AcademyHealth

April 9, 2021

Francis S. Collins, M.D., Ph.D.
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

RE: Response to RFI Inviting Comments and Suggestions to Advance and Strengthen Racial Equity, Diversity, and Inclusion in the Biomedical Research Workforce and Advance Health Disparities and Health Equity Research

Dear Dr. Collins:

AcademyHealth welcomes the opportunity to provide input to the National Institutes of Health (NIH) on suggestions to advance and strengthen racial and ethnic diversity, equity, and inclusion (DEI) in the biomedical research workforce and advance health disparities and equity research as raised in the Request for Information (RFI) NOT-OD-21-066. We are the professional home of health services researchers, policy experts, and practitioners, and as the leading organization for a field devoted to improving health outcomes for all, we are devoted to directly addressing systemic racism and promoting health equity. Our strategic plan explicitly names DEI as a core value of our organization and we agree that all facets of the biomedical research workforce must be considered to improve the nation's inadequate progress on achieving real diversity and inclusion.

AcademyHealth made a public commitment to equity, diversity, and inclusion in its 2015 report on The Future of Diversity and Inclusion in Health Services and Policy Research. We were already supporting a program of fellowships for under-represented researchers and we began to build a community of practice among them through mentoring and networking opportunities and special sessions at our Annual Research Meeting. At the same time, we began to diversify our programming to include more people of color in leadership roles and public presentations and broadened our conference content to include a greater emphasis on racial disparities and root causes of disparities related to social determinants of health. We also began tracking participation in our events to ensure we were giving under-represented members of communities of color a voice and an opportunity to engage on issues of equity, inclusion, workplace discrimination, and bias.

After five years of community-building and promoting diversity, AcademyHealth began to recognize the limitations of supporting people of color to adapt to the mainstream, largely white, institutions where they worked. We saw first-hand the struggles of junior faculty and their mentors to change their institutional cultures to acknowledge and value their areas of interest in research and practice, and to promote them at the same rate as white faculty. We observed a number of health services researchers from under-represented backgrounds who were leaving academia to explore other, more inclusive work environments. We became increasingly aware that implicit biases and embedded racism, also known as structural racism, were ingrained in the culture of the US and affected all of our institutions, and that it was our responsibility as a professional organization and thought leader in the field to proactively address these issues.

Our current initiative, announced in late 2020, addresses Diversity, Equity and Inclusion in three areas: (1) how we model inclusion and equity through self-assessments, staff training, and hiring policies; (2) providing leadership in collaboration with our members and partners to develop best practices in anti-

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racism research methods and representation of a wider variety of perspectives and expertise in our leadership forums; and (3) to facilitate changes in the field through education, training, and publications. We are currently engaging with an advisory group of experts on DEI in HSR whose report will be released in June 2021. We anticipate their recommendations will address several areas from this framework, including mentoring, networking, and career pathways; improved research methods that reduce data bias; accountability for funders in promoting a more inclusive and equitable research agenda; strategies for organizations to address and begin to eliminate their own structural racism and biases; and building support among those organizations to promote change in their own communities.

Structural racism is embedded racial bias across institutions and society. It is based on the cumulative and compounding effects of an array of historical and current events that systematically privilege and center white people and disadvantage people of color. Structural racism exists in every sector of our society, including our biomedical research workforce. Therefore, for NIH to be successful in making measurable progress on racial equity, diversity, and inclusion, it must explicitly include a focus on structural racism. To dismantle structural racism, it is incumbent upon us all to change ourselves and critically and honestly reconsider the norms, rules, behaviors, biases, and barriers within our systems – from our academic training to our research priorities to our professional organizations and beyond. NIH currently has the responsibilities and authorities to facilitate, support and reward critically needed change to each step of the recruitment, retention, and advancement of a far more diverse and inclusive research workforce. As stated by Krupat et al in 2013, "because U.S. biomedical research is largely driven by NIH-funded faculty in academic institutions, there is an urgency for NIH to encourage institutions to develop and implement broadly effective strategies to cultivate institutional culture change (Krupat E et al., 2013). NIH itself recently included reference to the diversity gap that is "driven in large part by institutional cultures lacking necessary elements of inclusion and equity and sending a message to certain groups that they do not belong in science" (RFA-RM-20-023). The recent announcement of the FIRST initiative (https://commonfund.nih.gov/first) and its focus on "inclusive excellence" is an important initial step.

NIH can immediately update its understanding of the racial diversity within its workforce and among funded investigators and gather feedback directly from those individuals regarding the sense of inclusion they feel and barriers they have encountered, including whether their institution supports research on racism and equity. It should similarly survey unsuccessful applicants for NIH funding about the areas of study which were not funded, and how those PIs institutions responded when the application for funding failed. With information gathered from this community, NIH should begin assessing the progress to date of its current initiatives for increasing representation and use this as opportunity to increase their number and reach and enhance their impact, including annually reporting of its progress. However, funded grants are the end results of a complex and distributed set of policies and processes across many parts of the NIH, including the Office of Extramural Research, the Center for Scientific Review and each of the Institutes and Centers. Each of those steps in the process is an opportunity to promote diversity and should be systematically reviewed for factors that may be unintentionally contributing to the current outcome: little progress on diversity of the biomedical workforce. This would be a significant endeavor, however critical as "every system is perfectly designed to achieve the results it gets" (Batalden, 1995).

Evidence has also shown that underrepresented investigators are more likely to pursue studies, such as those related to health disparities, which have lower award rates. Hoppe et al (2019) found that topic choice alone accounts for over 20 percent of the funding gap faced by Black researchers when controlling for other variables. NIH should use data from the Research Project Grant Program (R01) to identify submissions and awards by race, ethnicity, and gender to reevaluate funding priorities with respect to the types of research that are more likely to be pursued by underrepresented groups and further fund these areas of study. This is an important step for addressing diversity, but it is also a crucial component of NIH's mandate to improve the health of the nation. It is critical to expand research support for topics that disproportionately impact racial and ethnic minorities with the above discussed community-engagement

strategies that have been shown to provide more sustainable solutions to reducing health disparities. Underserved communities know what types of obstacles they are facing, and should have the resources to study and eliminate them.

Addressing DEI in the research workforce requires community-engaged approaches. NIH should prioritize engaging with academic institutions from Historically Black Colleges and Universities (HBCUs), Minority Serving Institutions (MSI), and Hispanic Serving Institutions (HSIs) by directing research grants to include them as partners and helping to invest in building their institutional capacity. Research funding opportunities should require that investigators meaningfully engage members of under-resourced communities as partners in determining research priorities and questions, study design, implementation, analysis, reporting, and translation into practice and policy. A key component here is "meaningfully". This means that funding applications should describe how these communities were engaged in the process of priority-setting to develop the research questions and the study design proposed as well as how researchers will continue to engage community members throughout the research cycle. This should be a requirement of all applications for funding with points awarded based on this criterion. Every review panel should incorporate members from diverse communities, and efforts needed to accomplish this goal should be bolstered.

Another critical role that NIH plays in the development of the research workforce is through the directs support of individual and institutional training grants (including all forms of NRSA training grants). It is not clear the extent to which NIH has supported and publicly reported on the effectiveness of these programs in advancing diversity. If a relevant evaluation has not been conducted in the last five years, it should be done now. However, it is evident that current investments are insufficient to achieve the goal of a truly diverse and inclusive research workforce. Therefore, NIH should create new fellowships and leadership training programs, based on the best available evidence of effectiveness, with eligibility criteria that removes unnecessary barriers to admission particularly barriers where institutionalized or structural racism played a role. Part of building an inclusive and equitable future for the biomedical research workforce should include the development of emerging leaders who are racially and ethnically representative of the U.S. population. For example, NIH should eliminate barriers preventing access to opportunities like mentoring or apprenticeships, and directly address the role of implicit and explicit bias as barriers within decision making processes.

Finally, this work needs to be bi-directional with the HSR community advancing racial equity and diversity as described above. HSR organizations should be taking necessary steps to prioritize hiring, funding, and mentorship of researchers from underrepresented racial/ethnic backgrounds. Regarding inclusion, it is important to create a community where researchers from diverse backgrounds feel welcome and valued. This includes diversifying speakers at conferences, the leadership of HSR organizational boards, and reviewers in gatekeeping publications. The future HSR workforce will be defined in large part about how we encourage individuals to consider a career in health services research, including investing in pipeline programs in schools that offer the opportunity to engage diverse talent to ensure that our field remains diverse, dynamic, and inclusive – just like the American population we serve.

NIH should provide significant support and funding for health services research that documents, understands, and mitigates health equity issues for underserved populations with a focus on identifying and eliminating structural barriers to care and access that were created or influenced by racism. In order to deliver better health outcomes, we need to be able to differentiate which health care interventions work, for whom they work – including expressly evaluating if our health systems are effective at a granular level for people of color- and how to implement them equitably, and HSR is the process through which we develop that knowledge. It is unambiguous that there exist deep racial and ethnic inequities within the

health care system, and that robustly supporting health care delivery research is one of the most effective ways to identify these disparities and create actionable and scalable research to eliminate them.

It is valuable and important that NIH is engaging stakeholders for feedback, but it is even more important that such feedback is followed by robust and serious policy changes and actions that support racial equity, diversity, and inclusion. This is a systems issue where each facet drives the other: which investigators are mentored effectively influences their success at NIH funding, which drives their publications, which in turn drives their opportunity for advancement, which in turn drives what issues are studied. We will now proceed to expand on some of these themes with the more specific questions raised by the RFI, recognizing that each affects the other and must be considered in total.

1. All Aspects of the Biomedical Workforce

1.A Perception and reputation of NIH as an organization, specifically as an employer (e.g., culture), with respect to support of workforce diversity and as an overall advocate for racial and gender equity in NIH-funded research.

AcademyHealth's membership has noted that while the NIH has a long history of advocating for racial and gender equity, and that there are fellowship and training programs aimed at addressing known gaps in career development. Nonetheless, there is still a concern that, based on evidence, there remain disparities between the number of Black researchers and faculty of color being awarded NIH grants and access to professional opportunities in comparison to their white counterparts. Thus, there is a gap between NIH's intent of being an advocate for racial and gender equity and the reality faced by researchers. This is likely in part due to the previously discussed societal factors. NIH's challenge, and also opportunity, is to not only advocate for, but actually implement policies that address systemic societal issues that currently limit the number of women and racial/ethnic minorities with successful research careers. NIH policies, in turn, will have the beneficial spillover effect of promoting other institutions to change their organizational policies and practices so that all institutions encourage the engagement and success of individuals from these backgrounds in the biomedical research workforce.

An example of a policy reform that could do this is the NIH Loan Repayment Programs (LRPs), which is a beneficial program that has helped many researchers from under-represented backgrounds advance their careers. However, for LRP alumni who have not successfully obtained R01 funding there is no built-in follow up to understand their research support needs or to provide guidance on strategies that can help them be more successful. Follow up with those who have had funding success and those who have not could provide useful information on strategies to help improve the program structure and outcomes.

Another reputational aspect is that of resistance to change and opacity of processes. While numerous studies have documented the challenges of diverse researchers, and various national advisory groups have been convened on this topic, it is unclear what has fundamentally changed in how the NIH actually reformed its approaches to be responsive. NIH should hold itself accountable for progress through a structured and transparent monitoring and evaluation strategy for diversity and inclusion.

1.B New or existing influence, partnerships, or collaborations NIH could leverage to enhance its outreach and presence with regards to workforce diversity (both the internal NIH workforce and the NIH-funded biomedical research enterprise); including engagement with academic institutions that have shown a historical commitment to educating students from underrepresented groups (especially Historically Black Colleges and Universities (HBCUs), Hispanic-Serving Institutions (HSIs), Tribal Colleges and Universities (TCUs), and other institutions), racial equity organizations, professional societies, or other federal agencies.

As stated above, it is critical that NIH direct research grants and build institutional capacity of researchers at HBCUs, MSIs, HSIs, and TCUs. This includes requiring that investigators meaningfully engage members of under-resourced communities as partners in determining research priorities and questions, study design, implementation, analysis, reporting, and translation into practice and policy. A limitation on the benefits of engagement is the systemic and structural factors that contribute to these organizations being under-resourced in the first place. For example, an HBCU would be at a disadvantage as a full partner in research if they are completely dependent on well-funded institutions for all of the administrative activities related to the grant. NIH should be a leading actor in ensuring that these organizations have the structural support and resources necessary for success.

In addition, NIH should recognize and value the contributions of partners through budget allocations. True partnerships take time to build, as trust must be established. This time takes sustained funding and an understanding of the pace of research in truly community engaged and participatory ways.

1.C Factors that present obstacles to training, mentoring, or career path (e.g., training environments) leading to underrepresentation of racial and ethnic groups (particularly Black/African Americans) in the biomedical research enterprise throughout the educational and career continuum and proposed solutions (novel or proven effective) to address them.

Institutions that train a large proportion of racial/ethnic minorities often have less funding than others and may not attract faculty who have a successful research track record. This resource gap can potentially impact students and the career paths that they eventually pursue. NIH should strengthen training and mentoring programs in these institutions, possibly through equitable partnering with well-funded institutions that can help address this gap. However, the more fundamental barrier is the dearth of mentors since this role is usually unfunded and demand often exceed capacity even within a well-funded institution. That situation is particularly acute for the very small number of well-funded investigators who are themselves diverse, because the supply of culturally attuned mentors is far less than the demand. Additionally, mentoring has historically been limited by geography and the effectiveness of distance mentoring is not well understood. Programs that encourage and incentivize mentors, especially those from underrepresented backgrounds who may already be formally or informally mentoring many students and junior researchers, are warranted.

Once they begin their careers, under-represented minority (URM) investigators face extra burdens, and they often do not have the bandwidth or capacity to be as productive with research grants and publications. It is the responsibility of leaders of academic and other research institutions to carry the burden of reshaping their campuses to address historic inequities and valuing the mentoring, community service and other contributions of junior URM faculty in the promotions. This burden is not that of the young, struggling, unmentored junior faculty of color. However, there are other factors related to biased hiring and retention strategies that also contribute to the exodus of URM researchers from research careers. NIH needs to do more to guide institutions in addressing such biases in their own processes and to recognize those institutions that are making important strides in these areas.

Finally, NIH should consider additional support of collaborative networks of diverse investigator to support informal growth, support, and retention.

1.D Barriers inhibiting recruitment and hiring, promotion, retention and tenure, including the barriers scientists of underrepresented groups may face in gaining professional promotions, awards, and recognition for scientific or non-scientific contributions (e.g., mentoring, committees), and proven strategies or novel models to overcome and eliminate such barriers.

Barriers that inhibit recruitment, hiring, promotion, retention, and tenure of persons from underrepresented groups may be the result of conscious or unconscious biases. It is important to create clear and equitable pathways to tenure and promotion, recognition, publications in top journals, and access to grant funding. Breaking down barriers also requires engagement with underrepresented faculty and systemic incorporation and engagement that values their research, scholarship, and service. Mentorship is key to a successful and productive career, as noted above. Faculty and university administrators should be held accountable for recruiting a diverse pool of junior faculty, making diverse faculty promotions, and should be regularly evaluated by a diversity advisory committee to ensure that they are identifying and eliminating barriers unique to their institution.

One point that has been emphasized in the last year is the work that researchers from underrepresented backgrounds are performing in leading DEI initiatives in their various organizations. This work is important and is usually done out of personal commitment and interest. However, it takes away from time that could be spent doing research. NIH should provide tangible recognition of this work so as to make it count in promotion and tenure opportunities will help to address some of the barriers that exist for researchers from underrepresented backgrounds while also further promoting DEI efforts.

1.E Successful actions NIH and other institutions and organizations are currently taking to improve representation, equity, and inclusion and/or reduce barriers within the internal NIH workforce and across the broader funded biomedical research enterprise.

AcademyHealth and its' members have identified the UNITE Program at NIH, and more recently the FIRST program noted above, as promising because of its mission to improve diversity in biomedical research and the health workforce by addressing systemic racism.

2. **Do you have comments on any aspect of NIH's policies and partnerships?**

2.A Existing NIH policies, procedures, or practices that may perpetuate racial disparities/bias in application preparations/submissions, peer review, and funding, particularly for low resourced institutions, and proposed solutions to improve the NIH grant application process to consider diversity, inclusion, and equal opportunity to participate in research (e.g., access to application submission resources, changes to application submission instructions/guidance, interactions with and support from NIH staff during application process)

As noted above, who is successful at securing NIH support is dependent on the complex interplay of multiple policies and processes overseen by a range of NIH staff across Institutes and Centers. The NIH needs to be intentional and proactive in diversifying its review committees. Existing processes that recruit reviewers from among those with an established NIH funding track should be reconsidered as it could create a gatekeeping function that limits the diversity of the research pool and potentially overtaxes the limited number of reviewers from underrepresented backgrounds. NIH may expand their search for reviewers by looking at current peer-reviewed literature to find researchers who may be experts in their field although without NIH funding. Including reviewers with relevant expertise in community-engaged research and health disparities will also be important for applications on those topics. It is also not clear as to whether NIH includes any training on diversity and how it should be addressed in the review process for their review committee members. This must be understood by all members and not simply those who may be of diverse backgrounds.

NIH should regularly review and restructure the grant funding requirements to determine if invisible biases exist within the application and review processes. A focus on eliminating outdated procedures or administrative barriers to obtaining funding and research opportunities for underrepresented biomedical researchers would allow for more inclusive and equitable contributions in the field of health disparities

research and biomedical research and innovation. These procedural changes should be produced by a top office such as the Office of the Director. Regular reporting of results and further steps taken (in policy or process) to make progress on equity would promote trust and transparency.

Finally, for researchers, one of the key factors that determine success with grant submissions is the quality of the grant administrative support at their institution. NIH could provide regional or centralized support and training to under-resourced institutions in preparing and submitting competitive grant applications, to improve grant equity.

3. **Do you have comments on any aspect of NIH's research priorities?**

3.A Significant research gaps or barriers to expanding and advancing the science of health disparities/health inequities research and proposed approaches to address them, particularly those beyond additional funding (although comments could include discussion of distribution or focus of resources)

There are many priorities and issues to be addressed for advancing science and eliminating health disparities and inequities. A recommendation is for NIH to fully integrate an equity focused lens and framework to be used throughout current and future research priorities and upcoming funding opportunities. The National Institute on Minority Health and Health Disparities (NIMHD) Research Framework is a useful template for understanding the multilevel factors that influence health disparities. It is important to be constantly engaging with diverse academic researchers and institutions in a meaningful way to identify priorities and issues.

Regardless of the specific priorities of the NIH or any of its institutes and centers, there must be a far more concerted effort to achieve sufficient diversity in the pool of human subjects and samples collected so that research is relevant to the full range of populations in this country.

We were pleased to see the recently released NIH Minority Health and Health Disparities Strategic Plan, 2021-2025. While it is critical that NIH have a proactive short-, medium-, and long-term strategy for eliminating racial and ethnic health disparities, we were disappointed that it did not directly address structural racism and race-based barriers to health care access and high-value care. Successfully eliminating disparities without explicitly engaging the institutions and barriers that have created and maintained these disparities, as well as other health-related disparities such as housing and nutrition insecurity, is an insufficient use of NIH's authority and inexplicable missed opportunity.

For further comment, clarification, or inquiry, please email Josh Caplan at Josh.Caplan@AcademyHealth.org.