and structural racism.*

Rather than use “race” as a proxy for assuming that broad swaths of the population are uniformly predisposed to certain negative health impacts, we suggest instead focusing more on examining the *effect* of racism and structural inequalities on Black, Indigenous, and People of Color (BIPOC) communities. We know, for example, that some BIPOC communities show evidence of genetic “weathering” over time (Geronimus et. al., 2006), and that trauma associated with racism can cause epigenetic changes that can be passed along to succeeding generations (Goosby & Heidbrink, 2013). To better understand this health phenomenon, more social and behavioral science is essential to understand the lived experiences of BIPOC populations, how such experiences affect and are affected by individuals and communities, and how best to intervene.

Ample psychological research supports the notion that multiple forms of racism—internalized, interpersonal, institutional, and structural—act in an interrelated manner to undermine equal access and outcomes in the scientific fields (Avery & Ruggs, 2020). *Internalized* racism refers to the acceptance by diverse racial populations of the negative societal beliefs and stereotypes about themselves—including negative stereotypes and beliefs about complexion and color that can lead to the perception of themselves as devalued, worthless, and powerless (Jones, 2001). *Interpersonal* racism occurs when individuals from socially and politically dominant racial groups behave in ways that diminish and harm people who belong to other racial groups (Yearby et. al., 2020; American Psychological Association, 2019). *Institutional* racism results from policies, practices, and procedures of institutions—such as school, health care, law enforcement, and criminal justice systems—that marginalize diverse racial groups (American Psychological Association, 2019; Kovera, 2019; Yearby et. al., 2020). *Structural* racism results from laws, policies, and practices, as well as the White supremacist ideologies that bolster them, that produce cumulative, durable, and race-based inequalities, which includes the failure to correct previous laws and practices that were explicitly racist (Yearby et. al., 2020). APA urges consideration of recommendations that will aid NIH in its detection of and response to each of these forms of racism.

*III. Further steps are needed regarding NIH as a funding source of research with respect to workforce diversity and as an overall advocate for racial equity in NIH-funded research.*

Despite NIH’s commendable efforts to better understand racism within or concerning the research workforce, the data concerning distribution of NIH grants to primary investigators of color continues to undercut these positive efforts. A comprehensive review of R01 grant awards in 2011 showed that White Principal Investigators (PIs) seeking independent research grants were nearly twice as likely to be funded as Black PIs (Ginther et. al., 2011). Despite condemnation of this phenomenon from NIH leadership (Corbyn, 2011) as well as recent progress for K grant awards (National Institutes of Health, n.d.), a follow-up study conducted eight years later showed that little changed for R01 grants and that applications with White PIs were still nearly twice as likely to be funded than applications with Black PIs (Hoppe et. al., 2009).

The experience of Asian-American and Pacific Islander PIs raises similar issues. Long subsumed even by NIH under a broad category of “other communities of color,” Asian-Americans are among the fastest-growing minority communities in the United States but continue to face harassment and “perpetual foreigner” stereotypes—a xenophobic sentiment exacerbated by the COVID-19 pandemic. Recent studies of NIH research support found that only a very small fraction of funding—only 0.17% of all NIH funding over the past quarter century—was awarded to support research concerning Asian-American communities (Doan et. al., 2019). We implore you to add explicit reference to the study of Asian Americans and Pacific Islanders as a priority for NIH, alongside priorities for other BIPOC groups. It reflects poorly on NIH that such disparities continue to exist.

The NIH, as a key source of funding for critical research, can do more to directly address the persistent problem. A number of specific recommendations, none requiring major policy changes, have been advanced by other scientific organizations and scientists (Stevens et. al., 2021; Taffe & Gilpin, 2021; American Society for Cell Biology, 2021). They include, but are not limited to, (1) inclusion of an NIH expert trained in racism on all review panels; (2) inclusion of more Black PIs on study sections; (3) encouragement and empowerment of program officers and program directors (POs/PDs) to reevaluate grants of Black PIs with initial scores above the funding pay-line and bringing these grants forward to council to funding; and (4) creating efficient mechanisms for reporting racist or biased conduct during and after review panels. Additionally, in response to the 2011 study referenced above, SRCD is creating a database of developmental scientists from diverse backgrounds interested in participating in reviewing proposals for federal agencies and foundations. With this information, the reviewing experience of developmental scientists from diverse backgrounds will increase and their perspectives and expertise will be brought to bear during reviews.

APA supports these efforts and recommendations. Further, we believe that by adopting practices and recommendations like these, NIH will set the standard for other sources of funding. These highly disparate outcomes deserve both more immediate action and a close look at processes that give rise to them, with particular attention to factors that are under NIH’s control such as the processes and procedures regulating grant review and funding. Further, we recommend that NIH create an accountability plan that builds community and public trust through regular assessment and reporting on their progress to remedy the funding gap and other obstacles to equity.

NIH panels have a reputation for being less receptive to less traditional lines of research, such as topics that consider racial and ethnic disparities in a broader context. However, APA regularly collaborates with a number of Ethnic Minority Psychology Associations (EMPAs)—including but not limited to the Association of Black Psychologists, the Asian American Psychological Association, and the National Latino/a Psychological Association. APA also counts many specialists in applied psychology amongst its members; these include industrial-organizational (I/O) psychologists who, as experts in the science and practice of workplace behavior, can provide critical input into creating equity in NIH-funded research. APA and its members welcome an

opportunity to work with NIH leadership on strategies informed by psychological science to remedy these disparities.

*IV. Focus on solutions to overcome the lack of diversity on scientific review panels and its long-term implications, as well as the factors giving rise to underlying disparities in the scientific workforce.*

A lack of diversity in NIH Center for Scientific Review panels contributes to the disparities in grant funding. As of 2020, only 4.6% of CSR reviewers identified as Latino/a, only 2.5% as Black or African-American, and only 3.2% as biracial or multiracial (NIH Center for Scientific Review, n.d.). While APA acknowledges and expresses appreciation for the efforts of past leaders like Richard Nakamura to help scientists become familiar with the review process, the traditional NIH criteria for becoming a grant reviewer generally requires past success in obtaining a grant, which only serves to compound these disparities. A more diverse panel will make a significant impact on understanding methods and needs that advance research concerning diverse populations. Additionally, more expertise on structural racism is needed on these panels, and better instructions, guidelines, and processes for grant review are also necessary to reduce the chances of racist biases that influence ratings. For example, APA is concerned about recent proposals to blindly select PIs during the first stage of review, which would only exacerbate the current disparities.

These funding disparities have long-term implications for the career of aspiring scientists. Funding of research is “career currency” for scientists across different fields, as promotion and tenure committees frequently use research grants to assess whether a candidate can sustain a research program over the long-term (Stevens et. al., 2021). The less successful a candidate is at obtaining these grants, the more likely he or she will either be denied tenure or “burn out” and leave academia altogether. We urge the NIH Center for Scientific Review to work with associations like APA and SRCDC in facilitating the inclusion of researchers of color as reviewers.

Long-term mentoring programs and initiatives are effective in increasing and retaining the number of Black/African Americans and Latinos in STEM and behavioral science careers, as evidenced by programs such as the NIMH Minority Fellowship Program. Unfortunately, racial and ethnic disparities often begin much earlier in the lives of early-career scientists than the point where they apply for graduate programs or research grants. Structural inequities in the research workforce often begin with residential segregation and resulting deep inequities in primary and secondary education, as BIPOC children frequently reside in areas without access to the quality educational opportunities necessary for STEM careers, such as access to AP classes in high school, and lower per-pupil funding. Retention is a particularly important issue for career scientists, and there is ample evidence demonstrating earlier intervention is associated with better long-term outcomes (Estrada et. al., 2018; Hrabowski & Henderson, 2019; McGee et. al., 2012; Patel et. al., 2015; Risner et. al., 2020; Toven-Lindsey, 2017). Support from the NIH in terms of sustainable funding, infrastructure, and partnerships, as well as identification of more senior mentors for BIPOC researchers, is imperative to attracting a more diverse pool of scholars.

NIH Research Training Grants are another important tool to help address these disparities to prepare individuals for careers in behavioral health clinical research. However, the program is vastly underfunded, and the program overall adopts a rigid view of what activities can be covered by such grants and the criteria for those involved in reviewing grant applications. More flexibility on these grants, more cross-institution applications, and more expertise on application review panels on the topic of diversity, would go a long way towards helping these programs reach their fullest potential.

Diversity Supplement Initiative grants also provide more opportunities for post-doctoral and faculty supplements across all NIH institutes; however, as with the Training Grants, these programs are disconnected across the NIH's various institutes and suffer from a narrow scope and insufficient funding. Many psychology departments currently fund their own outreach and educational efforts to underserved communities about how to apply for doctoral-level scientific programs. However, current funding limitations mean that these departments are only able to assist approximately 30 prospective students at a time across the nation. NIH has an opportunity to bolster these efforts by offering supplemental funding. APA supports the NIH continuing to earmark funds for training programs in smaller institutions that serve larger numbers of underrepresented racial and ethnic student groups.

The R15 funding mechanism (Academic Research Enhancement Award for Undergraduate-Focused Institutions) should be continued and expanded to allow for additional awardees per year as well as a specific boost to institutions that primarily serve underrepresented students. Should NIH look to the private sector for effective models of supporting undergraduate students, the Social-Personality Undergraduate Research (SPUR) Program created by our sister organization the Society for Personality and Social Psychology (SPSP) expands opportunities for doctoral training and mentorship to underserved undergraduate students through a series of professional development seminars and collaboration with mentors on an independent project.

*V. Focus efforts on barriers inhibiting the retention and advancement of scholars from BIPOC communities.*

The discipline of educational psychology highlights personal and contextual factors that create obstacles to recruitment, training, promotion, retention, and overall educational and career progress of professionals from underrepresented groups (Nasir et. al., 2016). For example, there are a number of ways that social-cultural, contextual, and personal factors interplay in hindering training and employment opportunities by facilitating a debilitating mindset that may include a low sense of belonging (Nasir et. al., 2016), a low sense of competence (Marsh et. al, 2017; Usher, 2016), a low sense of personal and collective meaning (Meece et. al., 2006; Wigfield et. al. 2017), or a high sense of personal and collective cost (Barron & Hulleman, 2015).

To help combat this phenomenon, educational psychologists developed conceptual perspectives and a variety of practical interventions (Flum & Kaplan, 2006; Schachter & Rich, 2011). These range from interventions that shift mindsets and enhance personal resources to intensive contextual

interventions that modify policies and practices in ways that support an individual’s agency, sense of competence, and sense of belonging (Oyserman, 2015; Reeve, 2016). These approaches can be coupled with concrete actions, such as including people of color on selection committees, that reflect a strong organizational commitment to values of equity and diversity and to supporting people of color.

Although long-overdue attention is being paid to the *recruitment* of scholars of color (Griffin, 2016), much less is focused on *retention* of these scholars. The additional administrative workload often expected of faculty representing communities of color compounds the impact of the funding and review panel disparities described above. Faculty from underrepresented communities report spending more time on “school service” activities—including but not limited to student advising, faculty committee representation, and community service—than faculty from non-underrepresented communities (Hare, 2018). Universities may require diverse representation on various faculty panels, which given the existing underrepresentation of racial and ethnic minorities in faculty overall, is a burden that tends to fall on the same individuals over and over again. These additional burdens are associated with additional stress, higher rates of burnout, and lower job satisfaction.

Moreover, these additional burdens also take valuable time away from grant-writing, research and publication efforts that are key to career advancement. Scholars from underrepresented communities often find themselves in a convoluted career path, where they start in an accelerated recruitment pipeline that leads them to recruitment into faculty roles, only to find that they have fewer opportunities for training, research, and publication, which makes them disadvantaged for higher-level or tenured faculty appointments. APA’s experts in applied psychology, such as I/O psychologists, can also offer research and practical expertise in the areas of training effectiveness, mentorship and career guidance, workforce readiness, and other cultural factors that support BIPOC scholars.

Additionally, some NIH Program Announcements contain language that perpetuates racial disparities in applicants, awardees, and training opportunities for scientists from underrepresented racial and ethnic groups. These include announcements requiring administration by research institutions with substantial existing NIH funding. However, these institutions are predominantly institutions with limited outreach to and inclusion of scientists from BIPOC communities and other underrepresented groups. APA supports requiring major research institutions to partner with low-resourced institutions that primarily serve underrepresented groups in the administration of such funding. Additionally, psychological science can be leveraged to identify biases in the review process as well as determine the effectiveness of interventions in the peer review process, such as blinding of applications and standardizing review processes.

*VI. Continue and expand NIH efforts and programs that address institutional barriers to advancement of BIPOC scholars and support community partnerships necessary for the development of health equity solutions.*

APA applauds the establishment of the NIH Office of Equity, Diversity and Inclusion, and recognizes that NIH is taking proactive steps to implement the Biden's Administration's racial justice executive order (Exec. Order No. 13985, 2021). APA urges NIH to continue its existing racial justice initiatives within the agency's operation. Such federal leadership and comprehensive approaches to racial justice are essential to challenging racism at the institutional level, as well as to reshaping longstanding institutional policies and practices (Smedley, 2019).

The NIH's Bridges to the Doctorate program offers dedicated funding for post-baccalaureate training that enables a faster transition to post-doctoral research programs. This is an important means of boosting the research workforce overall and the psychology workforce specifically, including by people from BIPOC communities. APA urges NIH to consider expanding this program and allow more innovative applications that apply across training levels and universities, as well as address the needs of not only the individual applicant but the broader community as well.

Building a robust and effective network of community partnerships is essential to the development of health equity solutions (National Academies of Sciences, 2017). Collaboration with an array of public and private community partners from multiple sectors—including public health agencies, faith-based organizations, and local businesses—creates a shared vision amongst diverse stakeholders, increases the project's capacity and value, and creates multiple pathways for championing and implementing such solutions. Although NIH funding is theoretically available to support such partnerships, in practice the grant periods are usually too short and there is often a lack of understanding amongst the review panel as to the nuances of these partnerships. To augment NIH's support for these partnerships, APA supports the creation of a new funding mechanism to support them; additionally, training modules could be developed for grant reviewers about diversity science and community-based partnerships.

*VII. Consider adoption of a cohort model of hiring, examine systemic biases in the collection of data, and develop culturally sensitive research training for NIH leadership.*

NIH recently announced an ambitious and innovative Funding Opportunity Announcement (FOA) through the Common Fund (National Institutes of Health, 2020). This FOA is to support best practices for faculty hiring in medical schools and other STEM fields that will support the recruitment and retention of a diverse scientific workforce. The NIH leaders who shepherded this FOA to completion focused on ways to incentivize a cohort model of hiring that would provide additional support for new faculty. The monetary support provided by NIH via these grant funds may also provide an incentive for the recipient institutions to adapt to the changes that may be required for a more diverse workforce to take root.

Through this initiative, we understand that NIH is planning to collect data to determine how well the component elements described above will work, together and separately, to help transform the workplaces that house and support NIH grantees. Even though aspects of the FOA may be considered experimental, we assume it is part of the thinking of NIH leaders to use some combination of those elements within its own workforce. APA encourages NIH to consider at

least experimentally adopting the cohort hiring model and the other elements for its own workforce that it is now encouraging grantee institutions to adopt. In so doing, NIH may lead the federal workforce in strengthening its human capital with more diversity and allowing a more inclusive workplace culture to take hold.

Additionally, research across many fields—including behavioral science—can be susceptible to a systemic bias known as “convenience sampling” (Elfil & Negida, 2017). An investigator in a particular study may examine data from a sample population—such as patients from a nearby hospital or students at the investigator’s educational institution—that is easily accessible to the investigator. This presents an especially difficult problem in diversity-based research, because the chosen sample of racial and ethnic minorities is often not representative of the community at large, which tends to understate the experiences of underserved communities.

Investigator training on methods to “go deeper” within underserved communities would be an invaluable tool to combat this bias. Such training would, among other features, provide information to investigators on how to clearly define their population of interest, rather than just assume it from the convenience sample, as well as how to sample representatively from that population and provide statistical information on how well the sampling aligns with the population as defined. Training would also help investigators understand the populations they are studying and avoid applying a deficits-based lens to the research or conducting “colorblind research” that does not attend to systemic oppression and its consequences for BIPOC populations. Currently, NIH asks for the inclusion of diverse samples but there is not attention to the responsibilities of investigators in framing these studies. SRCD recently conducted a webinar that can help NIH apply an antiracist lens to research (Society for Research in Child Development, 2020).

APA also encourages NIH to provide culturally-sensitive research training for the leaders at NIH—training that includes didactic methods wherein participants visit Native American, Black, Hispanic and other minority communities plagued with health disparities and health care inequities and directly engage with researchers from these minority groups. Culturally *sensitive* training differs from cultural *competence* training in that the former involves conveying cultural competence in ways that enables community members and researchers to feel trusting of, comfortable with, and respected by NIH biomedical and other research leaders (Tucker et. al., 2017).

*VIII. Address the significant research gaps and need for evidence-based interventions identified below.*

A population health approach offers a proactive way to address the mental health of individuals and communities because it recognizes that our mental health exists on a continuum. It emphasizes the need to meet people wherever they are on that continuum, rather than passively waiting for them to reach a crisis before some kind of intervention occurs. The COVID-19 pandemic underscored the urgent need for this kind of early intervention approach, as the pre-existing lack of treatment resources and the significant increase in need due to the public health and economic fallout of the pandemic overwhelmed mental health and substance use treatment systems in many

areas, particularly amongst BIPOC communities. Urgent attention to the mental health needs of children and youth of color is also needed, given the disproportionate burdens of the pandemic on them and their families.

An equitable response requires evidence-based approaches to not just turning the page on the current pandemic but also planning for future crises of this nature. Research on emergency responses to public health crises is needed, as well as guidance on how to build and deploy emergency response teams to effectively deliver information and resources to underserved communities in a timely manner. These emergency response teams must be embedded within underserved communities, as well as in relevant environments such as work sites, healthcare facilities, schools, and community centers. Risk communication and messaging in the context of emergencies is another area that would benefit from further research. Such work could lead to more effective strategies for message framing that would be especially useful when pursued in collaboration with media sources and channels that are preferred by underserved communities.

Research on how to recruit and retain members of underserved communities in science careers, particularly those from difficult-to-reach populations, would also be useful to identify factors that inhibit or facilitate inclusion of marginalized populations in health efforts at all stages of prevention and treatment. Given the value of online resources as an effective platform for assessment and intervention, it may be beneficial to study ways to increase access to technology within these communities, such as expanding access to smartphones or broadband Internet connectivity and to simultaneously increase capacity and confidence to use these digital resources.

There is a dire need to develop culturally and contextually sensitive assessment measures that are supported by evidence of their psychometric reliability, validity, and fairness. These measures would include the consideration of non-traditional symptom presentation and mental health distress that extend beyond the specific framework of the Diagnostic and Statistical Manual (DSM-5). These efforts would also consider various cultures' concepts of distress and aim to capture the multiple ways in which trauma-related distress stemming from constructs of oppression such as racism and xenophobia can be manifested within those cultures, including among communities of non-Western backgrounds. They might also aim to study the aspects of culture and context that can influence mental health conditions and treatment outcomes for children and youth as well as adults. Given the need for centering systems of oppression and how they have persisted (Metzl & Roberts, 2014; Byrd et. al, 2021), issues of structural racism must be addressed broadly—by, for example, eliminating racist stimuli in testing materials.

Given that half of those who will develop mental health disorders show symptoms by 14 years of age (Kessler et. al., 2005), it is impossible to overstate the importance of early intervention in mental health to avert worse outcomes and higher costs downstream. The same is true of early intervention to address racism and discrimination, and we are eager to see research that takes a lifespan developmental approach, including work that focuses on early development and the early impacts of social determinants of health, inequality, and racism. Interventions could operate within a variety of contexts, including but not limited to pregnancy, parenting, education, neighborhood

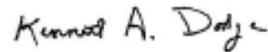
communities, and employment. Ideally, research would follow the effects of such interventions longitudinally throughout much of the person's lifetime. At the same time, there is an urgent need for NIH to fund research that moves beyond the documentation of disparities and inequities in mental health and healthcare to research that tests multi-level and multi-domain interventions that address structural racism and its effects on health.

Thank you again for the opportunity to share our ideas. APA would welcome an opportunity to work with NIH to further develop and implement these recommendations. Our colleagues at SRCD who have reviewed and endorsed this letter would also welcome the opportunity for follow-up discussions. If you have any questions or would like to further discuss any of these recommendations, from APA please contact myself (MPrinstein@apa.org) or Deputy Chief of Scientific Affairs Pat Kobor (pkobor@apa.org), or from SRCD, current President Kenneth Dodge (dodge@duke.edu) and Interim Executive Director Martha Zaslow (mzaslow@srcd.org).

Sincerely,



Mitch Prinstein, Ph.D.  
Chief Science Officer  
American Psychological Association



Kenneth A. Dodge, Ph.D.  
President  
Society for Research in Child Development

## References

- American Psychological Association (APA) Task Force on Race and Ethnicity Guidelines in Psychology. (2019). *Race and ethnicity guidelines in psychology: Promoting responsiveness and equity*. <http://www.apa.org/about/policy/race-and-ethnicity-in-psychology.pdf>.
- American Society for Cell Biology. (Feb. 24, 2021). Ending racial disparities in NIH funding. <https://www.ascb.org/science-policy/ending-racial-disparities-in-nih-funding/>.
- Avery, D.R. & Ruggs, E.N. (2020). Confronting the uncomfortable reality of workplace discrimination. *MIT Sloan Management Review*. <https://sloanreview.mit.edu/article/confronting-the-uncomfortable-reality-of-workplace-discrimination/>.
- Barron, K.E., & Hulleman, C.S. (2015). The expectancy-value-cost model of motivation. In J. D. Wright (Eds.), *International encyclopedia of the social and behavioral sciences* (2nd Ed.). Oxford, UK: Elsevier.
- Byrd, D.A., Rivera Mindt, M.M., Clark, U. S., Clarke, Y., Thames, A. D., Gammada, E. Z., & Manly, J. J. (2021). Creating an antiracist psychology by addressing professional complicity in psychological assessment. *Psychological Assessment*, 33(3), 279–285. <https://doi.org/10.1037/pas0000993>.
- Congressional Black Caucus Emergency Taskforce on Black Youth Suicide and Mental Health. (December 2019). *Ring the alarm: The crisis of black youth suicide in America*. [https://watsoncoleman.house.gov/uploadedfiles/full\\_taskforce\\_report.pdf](https://watsoncoleman.house.gov/uploadedfiles/full_taskforce_report.pdf).
- Corbyn, Z. (2011) Black applicants less likely to win NIH grants. *Nature*, 333:485. <https://doi.org/10.1038/news.2011.485>.
- Đoàn, L.N., Takata, Y., Sakuma, K. K., & Irvin, V. L. (2019). Trends in clinical research including Asian American, Native Hawaiian, and Pacific Islander participants funded by the US National Institutes of Health, 1992 to 2018. *JAMA Network Open*, 2(7):e197432. doi:10.1001/jamanetworkopen.2019.7432.
- Elfil, M., & Negida, A. (2017). Sampling methods in Clinical Research: an Educational Review. *Emergency (Tehran, Iran)*, 5(1), e52.
- Estrada, M., Hernandez, P. R., & Schultz, P. W. (2018). A Longitudinal Study of How Quality Mentorship and Research Experience Integrate Underrepresented Minorities into STEM Careers. *CBE life sciences education*, 17(1), ar9. <https://doi.org/10.1187/cbe.17-04-0066>
- Exec. Order No. 13985, 86 Fed. Reg. 7009 (Jan. 20, 2021).
- Flum, H., & Kaplan, A. (2006). Exploratory orientation as an educational goal. *Educational Psychologist*, 41(2), 99–110.
- Geronimus, A.T., Hicken, M., Keene, D., Bound, J. (2006). "Weathering" and age patterns of allostatic load scores among blacks and whites in the United States. *Am J Public Health*, 96(5):826-833. doi:10.2105/AJPH.2004.060749
- Ginther, D.K., Schaffer, W.T., Schnell, J., Masimore, B., Liu, F., Haak, L.L., Kington, R. (2011) Race, ethnicity, and NIH research awards. *Science*, 333:1015–1019. <https://doi.org/10.1126/science.1196783>
- Goosby, B. J., & Heidbrink, C. (2013). Transgenerational Consequences of Racial Discrimination for African American Health. *Sociology Compass*, 7(8), 630–643. <https://doi.org/10.1111/soc4.12054>

Griffin, K. (February 10, 2016). Reconsidering the pipeline problem: Increasing faculty diversity, *Higher Education Today*, <https://www.higheredtoday.org/2016/02/10/reconsidering-the-pipeline-problem-increasing-faculty-diversity/>.

Hare, H. (2018). Service work of underrepresented faculty (ProQuest ID: Hare\_ucla\_0031D\_17194) [Doctoral Dissertation, University of California at Los Angeles]. Retrieved from <https://escholarship.org/uc/item/6pr0b5jz>.

Hoppe, T.A., Litovitz, A., Willis, K.A., Meseroll R.A., Perkins M.J., Hutchins B.I., Davis, A.F., Lauer, M.S., Valantine, H.A., Anderson, J.M., Santangelo, G.M. (2019). Topic choice contributes to the lower rate of NIH awards to African-American/Black scientists. *Science Advances*,5(10). <https://doi.org/10.1126/sciadv.aaw7238>.

Hrabowski, F. A. & Henderson, P. H. (2019). How to actually promote diversity in STEM. *The Atlantic*. <https://www.theatlantic.com/ideas/archive/2019/11/how-umbc-got-minority-students-stick-stem/602635/>.

Jones, C. P. (2001). "Race," racism, and the practice of epidemiology. *American Journal of Epidemiology*, 154(4), 299–304.

Kessler, R. C., Chiu, W. T., Demler, O., Merikangas, K. R., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of general psychiatry*, 62(6), 617–627. <https://doi.org/10.1001/archpsyc.62.6.617>.

Kovera, M.B. (2019). Racial disparities in the criminal justice system: Prevalence, causes, and a search for solutions. *Journal of Social Issues*, 75, 1139-1164. <https://doi.org/10.1111/josi.12355>.

Louis-Jean, J., Cenat, K., Njoku, C. V., Angelo, J., & Sanon, D. (2020). Coronavirus (COVID-19) and racial disparities: A perspective analysis. *Journal of Racial and Ethnic Health Disparities*, 7(6), 1039–1045. <https://doi.org/10.1007/s40615-020-00879-4>

Marsh, H. W., Martin, A. J., Yeung, A. S., & Craven, R. G. (2017). Competence self-perceptions. In A. J. Elliot, C. S. Dweck, & D. Yeager (Eds.), *Handbook of Competence and Motivation* (2nd ed., pp. 85–115). New York, NY: Guilford Press.

McGee, R., Jr, Saran, S., & Krulwich, T. A. (2012). Diversity in the biomedical research workforce: developing talent. *The Mount Sinai Journal of Medicine, New York*, 79(3), 397–411. <https://doi.org/10.1002/msj.21310>.

Meece, J. L., Anderman, E. M., & Anderman, L. H. (2006). Classroom goal structure, student motivation, and academic achievement. *Annual Review of Psychology*, 57, 487-503.

Metzl, JM & Roberts, DE. (2014). Structural competency meets structural racism: Race, politics, and the structure of medical knowledge. *Virtual Mentor*, 16(9):674-690. doi: 10.1001/virtualmentor.2014.16.9.spec1-1409.

Nasir, N. S., Rowley, S. J., & Perez, W. (2016). Culture, racial/ethnic, and linguistic diversity, and identity. In L. Corno & E. Anderman (Eds.), *Handbook of Educational Psychology* (3rd Ed.) (pp. 186-198). New York, NY: Routledge.

National Academies of Sciences, Engineering, and Medicine. (2017). Partners in promoting health equity in communities. <https://www.ncbi.nlm.nih.gov/books/NBK425859/>.

National Institutes of Health. *Racial Disparities in NIH Funding*. <https://diversity.nih.gov/building-evidence/racial-disparities-nih-funding>.

National Institutes of Health. (July 29, 2020). *Notice of Intent to Publish a Funding Opportunity Announcement for NIH Faculty Institutional Recruitment for Sustainable Transformation (FIRST) Program*. <https://grants.nih.gov/grants/guide/notice-files/NOT-RM-20-023.html>.

NIH Center for Scientific Review. *CSR Data and Evaluations*. <https://public.csr.nih.gov/AboutCSR/Evaluations>.

Oyserman, D. (2015). Identity-based motivation. In R. Scott & S. Kosslyn (Eds.), *Emerging Trends in the Behavioral and Social Sciences* (pp. 1–11). Hoboken, NJ.

Paluck, E. & Green, D. (2009). Prejudice reduction: What works? A review and assessment of research and practice. *Annual Review of Psychology*, Vol. 60:339-367, <https://doi.org/10.1146/annurev.psych.60.110707.163607>.

Patel, S.I., Rodríguez, P. & Gonzales, R.J. (2015). The implementation of an innovative high school mentoring program designed to enhance diversity and provide a pathway for future careers in healthcare related fields. *Journal of Racial and Ethnic Health Disparities*, 2(3). 395–402.

Population Association of America and Association of Population Centers. (March 31, 2021). *Comments on NIH RFI on Racial Equity, Diversity, and Inclusion in the Biomedical Research Workforce*. <https://www.populationassociation.org/viewdocument/comments-on-nih-rfi-on-racial-equit>

Reeve, J. (2016). Autonomy-supportive teaching: What it is, how to do it. In J. C. K. Wang, W. C. Liu, & R. M. Ryan (Eds.), *Motivation in Educational Research: Translating Theory into Classroom Practice* (pp. 129–152). Springer.

Risner, L.E., Morin, X.K., Erenrich, E.S., Clifford, P.S., Franke, J., & Hurley I. (2020). Leveraging a collaborative consortium model of mentee/mentor training to foster career progression of underrepresented postdoctoral researchers and promote institutional diversity and inclusion. *PLoS ONE*, 15(9): e0238518. <https://doi.org/10.1371/journal.pone.0238518>.

Schachter, E. P., & Rich, Y. (2011). Identity education: A conceptual framework for educational researchers and practitioners. *Educational Psychologist*, 46, 222-238.

Smedley, B. D. (2019). Multilevel interventions to undo the health consequences of racism: The need for comprehensive approaches. *Cultural Diversity and Ethnic Minority Psychology*, 25(1), 123–125. <https://doi.org/10.1037/cdp0000263>.

Society for Research in Child Development. (July 9, 2020). *Becoming an Antiracist Society: Setting a Developmental Research Agenda*. [https://www.youtube.com/watch?v=X\\_IGmFVkJShw](https://www.youtube.com/watch?v=X_IGmFVkJShw).

Stevens, K.R. & Masters, K.S. (2021). Fund Black scientists. *Cell*, 184(3), 561-565. <https://doi.org/10.1016/j.cell.2021.01.011>

Taffe, M. & Gilpin, N. (2021). Equity, diversity and inclusion: Racial inequity in grant funding from the US National Institutes of Health, *eLife*, 10:e65697. DOI: 10.7554/eLife.65697.

Toven-Lindsey, B., Levis-Fitzgerald, M., Barber, P. H., & Hasson, T. (2017). Increasing persistence in undergraduate science majors: A model for institutional support of underrepresented students. *CBE—Life Sciences Education*, 14(2), ar12. <https://doi.org/10.1187/cbe.14-05-0082>.

Tucker, C. M., Williams, J., Roncoroni, J. L., & Heesacker, M. (2017). A socially just leadership approach to community-partnered research for reducing health disparities. *The Counseling Psychologist*, 45(6), 781-809.

Usher, E. L. (2016). Personal capability beliefs. In L. Corno & E. Anderman (Eds.), *Handbook of Educational Psychology* (3rd ed.), pp. 146– 159). New York, NY: Taylor and Francis.

Wigfield, A., Rosenzweig, E. Q., & Eccles, J. (2017). Achievement values: Interactions, interventions, and future directions. In A. Elliot, C. Dweck, & D. Yeager (Eds.), *Handbook of Competence and Motivation: Theory and Application* (2nd Ed.). New York, NY: Guildford Press.

Yearby, R., Lewis, C. N., Gilbert, K. L., & Banks, K. (2020). *Racism is a Public Health Crisis: Here's How to Respond*. <https://www.filesforprogress.org/memos/racism-is-a-public-health-crisis.pdf>.