Report on the Request for Information, Inviting Comments and Suggestions on a Framework for the Fiscal Years 2023-2027 NIH-Wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility

## Report on the Results of the RFI

## Introduction

As the National Institutes of Health (NIH) works to turn discovery into health, the agency recognizes that principles of diversity, equity, inclusion, and accessibility (DEIA) are intrinsic to the achievement of better health for all. The purpose of the Fiscal Years 2023-2027 NIH-Wide Strategic Plan for DEIA (the Plan) is to demonstrate NIH's commitment to this recognition by articulating a path forward for the next 5 years in which NIH will address DEIA-related goals in all aspects of its activities. This includes enhancing the agency's stewardship, empowering its own workforce and that of the research community it supports, and building on research for the benefit of the public that it serves.

Several directives from Congress and the administration influenced NIH's development of this Plan. In 2021, Congress directed NIH to develop a strategic plan with long-term and short-term goals to identify and address racial, ethnic, and gender disparities at NIH and barriers in access to NIH funding faced by investigators researching health disparities. ${ }^{1}$ The Plan is also responsive to relevant Executive Orders (EOs) issued by the administration, including but not limited to, EO 14035: Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce. ${ }^{2}$ EO 14035 , issued on June 25,2021 , launched a whole-ofgovernment initiative to cultivate a federal workforce that draws from the full diversity of the nation and advances equitable employment opportunities. Building on the foundation laid out in EO 14035, the administration released the Government-Wide Strategic Plan to Advance DEIA in the Federal Workforce, ${ }^{3}$ on November 23, 2021, which offers a roadmap for implementing EO 14035 and lays out key steps that agencies can take to strengthen DEIA in their workforce policies, practices, and culture.

The NIH Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI) was charged in 2021 to work with NIH's Chief Officer for Scientific Workforce Diversity (COSWD); the Office of Equity, Diversity, and Inclusion (EDI); and the Office of Human Resources (OHR) to develop the Plan. At the initiation of this process, DPCPSI developed a timeline for the strategic planning process and established an NIH-Wide Strategic Plan for DEIA Working Group, comprising staff from each institute and center (IC) and many offices within the Office of the Director (OD), representing the range of NIH's activities and research portfolio. The first working group meeting was held at the end of October 2021.

Throughout the process of creating the Plan, NIH solicited feedback from internal and external community members, including the public, to identify emerging scientific opportunities and gather suggestions for how to improve the draft framework for the Plan. The internal NIH DEIA community comprises a wide network of all 27 ICs; offices within the OD; and staff committees, advisory groups, and employee groups across NIH. The external NIH community also comprises a wide networkincluding members of the scientific and health care communities, professional societies, advocacy organizations, industry, other federal agencies, and the public. The input gathered from these internal and external communities was crucial throughout development of the Plan.

[^0]To solicit comments on the proposed framework from internal and external communities, the working group developed a Request for Information (RFI)—published in the NIH Guide for Grants and Contracts (NOT-OD-22-061) ${ }^{4}$ and the Federal Register (FRN 2022-02972) ${ }^{5}$ - which was advertised broadly. Comments were accepted online from February 1, 2022, to April 3, 2022. NIH received 172 responses to the RFI from community members. In addition, NIH hosted a webinar on March 29, 2022, to provide the opportunity for internal and external community members to ask questions about the strategic plan development process and comment on the framework. The draft Plan was finalized through an iterative review process. Beginning in July 2022, the draft Plan was reviewed by NIH leadership, the NIH Steering Committee DEIA Working Group, IC Directors, the Office of General Counsel, and the Advisory Committee to the Director. Following final review and approval by NIH leadership, NIH publicly released the Plan.

The Plan demonstrates NIH's intention to integrate the principles of DEIA into all of its processes, policies, and programs. The Plan also includes approaches to advance DEIA within NIH and the broader biomedical and behavioral research enterprise. The Framework of the Plan is harmonized to the Framework of the NIH-Wide Strategic Plan for Fiscal Years 2021-2025, with NIH's DEIA priorities organized around accomplishments, needs, opportunities, and challenges in three key areas or Objectives-Operations, Workforce, and Research—and their underlying subobjectives. There are also three Crosscutting Themes-promoting transparency, communication, and engagement; fostering sustainable change; and harnessing data-which are common approaches across all objectives of the Plan that are integral to realizing $\mathrm{NIH}^{\prime}$ s vision.

In the RFI, NIH invited community feedback on several topic areas:

- Potential benefits, drawbacks or challenges, and priority areas of consideration for the draft Framework
- Comments on the Framework of NIH's priorities as divided across the three Objectives: centering and prioritizing DEIA in the workforce; growing and sustaining DEIA through structural and cultural change; and advancing DEIA through research

NIH encouraged organizations (e.g., patient advocacy groups, professional member societies) to submit a single response reflective of the views of the organization or membership.

## Characteristics of Respondents

NIH received 172 responses to the RFI, with 165 responses to the webform and seven responses received via email. Thirty-six respondents ( 21 percent) chose to remain anonymous. Overall, respondents came from a variety of organizations, including 56 from academic institutions, 21 from professional societies, 14 from advocacy groups, one from the public, four from the private sector, ten from government agencies, eight from health professionals, seven from research organizations (nonacademic), 12 from other types of organizations not listed, and 38 who left their organization type blank (Figure 1).

[^1]Figure 1. Organizational distribution of respondents


Respondents represented a variety of roles within their organizations, including senior leadership (25 respondents), mid-level leadership ( 30 respondents), administrative staff (3 respondents), clinical or research staff ( 13 respondents), students or post-docs (4 respondents), faculty ( 28 respondents), with four respondents representing other roles and 60 respondents leaving their role blank or anonymous (Figure 2).


## Comments on the Framework

Respondents were asked to provide comments on NIH's priorities across the three objectives in the framework. For each objective, respondents could provide potential benefits, drawbacks or challenges, and other priority areas for consideration. One hundred twenty-six respondents provided comments on the objective focused on growing and sustaining DEIA through structural and cultural change; 151 respondents provided comments on the objective focused on implementing organizational practices to center and prioritize DEIA in the workforce; and 120 respondents provided comments on the objective focused on advancing DEIA through research.

All responses were provided to the working group tasked with developing the Plan, and the working group reviewed all responses and analyzed the responses for common themes and suggestions. These themes then informed the goals, strategies, and example activities that the working group included in the Plan. A summary of these themes, organized around each objective, is below.

## Objective $1^{6}$ : Grow and Sustain DEIA through Structural and Cultural Change

When commenting on the objective focused on structural and cultural change to advance DEIA, several themes and suggestions were made that then carried through to comments in other objectives. Many respondents felt that specific communities, e.g., sexual and gender minority (SGM) community, disability community, as well as others, should be engaged in NIH's planning and programmatic work, including, but not limited to, work focused on DEIA. Specifically, the deaf and disabled community called upon NIH to ensure that accessibility is centered within these DEIA efforts and is not an add on. Thirteen comments within this section mentioned accessibility in their feedback, and 19 specifically mentioned people with disabilities.

Twenty-nine responses to this objective mentioned grants, and respondents commented on the grant review process calling upon NIH to ensure the diversity and fairness of reviewers. Respondents also want NIH to focus on increasing the diversity of awardees to include more women, Black, indigenous, and other people of color, and SGM individuals. To this end, respondents called upon NIH to investigate systemic barriers preventing diverse applicants from applying to and being granted NIH funding.

In addition to calling upon NIH to develop and improve its own processes, several respondents requested that NIH create and disseminate DEIA tools for other research organizations. Respondents called upon NIH to partner with community organizations, limited resource organizations, minorityserving institutions, and other organizations that have historically received lower levels of NIH support. Respondents also emphasized training as a tool to support culture change within the organization and across organizations outside of NIH.

Respondents commented that the Plan should acknowledge the intersectionality of disability with race, sexual orientation, immigration status, and all other historically marginalized identities. Several respondents recommended that NIH use inclusive language in funding opportunities, notices, and on NIH webpages. Additionally, respondents noted that advancing DEIA is work that is often taken on by people who belong to historically underrepresented groups and who take on a disproportionate burden of these activities within organizations, even though this work is not always noted or compensated.

[^2]Respondents highlighted that this is one of many reasons that advancing DEIA is the work of everyone within institutions, and NIH should continue to promote activities that incentivize all institutions to take on this shared burden. These suggestions are reflected in the crosscutting theme that is focused on sustainable change and the strategies that take on culture change in the form of transparently updating grant processes, reviewing and updating management practices, centering communities' priorities within research programs, and communicating and sharing across the whole biomedical and behavioral research ecosystem.

## Objective 2: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

The next section that respondents were asked to comment on was the objective focused on prioritizing DEIA within the workforce, both at NIH and the workforce at institutions supported by NIH. Again, many respondents emphasized the importance of expanding NIH's focus on diversity beyond race; specifically, respondents called on NIH to include people with disabilities and SGM populations in DEIA-focused efforts. Twenty-three respondents mentioned accessibility as a specific area that NIH needs to focus on with regard to the workforce.

In commenting on the workforce within NIH, respondents also noted that with increasing diversity within the workforce, policies will need to be updated to better support employees. In addition to recruiting and hiring a diverse workforce, respondents noted that NIH should emphasize equity and inclusion in retention of current employees, and one of the ways to ensure that the principles of DEIA are being integrated into these efforts is through making sure that these efforts are transparent. It was also noted several times that leadership within NIH should reflect the full diversity of the U.S. population. Respondents also encouraged that NIH expand data collection efforts that relate to DEIA, and this aligns with the Plan's crosscutting theme of harnessing data to inform programs and decisionmaking.

Respondents emphasized that NIH should support efforts to advance DEIA within the workforce of NIHfunded institutions, not just within NIH itself. In addition to funding Minority Serving Institutions (MSIs) and expanding funding to include institutions that historically received less NIH funding, respondents encouraged NIH to build upon programs that already exist, such as requiring funded projects to include plans for enhancing diversity. Respondents also recommended that NIH recognize the importance of, and fund, mentoring programs as an effective tool to advance DEIA, with 21 respondents mentioning mentoring specifically within their responses to this objective. Respondents also encouraged NIH to expand support for and collaboration with community organizations, both to enable these organizations to receive NIH funding and to equitably partner with these organizations so that diverse voices from the community can contribute to NIH's work and workforce. In response to these comments, many strategies within the Plan are focused on supporting DEIA efforts at institutions funded by NIH and a crosscutting theme is focused on fostering engagement within communities, highlighting these efforts throughout the whole Plan.

## Objective 3: Advance DEIA through Research

Respondents commented on both aspects of the Plan's objective focused on research: supporting research on the workforce and DEIA and research on health. Of the 16 respondents who specifically commented on workforce research, several noted their appreciation of NIH including workforce research in this objective and encouraged NIH to build upon the wealth of pre-existing literature on how diverse research teams impacts research. Respondents also called upon NIH to investigate its own data
and processes to look for patterns contributing to the diversity of NIH researchers. Similarly, respondents noted that within this objective falls specific research to track the impact of the activities related to the objective focused on the workforce, and these efforts can go hand in hand. The Plan reflects these comments through strategies that specifically articulate research priorities that will take advantage of the wealth of data that NIH has access to and investigate potential barriers to advancing DEIA within the biomedical research workforce.

In the comments focused on health research, a key theme that arose was for NIH to work to increase the diversity of clinical trial participants. As was mentioned in other objectives, respondents communicated that DEIA is not just about race, and NIH's efforts should include all facets of diversity. Several respondents also noted that there should be better representation and greater engagement of researchers with different physical abilities in the biomedical research enterprise. Twenty-seven respondents mentioned health disparities, and they emphasized that NIH should promote research to understand social and structural determinants of health and promote responsible use of data when studying health disparities. Respondents also encouraged NIH to evaluate study measures for inclusivity and validation in diverse samples. Respondents suggested that NIH focus on unique underserved populations, and the examples given were Native Hawaiians, Pacific Islanders, and Filipinos.

As was mentioned in comments on the objective focused on culture change, respondents commented that it is important that language should be inclusive within and across all biomedical and behavioral sciences. It was also suggested that NIH work with communities as partners in research, and communitybased, participatory, and community engaged research should be strengthened both through funding and technical support as well as through encouraging researchers to incorporate these methods. The Plan reflects these comments throughout, including through strategies focused on increasing the diversity of clinical trial participants and building community-engaged research programs.

## Summary and Conclusions

NIH recognizes that input from its community-including members of the scientific and health care communities, professional societies, advocacy organizations, industry, other federal agencies, the public, and its own staff—provides valuable insight to be considered during its strategic planning process. The RFI responses received reflected a wide array of perspectives on NIH's DEIA priorities outlined in the strategic plan framework. While there was considerable support for the framework, some respondents suggested changes or additional items for consideration, which influenced drafting of the Plan as it evolved. NIH thanks the respondents for their time and effort in preparing responses to the RFI.

## Appendices

Appendix A: Request for Information (RFI): Inviting Comments and Suggestions on a Framework for the NIH-Wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility

## Notice Number:

NOT-OD-22-061

## Key Dates

Release Date: February 1, 2022
Response Date: April 03, 2022

## Related Announcements

NOT-OD-22-054 - Inviting Comments and Suggestions on the Draft NIH Chief Officer for Scientific Workforce Diversity Strategic Plan for FYs 2022-2026

## Issued by

NATIONAL INSTITUTES OF HEALTH (NIH)

## Purpose

This Notice is a Request for Information (RFI) inviting feedback on the Framework for the NIH-Wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility (DEIA).

NOTE: It is important to read this entire RFI notice to ensure an adequate response is prepared and to have a full understanding of how your response will be utilized.

## Background

The purpose of the NIH-Wide Strategic Plan for DEIA is to articulate NIH's vision for embracing, integrating, and strengthening diversity, equity, inclusion, and accessibility (DEIA) across all NIH activities to achieve the NIH mission. The Strategic Plan will capture activities that NIH will undertake to meet the vision of the Strategic Plan, and will be organized around accomplishments, needs, opportunities, and challenges in addressing DEIA in the NIH workforce, its structure and culture, and the research it supports.

NIH has implemented a range of other past and current initiatives, and is planning initiatives in the future to advance DEIA. Among them, the UNITE initiative was established in 2021 to identify and address structural racism within the NIH-supported and the greater scientific community. Please note that an RFI on a Draft 2022-2026 Chief Officer for Scientific Workforce Diversity (COSWD) Strategic Plan was released on January 12, 2022 and, therefore, open for public comment at the same time as a Framework for the NIH-Wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility (DEIA). You are encouraged to respond to both.

The NIH-Wide Strategic Plan for DEIA highlights NIH's ongoing and future efforts to foster DEIA within the biomedical research enterprise. The Framework for the NIH-Wide Strategic Plan for DEIA, below, articulates NIH's priorities in three key areas (Objectives). These Objectives apply across NIH.

## NIH-Wide Strategic Plan for DEIA Framework

Objective 1: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

- NIH Workforce
- Workforce at Institutions Supported by NIH Funding


## Objective 2: Grow and Sustain DEIA through Structural and Cultural Change

- Stewardship
- Partnerships and Engagements
- Accountability and Confidence
- Management and Operations

Objective 3: Advance DEIA Through Research

- Workforce Research
- Health Research


## Request for Comments

This RFI invites input from stakeholders throughout the scientific research, advocacy, and clinical practice communities, those employed by NIH or at institutions receiving NIH support as well as the general public, regarding the above proposed framework for the NIH-Wide Strategic Plan for DEIA.

The NIH seeks comments on any or all of, but not limited to, NIH's priorities across the three key areas (Objectives) articulated in the framework, including potential benefits, drawbacks or challenges, and other priority areas for consideration.

NIH encourages organizations (e.g., patient advocacy groups, professional organizations) to submit a single response reflective of the views of the organization or membership as a whole.

## How to Submit a Response

All comments must be submitted electronically on the submission website.
Responses must be received by 11:59:59 pm (ET) on April 3, 2022.
Responses to this RFI are voluntary and may be submitted anonymously. Please do not include any personally identifiable information or any information that you do not wish to make public. Proprietary, classified, confidential, or sensitive information should not be included in your response. The Government will use the information submitted in response to this RFI at its discretion. The Government reserves the right to use any submitted information on public websites, in reports, in summaries of the state of the science, in any possible resultant solicitation(s), grant(s), or cooperative agreement(s), or in the development of future funding opportunity announcements. This RFI is for informational and planning purposes only and is not a solicitation for applications or an obligation on the part of the Government to provide support for any ideas identified in response to it. Please note that the Government will not pay for the preparation of any information submitted or for use of that information.

We look forward to your input and hope that you will share this RFI opportunity with your colleagues.

## Inquiries

Please direct all inquiries to:
Email: nihstrategicplan@od.nih.gov

Appendix B: Individual Responses
Personally identifiable information (PII) has been removed from all entries.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

I would start by making your plan accessible to members of the disability community. My dyslexia makes the current PDF almost impossible to read because of the spacing and font choice. While slightly harder to prepare, an HTML page, downloadable read-only text doc that I could modify would help me, with dyslexia, but also help people with low vision, and those who use an HTML-based browser plugin for translation and secondary comprehension. Although in my case, a double spaced, more friendly font (the one on this page is great) would make it possible to read the plan.
I haven't been to many NIH events, but it's worth thinking about whether you have an ASL interpreter at the event or provide captions on follow up videos. (Captions are awesome for people who are deaf, neurodivergent, being introduced to new terms, or just generally distracted). I know these add cost and time. There is absolutely an opportunity cost (financial, time wise, effort wise) to make sure things are accessible. The flip side, and unseen opportunity cost is that there are plenty of people who can't even get in the room to look for a seat at the table because the room is on the second floor and there's no elevator.
Disability access is going to be an increasing issue as we continue into the pandemic and more people become permanently disabled. There are going to be structural access issues - most NIH funded universities have inaccessible research labs. There are also going to need to be smaller changes and options for flexibility. Am I allowed to use grant money to pay for an ergonomic aid? Do publication funds cover the cost of a professional proof reader? Are there structural grants available that I can apply for to replace a lab bench so postdoc who is an ambulatory wheelchair user can do their work which ever mobility aid they chose?
I also think you need to figure how to make things accessible early. I'm multiply disabled, but I had so many other advantages (I'm white, my family is relatively wealth, and both my parents have advanced degrees.) I made it through because I was lucky and a few people stood up for me at critical moments or offered me unofficial accommodations. (Getting accommodations is hard in general. Disability offices don't know how to accommodate a disabled graduate student who, say, needs a class to graduate but physically cannot attend a section offered at 8 am because her body doesn't switch on until 9 or who doesn't have the dexterity for mouse work.) Supplements help, if students can get them and the money doesn't get tied up other places. I dont know how you can implement a flexible system that lets students use accessibility tools they need (a stool for the lab, a premium account for the voice recording program they rely on, a lamp to manage migraines) and prevents abuse, like the support being re-routed into general funds.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

There's obviously a literally structural change here: require funded facilities to be accessible and start building on universal design principles to begin with. Use outside audits by people with disabilities, especially if no one has the disability. Make access a principle and "reasonable accommodation" a conversation with the disabled community.
Less literally, I think there's a structural pressure/requirement for physical ability for success (These are similar pressures for caregivers, I suspect.) My health limits the number of hours I can work, the amount of travel I can do, and the time it takes me to recover from certain things. Almost all of the top name scientists at big institutions are people who can physically do it all. Maybe they don't need 10 hours of sleep a night. Maybe they've figured out how to delegate their caregiving responsibilities. Either way,
pretty much every successfully funded PI I know works $40 \ldots 50 . . .60$ hour weeks. The ones who don't cant support their labs and leave. I do not know how to disincentivize this kind of system, but you need a change.
Additionally - and Im not sure if it goes here - but disabled people need to be included in the ethics review process earlier.
I'm doing CITI training right now, and there are all kinds of conversations around social and cultural sensitivity. I think it's wonderful to see conversations around economically and educationally disadvantaged people and coercion. I applaud the discussion around working with tribal governments and community leaders. So, why isn't there the same conversation about having a patient (or group of patients) included in the ethics review process? One of the major examples for me is autism research. Why aren't calls that involve work with autistic individuals built in collaboration with autistic adults? The kind of work that gets funded (i.e. studies into the biological causes of autism or certain early behavior interventions) may be in direct disagreement with research goals for autistic adults who might worry about issues like targeted eugenics or post-intervention trauma.
Finally, DEIA and service work needs to be credited as other traditional metrics in funding, and promotion. There are opportunity costs to this work and structural change wont happen as long as it continues to be devalued.

## Comments: Advance DEIA Through Research

Its worth looking at retention in addition to recruitment. How many faculty from who are queer, disabled, first gen, black, indigenous, or historically excluded are recruited or funded the first time? How long to do they stay, and how often do they get funded again?
There also needs to be a way to decouple demography from identification. Im multiply disabled in ways that make me a less attractive job candidate and possible a less attractive candidate for a funding application. Im not sure how you get that information without requiring me to out myself. (Which ends up being identifying because there just arent that many people in the world with my particular set of disabilities, especially not in my field.)

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

On behalf of deaf and hard of hearing federal employees, Deaf in Government (DIG) applauds the BidenHarris administration on launching Executive Order 14035, the government-wide mandate to cultivate a federal workforce that reflects the full diversity of the United States and advances diversity, equity, inclusion, and accessibility (DEIA).
By way of this paper, DIG requests that the below recommendations be incorporated in the federal agencies mandatory DEIA strategic plans which are to be finalized by March 23, 2022.
Recommendations:
Include deaf and hard of hearing employees in finalizing and implementing the DEIA strategic plans. The DEIA strategic plan will be flawed without true engagement with affected parties. Agencies must include deaf and hard of hearing employees and accessibility experts on the DEIA teams responsible for the March 2021 strategic plans, and accessibility policies and related plans. Unfortunately, the DEIA mandate currently requires agencies to consult only with their Office of General Counsel, and the DEIA cross-agency team is defined as follows: Office of the Secretary; Chief Diversity Officer; Chief Human Capital Officer; Equal Employment Opportunity Officer; Performance Improvement Officer; Chief Learning Officer; Chief Financial Officer; and Agency Equity Team lead. Currently there is no recommendation or mandate to include people with disabilities and accessibility experts as essential team members. Only with deaf and hard of hearing people at the table and on the DEIA team, can these

DEIA strategic plans be made appropriately and effectively about them. In fact, EO 13985 recognizes the indispensability of inclusion with a mandate that federal agencies coordinate, communicate, and engage with targeted underserved communities in executing the tasks of the Order.
DEIA strategic plans must commit to agency staffing that includes people with targeted disabilities at every level of employment, including senior leadership positions, and specialized positions to advance accessibility and disability employment.

Agencies must commit to hire more deaf and hard of hearing employees. Agencies are supposed to reflect the diversity of the United States, and are required to ensure that at least $2 \%$ of their workforces consist of people with targeted disabilities (PWTD) and $12 \%$ of people with reported disabilities. This has not been accomplished. In fact, the latest annual federal disability employment report data illustrates a significant shortfall in the thousands. Deaf and hard of hearing individuals make up approximately $13 \%$ of the U.S. population, but constitute approximately half of one percent of the federal workforce. Further, the report states that much less than $2 \%$ of senior leadership positions are filled with PWTD. Not a single self-disclosed deaf or hard of hearing individual has held a career Senior Executive Series (SES) position in the history of the government.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Specialized Disability-Specific Positions. Agencies must create and maintain specific positions to ensure accessibility and a diversified workforce, and have a Disability Emphasis Program Manager (DEPM) or Selective Placement Program Coordinator (SPPC) who is a person with a targeted disability. This DEPM can ensure vacancy announcements are circulated to disability organizations, state vocational rehabilitation services, postsecondary institutions with programs primarily for deaf and hard of hearing individuals (such as Gallaudet University and the National Technical Institute for the Deaf), and implement other measures to retain and promote PWTD in the workforce. Further, agencies should establish a diversity committee comprised of the Disability Emphasis Program Manager, Selective Placement Coordinator, Reasonable Accommodations Manager, selected managers, and members of affinity groups and diversified employees with targeted disabilities to address the hiring, advancement, and retention of all EEO groups, including people with targeted disabilities.

Agency Direct Video Communications ASL Line. Agencies with significant public interaction and engagement should establish a direct American Sign Language consumer support line and hire an ASLfluent individual who is deaf or hard of hearing to staff the videophone line. Agencies should also consider making a text number available for those who are text-reliant in order to enable another option for direct communications with the agency. For more information about establishing a direct video communications line, visit www.fcc.gov/dvc.
DEIA strategic plans must include the agency's centralized funding and coordination mechanism for reasonable accommodations.

Without an appropriate framework for accommodations, deaf and hard of hearing employees are set up to fail. Deaf and hard of hearing individuals who rely on quality interpreting and captioning services to bridge the communication barriers must be able to obtain such services seamlessly and efficiently. As a result, DEIA strategic plans must include information about the agencies centralized funding and coordination mechanisms for reasonable accommodations, including such interpreting and captioning services and specialized equipment. Given the need to develop such a centralized funding and coordination accommodations mechanism, a task force should be created to address this tremendous need.

Existing systems within the federal government for the provision of reasonable accommodations fail to include people with disabilities in the qualitative procurement and assessment of these accommodations. As a result, the present system of procuring interpreters and captioning services is done on a financial basis without regard to the quality of the services needed to ensure deaf and hard of
hearing employees are able to perform their job duties. Therefore, the task force that is responsible for proposing a centralized funding and coordination accommodations mechanism should be given jurisdiction to recommend a complete overhaul over the current procurement and contracting of services that are used as reasonable accommodations such as interpreting and captioning services.

## Comments: Advance DEIA Through Research

DEIA strategic plans must include accountability measures regarding workplace disability-specific data. DEIA strategic plans must ensure agencies public accountability through stringent reporting requirements. Such reporting must have a mandate to use plain language and analyses of trends and patterns regarding workforce data, public numerical goals for hiring PWTD, and affirmative action plans. Since 2003, Management Directive 715 has required all federal agencies to submit annual reports regarding the number and percentages of employees with targeted disabilities. Yet, simple reports aggregating and analyzing such raw data ceased after 2015. The DEIA strategic plans should mandate public reporting of agency data about employment of persons with targeted disabilities, including breakdowns by grade levels, types of disabilities, and bureau/department/office. While MD-715 requires agencies to collect and analyze data which show the representation of groups by disability status, there is no public data about disability-specific grade distribution, major occupations, promotions, career development, and other information. To truly promote improved hiring of people with disabilities across the board, this reporting mandate should be changed in this way for accountability and transparency purposes.

DEIA strategic plans should include the MD-715 framework proposed by the EEOC as outlined in its guidance at this link: Applying MD-715 to Improve Participation of Employees with Targeted Disabilities. This succinct yet comprehensive framework includes crucial points on the following issues: commitment from agency leadership, integration of equal employment opportunity (EEO) into the agency's strategic mission, management and program accountability, proactive prevention of unlawful discrimination, efficiency, and responsiveness and legal compliance.
DEIA strategic plans must affirm express commitment - in accordance with the Biden Harris EO - to go beyond mere compliance with current accessibility laws.

DEIA strategic plans must affirm agencies' commitment to comply with, and strive to exceed the requirements of, applicable accessibility laws, such as these that require:
o accessible captioned and sign language interpreted videos, video conferencing platforms, telecommunications (including relay services, videophone, and captioned telephone communications), virtual and in-person meetings, communication and IT technologies, training and other work-related materials, and general accessibility and usability of agencies' respective programs and services. o non-discrimination, equity, numerical hiring goals, proactive utilization of Schedule A authority, and all requirements pursuant to Sections 501, 504, and 508, relevant Executive Orders and any other applicable laws.

Annually issue a policy statement ensuring equal employment opportunity (EEO) for all applicants and employees, including those with targeted disabilities.

Embrace innovative and non-traditional ways to expand the workforce, and to accommodate deaf and hard of hearing individuals. An example would be to support the use of certain video conferencing platforms that may have accessibility features absent in other platforms, or to cover the cost of specialized equipment and services, such as tactile interpreting in one's home during the remote environment setting.
DIG stands ready to provide further support in any way needed regarding this pivotal DEIA mandate. For any further information, assistance, or requests for meetings, please contact DIG at learning@deafingov.org.
Sincerely,

Deaf In Government
www.deafingov.org

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 I believe that both the NIH workforce and the workforce at funded institutions are important. A key consideration would seem to be wheher they receive equal weight as part of the framework. Does the NIH envision focusing more on its own workforce than on the workforce of the funded institutions or are both equally important?
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Everything on the list is important to consider. The accountability and confidence pair seems like a strength as the populations being impacted (the researchers, those impacted by the reseracn, and the participants in the reserch) need to have confidence that those who are making decisions are holding themselves and the scietific workforce accountability. However, confidence is slightly different from trust. Is trust something that shoudl be consdiered here. Accountability can be used to drive change because people can be required to be compliant. However, if trust were considered, perhaps it would be possible to simply have the various research stakeholders trust each other. The accountability will still be necessary. However, if we could simply trust others to have the best intentions of those around them as a primary motivator, that may be more efficient than a need for constant enforcement.

## Comments: Advance DEIA Through Research

I think of this one similarly to Objective 1. Yes, to work toward equity, it will be important to do reserach both on the workforce and on health. But is one of these consdiered inherently more important? How will those with the power to allocate resources rank the importance of these two types of research relative to one another/.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Objective \#1 should prioritize programs and funding for MSIs. A few models for partnerships exist for academic medical centers/research intensive universities and MSIs exist e.g.
https://ascpt.onlinelibrary.wiley.com/doi/10.1111/cts.12118. The new strategic plan should fund the creation of new, innovative models for partnerships to enhance workforce diversity. In addition, the NIH CRCHD CURE program is highly successful in diversifying the diversity of the research workforce and should be expanded. Lastly, in Oct $2021, \mathrm{NCl}$ has mandated that all cancer centers supported by NCl establish a Plan to Enhance Diversity. A similar PED should be mandated of all centers that are funded by the NIH including CTSAs and their funding should depend on an evaluation of their PED.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Related to Objective \#2: While I greatly support and agree with the plan to center and prioritize DEIA in both the scientific workforce at NIH and the extramural organizations supported by NIH funding, simply put if there is no accountability there will be no change. Perhaps the DEIA framework should be expanded to DEIAA - by adding "accountability." Ways to incorporate accountability are through an organization's rates of graduation/training completion, hiring, NIH funding, promotion/advancement, leadership training and appointment, retention, attrition, and through measures of the climate of an
organization and how they impact those underrepresented in biomedical research vs. the majority. If we do not hold organizations accountable, then it feels unethical for me to lead programs to train diverse scientists and then place them in organizations where there is no accountability and, thus, they are highly likely to fail.

## Comments: Advance DEIA Through Research

The NIH has long valued bench research over research that improves the health of populations. The underinvestment in the heatlh of populations has prevented us from being able to eliminate health disparities. A central objective to advancing DEIA through research has significantly increase the amount of funding that is invested in the health of different populations and measure the impact of that research. The research funded by the NIH has to measure its impact by sociodemographic data. We cannot continue aggregation without representation. Intervention research that offers new models to reduce and eliminate disparities in disease by multiple demographics (gender, race/ethnicity, income, geography) have to be prioritized for funding.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Sexual and gender minority identities and well as their intersection with race ethnicity must be incorporated in all DEIA efforts; else the work is heteronormative excluding 10\% of the population

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Sexual and gender minority identities and well as their intersection with race ethnicity must be incorporated in all DEIA efforts; else the work is heteronormative excluding $10 \%$ of the population

## Comments: Advance DEIA Through Research

Sexual and gender minority identities and well as their intersection with race ethnicity must be incorporated in all DEIA efforts; else the work is heteronormative excluding $10 \%$ of the population

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce <br> ( Submitter left answer blank) <br> Comments: Grow and Sustain DEIA through Structural and Cultural Change <br> I am reaching out to ask that the NIH please prioritize outreach to disabled people in future projects. Inequalities based on disability create major health disparities, and the pandemic has only exacerbated these differences. Please invest in disabled citizens to strengthen the NIH's work. <br> Comments: Advance DEIA Through Research <br> ( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

DEIA outcomes are hard to measure if institutes do not have the relevant data needed in a timely manner. My suggestion is to amend the OD/EDI 2205 - Equal Employment Opportunity Sensitive Data Access policy to allow for data to be released to designated HR representatives within each IC that is not
in the aggregate form. At the moment, many IC's seem to be challenged by tracking items like promotion, awards recognition, and opportunities for professional development, or doing bias checks within these areas of the workforce. We are not able to fully assess the demographics of staff because we don't know what they are outside of the aggregate form. If we want to change the culture and data of NIH demographics we need more access and policy revision.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Wnat can we do regarding diversity in the organization.Work in underrepresented communities.. and promote condflic resoultion ..peacefully

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

partner with genetic epidemiology at howard university in DC

## Comments: Advance DEIA Through Research

create fellowships, interships...student opportunities to reach lower level in the pipeline.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 Respectfully, I urge NIH to reconsider the wording for the subtopic under this objective. Specifically, consider removing the phrase "at institutions supported by NIH funding" as stated below. The foci of UNITE and other DEIA initiatives at NIH seem to be pointed toward increasing the capacity of underrepresented investigators among NIH's funded investigator ranks and providing support for infrastructure at institutions most likely to train underrepresented individuals at the baccaluareate/postsecodary, postdoctoral, and professional levels. If this objective is limited only to those institutions "supported by NIH funding," then when will the other institutions ever benefit from the tremendous resources NIH expends or plans to expend to achieve this objective. HBCUs, MSIs, and Tribal institutions are likely among the many that do not benefit in equitable ways from such NIH funding. Hopefully, the strategic plan will include "tactics" to ensure that this inequity does not persist. Removing the phrase "supported by NIH funding" and/or leaving it but adding "and institutions that have little to no history of NIH funding" (or something on that order) would go a long ways to suggest that NIH is indeed interested in advancing racial and ethnic equity in its future workforce initiatives.Objective 1: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce NIH Workforce
Workforce at Institutions Supported by NIH Funding

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 Partner with community based organizations especially in capacity building and providing technical assistance.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

Partner with CBOs to conduct research at the community level by providing both funding and technical support. Create a streamlined, non-bureaucratic process that can effectively, quickly and efficiently promote change and reduce inequities in cancer care.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Team building skills workshop. <br> Comments: Grow and Sustain DEIA through Structural and Cultural Change <br> Festival: Cultural awareness, diversity, and inclusion pamphlets about values, food celebration, and exercise training like bean bag toss or potato sack races. Face paint and making a plant or feeding the farm animals. Live music and networking opportunities and kids can do a jumping gym.

## Comments: Advance DEIA Through Research

Cells and how we strive for anti-viral or rath non-paradoxical said in our human body and cells as the complex organisms that they are.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 Including medical education programs since many of these issues are perpetuated in the higher education.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Including medical education programs since many of these issues are perpetuated in the higher education. Increasing intervention research much of the research outlines the problems but not really working through them.

## Comments: Advance DEIA Through Research

Including medical education programs since many of these issues are perpetuated in the higher education.
Encouraging intervention studies to be more solution oriented to move beyond illustrating the problem.

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce How will this be done?

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

How will this be done and what resources will be available for this?

## Comments: Advance DEIA Through Research

How will this be done, who will coordinate the recruitment process and will it be limited to health care disparities as usual?

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

This may be inferred through Objective 2, but assessing the diversity of the workforce and assessing policies that might influence experiences of the workforce will be important.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

In alignment with the pillars noted, a health equity assessment of policies and procedures might serve as a gap analysis to identify opportunities for improvement.

## Comments: Advance DEIA Through Research

In terms of workforce research, can you include both cultivation of a diverse workforce as well as prioritizing research to elevate implicit bias and cultural skills training for practitioners?

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 I applied for the extramural NIH LRP this cycle. I considered applying for the Clinical Research for Individual from Disadvantaged Backgrounds (L32) but was struck by two key things. First, the criteria to qualify as being from a disadvantaged background is too narrow, thus not inclusive. For instance, I am an immigrant from Central America and was undocumented through most of college (I am now a citizen). I was raised and supported financially by a single mother who cleans houses for a living. After moving to the states, we lived in a a fairly rural area of South Carolina. Due to my immigration status, I was unable to apply to the majority of colleges in SC because they would have considered me out of state since I could not show a Green Card, and we simply could not afford out-of-state tuition. I would personally consider these and many other factors (e.g. not knowing a career as a physician-scientist even existed) as disadvantages. However, this would not qualify as defined by the criteria set forth by the LRP which rely on financial programs in college. I went to a private medical school after being offered a much better financial aid package and scholarship than my state school options, but those programs again did not meet the criteria specified by the LRP. To be clear, while the descriptive langue of a disadvantaged backdround is inclusive, the required documentation is restricted to proof of financial hardship which as highlighted in my case, would not be available (undocumented immigrants do not typically receive government services/funding). Second, when I inquired with the Officer regarding my circumstances, she referred me to the award rates for applicants in the Disadvantaged program (L32) vs the Clinical Research program (L30). It was alarming to see that the award rates are much lower for the Disadvantaged group. I would theorize that this reflects that some applicants cannot provide the appropriate documentation to prove a disadvantaged state, the fact these applicants are disadvantagedto being with (thus less likely to have adequate resources, mentorship, representation) and the represented institutions (more money goes to institutions with money/resources, minorities are less likely to be at those). Of course, I don't know the cause of this troubling pattern, and would suggest that understanding what factors lead to this should be a high priority. The findings of such project should be made available to the public so those that may be affected can attempt to mitigate where they can. Additionally, extra resources and staffing should be dedicated to this category of applicants since they are by definition, disadvantaged. I genuinely believe this program has tremendous potential and I am happy to see that it's there but as it exists, it's not quite there. I can imagine similar issues extending to hiring practices, other grant applications... To be clear, I am only speaking for myself and not JHU.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

As noted above, gaining an understanding of why applicants from disadvantaged backgrounds have lower success rates for the LRP (and other grants) is paramount. Without understanding this, simply having the program is not enough.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

For this and objective 2 (specifically), consideration should be given for protections to areas where DEIA is perceived a threat to the higher education landscape. There needs to be a way to support implementation with some clearly defined federal protections. Otherwise, there maybe limited impacts of such opportunities to only certain states or private institutions that are willing to embrace these measures.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Funding by NIH which address the social structural determinants impacting health disparities conditions in vulnerable populations needs to be significantly increase. The current research initiatives are inadequate.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

The review process needs to be change so that minority serving instituÃ-os who are not able to compete with majority institutions are able to do so more competitively.

## Comments: Advance DEIA Through Research

See the above two comments on objective 1 and 2

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 this proposal is out to lunch.nih is a corrupt, lying, sneaky anti american money mad agency that needs to be shut down. it needs to be defunded. the entire proposal is a total waste. lets encourae senile biden to resignthis agencys personnel acts like breain dead when makng proposals like thisComments: Grow and Sustain DEIA through Structural and Cultural Change shut down deia

Comments: Advance DEIA Through Research
shut down deia

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

( Submitter left answer blank )

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Accessibility to DEI programs is certainly crucial, but is it enough? Is it really including persons who are Deaf or disabled in the Diversity, Equity, and Inclusion initiatives? Are persons with disabilities invited and even expected to be at the table, setting the agenda or direction, or are they relegated to the audience, watching someone else's DEI program? Simply put, are people who are Deaf or disabled represented in DEI programs, initiatives, or activities? Are they hosting and planning the party or are they simply on the invitation list to someone else's party?
The Deaf and disabled community certainly sees the A in DEIA as Afterthought or Add-on, not as Accessibility accessibility to DEI efforts that, by definition, do not include them or are not for them. It seems to be that People with Disabilities are never a target audience, community, or population - by pretty much any DEI initiative or 'diversity professional'. This is true of employment recruitment, training, promotion, retention, etc. This is true of healthcare disparities and healthcare inequities. And, yet, as a class, people with disabilities experience just as much employment discrimination and just as severe healthcare disparities and inequities as other minoritized or historically overlooked or oppressed minority groups People who are Deaf or disabled do not see themselves represented in NIH's DEI programs. (I was told directly that people with disabilities are not a part of UNITE. No, people with disabilities are not being included in Diversity, Equity, and Inclusion maybe next year.)
It's difficult to see what, if anything, the NIH (or HHS) is doing to improve the representation of people with disabilities in and across its workforce (e.g., by grade or profession) nor conducting outreach to improve healthcare disparities and healthcare inequities amongst people who are Deaf or disabled. Diversity demographics rarely include people with disabilities and on those occasions where PWD are noted, the data is terrible (are the numbers suppressed because they're so poor or are they simply not being measured?) Accessibility to programs for other target communities or populations still leaves them on the periphery, not at the table helping to set and lead the agenda.

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Invest in ME/CFS research. It's time for the shameful walls of exclusion for ME/CFS at the NIH to crumble after Long COVID. It's high-time this neglect stops.

Comments: Grow and Sustain DEIA through Structural and Cultural Change
Invest in ME/CFS research. It's time for the shameful walls of exclusion for ME/CFS at the NIH to crumble after Long COVID. It's high-time this neglect stops.

## Comments: Advance DEIA Through Research

Invest in ME/CFS research. It's time for the shameful walls of exclusion for ME/CFS at the NIH to crumble after Long COVID. It's high-time this neglect stops.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 Workplaces should be committed to eliminating inequities in hiring people of color, women, and members of the LGBTQ communities to prominent positions. The higher the diversity the more productive is the company due to the diverse viewpoints of the employees. Employee diversity contributes to sharing perspectives from a varied group of people to attract widespread market audiences.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

One severe problem that is present in too many organizations is the use of microaggressions. Employees and employers make comments that may appear to be compliments but are instead hurtful. One example includes, " You are pretty smart. I wish more people your race was like you." Another fundamental problem in organizations is unconscious bias. Most people have been raised with certain negative perspectives of others because of their families, friends, and environment. They unconsciously and sometimes consciously exhibit these biases in the workplace. Unconscious bias erodes trust and can destroy an entire workplace thus sabotaging goals. There are scientific and practical ways to address unconscious bias.

## Comments: Advance DEIA Through Research

Research on how to advance DEIA is ongoing. A wealth of information exists about how to improve DEIA in the workplace that is based on research-based practices. Organizations need to put long term professional development training in place to address DEIA and select tools that monitor and evaluate the implementation of the professional development opportunities. This is tedious but necessary work that should improve the climate and culture of the workplace.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Provide clear consistent guidelines for improving cooperation within the workplace.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Emphasis on partnering with organizations that include a variety of different different cultures, classes, ethnicities, religions, lifestyles; etc.

## Comments: Advance DEIA Through Research

More research on the impact on bi/multiracial children's identity development.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Who do I care about the skin color of the person who cures me of cancer? Any suggestion that cancer will be cured faster by a diverse workforce is ludicrous. Any research that suggests this is biased, conducted by researchers with an agenda, and has no merit. This DEIA effort is simply using taxpayer money to institute racial quotas, which is not an appropriate use of taxpayer money that is supposed to be given to the NIH from congress to achieve benefits to human health in the most cost-effective way possible. Any efforts to eliminate racism are to be applauded, however, any funding mechanism that is only open to certain ethnicities is inherently racist, and a misuse of taxpayer money. The obvious reverse discrimination that this DEIA effort inflicts on the minority of Asian Americans is particularly deplorable (I am Caucasian, if that matters). Furthermore, this DEIA effort is not making our country less racist. Its effect has backfired and is making the country worse by increasing racism. The only solution is for the NIH to declare and put into practice that race or ethnicity has zero influence on the research that it chooses to fund.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Who do I care about the skin color of the person who cures me of cancer? Any suggestion that cancer will be cured faster by a diverse workforce is ludicrous. Any research that suggests this is biased, conducted by researchers with an agenda, and has no merit. This DEIA effort is simply using taxpayer money to institute racial quotas, which is not an appropriate use of taxpayer money that is supposed to be given to the NIH from congress to achieve benefits to human health in the most cost-effective way possible. Any efforts to eliminate racism are to be applauded, however, any funding mechanism that is only open to certain ethnicities is inherently racist, and a misuse of taxpayer money. The obvious reverse discrimination that this DEIA effort inflicts on the minority of Asian Americans is particularly deplorable (I am Caucasian, if that matters). Furthermore, this DEIA effort is not making our country less racist. Its effect has backfired and is making the country worse by increasing racism. The only solution is for the NIH to declare and put into practice that race or ethnicity has zero influence on the research that it chooses to fund.

## Comments: Advance DEIA Through Research

Who do I care about the skin color of the person who cures me of cancer? Any suggestion that cancer will be cured faster by a diverse workforce is ludicrous. Any research that suggests this is biased, conducted by researchers with an agenda, and has no merit. This DEIA effort is simply using taxpayer money to institute racial quotas, which is not an appropriate use of taxpayer money that is supposed to be given to the NIH from congress to achieve benefits to human health in the most cost-effective way possible. Any efforts to eliminate racism are to be applauded, however, any funding mechanism that is only open to certain ethnicities is inherently racist, and a misuse of taxpayer money. The obvious reverse discrimination that this DEIA effort inflicts on the minority of Asian Americans is particularly deplorable (I am Caucasian, if that matters). Furthermore, this DEIA effort is not making our country less racist. Its effect has backfired and is making the country worse by increasing racism. The only solution is for the NIH to declare and put into practice that race or ethnicity has zero influence on the research that it chooses to fund.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Training on hiring and retention of DEIA

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Use NIH clout to promote minorities. Increase their representation in review panels, invite minorities to lead and present in workshops and seminar series sponsored or organized by NIH.

## Comments: Advance DEIA Through Research

Provide special funding lines for DEIA across the scientific career path. As of Today, there are financial incentives to recruit and train minority undergraduate and graduate students. However, that is discontinued at the postdoctoral and faculty levels. Unfortunately, institutions are driven by financial incentives. Therefore, postdoctoral fellowships and grant lines targeted to minorities would be an effective way to incentivize institutions to hire and retain minorities.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

There is not a lot of detail in this webpage on the three Objectives, so it is hard for me to know which one is most relevant to my comment. I'm just placing this comment under Objective 1, but it may fit under one of the other Objectives. I would like to recommend that the NIH begin identifying and training minority and under-represented students during their later high school years. I feel that most NIH programs start too late, when many strong applicants have already pursued other paths. This leads to a small pipeline of qualified applicants to higher level positions. I would partner with high school science teachers to identify meritorious candidates and begin supporting them (financially and with career advice) by their senior year in high school. Such candidates can be further nurtured and supported through undergraduate programs and then graduate programs. I feel this will lead to a stronger pipeline of talented students who make it to the graduate level and eventually into faculty positions.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

## Comments: Advance DEIA Through Research

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

I am responding to the Strategic Plan for DEIA, rather than the three objectives, as the Strategic Plan has more specific details. I am looking at the description of how diversity is defined and pleased to see that disability is included in addition to underrepresented racial and ethnic groups and women. What I recommend and would like to see is inclusion of the LGBTQIA+ community in these types of initiatives. I have noticed that NIH's operationalization of gender as male and female (or even male, female, other) is non-inclusive of the trans, non-binary, and gender non-conforming communities. I think it is important to promote greater involvement of the LGBTQIA+ community in decision-making and policy-making related to health initiatives and health research. Please feel free to contact me to discuss this further.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce ( Submitter left answer blank )

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

1. Similar to New and Young Investigator status, PI's could choose to report their racial/ethnic minority status on NIH grant submissions, which could similarly be officially prioritized.
2. All NIH review panels should have a required number of ECR reviewers (e.g. 1/3), where applicants from racial/ethnic minoritized groups should be prioritized.
3. Among R grants, R15 grants are awarded to institutions where the research infrastructure is not strong, and where most of the future's diverse workforce is being trained. Yet the R15 mechanism is very limited, similar to an R21 grant that is meant to conduct a small, exploratory project. I urge the NIH to consider a new mechanism that would be more similar to an R01 in scope but limited to LRI's, with the expectation of a strong training and mentoring component of a diverse workforce.

## Comments: Advance DEIA Through Research

( Submitter left answer blank )


#### Abstract

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce A key pervasive structural barrier to scientific progress is securing funds in a competitive atmosphere. This structural barrier is compounded by onerous, increasing, and ever-changing documents and requirements by NIH for submission. From an equity perspective, scholars and institutions with power and privilege have inherently more capacity to adapt to this abrupt and onerous changes. Therefore, if NIH is truly committed to a diverse, equitable, and inclusive climate and scientific workforce, the NIH should PAUSE any and all changes to grant proposal submissions for at least three years so that organizations and applicants don't have to devote time, talent, and treasure to fulfilling administrative burdens imposed by NIH that don't improve the quality of the science and in fact, do not achieve our shared goal of a more diverse scientific workforce.


## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Part of the intiative includes accessibility but the only thing I saw about including people with disabilities was about applying for accomodation at the NIH. People with disabilities are woefully underrepresented in academia especially in the health sciences. People with disabilities should be included when creating intiatives such as the mentor program. You can identify race but not if you have a disability. It would be extremely beneficial to be able to identify mentors with a disbaility. I have a disability and do not know a
single person in academia wih a disability that can help me navigate looking for a post-doc or faculty position. The diversity pathway for grant funding is helpful but support needs continue after funding is awarded. A disability may affect progress of a project if the person becomes sick. Currently there is no space in the annual report that asks if there are any obstacles related to being an underrepresented minority that has afffected your research. People with disabilities are often afraid to bring up issues they may have had out of fear of discrimination. There are similar problems with T32 funding. If an awardee becomes sick or has a child and need more thatn 6 weeks for maternal or newborn complications their funding is not secure and the awardee may have to reapply for their funding when they return from leave. This greatly inhibits females from having children during a post-doc, at time when many are at the child baring age. This disportionately affects women and people with disabilities and can be a reason they do not finish a post-doc and leave the work force.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Iniatives that allow for flexibility for people with disabilities and child baring. Initiaves are there for when applying for funding but they stop there. It needs to be taken into consideration that having a disability or having a child during reseach may affect the timeline. Programs at the NIH should be more disabled friendly. I attended a summer genetics institute throught the NINR before 2020. The application asked if the applicant had any disabilities or needs. I noted my disability, however, when attending no accomodation was available (even up request). No information was provided to me about disbaility services or DEIA at the NIH. I was later repramanded for not being able to complete the seminar in the same form other participants did.

## Comments: Advance DEIA Through Research

Continueing support once funding is awarded for people from underrepresented minorities. The diversity pathway for grant funding is helpful but support needs continue after funding is awarded. A disability may affect progress of a project if the person becomes sick. Currently there is no space in the annual report that asks if there are any obstacles related to being an underrepresented minority that has afffected your research. People with disabilities are often afraid to bring up issues they may have had out of fear of discrimination. There are similar problems with T32 funding. If an awardee becomes sick or has a child and need more thatn 6 weeks for maternal or newborn complications their funding is not secure and the awardee may have to reapply for their funding when they return from leave. This greatly inhibits females from having children during a post-doc, at time when many are at the child baring age. This disportionately affects women and people with disabilities and can be a reason they do not finish a post-doc and leave the work force.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

I was quite disheartened and surprised to see a glaring omission of lesbian, gay, bisexual, transgender, and queer (LGBTQ+) individuals from the 2022-2026 NIH Chief Officer for Scientific Workforce Diversity (COSWD) Strategic plan. Although many groups are represented including specific racial, gender, geographic, and social categories there is no specific inclusion of persons identifying as LGBTQ+. This is despite LGBTQ+ individuals continuing to experience systemic inequalities in science that is at least as pervasive as other underrepresented groups.

In a study of 25,324 people individuals in STEM disciplines were more likely to be limited in their careers, experience harassment, and suffer professional devaluation if they identified as LGBTQ+1. Furthermore, LGBTQ+ individuals were more likely to not only leave their job but the STEM field altogether, regardless
of specific discipline or employment sector. Some of the reasons for this include feelings of isolation and lack of belonging as well as, in the words commonly reported by LGBTQ+ scientists in another study, it is exhausting to have to come out over and over again2.Even earlier in their training, sexual minority individuals were shown to be $7 \%$ less likely to finish their STEM undergraduate training despite being more likely to participate in undergraduate research3. This is echoed by the fact that from 2009-2018, $12 \%$ fewer men in same-sex couples completed a bachelor's degree in a STEM field compared to those in different-sex relationships4. This difference was larger than that between all White and Black men. Finally, looking at earlier age groups and confirming that these disparities are not unique to the United States, a 2018 study from The Institution of Engineering and Technology in the United Kingdom found that 29\% of LBGTQ+ persons aged 13-23 would never consider a career in engineering for fear of discrimination5.

As echoed in a prior New York Times Op-Ed, the goal should be to get to a point where STEM fields genuinely recognize L.G.B.T. members as an asset worth nurturing. 7 The specific inclusion of this category of scientists in the upcoming COSDW Strategic Plan would be an enormously important and long overdue step to achieve this.
References:

1. Cech, E. A., and Waidzunas, T. J. "Systemic inequalities for LGBTQ professionals in STEM." Science advances 7.3 (2021).
2. Yoder, J. B., and Mattheis A. "Queer in STEM: Workplace experiences reported in a national survey of LGBTQA individuals in science, technology, engineering, and mathematics careers." Journal of homosexuality 63.1 (2016): 1-27.
3. Hughes, BE. "Coming out in STEM: Factors affecting retention of sexual minority STEM students." Science advances 4.3 (2018).
4. Sansone, D., and Carpenter, C.S. "Turing's children: Representation of sexual minorities in STEM." PloS one 15.11 (2020).
5. Equality, Diversity and Inclusion: Strategy 2018-2023. The Institution of Engineering and Technology. https://www.theiet.org/media/4624/edi-strategy.pdf
6. How LGBT+ scientists would like to be included and welcomed in STEM workplaces. Nature, 10/19/2020, https://www.nature.com/articles/d41586-020-02949-3
7. Why is Science So Straight?Manil Suri, New York Times, 9/4/2015. https://www.nytimes.com/2015/09/05/opinion/manil-suri-why-is-science-so-straight.html

Comments: Grow and Sustain DEIA through Structural and Cultural Change ( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

One concern with implementing DEIA initiatives in the workforce is if those initiatives comply with equal opportunity laws. Another concern is the extent to which implementing these initiatives takes time away from the core mission of producing research.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce ( Submitter left answer blank )

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

I am not sure which objective this comment pertains to, but based on my experiences over a decade+ leading NIH-funded research projects, mentoring PhD students and postdoctoral trainees, serving on grad student admissions committees for multiple programs, and chairing my department's DEI commmittee, I have formed the opinion that the best way to address various problems with mentorship and training is to offer trainees a way to write for their own funding, independent of PI research projects. In this way their funding will not be tied to their PI's research, and this can prevent abusive relationships and shift power to the trainee. It also gives trainees the opportunity to compete for funding on their own, eliminating questions about whether their funding was a function of the PI they worked for, or their own capacity to secure funding.

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce ( Submitter left answer blank )

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

My concern spans across objectives and questions the limited scope of DEI initiatives by the NIH to primarily include/focus on racial and binary gender DEI, whereas diversity and the need for equity, inclusion, and accountability extend far beyond these groups. For instance, LGBTQ+ is largely omitted in NIH initiatives.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

As has been described in other NIH Funding mechanisms, mentorship is critical for developing a more diverse, inclusive and accessible workforce. I think mentorship and funding pathways should be an explicit priority.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

I am unclear why accountability and confidence are linked. If it is for confidence in NIH or research, or science in general. I think accountability should stand alone, as without it, no DEIA effort will last.

## Comments: Advance DEIA Through Research

There should be an explicit direction to advance DEIA on review committees, support for pipeline programs and collaboration with people with many perspectives.

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Any consideration of race in any scientific endeavor where race is not relevant to the science contributes to racism.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Any consideration of race in any scientific endeavor where race is not relevant to the science contributes to racism.

## Comments: Advance DEIA Through Research

This research can be valuable only if the conclusion is not pre-determined. Do not suppress methodologically sound research that reaches conclusions that contradict existing opinions. Case in point: American Heart Association's shameful retraction of Dr. Norman C. Wang's study of cardiology fellowship training programs.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

I would like for the eligibility criteria for minority supplements to be broadened. I've been a minority Assistant Professor for 10 years and was never eligible for a minority supplement: the first exclusion was the foreign citizenship/lack of Green Card, then the parent mechanism I tried did not allow diversity supplements, and after that I got my K01 and was no longer eligible. I have 3 African American colleagues who have also found out that the options are both too sparse and too exclusionary and were never eligible for a minority supplement. Many of us had to navigate unusual paths and overcome obstacles to be in academia. Given the different and diverse paths and timelines to attain research positions in academia, and difficulties in transitioning from that first R01, there should be options for junior scientists (Assistant Professors) that no longer meet the ECI or NI status, but need support to get beyond the 1st R01. This becomes even more important when we know that many of us do research in health disparities and harder-to-fund areas.
In sum, one strategy to increase and maintain the diversity of the workforce is to acknowledge the diverse and often long paths that historically marginalized groups have to go through to get to their faculty position, and create inclusive funding opportunities to support such scientists at different career stages - especially those dedicated to health disparities research.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Currently, universities and the government do not reward efforts to support diversity in the workforce. Diverse faculty are recruited (like me), used to meet the "minority quota", join committees, participate in academic and community outreach, but are then exclusively evaluated by the amount of funds we bring from grants, and are punished for all the time we invest in other efforts to try to support diversity and bring change. I have been "encouraged" to stop community engagement, public education, or teaching efforts, and even stop doing health disparities research, and just focus on getting basic research grants.

My suggestion is for institutions and the NIH to, even if not reward, at a minimum acknowledge the value of social or other contributions so that, when it comes to salary or promotion, one is not penalized for his/her investment in other commitments (and no, a personalized engraved plaque is not enough). Other suggestion is to penalize institutions that lose minority faculty, or those whose minority faculty are struggling or unhappy in relation to the non-minority faculty.

## Comments: Advance DEIA Through Research

As others have noted in the literature, increasing funding for health disparities research, or research that minority individuals are more likely to focus on, would be helpful.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Making sure that people you hire/fund are supportive of diversity by their track record and people from underrepresented groups voguing for them.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Willing to work and listen to underrepresented groups in what they need to help keep their communities healthy and then provide support. If women ask for therapy paid for after being harmed in NIH trainee sites you offer that. If people of color are complaining about a toxic NIH trainee site do the investigation and repair the harm that you allowed occur.
But allowing people to be harmed and not fixing your mistakes is not OK.

## Comments: Advance DEIA Through Research

Not funding people who sexually harass people. The FDA and NIH funded Stanton Glantz after he was found guilty of sexually harassing several women. This makes people distrust the NIH more. Plus not placing people who have racists allegations against them on sexual harassment working groups is helpful as well. Many people complained about Angie Rasmussen being racist against them and the NIH placed her on their sexual harassment working group. These repeated slights makes people believe the NIH is serious about diversity.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 ( Submitter left answer blank )
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

I am responding to the Strategic Plan for DEIA, rather than the three objectives, as the Strategic Plan has more specific details. I am looking at the description of how diversity is defined and pleased to see that disability is included in addition to underrepresented racial and ethnic groups and women. What I recommend and would like to see is inclusion of the LGBTQIA+ community in these types of initiatives. I have noticed that NIH's operationalization of gender as male and female (or even male, female, other) is non-inclusive of the trans, non-binary, and gender non-conforming communities. I think it is important to promote greater involvement of the LGBTQIA+ community in decision-making and policy-making related to health initiatives and health research.

## Comments: Advance DEIA Through Research

(Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

The American taxpayers do not care what the race of the biomedical workforce is, nor should they. Only the most qualified personnel should be hired, regardless of race. Discriminating on the basis of race is illegal in this country, though rarely enforced. This condescending attitude towards blacks and Latinos must end. Lower standards for underrepresented minorities has routinely resulted in them performing below whites and Asians on every academic and professional standard imaginable. Then societal progressives foolishly say the system is racist against them. That is true only insofar as they are systemically held to lower standards. This toxic focus on DEIA is tearing apart our country, crippling our workforce and impeding justice. It must end.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

DEIA is nothing more than politically fashionable racism and sexism. It must end in the name of justice.

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

We will not solve anything until we fix the financial risks of participating in science and especially academic science. Research has shown that a key driver of the wealth and opportunity gap between poor white people and poor minorities is that the former exist in a community where they can borrow a few thousand dollars if needed. For example, in the center of the US's biomedical capital (Boston), in 2015 the median net worth of white people is $\$ 250,000$. For black people that figure is $\$ 8$. That is not a typo, it is $\$ 8$. We cannot expect a talented, ambitious person who has overcome institutional racism and one of the lowest prospects for social mobility in the OECD to use their college education towards a career in science where they must endure 4-7 years at or below the poverty level obtaining a PhD only to spend 3-7 years as a post-doc making below what is a self-sufficient wage in the top locations for research in the country. This, only for a shot at one day having a

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

I am responding to the Strategic Plan for DEIA, rather than the three objectives, as the Strategic Plan has more specific details. I am looking at the description of how diversity is defined and pleased to see that disability is included in addition to underrepresented racial and ethnic groups and women. What I recommend and would like to see is inclusion of the LGBTQIA+ community in these types of initiatives. I have noticed that NIH's operationalization of gender as male and female (or even male, female, other) is non-inclusive of the trans, non-binary, and gender non-conforming communities. I think it is important
to promote greater involvement of the LGBTQIA+ community in decision-making and policy-making related to health initiatives and health research

# Comments: Grow and Sustain DEIA through Structural and Cultural Change 

(Submitter left answer blank )

Comments: Advance DEIA Through Research
(Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 (Submitter left answer blank )
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

I think NIH should provide more emphasis in supporting MS programs to train a diverse workforce. MS programs are largely ignored by most NIH training initiatives, yet they are much more likely targets of underrepresented populations, which can lack the funding and family support to directly enroll in PhD programs. If NIH wishes to improve the number of URM individuals in PhD-based research careers, supporting and enhancing MS programs to serve as a springboard for these individuals is essential.

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

> Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Consider adding supports to the pipeline (middle school/high school/college) level because efforts focused directly on the NIH or university faculty level will only support minorities who have already made it that far. Consider that the goal of the NIH should be the pursuit of knowledge first and foremost- if NIH or NHLBI would like to get into the business of social engineering, they should dedicate sufficient resources to study the effect that their social engineering has on breakthroughs in science and on the career progress of the minorities that they hope to help.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Consider being careful and evidence based in finding targets that need changing and be very deliberate in documenting the effects (positive and negative) of each change. Abandon "bad ideas" that "sound good" if they are not having the intended consequence.

## Comments: Advance DEIA Through Research

I recently got a review on an internal grant that was unfunded that said "this research is not likely to be NIH funded because it lacks a health equity focus". I want you at the NIH to think through the list of medical breakthroughs on the last century and point out which ones happened becase there was an equity focus? If all of us who were trained in really unique and specific techniques are suddenly expected to become social scientists, we may as well leave the profession altogether. Recognize that one does not have to be a certain skin color to want to discover the mechanism of a certain molecular pathway or find a targeted therapy- that is a basic instinct that resides in all of us scientists. Don't push policies that will extinguish the very thing that makes us passionate (our need to discover something
that will helps improves health) by shoving a policital "untested" ideology that thrwarts academic freedom and free enquiry.

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce NIH and NSF must start to recognise, gender minorities as part of the metrics it collects on it's researchers.
This includes intersex persons, who represent $1.7 \%$ of the population or $4,784,172$ people in the USA. NIH should also include intersex and other SGM within their definitions of underrepresented minorities within biomedical, clinical, behavioral, and social sciences. NIH is currently excluding this population from applying for resources centered on improving the DEIA in the workplace. (For example the PRIDE program, which given the name of the program is really quite insulting)

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

NIH should work towards a $1.7 \%$ intersex and other SGM inclusion in their hiring practices, as well is their reviewer pools for study section.
The perspectives on key aspects of grant review will be invaluable.

## Comments: Advance DEIA Through Research

Assess the current number of intersex and other SGM researchers within NIH and US institutions. Fund projects that target prior data, where the sex difference between male and female lies with $1.7 \%$. Fund re-analysis of biobanked specimens, to ascertain karyotype and or DSD genetic changes, to add complexity to the sex determination outcomes from these studies.
Fund grants that generate novel in vivo, ex vivo, and in vitro models of intersex and other DSD conditions.
In federally funded clinical studies, remove SGM/DSD/intersex as an option for exclusion in the study.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

This is a critical goal to strengthen STEM through inclusion of diverse voices and perspectives. The NIH funds and supports elitism and legacy-based definitions of 'success' that are presented as a meritocratic focus on excellence when they are in fact highly biased systems that are exclusionary to excellent research that is done outside of elite institutions. The programs that support small institutions are mere consolation prizes when compared to R1-level award mechanisms. Since many small undergraduate institutions disproportionately serve minoritized and marginalized students who are systematically disenfranchised by large research universities there should be a systematic focus on respecting their missions and identities, acknowledging their excellence and a nationwide capacity building effort to foster sophisticated research in the institutions that minority students choose based on belonging and accessibility.
Fix peer review. I review for and am funded by both NIH and NSF. There is a stark contrast between the review panel culture between NIH and NSF. Frankly, NIH review has degenerated to the level of legitimized trolling. There is a loss of civility, both scientific and social, that renders toxic and incompetent reviewing all to frequent at NIH.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Intersex and other SGM are not represented through inclusion in statistical counts and the non-binary experience is not lifted up by NIH in any meaningful way, starting with the demographic acknowledgment of intersex existence in official statistics.

## Comments: Advance DEIA Through Research

1. Study the impact of small PUI on the nation's science capacity, especially in the launching of graduates from poverty, rural, first generation, BIPOC communities. My hypothesis would be that you will see a disproportionate impact on STEM diversity that is attributable to these small and under-resourced colleges and that you will see the devastating numbers of minority and marginalized students who fall victim to broken pipelines but who could have been launched on these trajectories if resources followed rhetoric.
2. Study programs that punch above their weight in terms of actually promoting diverse success in STEM, not just access and demographic box checking. For example I run a Native Hawaiian STEM Scholars program with $100 \%$ graduation rate and $80 \%$ graduate school placement - how are we doing that? We have programs where victims of Hawaiian over-incarceration are entering college and being successful. How are we doing it? What is our secret sauce? You should be asking these questions and learning from our work and the work of many other passionate, mission-driven experts in student success who function largely outside of the R1-NIH orbit.
3. Research the lived experience of SGM scientists. Listen. Then change the system.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 I just have one general comment that can be applied to any/all of the three objectives. I think it would be important to include an educational component to DEIA since some of the potential biases may be at an unconscious level. Dr. John Baugh recently offered a presentation (there's a similar one on TEDx) where he discussed "linguistic profiling". It was an eye opener for me in terms of biases that can go undocumented. In other words, it has to be more than checking \#s to confirm compliance.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

(Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

On behalf of deaf and hard of hearing federal employees, Deaf in Government (DIG) applauds the BidenHarris administration on launching Executive Order 14035, the government-wide mandate to cultivate a federal workforce that reflects the full diversity of the United States and advances diversity, equity, inclusion, and accessibility (DEIA).
By way of this paper, DIG requests that the below recommendations be incorporated in the federal agencies' mandatory DEIA strategic plans which are to be finalized by March 23, 2022.
Include deaf and hard of hearing employees in finalizing and implementing the DEIA strategic plans.
The DEIA strategic plan will be flawed without true engagement with affected parties. Agencies must include deaf and hard of hearing employees and accessibility experts on the DEIA teams responsible for the March 2021 strategic plans, and accessibility policies and related plans.

Unfortunately, the DEIA mandate currently requires agencies to consult only with their Office of General Counsel, and the DEIA cross-agency team is defined as follows: Office of the Secretary; Chief Diversity Officer; Chief Human Capital Officer; Equal Employment Opportunity Officer; Performance Improvement Officer; Chief Learning Officer; Chief Financial Officer; and Agency Equity Team lead. Currently there is no recommendation or mandate to include people with disabilities and accessibility experts as essential team members. Only with deaf and hard of hearing people at the table and on the DEIA team, can these DEIA strategic plans be made appropriately and effectively about them. In fact, EO 13985 recognizes the indispensability of inclusion with a mandate that federal agencies coordinate, communicate, and engage with targeted underserved communities in executing the tasks of the Order.
DEIA strategic plans must commit to agency staffing that includes people with targeted disabilities at every level of employment, including senior leadership positions, and specialized positions to advance accessibility and disability employment.

Agencies must commit to hire more deaf and hard of hearing employees. Agencies are supposed to reflect the diversity of the United States, and are required to ensure that at least 2\% of their workforces consist of people with targeted disabilities (PWTD) and $12 \%$ of people with reported disabilities. This has not been accomplished. In fact, the latest annual federal disability employment report data illustrates a significant shortfall in the thousands. Deaf and hard of hearing individuals make up approximately $13 \%$ of the U.S. population, but constitute approximately half of one percent of the federal workforce. Further, the report states that much less than $2 \%$ of senior leadership positions are filled with PWTD. Not a single self-disclosed deaf or hard of hearing individual has held a career Senior Executive Series (SES) position in the history of the government.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Specialized Disability-Specific Positions. Agencies must create and maintain specific positions to ensure accessibility and a diversified workforce, and have a Disability Emphasis Program Manager (DEPM) or Selective Placement Program Coordinator (SPPC) who is a person with a targeted disability. This DEPM can ensure vacancy announcements are circulated to disability organizations, state vocational rehabilitation services, postsecondary institutions with programs primarily for deaf and hard of hearing individuals (such as Gallaudet University and the National Technical Institute for the Deaf), and implement other measures to retain and promote PWTD in the workforce. Further, agencies should establish a diversity committee comprised of the Disability Emphasis Program Manager, Selective Placement Coordinator, Reasonable Accommodations Manager, selected managers, and members of affinity groups and diversified employees with targeted disabilities to address the hiring, advancement, and retention of all EEO groups, including people with targeted disabilities.

Agency Direct Video Communications ASL Line. Agencies with significant public interaction and engagement should establish a direct American Sign Language consumer support line and hire an ASLfluent individual who is deaf or hard of hearing to staff the videophone line. Agencies should also consider making a text number available for those who are text-reliant in order to enable another option for direct communications with the agency.
DEIA strategic plans must include the agency's centralized funding and coordination mechanism for reasonable accommodations.

Without an appropriate framework for accommodations, deaf and hard of hearing employees are set up to fail. Deaf and hard of hearing individuals who rely on quality interpreting and captioning services to bridge the communication barriers must be able to obtain such services seamlessly and efficiently. As a result, DEIA strategic plans must include information about the agencies' centralized funding and coordination mechanisms for reasonable accommodations, including such interpreting and captioning services and specialized equipment. Given the need to develop such a centralized funding and coordination accommodations mechanism, a task force should be created to address this
tremendous need. This task force should include deaf and hard of hearing employees, managers, DIG representatives, the Registry of Interpreters for the Deaf, the National Association of the Deaf, the U.S. Access Board, the National Council on Disability, the U.S. Office of Personnel Management, and the U.S. Equal Employment Opportunities Commission.

Existing systems within the federal government for the provision of reasonable accommodations fail to include people with disabilities in the qualitative procurement and assessment of these accommodations. As a result, the present system of procuring interpreters and captioning services is done on a financial basis without regard to the quality of the services needed to ensure deaf and hard of hearing employees are able to perform their job duties. Therefore, the task force that is responsible for proposing a centralized funding and coordination accommodations mechanism should be given jurisdiction to recommend a complete overhaul over the current procurement and contracting of services that are used as reasonable accommodations such as interpreting and captioning services.

## Comments: Advance DEIA Through Research

DEIA strategic plans must include accountability measures regarding workplace disability-specific data.
DEIA strategic plans must ensure agencies' public accountability through stringent reporting requirements. Such reporting must have a mandate to use plain language and analyses of trends and patterns regarding workforce data, public numerical goals for hiring PWTD, and affirmative action plans. Since 2003, Management Directive 715 has required all federal agencies to submit annual reports regarding the number and percentages of employees with targeted disabilities.
Yet, simple reports aggregating and analyzing such raw data ceased after 2015. The DEIA strategic plans should mandate public reporting of agency data about employment of persons with targeted disabilities, including breakdowns by grade levels, types of disabilities, and bureau/department/office. While MD715 requires agencies to collect and analyze data which show the representation of groups by disability status, there is no public data about disability-specific grade distribution, major occupations, promotions, career development, and other information. To truly promote improved hiring of people with disabilities across the board, this reporting mandate should be changed in this way for accountability and transparency purposes.

DEIA strategic plans should include the MD-715 framework proposed by the EEOC as outlined in its guidance at this link: Applying MD-715 to Improve Participation of Employees with Targeted Disabilities. This succinct yet comprehensive framework includes crucial points on the following issues: commitment from agency leadership, integration of equal employment opportunity (EEO) into the agency's strategic mission, management and program accountability, proactive prevention of unlawful discrimination, efficiency, and responsiveness and legal compliance. DEIA strategic plans must affirm express commitment - in accordance with the Biden Harris EO - to go beyond mere compliance with current accessibility laws.

DEIA strategic plans must affirm agencies' commitment to comply with, and strive to exceed the requirements of, applicable accessibility laws, such as these that require: o accessible captioned and sign language interpreted videos, video conferencing platforms, telecommunications (including relay services, videophone, and captioned telephone communications), virtual and in-person meetings, communication and IT technologies, training and other work-related materials, and general accessibility and usability of agencies' respective programs and services. o non-discrimination, equity, numerical hiring goals, proactive utilization of Schedule A authority, and all requirements pursuant to Sections 501, 504, and 508, relevant Executive Orders and any other applicable laws.

Annually issue a policy statement ensuring equal employment opportunity (EEO) for all applicants and employees, including those with targeted disabilities.

Embrace innovative and non-traditional ways to expand the workforce, and to accommodate deaf and hard of hearing individuals. An example would be to support the use of certain video conferencing platforms that may have accessibility features absent in other platforms, or to cover the cost of specialized equipment and services, such as tactile interpreting in one's home during the remote environment setting.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 Would love to see similar programs to the "K01 - NINDS Faculty Development Award to Promote Diversity in Neuroscience Research" rolled out across NIH institutes. Similarly, consider expanding the window of eligibility for postdocs and early career researchers across the board (without requiring extensions or special consideration) in light of the COVID-19 pandemic. Create special funding mechanisms for individuals who left the academic science workforce during the pandemic to re-enter the field (as this disproportionately impacted individuals from underrepresented groups or with disadvantaged backgrounds). Lay out explicit formal policies about how postdoctoral or early career researcher applications should be reviewed and scored, with clear instructions to not penalize for reduced productivity, employment disruptions, or absence of preliminary/pilot data in light of the past few year's disruptions. All of the work done so far to promote equity in the sciences risks huge setbacks due to the pandemic- so now is the time to devote more resources and critical investment to supporting scientists facing more pressures or inequities, particularly women, individuals with disabilities, people of color, or individuals from financially or educationally disadvantaged areas. Consider funding mechanisms for scientists with lived experience related to the research they are proposing, or scientists who have had toxic or traumatic experiences in the academic workplace, or perhaps factoring in the indirect impacts of researchers who are excellent mentors (especially of individuals from underrepresented groups) when scoring their grants.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Much as the NIH focused on improving postdoctoral salaries to promote equity, also consider what could be done about graduate student and postdoctoral retirement benefits. Many universities do not offer matched retirement accounts for postdocs, or require 5+ years of work at the institution to become vested (which is unrealistic for most postdocs), and I know of no universities that provide graduate students with retirement benefits. These policies discourage or disadvantage individuals from lower income backgrounds (many from under-represented groups) from pursuing graduate or postdoctoral training, and put academic scientists at a huge financial disadvantage from their peers (who may have started careers and began accruing retirement benefits after college). Would be great for NIH to pursue more targeted outreach with small liberal arts or undergraduate-serving institutions, as many young scientists at such schools are not aware of the importance of post-bacc research experience in facilitating entry to graduate school and competitive success.

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce German Digital

# Comments: Grow and Sustain DEIA through Structural and Cultural Change <br> ( Submitter left answer blank ) 

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Talking is one thing <br> Need specific action plans <br> Comments: Grow and Sustain DEIA through Structural and Cultural Change <br> Very visionary <br> Need action <br> Comments: Advance DEIA Through Research <br> Yes - do it show it

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Completely based on lies, fraud and scientific plagiarism.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Completely based on lies, fraud and scientific plagiarism.

## Comments: Advance DEIA Through Research

Completely based on lies, fraud and scientific plagiarism.


#### Abstract

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Public Responsibility in Medicine and Research (PRIM\&R) appreciates the opportunity to comment on the Framework for the NIH-wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility (DEIA). PRIM\&R commends NIH for making such a concerted effort to ensure that this important and complex societal issue is integrated and strengthened across all its activities. However, PRIM\&R notes that the published framework is extremely sparse and inadequate in allowing for deliberative feedback from interested stakeholders. PRIM\&R is a nonprofit organization dedicated to advancing the highest ethical standard in the conduct of research. Since 1974, PRIM\&R has served as a professional home and trusted thought leader for the research protection community, including members and staff of human research protection programs and institutional review boards (IRBs), investigators, and their institutions. Through educational programming, professional development opportunities, and public policy initiatives, PRIM\&R seeks to ensure that all stakeholders in the research enterprise understand the central importance of ethics in the advancement of science.


The RFI seeks input on a proposed framework for the NIH-wide strategic plan for DEIA, which identifies three specific areas or objectives. The paucity of information provided in the RFI, however, makes providing substantive and constructive feedback impossible. For example, the RFI specifically states, ...NIH seeks comments on any or all of, but not limited to, NIH's priorities across the three key areas (Objectives) articulated in the framework, including potential benefits, drawbacks or challenges, and other priority areas for consideration. But it is unclear how one would even begin considering drawbacks as they relate to, for instance, Objective 2: Grow and Sustain DEIA through Structural and Cultural Change. Furthermore, what drawbacks could ever be associated with accountability and confidence? To take another example, with reference to Objective 3: Advance DEIA Through Research, it is unclear without more information, what is meant by Workforce Research and how that falls within the mission of NIH.
Given the tremendous potential for misinterpretation and misunderstanding of various terms used in the framework, PRIM\&R requests that NIH reissue the RFI with additional information that better defines and describes each objective, as well as the sub-components of the objectives. A more developed draft framework will ensure that NIH receives detailed and thoughtful comments from a range of stakeholders on developing a framework to guide its efforts to foster DEIA within the biomedical research enterprise.
Thank you for your consideration and if you have any questions, please feel free to contact me by phone at (617) 423-4112 or e-mail at ehurley@primr.org.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

(Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

In order for NIH to advance racial equity, diversity and inclusion within all facets of the biomedical research workforce, consideration should be taken to broaden the scope to include the research administration support network. This network plays an integral role in all aspects of biomedical research, including proposal preparation, application submission, and post-award financial, reporting and compliance management. Implementation of an equity strategy that could impact the demographic disparity of under-represented populations aligns with NIH's UNITE initiative. Promotion of hiring and training practices that focus on retention of under-represented populations in the research administration community allows for a voice that could uniquely influence the elimination of racial and ethnic inequities within the workplace.
An FOA with specific focus on development and implementation of policies and strategies for the hiring, training and retention of under-represented populations in the biomedical research administration community could impact racial equity, diversity, and inclusion in the biomedical research workforce. Gaining diverse perspectives, backgrounds, and skillsets in research administration allows for benefit of viewpoints not yet represented and promotes positive advances toward greater inclusiveness and diversity. Successful approaches would be sustainable and scalable, with outcome-driven metrics that are achievable within three to five years. Metrics would include percent increase of under-represented populations in the total Research Administrator pool of the applicant organization, percent of trainees that successfully secure a position as a Research Administrator after a pre-set intensive training course, job retention/advancement over a follow-up period of up to five years, and increase in topic knowledgebase over time, as demonstrated by both quantitative and qualitative assessments.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Building on Objective 1, once these hiring and training practices are established that focus on retention of under-represented populations in the research administration community, one could envision taking the basic hiring/training platform for further implementation and outreach of these programs to other institutions and/or community partners.
An FOA with specific focus on an education program to implement policies and strategies for the hiring, training and retention of under-represented populations in the biomedical research administration community across multiply institutions (both domestic and international) could impact racial equity, diversity, and inclusion in the biomedical research workforce on a global level.

## Comments: Advance DEIA Through Research

(Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

I think the most challenging aspect is maintaining the respect of all customers. I have seen recently a picture of a research collaboration group that was claimed by the speaker to represent high diversity. But I did not see anyone that looked like me - someone over age 60. The new practices must not discriminate against white males and must not discriminate based on age. Prioritization of diversity ideals must be done carefully in order to prevent discrimination.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

I had been a part of a scientific research group over most of the last 12 years led by a PI with USA citizenship but of Chinese origin. The group had a large number of post- and pre-doctoral students who were Chinese. I can only think of a handful of people who came through that laboratory that had a different background. Consequently the primary language of the laboratory was not English. I was unable to participate in much of the science discussed due to my lack of Chinese language and thus was not included.
I have also known research groups within the NIH headed by other foreign born scientists (I do not know their citizenship status), but a significant number of the post-docs in those laboratories had the same country of origin as the PI. This practice must be discouraged to promote diversity. Diversity should not only be across the agency; it needs to be displayed in the basic work group.

## Comments: Advance DEIA Through Research

( Submitter left answer blank)

[^3]recognition of non-traditional relationships and excuses for leaves and urging organizations to do the same. I lost my partner of 7 years, who l've known for 15 years, but because we were "only" engaged and had no "legalized" relationship, all requests for extensions/bereavement leave have been denied.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

(Submitter left answer blank)

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 (Submitter left answer blank )
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

(Submitter left answer blank )

## Comments: Advance DEIA Through Research

My comment is simple. Research is a good thing, and I have a degree in it. However, research leads to knowledge, which falls short of action.
What our country and citizens need is action. I would strongly encourage you to add "and Development" to your objective and commit to funding it.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

People with disabilities are included in the four classes of individuals protected by civil rights laws that apply to all NIH-supported activities. Section 504 of the Rehabilitation Act states, that no otherwise qualified individual with a disability in the United States shall, solely by reason of the physical or mental impairment, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Additionally, the Executive Order on Equity, Inclusion, and Accessibility in the Federal Workforce states, For agencies that have external advisory committees, commissions, or boards to which agencies appoint members, agency heads shall pursue opportunities to increase diversity, equity, inclusion, and accessibility on such committees, commissions, and boards. We outline how the NIH's DEIA framework could better include people with disabilities and prioritize accessibility.
Objective 1: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce While this Objective focuses on the NIH workforce and workforces at institutions supported by NIH funding, opportunities are needed to support ecosystem changes that advance DEIA. Under this Objective we suggest that the NIH:

Include disability as a core component of all NIH DEIA efforts.
Collect data to identify gaps, track progress, and allocate resources towards disability inclusion and accessibility. This includes ensuring transparency in data collection processes and by ensuring data is made publicly available.

Improve and monitor the accessibility of all NIH-supported activities and programs, and publicly reporting data on accessibility metrics.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

This broad aim includes stewardship, partnerships, engagements, and accountability and operations. These approaches are critical to addressing disability inclusion and accessibility gaps that have held back progress in research settings. We recommend the NIH to:

Incorporate disability inclusion and accessibility metrics as a required and scored component of NIH grant reviews.

Include people with disabilities on NIH leadership teams, advisory committees, and study sections, including but not limited to the ACD, the NIH Equity Committee, and the Council of Councils.

Conduct a review of all NIH policies and procedures to identify and revise those that create disability inequities and barriers to disability inclusion and accessibility.

Support partnerships with the disability community through targeted funding opportunities and inclusion on community engagement initiatives, such as The COVID-19 CEAL (Community Engagement Alliance).

## Comments: Advance DEIA Through Research

This objective focuses on both workforce and health research, which are critical to developing novel strategies and tools to advance and monitor DEIA. We urge the NIH to:

Create trans-NIH funding opportunities to support DEIA research, with a focus on addressing barriers to disability inclusion in the biomedical workforce.

Create funding opportunities to advance health equity for people with disabilities.
In addition to the suggestions outlined above to each of the three Objectives, we encourage the NIH to take bold action necessary to advance DEIA.

We urge the NIH to establish an Office of Disability Research to support the coordination of research, outreach, and policy efforts needed to achieve the goals of DEIA at the NIH. This office must include leaders with the lived experience of disability to uphold the tenants of DEIA.
We are encouraged by this administration's commitment to disability inclusion and accessibility. It is an inflection point that we urge the NIH to not miss. NIH has an important opportunity to forge a path to disability inclusion, in partnership with members from the disability community.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

I think there is a significant backlash to implementing diversity and equity as organizational practices in many academic institutes nationally. For example at postdoc level: most postdoctoral trainees are from international fellows, colored and females; however when we look at faculty and senior leadership positions, faculty/professorial positions are almost completely run by white males. Junior black and brown researchers who are awarded NIH awards are still struggling to transition to faculty positions, despite obtaining extremely competitive NIH awards. Their effort is not appreciated by their institutes. This needs to change by implementing policy changes that ensure the faculty transition of black/brown and female researchers who receive competitive funding. It looks as though blacks/browns have to over perform and obtain several awards/fundings but still struggle compared to their white counterparts who easily transition to faculty without even making an effort to apply for competitive grants.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Faculty level at academic institutes should reflect national population demographics. Many renowned institutes do not even have a single black faculty in a department of over 300 faculty. Effort should be made to recruit at least $10 \%$ blacks, which is reflective of the black population in the US. And when you look at these institutes' junior investigators' (postdocs, research scientists, instructors) demographics,
you will find higher black/brown proportion than in the faculty levels. Such disparity in demographics around this key career transition period is a clear indicator of the ongoing resistance from higher leaders to hire blacks for faculty.

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 One key issue that is usually left out of DEl initiatives is the hiring and recruitment of persons with disabilities. We need to make sure in the rush to address race and gender, we don't forget that people with disabilities can make substantial contributions to the scientific workforce. Without Thomas Edison, we would not be where we are today. As a person with a disability, I genuinely dislike how I am seen as non-diverse when I have a disability. The US department of labor mentions disability as a form of diversity and that should be included in any plan moving forward. Persons with disabilities, both visible and invisible, have many hardships and a difficult road towards having a stable career.Comments: Grow and Sustain DEIA through Structural and Cultural Change
( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Challenge is going to be accountability from outside institutions. Change always meets resistance, even if the benefits are substantial. I think any plan will need to account for that resistance.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Honestly, I think some of the most successful changes are going to be monetary ones. There are significant financial barriers to becoming academic researchers, and many of us that are here have immense privileges of having family wealth in some capacity. For instance, the post-bacc salary is technically below the living wage for our area. Additionally, if postdocs were hired in the government, the GS scale would require them to be paid substantially more than they are offered. I understand that postdocs are considered "trainees" but as a 33 year old adult with a child, I should no longer be considered as a "student". Further, financial stability for professors is not usually achieved until their mid-40s. As a result, people with the privilege to be able to withstand that financial uncertainty have a significant advantage over those who don't. As a result, these people tend to be white men. Additionally, childcare access greatly influences success of mothers. It shouldn't be that way, but it is true. While NIH has (amazing) daycares, they can unfortunately only serve a small portion of the NIH population. There are several ways to get around this. One is to add more NIH-subsidized daycares. Another is to have vouchers or awards that can be put to use for daycares in the area.
I understand these are costly measures, but may be necessary to have sustained change in the retention of a diverse workforce. Talking about structural racism is not enough. You have to actually dismantle the structures and make significant change to make significant progress.

## Comments: Advance DEIA Through Research

There is a significant lack of data on what various skin disorders look like on non-white people.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Good

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Regarding cultural change, I would suggest strategies to promote a broader impact of this objective in society.
This comment is derived from comparing my years working in a research hospital in the Midwest vs. my new role as professor at UTRGV where $>80 \%$ of my students are from a minority-in-science population (Hispanics). I perceive lower motivation of students, probably triggered by the self-awareness of the low profile roles of Hispanics in society. Hence, I propose intense diffusion of information of successful scientist of hispanic community, as a mean to inspire children, teenagers, early career scientists to work hard for science.

## Comments: Advance DEIA Through Research

Good

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 develop standardized DEIA curriculum that can be used for training purposes across the healthcare continuum, so that new staff are oriented in similar fashion
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

standardized training on how to systemize DEIA within agencies that includes policies, practices, trainings, and consequences for non adherence

## Comments: Advance DEIA Through Research

develop list of professional DEIA trainers and researchers by states to make available to practitioners

> Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce A major area that I think requires significant attention to really be able to prioritize DEIA in the workforce is the mechanism of hiring contractors. We do not really have any insight into how contracting companies are identifying their candidates and themselves ensuring equity, diversity, and inclusion. Additionally, when an organization is composed of mainly contractors, they are not able to interview or interact with candidates, which also significantly impacts our ability to ensure an equitable hiring process.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change <br> (Submitter left answer blank )

## Comments: Advance DEIA Through Research

(Submitter left answer blank )


#### Abstract

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Using remote work to enhance DEIA in the NIH workforce -- allows people from diverse backgrounds who may not live in the DC area to be part of the NIH workforce, as well as those with disabilities or other personal limitations/obligations to participate (including those who need to provide care or assistance to family members that may not live in the DC area). The country is full of talent and people willing to serve the NIH but not everyone is able to live in the DC area. It's a loss to the agency to not fully capitalize on that diverse talent pool. People living in different geographies also have different perspectives than those who live in the DC region. Additionally, remote work makes interactions between colleagues to be more equal as everyone gets invited to the office video chat rather than the discriminatory social cliques that form in the office ('water cooler' conversations are not always open to everyone in the office and often leave certain individuals out). Remote work should be available to people equally across ICs (so those in the same job function should have equal access to remote work, regardless of IC affiliation) and not subject to the whims of an individual supervisor. Remote work allows the NIH to recruit and retain talent that might otherwise drop out of the federal workforce.


## Comments: Grow and Sustain DEIA through Structural and Cultural Change

(Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

In addition to focusing on the NIH Workforce, there also needs to be an examination of the pipeline to becoming part of the NIH Workforce. That is, what are the barriers to entry to fields which create NIH employees? For example, is the lack of diversity in the profession of nutrition \& dietetics due to credentialing which requires a lengthy unpaid internship? What is causing the lack of diversity in medical school graduates? Consideration must be given to the fact that the NIH Workforce is a factor of pipeline barriers.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 ( Submitter left answer blank )
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

More is needed to support existing employees with intellectual and developmental disabilities in the NIH workforce. A data driven approach should be used across NIH and ICs to measure how each is doing achieving the EEOC's Final Rule on Affirmative Action for People with Disabilities in Federal Employment
(https://www.eeoc.gov/laws/guidance/questions-answers-eeocs-final-rule-affirmative-action-people-disabilities-federal\#:~:text=Employment\ Goals,What\ goals\ are\&text=The\ rule\ requires\ each\ federal,higher\ and\ lower\ s alary\%20levels.)

## Comments: Advance DEIA Through Research

(Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 I think there are positions at NIH that have qualification requirements that are more rigid than others, despite someone being able to be a good fit for the job and being able to learn on the job. In particular, the HSA/SBSA (Program Official/SRO) roles. When looking at the requirements, only selecting people based on the discipline of their degree, whether they had post-doc experience or experience as a professor in academia, and/or experience working with large university-research grant greatly limits the pool of applicants and can be an unnecessary barrier for someone who could be otherwise qualified based on the independent research they conducted in graduate school. Additionally, I could imagine it would be a barrier for underrepresented applicants given that the trends in academia are such that the higher in the academic journey you go (e.g., graduate student to post-doc to assistant professor), the more white and male the population is, similar to how there is a stark difference in demographics between GS 13-15 roles and those 12 or lower. I think part of the strategic plan and more carefully considering DEIA in the workforce requires a review of position requirements (I only noticed this trend HSA/SBSA positions but this example does warrant looking at other roles too to see if there are similar trends) and whether certain requirements are unnecessary or too rigid, and could be disqualifying a large pool of applicants who would otherwise be qualified. Considering that it is more common now for those graduating with a PhD to not further pursue academia, I think not tapping into that talent pool is a missed opportunity for NIH in general but particularly in diversifying the workforce.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

(Submitter left answer blank )

## Comments: Advance DEIA Through Research

(Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Accessibility and diversity mean celebrating and educating the public about these diverse backgrounds and experiences. It's about exposure. A simple example is that our kids who are not familiar with Indian culture of celebrating Holi. In schools that chose to be agnostic, we were completely sheltered from this experience but when she went to an all-inclusive school, we learned about Holi, Kwanzaa, and Lunar New Year. This exposure of cultural differences through celebration helped us to be at least aware of that diversity. Same goes to building that awareness even at research institution.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Sustainable culture needs to be implemented everywhere. In this case, it would be great if we had a grand rounds to continue the learning of diversity and the different type of individuals so everything can
be part of the inclusivity conversation. We can then innovate more in that awareness to increase accessibility and cultural inclusion.

## Comments: Advance DEIA Through Research

I want to challenge research institutions to develop treatments and cures with patients in mind. Far too long, therapeutic developments think about developing cures without asking whether this will help patients improve their quality of life. They assume patients want a cure and therefore funding efforts may be supporting the most challenging cause with a low probability of achieving such goals. As a patient with an inherited retinal disease, if I can find a drug that slowed or stopped the progression of the disease, then that therapy would arrive earlier rather than later compared to gene therapy to develop a target for every single gene variant.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce ( Submitter left answer blank )

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

We need greater evidence and funding support for pathways to research and medical careers. To my knowledge, NIGMS funds the SEPA grant and I believe it focuses solely on the underrepresented research workforce. Developing physician-scientists are important as well to advance health equity. Also, this proposal is accepted once annually and more frequent cycles with greater funding allocation would health advance opportunity equity for underrepresented groups.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 ( Submitter left answer blank )
## Comments: Grow and Sustain DEIA through Structural and Cultural Change <br> ( Submitter left answer blank )

## Comments: Advance DEIA Through Research

Facilitate opportunities allowing veterans to contribute to the service of their Country as they did while in active Military Service. This population still has contributions to make to our Country and unfortunately often the US civilian population does not truly respect vets after their service . "Thank You for Your Service" needs to be more than a polite phrase to say - it needs more action. I feel that can be done by addressing soldier's needs in Health research outside the VA System.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

The greatest challenge to diversity at NIH in my mind largely has to do with retaining diverse employees (many of whom come as contractors first) and encouraging their continued growth with competitive compensation.
A current challenge:
There currently is no performance evaluation process for contractors under SOAR
This means no raises are possible without significant additions to Statements of Work
There is possibility of a cost of living adjustment (COLA) in September 2022 under SOAR, but this is not guaranteed
So there is a real likelihood of higher working costs (e.g., gas/tolls) without increase in pay any time soon for contractors under SOAR.
It seems likely inflation and gas prices will remain higher for 6 months or more due to supply chain and labor issues and geopolitical tensions.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

NIH should take a close look at the career path of trainees/contractors to becoming FTEs and think about if contracting company practices are encouraging retention of diverse employees.

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 Make sure all employees and customers know that leftist identity politics is a cancer. It is hateful and evil and seeks only to divide the people. It is a gigantic waste of time and money that is destroying this country from the inside out. It manufactures racism and makes the entire race relationship in this country much worse than it has to be. The people who do it are evil and wrong.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Shun the purveyors of identity politics in all walks of life. Let them know that these people are not welcome in your home in your business in your culture in your world. Reject them in every way possible. Do not treat them with kindness. Do not treat them with civility. Any government agency or any group operating in an official capacity That tries to introduce identity politics into any situation in public or private should be shunned, mocked, excoriated, and made to feel completely unwelcome in normal civilized society. These people should be roundly rejected as the evil scourge that they are.

## Comments: Advance DEIA Through Research

Show how identity politics has increased the divide between the races in America. Show how identity politics has caused civil unrest riots destruction of property and domestic terrorism.
Show the destruction of entire communities like Flint Detroit Chicago and all of the other progressive utopias there are slaughtering people wholesale and leaving a wake of death destruction illiteracy crime violence and poor health. Make sure that everyone knows How leftist identity politics has been the most cancerous and destructive process in this country. And those people trying to systematize are in fact the enemies.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

It's striking that amongst all the talk of equity and inclusion, there is no representationor even consideration of introverts. Yes, they are not in the hot-button demographic of race, religion, gender, etc., but they make up a sizeable portion of your workforce and they are constantly pushed to adapt to the extroverted worldview. Expected to attend unnecessary meetings? Compelled to craft time-wasting office presentations? Check. Obligated to partake in office social functions? Check. This continuous practice facilitates a stressful and sometimes hostilework environment, where those who don't "partake" are labeled not team players, discriminated against, and less likely to advance in their careers. If NIH is not interested in equity, do it for productivity's sake, as this unnecessary practice also clearly wastes a lot of time. I'd raise the issue of night owls here too, but I doubt the suggestion would gain any traction.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

If you want to actually do something about this and be "inclusive" then seek their perspectives. Send out an all-staff invite to form a focus group, new section of DEIA, or take part in an existing DEIA committee. You should also request anonymous feedback as it will generate more and more honest dialogue than identifiable feedback.

## Comments: Advance DEIA Through Research

Study the differences of introverts and learn how to capitalize on their strengths while minimizing their weaknesses. Learn how to be inclusive without being oppressive.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 I have worked at NIH for almost ten years and I have worked in few places as diverse as this institution. I believe this obsession with diversity and equity is actually racist because it focuses on one aspect of a person that can't be changed. I believe in equality and I think all hiring decisions should be blinded to race/gender and be based on merit.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

I don't believe this will result in improvement of our organization and is a waste of taxpayer dollars.

## Comments: Advance DEIA Through Research

See objective 2.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 I would like to request that the framework specifically prioritize inclusion of individuals with intellectual disabilities. This population faces potentially the greatest degree of economic disparity, workforce discrimination, and under-representation among all marginalized groups. Due to communication challenges, intellectually disabled individuals are often not included among self-advocacy efforts, leading to further lack of representation. Inclusion of intellectually disabled individuals requires specific structural and cultural elements that are likely to benefit individuals with a host of needs and challenges. However if they are not centered in disability inclusion, they are likely to be further excluded and at-risk for even greater marginalization, because well-meaning efforts will inadvertently target lessvulnerable individuals whose disability needs are more easily incorporated into the current structural and cultural framework.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change <br> See above

Comments: Advance DEIA Through Research
See above

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 ( Submitter left answer blank )
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

Scientific research - especially research funded by NIH - should be blind to gender - one does not need a penis to hold a pipette.
To advance DEIA, there are two areas that can create immediate positive change: one is changing financial award system and the other is making room at the table for female-identified people. Regarding the financial, the goal is to level the playing field so that research dollars are evenly allocated between genders. A Google search reveals that women get 60 cents to every $\$ 1$ a man receives in funding; and that women receive $\$ 41 \mathrm{k}$ less than men in research grants. The way to resolve this discrepancy is to take each Institute's research budget and divide it by 2 - one half will fund projects lead by female-identified PIs, and the other half will go to male-identified Pls; co-Pls that are one male and one female will receive funds from both buckets in proportion to their estimated time allocation. This is a radical way to even the playing field, and it will create a meaningful and immediate change. Yes, there may be some unethical researchers that agree to have a female PI on paper only; in academia it may be easier to verify the PI than in the business world. On the small business side, the PI should sign an affirmation under the pains and penalties of perjury that she is the Pl of the project and has not agreed to be a straw.
Females also need a seat at the table - they need to be named as PIs, they need to act as PIs and we need to hear their voices at every stage of scientific research. Having a seat at the table gives female Pls the opportunity to leverage the experience of their team and to encourage leadership. If women are not given the space to lead, then their voices will be drowned out. A seat at the table includes creating peer review groups with equal numbers of females and males; equal pay at the workplace for their job class; and promoting women from within and outside of the organization.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Objective 1 and Objective 2 would both have a stronger foundation if the history of Diversity, Equity, Inclusion, and Accessibility at the NIH was documented and described in a manner that would help both the planning and implementation of programs and policies. Such a history would answer questions such as: When and how was the culture of DEIA at NIH established, including the inclusion of women and
minorities into the work force? How did DEIA statistics change over time? What and who were the driving factors behind policy changes and program development? Did these policies work? What resistance or support did they meet? How do they compare to today's policies? What programs were attempted and how were they implemented? Were they successful? If not, why not? What does all of this tell us about the policies and programs that are currently being developed? In this historical light, what changes could be made and what paths should continue to be followed? To answer all of these questions, and more, a Ph.D. historian with a background in institutional history should be hired to do research into NIH's past realities as well as policies and programs, while making connections with current and planned policy and program makers, to result in several products including reports on specific programs' histories and success/failures, such as MARC; reports on the progress of various minority groups at the NIH; and a book about race and research careers at NIH. Other products could include biographical profiles which could be used by NIH UNITE, for example, for outreach efforts; a webpage devoted to the history of minorities at the NIH; and various social media campaigns. The Office of NIH History and Stetten Museum would be the supervisor of such a contract historian, providing a home base for this project.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

The leaky pipeline metaphor describes a loss of talent, often from historically excluded groups, during career progression. However, it is important to recognize the role of National Institutes of Health (NIH) as an architect of the system. Science careers were largely constructed with ideal worker norms in mind; therefore, the structure is leaky by design. In reality, a minority of scientists fit this outdated vision of an ideal worker, and it is imperative that all stakeholders actively challenge obsolete norms and dismantle barriers to success.
To understand needs of the scientific workforce current trends must be rigorously analyzed. Using NIH as a testbed, examining who has access to on the job learning and professional development opportunities, who is tapped for leadership experiences, and who receives quality mentoring, coaching, sponsorship, and promotions may help identify key areas for improvement. If possible, tracking individuals who leave academic sciences may also be illuminating. FASEB applauds NIH's publication of wage grade pay scale data by race and ethnicity, gender, and disability status, as well as demographic information by job category, supervisory status, and for senior leadership. We look forward to expansion of these data by individual Institute and Center, and suggest further breakdown of advancement to include step promotions within grade scales. Additionally, disaggregation of occupations, beyond scientific,health and research, and infrastructure, may unveil certain intramural sectors as exemplar in terms of diversity and pay equity to be replicated by other Institutes and Centers. This model can likely be adopted at majority of extramural institutions to help elucidate who are and are not being afforded opportunities to advance. Furthermore, it is critical to identify areas where intramural and extramural environments differ, such as grant funding, and research effective practices relevant to the extramural community.
Additionally, systemic collection, disaggregation, and publication of demographics when analyzing trends on opportunities and barriers is key. Repeating a previous FASEB recommendation, including perspectives from groups beyond those defined in the Notice of NIH's Interest in Diversity such as
targets of harassment, sexual orientation and gender minorities, and racial minorities outside the current National Science Foundation definition of underrepresented groups may reveal overlooked disparities.
Measuring the prevalence of bias, bullying, and harassment is also crucial to understanding the current climate and identifying areas ripe for change. NIH has made laudable progress with the 2019 Workplace Climate and Harassment Survey. Echoing a prior FASEB recommendation (reiterated in response to the Chief Officer for Scientific Workforce Diversity strategic plan), reaching the extramural community with helpful tools such as this may require widespread dissemination efforts beyond the usual players to those in the scientific workforce community that may not have direct lines of communication with NIH. Similarly, it is vital to routinely evaluate environments for overall culture change. A single survey is not enough. Follow up actions must be taken including intramural and extramural leaders revising policies as appropriate, and identifying outcomes to understand impact of programs and policy changes targeted to enhance diversity, equity, inclusion, and accessibility.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Despite grantee institutions operating independently, NIH has vast influence as a standard bearer and primary funder in the field. Generating meaningful mechanisms of grantee accountability for commitment to diversity, equity, inclusion, and accessibility (DEIA) may be impactful, but must be more than simply checking a box. One potential method could be that scored training grant criteria for proposed training and/or training potential sections clearly expect explicit plans to address different professional growth needs for trainees from varying backgrounds. For instance, NIH could ask for indication of advisors implementing evidence-informed mentoring, utilization of mentor networks by trainees that is supported by research advisors, and ongoing pedagogical training. Evaluation of any updated scored criteria will be essential to assess effectiveness.
Creating welcoming environments requires recognizing scientists as whole people, not only workers. Adequate benefits help foster inclusivity and reduce burden. FASEB recommends NIH promote best practices until sufficient benefits become the norm, with understanding that NIH does not control awardee institution practices. To meet this variability, NIH may need to adjust policies to allow opportunities for more equitable benefits. For example, all postdoctoral scholars, regardless of funding source, should be able to access benefits similar to other employees at their institution. Other categories to evaluate current standards and promote more equitable approaches include benefits for LGBTQIA+ scientists, availability of non-binary facilities, mitigating barriers to official employee identification matching personal identity, and support for working parents including childcare and lactation facilities.
The framework's emphasis on accessibility requires a focus on the needs of individuals with disabilities. FASEB looks forward to forthcoming recommendations from the Advisory Committee to the Director Working Group on Diversity Subgroup on Individuals with Disabilities. Extramural institution disability offices often focus on accommodations for coursework, and staff usually do not have knowledge of aids to help in scientific environments. NIH is well suited to collate available assistive technologies and devices that may be useful in laboratory settings and communicate these findings to the extramural community. Active listening, empathy, and appreciative inquiry from leadership can help unveil assumptions being made about individuals current capability and future potential, as well as if different standards are applied to some people or groups. By elevating needs of individuals with disabilities, NIH can encourage easier processes for requesting reasonable accommodations to help all scientist thrive. Finally, targets of harassment are a key group of individuals that require consideration, and the prevalence of unwelcomed behaviors is a sign of a hostile culture. NIH's Working Group on Changing the Culture to End Sexual Harassment recommended establishing mechanisms of restorative justice, such as bridge funding for those who have lost salary support due to harassment and funding opportunities to
restore careers of affected individuals. Implementation of restorative justice practices is understandably a difficult task, but as previously noted small actions may have meaningful outcomes to help retain talented scientists. FASEB supports further research into effective implementation practices, particularly to expand the ethos of proposed restorative justice mechanisms beyond sexual harassment to targets of all harassment.

## Comments: Advance DEIA Through Research

Additional and ongoing studies into the needs of the current scientific workforce are pertinent. Importantly, NIH should elevate these concerns by engaging scholars outside of the biomedical and biological scienceslikely economists and social scientiststo conduct routine assessments of the NIHfunded workforce and disseminate findings. Furthermore, NIH also has a vital role to play in encouraging the scientific community to value all forms of evidence, including qualitative information, not only quantitative metrics. As NIH has shown, focus groups and other forms of qualitative evidence can reveal illuminating findings. Matters such as measuring inclusive climates requires nuanced evaluation that cannot always be simplified to numbers with statistical significance. Conducting work that highlights active listening and empathy, and expecting extramural leaders to do the same, will be crucial to measuring culture change over time.
Further research is also needed into the financial implications and potential consequences of pursuing graduate education. The NSF 2020 Survey of Earned Doctorates data shows for all doctoral awardees that those who identify as Black or African American leave with nearly three times as much ( $\sim 2.7$ times) graduate debt $(\$ 63,087)$ as the overall mean for U.S. citizens and permanent residents $(\$ 23,569)$ (Table 40). Additionally, 18.3 percent of all life sciences doctorate recipients accumulated over $\$ 30,000$ in graduate debt, but again Black and African American scientists are disproportionately affected with 49.3 percent reporting graduate debt greater than $\$ 30,000$ (Table 41). NIH should collaborate with NSF to identify debt levels by race and ethnicity for subfields funded by NIH. If disturbing trends persist, NIH must address this issue with creative programmatic solutions. FASEB appreciates the recently expanded Loan Repayment Program (LRP), but individuals must have their terminal degree to qualify. Diversity supplements, cost of living stipend adjustments, or a new form of LRP for PhD candidates, all for those with qualifying debt levels, may help alleviate financial burden prior to becoming a postdoc. This level of debt accumulated may dissuade talented scientists from pursuing their desired career, such as academic sciences, to work in a field with a higher salary. The prospective debt might also deter talented high schoolers and undergraduates from pursuing science fields at all.
NSF 2019 Survey of Doctorate Recipients data also indicate that fewer female life science PhD recipients are employed at four-year educational institutions than males as full professors, associate professors, assistant professors, and instructors or lecturers (Table 17), and female median salary is less than male median salary at all ranks (Table 62). Faculty pay inequity by gender is problematic and adds to undue burden faced by historically excluded scholars. Minority faculty tend to spend time engaging in activities such as mentoring, committee service, and other ways of giving back to the community that are not acknowledged, rewarded, or compensatedall of this on top of likely earning a smaller salary than colleagues who hold majority identity. Research into effective practices to achieve pay equity may help identify solutions to retain diverse faculty.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

As a member of the Proof-of-Concept Network of NIH-supported commercialization hubs, the Ascend Hub is responding to Objective 1 - Implement Organizational Practices to Center and Prioritize DEIA in the Workforce. We recommend having a conversation with and accepting the feedback collected over
the past year by PACE (the Proof-of-Concept Network Action Committee on Equity, Diversity, and Inclusion). The group has invited the POCN's network of over 100 NIH-supported institutions nationwide to address this topic and an ongoing partnership with PACE is encouraged to continue this important component of community voice.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

As a member of the Proof-of-Concept Network of NIH-supported commercialization hubs, the Ascend Hub is responding to Objective 2 - Grow and Sustain DEIA through Structural and Cultural Change. We recommend having a conversation with and accepting the feedback collected over the past year by PACE (the Proof-of-Concept Network Action Committee on Equity, Diversity, and Inclusion). The group has invited the POCN's network of over 100 NIH-supported institutions nationwide to address this topic and an ongoing partnership with PACE is encouraged to continue this important component of community voice.

## Comments: Advance DEIA Through Research

As a member of the Proof-of-Concept Network of NIH-supported commercialization hubs, the ASCEND Hub is responding to Objective 3: Advance DEIA Through Research. We recommend having a conversation with and accepting the feedback collected over the past year by PACE (the Proof-ofConcept Network Action Committee on Equity, Diversity, and Inclusion). The group has invited the POCN's network of over 100 NIH-supported institutions nationwide to address this topic and an ongoing partnership with PACE is encouraged to continue this important component of community voice.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Comment for Objective 1 of RFI: Currently, the UNITE Initiative nor the Strategic Plan explicitly specifies developing efforts for funding that would support improving the ecosystem of investigators/trainees interested in structural racism. To improve Objective 1, release of training-related (i.e., R25, T32, T37, U54, UE5, etc.) funding announcements to support training-related activities for investigators/trainees with an explicit focus on structural racism and health is warranted. In particular, such funding opportunities should emphasize multilevel and multimodal training programs, similar to the Common Funds' Faculty FIRST Initiative, while also ensuring integration of community partnerships and novel dissemination efforts to reach audiences beyond traditional academic spaces.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Comment for Objective 2 of RFI: Currently, exemplar partnership/steward programs identified in the DEIA Strategic Plan, Goal 3 (i.e., BUILD, SPARC, NRMN, etc.), overwhelmingly emphasizes extramural academics/researchers and/or intramural entities with the exception of the Transformative Research to Address Health Disparities and Advance Health Equity Common Fund program. To achieve greater integration of community perspectives and partners to improve NIH's DEIA efforts, greater integration of community perspectives and partners is warranted throughout research and training opportunities, especially funding opportunities supporting research on structural racism and health

## Comments: Advance DEIA Through Research

Comment for Objective 3 of RFI: Currently, most DEIA focused funding opportunities to date have been R- or U- mechanism grants, with no P-and limited Resource related grant opportunities; particularly funding opportunities supporting research focused on structural racism. To improve advancing DEIA
through research, pilot programs and funding opportunities explicitly to support Program and/or Center grants focused on structural racism and health inequities are needed to fill these gaps.

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Bad idea do not do it.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Kind of arrogant that you want to celebrate diverse cultures, then say you want everybody to think as you think they should think.

## Comments: Advance DEIA Through Research

Waste of money do not do it.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 As a member of the Proof-of-Concept Network of NIH-supported commercialization hubs, the SPARK|REACH hub is responding to Objective 1 - Implement Organizational Practices to Center and Prioritize DEIA in the Workforce. We recommend having a conversation with and accepting the feedback collected over the past year by PACE (the Proof-of-Concept Network Action Committee on Equity, Diversity, and Inclusion). The group has invited the POCN's network of over 100 NIH-supported institutions nationwide to address this topic and an ongoing partnership with PACE is encouraged to continue this important component of community voice.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

As a member of the Proof-of-Concept Network of NIH-supported commercialization hubs, the SPARK|REACH hub is responding to Objective 2 - Grow and Sustain DEIA through Structural and Cultural Change. We recommend having a conversation with and accepting the feedback collected over the past year by PACE (the Proof-of-Concept Network Action Committee on Equity, Diversity, and Inclusion). The group has invited the POCN's network of over 100 NIH-supported institutions nationwide to address this topic and an ongoing partnership with PACE is encouraged to continue this important component of community voice.

## Comments: Advance DEIA Through Research

As a member of the Proof-of-Concept Network of NIH-supported commercialization hubs, the SPARK|REACH hub is responding to Objective 3: Advance DEIA Through Research. We recommend having a conversation with and accepting the feedback collected over the past year by PACE (the Proof-of-Concept Network Action Committee on Equity, Diversity, and Inclusion). The group has invited the POCN's network of over 100 NIH-supported institutions nationwide to address this topic and an ongoing partnership with PACE is encouraged to continue this important component of community voice.

[^4]
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Often, race, gender, and gender identity are placed at the forefront of every email. In all my years at the NIH, I have rarely seen a great deal of mention of diversity with regard to persons with disabilities, except when required by law at the bottom of a seminar. We represent a unique group that has contributed in meaningful ways to science and I would ask that disability representation also be considered in these communications. I assume this will probably fall on deaf ears again, but I would ask that the deaf, the blind, mobility, and invisible disabilities be recognized in these communications. The support for scientists who regularly contribute to the NIH mission who have a disability needs to be recognized and appreciated, in addition to all that these individuals have to overcome to become scientists, beyond that of what the typical person has to do.

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

This is a divisive theory that results in furthering the gap between races and classes. These ideologies have no place in medicine let alone any other capacity.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

See above

Comments: Advance DEIA Through Research
see above

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 I work as an analyst in human resources at NCl . Part of our goal is to help organizations obtain the right person, in the right role, at the right time, at the right cost. We consider the diversity of our workforce to be an important component of this goal. As such, we are interested in ensuring diversity data is available for organizations - so they understand their makeup and ways they would like to enhance their workforce.The current process for sharing diversity data at NCI is complex. While we have direct access to age and sex data, NIH's Office of Equity, Diversity, and Inclusion has direct access to additional diversity data that we do not (i.e., ethnicity/race and disability). NIH/OEDI aggregates this data into Excel spreadsheets and posts them to a shared space that has limited access. At NCl , we are working on creating an automated human capital dashboard in a data visualization tool called PowerBI - not just for diversity related data, but for all relevant HR data - including trends on retirement. Information will be fed directly from an nVision reporting system into this dashboard. We would like to include diversity data such as ethnicity and race and disability distribution in our dashboard. The current process for how we receive information from NIH/OEDI, and the fact that we don't have direct access to the information in a downstream account makes this a very manual process, which is subject to error and is inefficient. Having the data aggregated and automatically fed into dashboards that are provisioned for leadership would allow us, as human capital strategists, to spend energy/focus on the conversations and actions required to make change in the NIH workforce with leaders and managers. We also need to enhance our
processes for gathering and maintaining diversity data on populations outside of the NIH FTE workforce - including fellows and contractors. I recommend this be coordinated at the NIH level with additional help from the ICs. Lastly, it would help to have a resource group/community of practice established for presenting analyzing human capital data (to include diversity data). Over the last year, we as analysts/strategist have spent much time learning about diversity related data, what's available (and not) and how to speak about the information in a way that is respectful of all populations. I would like to see additional FTEs allocated to support this initiative across NIH. IT support/development is also critical in ensuring automated visualizations can be provided. There needs to be more training on how to remove bias from the recruitment and hiring process. More work needs to be done broaden the pool of applicants for government positions.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Changing the culture at NIH will require great amount of energy, change management, and human capital. I know many folks have volunteered to help with the equity, diversity, and inclusion initiatives on top of their already full workload. It would be helpful to rebalance workloads for these folks and add additional resources if individuals have been tapped to help with these initiatives. I think having a dedicated office to coordinate these efforts would be helpful AND everyone across the institute, especially leadership, supervisors, and managers should be dedicating some of their time to ensuring equity, diversity, and inclusion are a part of their workforces. I also think that more needs to be done to target underrepresented youth, and Im not sure this is NIHs role, or whose it would be - but to see change we definitely need to start earlier than just before we advertise for a job.

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce have one or more staff members who are given dedicated/protected time to oversee efforts related to promoting equity include welcoming statement on website that affirms value of diversity, equity and inclusion

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

consider including requirements for applications (jobs, grants, etc) that include percentages of URM (under-represented minorities)
offer scholarships, internships or other incentives to students to increase NIH's capacity for developing diversity

## Comments: Advance DEIA Through Research

give extra credit to applicants who are part of diverse teams convene a round table discussion with URM investigators - what are their ideas? issues? desires? related to diversity

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

The RFI is very generic and non-specific which is good since you can do with it anything you want to do with it. However, the implementation I hear about however is specific already and sounds like a return
to an old way of thinking about diversity. Diversity in the rollout is being focused almost exclusively to Under represented minorities and specifically hispanic/latino and African American. What about gender, age, disability, sexual orientation - these are not being mentioned to anywhere the same degree in the rollout of this program. What about the fact that diversity, no matter how it is defined or focused, varies a lot according to the local working group in NIH. Ex. Asian Americans are over represented in intramural and underrepresented in extramural programs. Similarly, males dominate leadership in intramural while females dominate leadership in Extramural.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change <br> ( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Re-consider the way that diversity mechanisms are designed: Are applicants competing among other applicants from historically excluded backgrounds, or are they competing against everyone? There should be separate funds that directly support applicants that come from historically excluded backgrounds. Lastly, we need further transparency on how these diversity funding mechanisms function: NIH should have publicly available and current information that clearly describes the way that any diversity mechanism operates, and if any variation in scoring or funding schemes exists across ICs, so that applicants that are considering these mechanisms can ensure that they are choosing the best path for them.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Adjust the minimum wages for academic researchers at various career levels. Many institutions use the NRSA stipend levels to set trainee stipends. This is hardly livable in many cities across the United States today where the research that NIH funds is often located. Moreover, this prefers graduate students who have access to other funds (e.g., their parents or trust funds) to support them. There are many people who would pursue an academic research career if they had the means to do so. These people are excluded by the cultural norm of underpaying academic trainees. Any serious attempt at DEIA efforts must upend this inequity.

## Comments: Advance DEIA Through Research

Prioritize research partnerships with leaders from the marginalized communities that many NIH-funded researchers (who do not belong to these communities) often study. Normalize valuing the work of researchers who belong to the communities they study over the work of researchers who do not. Focus on positionality. Examine what constitutes valid knowledge production.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

We believe that the NIH can take the following actions to improve organizational practices both inside the NIH and at NIH Workforce Institutions.
Define Diversity. We have firsthand experience having one NIH office declare a group to be URM, and a PO directly contradicting this. The NIH needs to specify what groups count as URM, apply these
definitions consistently, and update these definitions based on recent metrics. To achieve equity, program officers across the NIH then need to be kept up-to-date and universally follow new definitions and guidelines.
Related to this action, so as not to deprive existing URM groups of already limited and highly competitive opportunities, funding needs to scale with expanded inclusion criteria.
Guarantee Accountability. Many existing NIH funding mechanisms require a diversity component and diversity reporting. While this is required at the proposal stage, there are no consequences for failure to meet diversity goals during the funding period. What is the NIHs role in ensuring objectives are met? Has the NIH considered withdrawing funds from programs that dont achieve or sincerely attempt to achieve - their diversity objectives? What underlies these failures? How does the NIH ensure that the taxpayer funds it distributes are equitably spent? A clear system for reporting diversity information needs to be defined, established, enforced, and then transparently reported on to the public. Implementation of this accountability system would greatly facilitate the point above.
Resource disparities. The NIH should specifically and directly address trainee resource disparities. URM scientists are more likely to carry debt, have dependents (children or parents), and are less likely to have a family fiscal safety net to rely on. We have watched many postdocs and graduate students leave academia for purely fiscal reasons. Biotech salaries are often double what can be found in academia. The NIH urgently needs to address this issue. Training periods are now over a decade, and very few people can afford to be at such a low salary for such an extended period. Could the NIH expand its existing loan repayment program to all URM trainees? Offer cost of living subsidies? Subsidize childcare at a level that approaches its actual cost?

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Stewardship: NIH policies and requirements were one of the major forces behind the appointments of women PhDs to faculty positions at US Universities in the 1970s - a clear example of the NIH using its position to advance diversity. In terms of NIH stewardship- the NIH should emphasize equity and inclusion in retention, not simply recruitment. The proportion of URM faculty is lower than that of postdocs, and there are proportionally fewer URM postdocs than graduate students. What underlies this leaky pipeline? Data suggest equity and inclusion are significant factors (Jeste et al., Am J. Pub Heal. 2009). How will the NIH improve equity and inclusion to enhance retention? How can the NIH leverage its funds and influence to stop the attrition? How does the NIH ensure that faculty searches for positions expected to be funded by NIH grants are conducted equitably and transparently? How successful are initiatives like the NIH FIRST Faculty Recruitment Program? As stewards, the NIH needs to expand focus beyond recruitment.
Partnerships and Engagements: The NIH should consider expanding its educational scope. The quality of STEM education students receive in primary and secondary school varies dramatically across the US. The best teachers are drawn to well-funded districts able to support the resources required to provide quality STEM content. One consequence of this is that URM students, who often come from underresourced school systems, are less likely to pursue STEM training in college. Has the NIH considered partnering with other government organizations, universities, or industry to provide funding to these under-resourced school districts to increase the number of URM undergraduates majoring in STEM fields? Perhaps the NIH could fund graduate students and postdocs to develop and administer STEM outreach programs? How can the NIH link universities to their diverse local school systems? Accountability and Confidence: Communicating diversity goals with the same level of clarity, detail, and enforcement as the NIH communicates scientific goals and fiscal goals would go a long way toward centering DEIA. A dedicated mandatory diversity reporting system is key for these efforts.

Management and Operations: Decisions regarding funding occur through review committees and NIH staff. The NIH should assess, transparently report, and ensure diversity among NIH representatives who review funding requests.

## Comments: Advance DEIA Through Research

There is already a vast literature covering DEIA approaches and their efficacy. However, all studies require accurate metrics. As we touched upon in objective 1 and 2, the NIH needs to establish a clear, simple, and accurate mechanism for DEIA metrics. Too many NIH publications reference the 2011 Ginther et al. Science paper which reports application and investigator data for Research Project Grants submitted between FY 2000 and FY 2006. It has been over 15 years since these data were collected, and the NIH has instituted numerous diversity initiatives during this timeframe. The NIH needs to establish a reliable and transparent method of gathering metrics like the ones in Ginther et al. and make these metrics publicly available on the NIHs website. This will allow the NIH to set benchmarks that constitute success for its initiatives and model the expectations it sets for other institutions.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

In order to figure out what needs to be changed, data is important.

1. But the NIH's demographic data seems to be deliberately set up to hide data:
https://www.nih.gov/ending-structural-racism/national-institutes-health-nih-workforce-demographics
The site uses boxes with vertical splits to denote male/female trends, which is very difficult to understand and hides the trends instead of showcasing the trends. When EDI at NIH was asked why they chose these odd boxes, we were told it was visually appealing.
2. EDI from NIH has trend data for 5 years. EDI was proud of this data and was happy to tell us the data was available. But the data is not on the webpage. You have to submit a FOI to get the trend information.
3. OPM file called FEORP is from 2016. We have data from last year, but the FEORP is from 2016.
4. The NIH Report of the Advisory Committee on Research on Women's Health for FY 2019 to 2020 has lots of trend data. I have a Ph.D and I couldn't find it the trend data buried in the document. After asking others, they pointed out the relevant sections. In this report, the graphs for trends based on gender, flips the color coding from one graph to another. Great way to hide information.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

To promote equity, the NIH needs to remove the college degree requirement for FTE positions above GS9. Many non-degree scientists enter as very basic animal techs but can't get promoted because they don't have a degree. They have the expertise and knowledge but they don't have a degree. For those already at NIH as an FTE, a centralized funding mechanism needs to be available to allow them to take the needed coursework. Right now, the labs can claim they don't have funding for coursework. For those that enter as contractors, the degree requirement needs to be removed and replaced with "equivalent experience".
To reduce racism, NIH needs to adopt 360 evaluations on a quarterly basis for all employees who manage/supervise/lead. Industry manages this quite effectively, so there is no need to recreate the wheel. A tremendous amount of abuse and mismanagement can be reduced with a robust 360 .

## Comments: Advance DEIA Through Research

All the research in the world won't fix the problem, if the data is kept hidden.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 Provide incentives to universities that successfully employ and advance people of historically underrepresented backgrounds with a title of excellence or monetary reward. Criteria would have to be established, but could almost think of this as an accreditation.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

As a condition of employment and a condition to receive an award, a PI must have certification in DEIA. And there should be criteria or programs listed that qualify to take. I also think that departments/units that hold NIH funds should have to conduct and make public yearly audits about DEIA.

## Comments: Advance DEIA Through Research

It seems like we understand some of the barriers from the aspect of those that are marginalized - but what do we know about the people that are keeping the privilege? Should there be more research done there so we can understand the factors that drive those in privileged places/positions from making effective changes to improve DEIA?

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce ( Submitter left answer blank )

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Reward institutions that are doing the good work. In this case- using funding as a carrot to push institutions to do what they should already be doing. However, there should be specific requirements about metrics of retention.

## Comments: Advance DEIA Through Research

It is important to focus on funding the investigators who are currently performing DEI related activities as well as creating opportunities for investigators that are from historically marginalized groups- at the faculty level. Most of the current opportunities for funding are focused at the trainee level. However, if current investigators who form the bedrock of the community and provide mentoring opportunities for up and coming trainees of color and those from other marginalized groups are not supported, that community will collapse. Retention is crucial to building a scientific workforce that is both excellent and contains people from diverse backgrounds. The focus should be on funding investigators for scientific endeavors that include research and professional opportunities for trainees- not funding endeavors solely for outreach. We are not judged on our service- we do that because we care. We are judged on our research output and need money to be successful and compete in the current scientific environment.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

I'd like to see more consideration going into who is considered "disadvantaged" and "at risk" and looking at need-based measurements, such as household income and cost of living would be better than simply using metrics such as gender or familial status. It seems absurd to me that another female postdoc is
considered "more disadvantaged" than me and "in need of more support and time" because she had a child. Yet she leads a far more privileged life on a dual income - home ownership, nanny, house cleaning services, car ownership, etc. In contrast, as a single person in a high cost of living area I've been forced to live with 3-5 roommates for most of my adult life and I live paycheck to paycheck. The effects of housing instability due to renting and multiple roommates and the mental and physical toll of the stresses of living paycheck to paycheck are vastly underrated and completely ignored.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

I'd like to see diversity K01s at the faculty level still include the economic disadvantaged criteria for applicants. Being on a postdoc salary, especially in a high cost of living area, for $4-5$ years before applying doesn't negate our lack of generational wealth and lack of ability to generate savings during graduate and postdoctoral training still leaves us significantly disadvantaged. Even beginning assistant professors don't necessarily make enough to be sufficient and roommate free after years of living paycheck to paycheck.

> Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Look to enhance prior existing resources (e.g. OD-subcomponents, IC equity subcomponents, OEDI, COSWD) to enhance and consolidate best practices towards DEIA in the workplace. Suggest less "reinventing the wheel" of adding diversity officers to ICs, or creating numerous committees that could muddy the efforts of a consolidated practice towards DEIA.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

No Comments, see above on using existing resources.
Comments: Advance DEIA Through Research
No Comments

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

The input I have to this is to refactor our DEIA metrics, due diligence tracking, and discrimination and harassment policy in hiring, promotion, etc such that it protects against bias and discrimination on ANY AND ALL criteria that do not have an obvious mission critical bearing on suitability and security, nt just a specific list of protected statuses. We have ever evolving list of protected status that we actively promote diversity on these base and explicitly prohibit discrimination on, [a list that started with the basis of sex and religion, then evolved to eventually include disability status, then veteran status was added , then national origin was added , then sexual preference was added, then gender identity was added ...], each new entry added after citizens affected by the new status to be added had to waited for decades for change. Why can we not just add an omnibus addendum to our policies that simply precludes bias, promote diversity, and ban discrimination (or harassment) on any and all basis not clearly related to the true essential business requirements of a position? For example explicitly precluding discrimination on the basis of these existing items as well as discrimination or harassment
"on any other criteria not inherently essential to the business requirements of employment, for example":
Physical appearance;
"Likeability"
Popularity
Temperament or perceived personality;
Height;
Lawful personal values or political views (except such that promote unlawful activity or undermine the US constitution);
Lawful hobbies, interests, organization memberships, activities, etc., including those deemed
"Unorthodox" or unusual in American culture (other than participating in such behaviors or membership in organizations that are clearly maladaptive, dishonest, show lack of impulse control not explained by a disability, or pose obvious security / suitability risks, such as substance abuse behavior and smoking, dangerous behavior, abusive/ hostile / aggressive behavior, unlawful conduct, serious conflicts of interest, behavior that adversely affect the rights of others, etc.);
Having been a being a victim of a crime, a witness in a legal case, etc;
Having been a previous litigant against the federal government (or any other entity), unless knowingly doing so on bad faith;
Having been accused, tried, or convicted of any crime for which one has subsequently been duly vindicated of;
Familial status (broadly speaking including non-traditional family arrangements, being single / divorced, etc.);
Being a "loner";
Having developed the required skills for a position through non-traditional, but lawful means (e.g. a bachelor's degree bioinformatician with 5 years of experience working in industry and / or or contributing to open source projects applying for a postgrad fellowship). Note that the variable (Does a candidate posses a graduate degree, not just the equivalent skills as one holding the same?), becomes a proxy variable that reveals a candidate's socioeconomic, familial, or disability status. This is because candidates of modest means, those with disabilities, and those with children are less likely to be in a position to forgo 4 years of income to obtain a PhD.;
Gender non-conforming traits, behaviors, etc, including those seen in cisgendered individuals;
US region of birth

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

It is important to consider sexual and gender minorities in DEIA plans; they face significant stigmatization (i.e., the "Don't say gay" bill in Florida and the banning of gender-affirming treatment for children in Texas) and their civil rights have not been on the national radar for long. NIH buildings should have at least one easily accessed gender-neutral bathroom. The Center for Scientific Review recently renovated its space in Rockledge II, but only included male and female bathrooms in the initial plans. When this was pointed out, CSR designated a bathroom in the Office of the CSR Director to be gender-
neutral. It's good that they have one now, but their plan is not ideal: individuals probably won't want to traipse through their boss's boss's boss's office every time they have to use the facilities.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

It is important to consider sexual and gender minorities in DEIA plans; they face significant stigmatization (i.e., the "Don't say gay" bill in Florida and the banning of gender-affirming treatment for children in Texas) and their civil rights have not been on the national radar for long. Include sexual and gender minorities as an underrepresented group in grant applications and contract proposals, as well as in the make-up of scientific review panels. An evaluation criterion in grant applications now is "Inclusion of women, minorities, and individuals across the lifespan." Add sexual and gender minorities to that. Scientific Review Officers are strongly encouraged to have racial/ethnic, gender (although only male/female), and regional diversity on the panels they form. Add sexual and gender minorities to this.

## Comments: Advance DEIA Through Research

It is important to consider sexual and gender minorities in DEIA plans; they face significant stigmatization (i.e., the "Don't say gay" bill in Florida and the banning of gender-affirming treatment for children in Texas) and their civil rights have not been on the national radar for long. Ensure that all research areas have an Institute or Center (IC) home. Specifically, ensure that biomedical research on sexual and gender minority issues is not rejected because no IC considers the topic to be in their mission areas. For example, which IC would support an application on transgender voice issues? Which supports research on gender-affirming care? Such concerns are neither disparities nor illnesses, so are not necessarily appropriate for NIMHD or an illness-specific IC (such as NCI or NIAMS), nor do they pertain to a specific organ system (such as those covered by NIDDK or NHLBI), so where do they go?

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Do you have plans to create alternative pathways to becoming a leader (including a PI) in the NIH and in academia? It is often not feasible for people from economically challenged backgrounds, or young single mothers, or those who provide financial or physical assistance to parents or other family members, or people from the foster care system or other difficult situations to take a traditional path to becoming a scientist (which typically includes doing a full-time Ph.D. followed by full-time post-doctoral research). As a young single mother, I was able to navigate the "system" to do my Ph.D. part-time and skip a postdoc so that I could, concurrently, work as a technician and then as a staff scientist with a higher salary that allowed me to support myself and my child and pay for childcare while working my way to becoming a PI in the NIH. This alternative path is very rare and is not currently encouraged. Alternative pathways to leadership positions need to be made available to increase diversity in academic research in my opinion.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

I think structural changes are needed to accommodate people who cannot support their families on a Ph.D. stipend or a post-doc salary. We are losing talented people to industry or other careers because they cannot support their families or pay for childcare with the low salaries in academia and gov't. For example, technicians should have a path to higher education and to leadership positions in the NIH so that they can have salaries to support their families while they advance their education and their careers.

## Comments: Advance DEIA Through Research

(Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

As a member of the Proof-of-Concept Network of NIH-supported commercialization hubs, the Central Region SHARPhub and BBC Entrepreneurial Training and Consulting is responding to Objective 1 Implement Organizational Practices to Center and Prioritize DEIA in the Workforce. We recommend having a conversation with and accepting the feedback collected over the past year by PACE (the Proof-of-Concept Network Action Committee on Equity, Diversity, and Inclusion). The group has invited the POCN's network of over 100 NIH-supported institutions nationwide to address this topic and an ongoing partnership with PACE is encouraged to continue this important component of community voice. You may contact them at korley@udel.edu

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

As a member of the Proof-of-Concept Network of NIH-supported commercialization hubs, the Central Region SHARPhub and BBC Entrepreneurial Training and Consulting is responding to Objective 2 - Grow and Sustain DEIA through Structural and Cultural Change. We recommend having a conversation with and accepting the feedback collected over the past year by PACE (the Proof-of-Concept Network Action Committee on Equity, Diversity, and Inclusion). The group has invited the POCN's network of over 100 NIH-supported institutions nationwide to address this topic and an ongoing partnership with PACE is encouraged to continue this important component of community voice. You may contact them at korley@udel.edu

## Comments: Advance DEIA Through Research

As a member of the Proof-of-Concept Network of NIH-supported commercialization hubs, the Central Region SHARPhub and BBC Entrepreneurial Training and Consulting is responding to Objective 3: Advance DEIA Through Research. We recommend having a conversation with and accepting the feedback collected over the past year by PACE (the Proof-of-Concept Network Action Committee on Equity, Diversity, and Inclusion). The group has invited the POCN's network of over 100 NIH-supported institutions nationwide to address this topic and an ongoing partnership with PACE is encouraged to continue this important component of community voice. You may contact them at korley@udel.edu

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

We recognize that NIH offers diversity supplements and encourages grant awardees to apply for them, and the agency should continue this practice.

A 2019 study found that the typical NIH research grant to a male principal investigator ( PI ) is $\$ 41,000$ more than to a female PI (Oliveira et al, 2018). The gap between NIH grants for women and men is even larger at top universities: $\$ 68,800$ at Yale and $\$ 76,500$ at Brown. Another study looked at the R01 program and found that female grant applicants were less likely than male applicants to be described as leaders (Witteman et al, 2019). NIH should expand its work to address funding disparities and consider the diversity of trainees in a lab when granting awards. Similarly, NIH should prioritize supplements for bridge funding for underrepresented faculty, including racial and ethnic minorities and women as they are significantly underrepresented as NIH funded investigators and in other leadership roles.

NIH should consider implementing a sponsorship approach in which senior leaders leverage their expertise to help emerging leaders, specifically women and other underrepresented faculty. NIH should also provide education for leaders and mentors to support career advancement for underrepresented faculty by deploying tools to cultivate their retention and promotion after theyve been recruited. This includes education for mentors and leaders, and structural support (time and funding) for mentorship, as well as training for new faculty members specifically for navigating institutional racism and gender bias. NIH must ensure that all education and training methods designed to support underrepresented faculty undergo rigorous testing for efficacy before theyre widely deployed.
The NIH should continue to promote policies and practices that support diverse scientific workforce participants. To support this, NIH should make changes to its Early Stage Investigator (ESI) policies. WFRC recommends NIH consider changing the timeframe for ESIs from 10 to 15 years. ESI status excludes the time spent in post-doctoral fellowships if the terminal research degree is a PhD. It is extremely challenging to get an R01 within 10 years of your PhD especially if youve completed a 2 to 3year post-doctoral fellowship. For MDs, ESI status begins once residency, and sometimes clinical fellowships, conclude and at the start of an MDs first faculty appointment. Recent studies show the average time it takes for an ESI to receive an R01 award is increasing and typically longer than 10 years of an individual starting their first faculty appointment (Lauer, 2021). This has been especially difficult during the COVID-19 pandemic as many scientists and aspiring scientists have stepped away from research due to many reasons, such as their caregiving responsibilities, compounded by severe burnout. This has been particularly challenging for surgeon scientists, such as those who are in Gynecological Oncology, Reproductive Endocrinology and Infertility, and Urogynecology, fields critical to advancing womens health, as it is increasing difficult for them to have enough protected time to do research that supports a trajectory to a R01 submission.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

NIH has been slow to improve the environment for women and other underrepresented groups. The agency is undergoing an internal review and found that harassment and problems related to these groups exist and is working to implement policies to improve this situation. However, more work needs to be done. Theres a lack of data on how underrepresented groups are impacted, and theres a need for this data to assess the degree to which those who are underrepresented in medicine face barriers. To enhance NIHs outreach and presence with regards to workforce diversity, NIH should engage in partnerships with organizations and professional societies dedicated to advancing equity, diversity, and inclusion in the biomedical workforce. For example, the American Medical Womens Association (AMWA) is a membership organization with a mission to advance women in medicine, advocate for equity, and ensure excellence in health care. AMWAkey values include integrity, equity, diversity, inclusion, collaboration, and mentorship. Also, NIH could benefit from partnering with the Association for Women in Science (AWIS), which is dedicated to driving excellence in STEM by achieving equity and full participation of women in all disciplines and across all employment sectors. AWIS recognizes that there is an equity gap for women in science and works to break down systemic barriers to womens advancement in the field. Additionally, NIH should partner and engage with the National Medical Association whose mission is to advance the art and science of medicine for people of African descent through education, advocacy, and health policy to promote health and wellness, eliminate health disparities, and sustain physician viability. Finally, NIH should engage with the Association of American Medical Colleges. The Association provides gender-disaggregated data for schools of medicine and through its Group on Women in Medicine and Science, has established active support for women-inleadership groups at medical schools around the country.
The missions of the above-mentioned organizations align well with NIHs goals to advance and strengthen racial equity, diversity, and inclusion in the biomedical research workforce and advance
health disparities and health equity research. NIH should continue partnering with national medical organizations that are dedicated to serving minority and underrepresented scientists.
Internally, NIH should continue leveraging the important work of the Office of Research on Womens Health and the Women of Color Committee of the NIH Working Group on Women in Biomedical Careers.
Additionally, there is opportunity for improvement within the study section process to better encourage diversity and inclusion in research. For example, the process should be revised to include equity as a criterion alongside scientific expertise. Also, grant review panels should be made aware of and held accountable to expectations around bias and disparities during the application process. Bias in review is evident and there is a need for study sections to be more diverse and represent the population. To support this effort, program officials and reviewers should be selected and trained accordingly. Additionally, NIH should consider applying a bias officer in the room for all grant reviews to avoid bias within the review process.

## Comments: Advance DEIA Through Research

Current health equity research funding is not sufficient to advance DEIA at the NIH. The WFRC recognizes that NIH, across many institutes and centers, has issued requests for applications (RFAs) with disparities as a focus. However, the relative amount of funding being allocated to these proposals is substantially small compared to the levels at which other grants are funded. For example, the NIH Common Fund issued an RFA for a U01 for institutions with high research activity and issued a separate RFA for institutions with a low amount of research activity. And while the RFA for Minority Serving institutions was reissued this year, the RFA for institutions with high research activity was not reissued. The amount of funding allocated for these grants under both mechanisms was substantially low, and in turn could hardly fund many of the meritorious proposals. The WFRC strongly recommends NIH prioritize and increase funding available for DEIA research and reissue this RFA for all institutions.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

It would be very helpful for NIH to provide methods to help remove bias from applications. For example: a centralized service that could blind post-doc applications, blinding the names/gpas/institutions of post-bacs until selected for an interview.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

(Submitter left answer blank )

## Comments: Advance DEIA Through Research

(Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

As we stated in our comments on the UNITE initiative and elsewhere, many of the obstacles facing underrepresented minority (URM) scientists throughout their training, mentoring, and career path are compounded by the lack of diversity among faculty at all career stages; this is particularly pronounced at the highest academic ranks and career stages. For trainees, it is important that URM scientists can see themselves among institutional leaders and have mentors available who can relate to their experiences.

The limited number of URM faculty therefore often have significant mentorship responsibilities, with few professional incentives to promote a significant mentorship load that may be unsustainable. In fact, taking on mentorship and other administrative responsibilities without associated effort can constrain URM faculty in their ability to get promoted, exactly the opposite of the desired outcome. While not a substitute for URM representation, non-URM scientists should be expected to participate in efforts to advance diversity, equity, inclusion, and accessibility (DEIA). Institutions should encourage the development of non-URM allies who can shoulder some of the work needed to achieve DEIA goals. We also note that training programs that might benefit from a more diverse candidate pool often focus on traditional entry points to biomedical research and may be missing opportunities to engage URM candidates elsewhere in educational systems. Diversified outreach to candidates throughout various undergraduate or graduate programs could help institutions recruit more trainees, but retention will require a diverse pool of senior scientists and mentors to provide support and develop confidence in promising URM candidates.
Finally, while we enthusiastically support NIH programs such as the Future Leaders Advancing Research in Endocrinology (FLARE) program to generate cohorts of URM investigators, NIH should take a broader look at the pipeline to ensure that these cohorts have viable pathways to a stable mid-career position and beyond. Additional programs targeted to mid-career investigators would not only help stabilize the pipeline, but also ensure that early-stage investigators have a robust pool of URM advisors, mentors, and role-models.
Training and mentoring will be significant aspects of NIHs overall approach to prioritize DEIA in the workforce. To ensure that efforts supporting a pipeline that fully integrates DEIA are successful, NIH should:
Initiate programs that seek to retain URM scientists by providing targeted funding at critical career points, for example the transition from post-doctoral fellowship to $K$ award, and from $K$ to $R$ award, etc. Allow URM faculty to serve as a mentor on training grants, irrespective of funding status.
Create incentives for URM mentorship activities, e.g., for mentors of F-and K08 or K23 awardees, or for K24-supported mentoring activities, and for individuals within a Cancer Center or as trainers in Cancer Center education cores.
Recruit promising URM candidates at all training stages through outreach to students/trainees who take non-traditional career pathways (e.g., a postdoctoral fellow who works in industry for a time) or who temporarily explore other careers due to interest or due to a gap in funding.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

The lack of diversity at institutions itself creates additional challenges and barriers for underrepresented minority (URM) faculty in the biomedical research workforce. For example, URM faculty who have secured R01 funding at their institutions are often highly sought after for service activities and other campus activities to enhance diversity. While recognizing their importance, these service activities take time away from research and other career development activities, potentially resulting in diminished research productivity, challenges in applying for grants in the future, and ultimately loss of R01 funding. This reinforces the need to engage non-URM allies to share in the work required to advance DEIA goals. Because funding is a critical element of any scientists career path, NIH review panels have tremendous influence over the retention of faculty, including URM scientists. It is particularly important for diverse perspectives to be present on grant review panels. In the near-term this will require training allies to reduce the burden on URM faculty and recruiting more URM faculty as participants. Unconscious bias training is helpful and should be encouraged, but it is not a substitute for inclusive panels that can mitigate subtle yet persistent sources of bias.
NIH policies that restrict participation in certain activities to R01 grantees often create additional barriers for URM faculty. Like all faculty, URM faculty benefit from service on study sections or in a
mentorship capacity on training grants and rigid eligibility rules on these activities create further barriers to URM participation if they face a gap in funding. Restricted eligibility rules, on top of the general disparities in funding that URM faculty face, help perpetuate a vicious cycle where URM faculty are not included in key activities where diverse perspectives could help foster a more inclusive workforce. Additionally, some policies to reduce bias are well-intentioned but lack enforcement mechanisms. For example, training and center grant applications have a diversity component; however, this is not a scorable component of the grant. Institutions are therefore less incentivized to prioritize and pay close attention to DEIA in the training environment.
To further grow and sustain DEAI through structural and cultural change, NIH should:
Provide mechanisms for bridge funding (e.g., matching institutional bridge support) for URM faculty when there is a break in funding due to their efforts to enhance minority recruitment, engagement, and mentorship.
Incentivize universities by providing funding through center grants or training grants for URM faculty that are working to increase diversity, i.e. compensate faculty for the extra workload placed on them and support training other faculty to act as allies.
Consider that the current rules which govern participation in important decision-making panels are themselves barriers to diversity, inclusion, and equity, and test the effects of removing these rules on outcomes related to DEIA.
Increase participation of URM scientists in the early career reviewer program and report metrics that track URM participation and career progression.

## Comments: Advance DEIA Through Research

(Submitter left answer blank )

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce SWHR supports NIH Workforce and Workforce at Institutions Supported by NIH Funding as the designated focus areas under Objective 1. Concentrating on each of these populations as NIH both analyzes and reinvigorates its organizational practices will be key in ensuring that NIHs policies lead to centering and prioritizing DEIA in its workforce.
Reaching this objective, however, will require NIHs attention on subpopulations within the NIH workforce as well as institutions workforces. This includes exploring the critical intersection of race, ethnicity, and gender, and considering how these issues can change the nature of the barriers individuals face or create new barriers. On this point, SWHR would flag the following issues as key needs for the DEIA Strategic Plan:
Women in the Research Workforce. Although women account for about half of medical graduates and doctoral recipients in the biological sciences, they are underrepresented at all levels of leadership in the biomedical field. Women in research earn less, receive less funding at the beginning of their careers, and are cited less frequently. Women are also more likely to switch to part-time work, change careers, or leave the workforce. Furthermore, women disproportionately face sexual harassment and discrimination.
Disparities are even greater for women of color, who encounter both significant racial and gender biases. These biases can present differently, but have a detrimental impact on those forced to confront them. For example, Black women are significantly more likely to report having to provide more evidence of competence to prove themselves to colleagues, and Latinas are more frequently perceived as angry or emotional. Black women are also more likely to report feeling isolated in their work environment. Scientists of Color. Recent scientific communications suggest that racial disparities in NIH R01 funding can significantly and negatively affect the careers of faculty members and scientists of color. While
white men and women are about as likely to receive an R01 award, Asian women and Black women are significantly less likely to receive the same funding. Among certain fields, the disparities become even more striking. For example, in 2019, female surgeons received NIH grants at significantly lower rates than male colleagues, and no Black or Hispanic women surgeons received R01s or equivalent awards. SWHR encourages NIH to specifically address the barriers facing scientists of color within the NIH, including investigating and defining these barriers and creating and implementing policies that will address these disparities.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

SWHR believes the sections identified under Objective 2Stewardship, Partnerships and Engagements, Accountability and Confidence, and Management and Operationscover the right range of areas to achieve cultural change. Yet, how NIH builds on each of these areas will be critical for determining success.
To build trust among stakeholders and ensure appropriate groundwork is undertaken, SWHR encourages NIH to continue reflecting on how its past policies and culture may have affected workforce growth and retention and how policies can be strengthened to ensure greater diversity and equity within review panels, in funding NIH awards, and in ensuring a representative biomedical research workforce.
In addition, SWHR encourages NIH to more strategically consider the roles of sex and gender and sexual and gender minorities. This includes not only analyzing how the current landscape may affect different populationsincluding how implicit or subconscious bias and harassment against LGBTQ and other populations may serve as a barrier to advancementbut also ensuring that future policies at NIH resolve the unique disparities faced by these populations in order to create a truly inclusive and welcoming workforce.
Finally, there are important considerations for enhancing recruitment and developing and rewarding practices specifically among women, who face unique challenges within the research workforce. A 2019 paper by Alfred, Ray, and Johnson highlights broad barriers that affect women and women of color in STEM:
The effect of stereotyping, societal influences, and institutional influences throughout pre-college, college, and postgraduate studies.
Isolation within the workforce and lack of inherent support systems. Negative experiences, including feelings of tokenism, alienation, and a lack of support, can derail long-term aspirations and cause some women to leave the field. Women who stay in the workforce are vulnerable to harassment and discrimination, and peer networks are often found to be unwelcoming.
Disproportionate burdens from balancing career/caregiving responsibilities. At work, women are expected to take on more service hours, provide more student mentorship, and engage in more administrative duties, while facing caregiving responsibilities at home. Emotional support, mentorship, and administrative responsibilities are not often reflected on a CV or incorporated in reviews.
It will be vital for NIH to carefully consider systemic barriers that affect women at each step of their careers, implement methods aimed at overcoming these obstacles, and create and foster safe training and work environments, which involves continuing its work to prevent and address harassment based on sex, gender, or race/ethnicity and ensure that reporting mechanisms, independent investigations of complaints, and consequences for harassment are continually communicated and emphasized. Mentorship and training for women and people of color are critical; however, balance should remain a consideration. Programs should be careful not to exacerbate feelings of isolation by highlighting individual or group status as a minority (with the implication being that these groups may be in need of more intensive support solely because of their minority status). Successful interventions will not only
provide additional support to members of marginalized communities, but will incorporate initiatives that target pervasive biases on a systems level.

## Comments: Advance DEIA Through Research

As a research-centered organization, SWHR appreciates that NIH has chosen to consider through this Strategic Plan how DEIA can be advanced through research by focusing on both Workforce Research and Health Research. While SWHR encourages NIH to continue building on the wealth of pre-existing evidence related to biomedical research workforce diversityincluding how the pandemic disproportionately affected women in science and the prevalence of sexual harassment of women in STEM fieldsand synthesize it to create a foundation on which to move forward, continuing to identify where there are knowledge gaps and the barriers individuals may face based on their identity will be key not only for measuring progress but also for providing insight into which strategies and tactics may need to be adjusted so NIH can achieve an inclusive, welcoming, and accessible workforce.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 objectives are too broad and vague to elicit substantive responsive comment. lack of any real accountability - new pmap elements are ineffective if nih/mgmt still protects nih/mgmt in nontransparent closed system.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

objectives are too broad and vague to elicit substantive responsive comment. lack of any real accountability - new pmap elements are ineffective if nih/mgmt still protects nih/mgmt in nontransparent closed system.

## Comments: Advance DEIA Through Research

objectives are too broad and vague to elicit substantive responsive comment. nih needs to allow for programs/\$ to address and rectify historical funding gaps and biases (but has refused to do so, or rfa creates bottleneck such that rfa is potentially disadvantageous compared to usual parent mechanism)

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

For HHS to ensure, in a trust but verify philosophy, that the entire HHS workforce is being treated with equity, substantial changes are required to increase oversight of and address inequities relating to the contract workforce. Current gaps include: 1) No route available to obtain demographics of contract employees and applications for contract positions, to ensure Federal oversight of equity within and across HHS ICs.; 2) No requirement for contract vendors to disclose contract employee compensation or ensure similar compensation for identical positions - this opens the door for rampant discrimination and inequity within and across contract vendors. For example, two contract employees, employed in the same job by different vendors, can receive drastically different compensation with no recourse for equity in the governing contract. 3) No requirement for contract vendors to pass yearly cost of living or similar increase onto contract workers in form of salary increases - the vendors can and have pocketed those increases for themselves. A full overhaul of hiring contracts is needed to accomplish HHS goals.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Recommend instituting a major outreach program to underrepresented populations in STEM programs. I have worked at the NIH for 10 years, and the OITE diversity programs, although well intentioned and managed by hard working people, are insufficient and underpublicized.

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

This comment is specifically related to the NIH workforce. NIH should offer student loan repayment or educational support for ALL employees. As it currently stands, only select ICs broadly offer educational support to ALL staff.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

The NIH has released a DEI Supplement to award great mentors, and developed diversity-enhancing programs and funding, but the need for broader, institution-wide mentoring and supervisory training for all investigators is needed. Graduate students and postdocs in the scientific workforce currently report a lack of mentoring training and that it negatively affects their experience in completing the degree. The scientific workforce is suffering from high levels of attrition, mental health, retention, and bullying of trainees and faculty with marginalized identities. Data from the 2015 Doctoral Initiative on Minority Attrition and Completion by CGS show that completion rates for Latino/Hispanic and Black/African American students was less than White students. This survey also reported that students said the factors that contribute to finishing their PhD included their advisor, mentoring/advising, program climate, professional direction, and social environmental/peer group support, and financial support may affect their ability to finish their degrees. Training in mentoring and supervision could address many of these factors.
Given this lack of mentored support, we suggest that NIH and institutions implement and/or require courses in mentorship and professional relationships, especially geared toward the inclusion and mentorship of underrepresented minority (URM) students. A greater emphasis on how individual mentors can better support their URM trainees could help attrition and retention. Ethics and responsible conduct courses, which are required for graduate students, should also be required for mentors. Institutions currently curate their own ethics courses for students, but they often focus on research ethics. NIH could require that lessons include appropriate professional relationships and conflict management, and should also be a requirement for faculty. Trainees don't have power in these professional relationships and all advisors need to better understand the power dynamics of their working relationships, the influence they have on the career of their trainees. Proper training in conflict management and interpersonal skills would help Pls create healthy working environments within their labs. This could also address the mental health issues that are unfortunately widespread in the scientific workforce.

Financial stability is important for attracting and retaining URM trainees. To increase diversity, NIH should steadily and continually increase stipend rates for graduate students and postdocs, since many institutions use the NIH standards for their stipends. URM graduate students and postdocs are more likely to provide financial support for family members, too, so providing more livable stipends for trainees would provide them with more incentive to stay in the scientific workforce and would provide them a better sense of security and mental health, so they can have the capacity to focus on their training and careers.
Additionally, institutions need to develop more sustainable approaches to support DEIA trainees. To implement this, institutions need to fund and create permanent staff and faculty training roles with expertise in DEIA that have dedicated time and energy for this work. If institutions start this practice, they will be able to stay competitive as graduate students seek out programs that have the best DEIA support in addition to research excellence.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

URMs often cite lack of structural support as a barrier at all levels of academia. To provide structural support, we would like the NIH to increase funding for training programs like Initiative Maximizing Student Development (IMSD) and Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC). These programs are critical for the success and retention of underrepresented students in the scientific workforce. To secure these funds, institutions should be required to propose evidence-based DEI initiatives with measurable outcomes that can be assessed and improved over time. An institution committed to diversity, equity, and inclusion should be willing to invest institutional funds. DEI initiatives should not rely solely on extramural funding. Thus, in addition to an increase in NIH funding for critical programs (IMSD, MOSAIC, etc.), we would like the NIH to require university leadership to also contribute institutional funds to sustain DEI programs. In order to ensure institutions are honoring their commitment to DEI, institutions should be required to provide progress/data reports on how funding is being used and how it contributes to the success and retention of URM trainees. The number of faculty from marginalized backgrounds has stagnated despite efforts to increase participation and workforce training; equity is not being achieved at this level. Thus we would like a more transparent, equitable recruitment process for faculty. Research excellence is heavily weighed in the tenure review process. Contributions to DEI should be weighed equally to research excellence for promotion criteria, as both are necessary to build an inclusive research climate

## Comments: Advance DEIA Through Research

Graduate programs traditionally recruit and retain students by highlighting faculty research and department resources. However, other factors contribute significantly to programs recruitment and retention rates, including but not limited to the composition and reputation of the programs advisors, establishment and maintenance of program culture, and non-research-related factors (CGS study, 2015; CGS study, 2020). In light of recent publications in the New York Times and the August 17, 2021 edition of the JAMA that acknowledge the underreporting and outright suppression of DEIA-relevant content, we support additional funding to identify causative mechanisms through which DEIA support contributes to the recruitment and retention of minority graduate students and postdocs.
A DEIA-dedicated institution should commit funding to allow staff, students, and faculty the protected time for the experimentation, execution, and evaluation of DEIA-driven initiatives. This approach can be internally driven, such as the UMBC's Meyerhoff Scholars Program, the UCSF course on JEDI and UCSF taskforce, or it can involve a collaborative effort similar to the Distance Learning Center, which pairs STEM-focused URMs with researchers at biomedical research institutions in Philadelphia, Dallas, and Washington. Each of the aforementioned programs successfully recruits and mentors URMs towards
terminal STEM degrees, in large part because they receive the resources necessary to drive research, development, implementation, and dissemination of DEIA-oriented policies and initiatives.
Additionally, leadership at these programs emphasize accountability, which ensures quality mentorship through the removal of detrimental elements. Mechanisms to research the impact of quality mentorship on access and retention is needed.
For example, through IMSD, Washington University has made a strong start towards becoming a DEIAdedicated institution. IMSD graduate students started identifying mechanisms to improve graduate student retention by establishing the Research Rotation Resource Page. This online database provides a guide for incoming graduate students to identify investigators with whom they would have the best fit. We believe that improving the match between mentor and mentee will, in turn, benefits minority STEM experiences. We want to evaluate and build on that effort, and we look forward to quantifying and analyzing these data. Other institutions may have similar efforts.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 For incoming employees as part of orientation, include discussion about NIH DEIA and provide information about Employee Resource Groups (ERGs), invite representatives from these groups to introduce themselves to new employees and or include someone from EDI in orientation.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Greater involvement of ERGs in strategic planning (all of them, not some of them) and engagement with the larger employee community, incoming fellows, incoming staff, better website visibility on EDI webpages, an integrated ERG day/fair where the community can meet and great and be seen and welcomed.

## Comments: Advance DEIA Through Research

Intramural and Extramural can both learn more about a methodology called community engagement in research (CeNR) or community engaged participatory research (CBPR). NIMHD needs to be more visible and have some serious public discussions about how to engage underserved communities and to highlight important initiatives or innovative researchers. Have a speakers series (Listening sessions) to highlight leaders from underserved patient communities to talk to NIH researchers and program officers about health priorities and needs and effective mechanisms for engagement. Teach unconscious bias to researchers, fellows and program officers, this issue is important not only to broaden hiring diversity but also to recruitment of subject populations.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

We applaud the NIH for proactively addressing the structural racism that permeates the scientific research community. Recognizing the challenges within our own field, in 2019, the PAA established a task force to develop and support opportunities for BIPOC demographers to gather and interact with senior scholars; provide mentoring opportunities; ensure diversity in PAAs governance and programming; and to incorporate issues of interest into the PAA Annual Meeting. The task force, which has since been formalized within the PAA governance structure as the PAA Diversity, Equity, and Inclusion Committee, has provided an ongoing forum for educating our members and developing initiatives to ensure greater opportunities for population scientists regardless of their race, ethnicity,
gender, gender expression, socioeconomic status, nationality, ability, and sexual orientation, and to encourage the adoption of effective institutional policies and practices that encourage and enhance greater diversity in the scientific workforce.
Within our organizational efforts, we have grappled with the lack of data regarding the DEIA environment. We believe the NIH should be collecting and sharing demographic data regarding grantees to facilitate a greater understanding of the DEIA environment. For example, the scientific research community needs better data to determine the percentage of tenured faculty and graduate students that are underrepresented among NIH grantees. Further, there are a dearth of data about existing programs that support underrepresented scholars in training and retention. These data are crucial to informing the adoption of constructive organizational DEIA workforce practices both within the NIH and academic research institutions.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

It is imperative that institutions supported by NIH funding provide evidence of a commitment to workforce diversity practices. Unfortunately, the institutions that often receive the most NIH dollars do not have strong commitments to diversity in recruitment, hiring, training, and/or retention. A large body of research shows that efforts to diversify the workforce through mentorship or other programs will not work if there are no institutional practices in place to ensure diversity and accountability to diversity. The NIH Faculty Institutional Recruitment for Sustainable Transformation (FIRST) program is a good model for supporting institutions that also commit their own resources to diversity as well to ensure transformational change institutionally and structurally.

## Comments: Advance DEIA Through Research

Advancing DEIA through research should begin with the NIH peer review process. We hope the NIH DEIA strategic plan will prioritize DEIA training for NIH review committees as part of their preparations. Moreover, the composition of review committees needs to be critically assessed to reduce systematic bias that occurs when funding decisions are made, and significant questions are considered. Just as we might ensure that an expert of racism is included in a grant that plans to examine racism, we must also ensure that experts in these areas are represented on review panels.
The bulk of NIH funding focuses on biomedical and behavioral research. While this is important and crucial research, this research has to be informed by work on structural racism to ensure that biological and deficit-based definitions and conceptions of race do not continue to be reified. One possibility is to include another criterion in assessments of grants or expanding definitions of impact, significance, innovation, environment, and approach to ensure structural racism is addressed in terms of who benefits from research and how race is being operationalized and understood.
In sum, our organizations believe the proposed framework addresses important, ambitious objectives. We hope that our comments inform the next steps that the NIH takes to fully develop its DEIA Strategic Plan.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 ( Submitter left answer blank )
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

To achieve true DEIA within the research ecosystem, all parts of that ecosystem must collaborate. Thus, we are pleased to see that the proposed NIH-Wide Strategic Plan for DEIA Framework recognizes the need for Partnerships and Engagements. Publishers (including Springer Nature) have been grappling
with many of the same issues as funders and have even created a Joint Commitment for Action on Inclusion and Diversity in Publishing (https://www.rsc.org/new-perspectives/talent/joint-commitment-for-action-inclusion-and-diversity-in-publishing/). We believe that open dialogue will lead to better and more aligned solutions to common challenges.
Springer Nature has a strong commitment to promoting DEIA, but we know that turning that commitment into effective actions is challenging. Thus we have made a long term, multi-year commitment to our DEIA efforts - both internally in creating a diverse and inclusive workplace and in our external activities in the communities we serve (https://group.springernature.com/gp/group/taking-responsibility/diversity-equity-inclusion). We already have many initiatives underway and many ideas and plans for the future. To help organize our work within our Research \& Solutions departments, which focus on our publishing and solutions activities, we have identified four pillars underpinning our DEIA activities (https://www.springernature.com/gp/advancing-discovery/springboard/blog/blogposts-sustainability-inclusion/furthering-diversity-equity-and-inclusion-commitment/19677418), many of which could be strengthened through a collaborative approach.

1. Becoming intentionally inclusive. This includes diversifying representation in all our networks (authors, peer reviewers, speakers, editorial board members etc.) and being intentionally inclusive in content creation.
2. Engaging our communities and stakeholders to support collaborative action. This includes engaging our external networks; strengthening the capacity of our communities through training; engaging with funders, institutions, governments and industry; and understanding DEIA in our global constituencies.
3. Improving research and publishing practices through policy. Policies weve instituted or that are in the works include an inclusive author name change policy; guides on people-first and identity first language; development of guidance for awareness of harms of research and research communication in the contexts of race, ethnicity and racism, and of discrimination in respect to gender (identity) and sexual orientation; improving reporting on sex, gender, race and ethnicity; and policies on ethics dumping and helicopter research.
4. Communicating our position and ambition. We feel its important to share our commitments externally, as well as updating our agreements, contracts and guidance documents to reflect our beliefs and standards.
Last year, Springer Nature editorial and publishing staff met with representatives from NIH UNITE to exchange information on our activities addressing DEIA issues and discuss how we might align our work. Since then, we have created an internal steering group to guide our related activities. We have had follow-up discussions with Dr. Marie Bernard, Dr. Charlene Le Fauve, Dr. Monica Webb-Hooper, Dr. Eliseo Perez-Stable, and Dr. Anna Napoles, and a group of editors from our Nature portfolio and BMC journals are organizing virtual lab visits soon. We hope that we can find additional ways to partner and engage and look forward to seeing how NIH envisions these partnerships in the next iteration of this Strategic Plan.

## Comments: Advance DEIA Through Research

(Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

To achieve this objective, AUGS recommends the examination of organizational practices in both the NIH workforce and the workforce at institutions supported by NIH funding through the following: 1) creation of initiatives to recruit, retain, and advance workforce members from underrepresented backgrounds,
2) increasing transparency regarding employee recruitment and hiring practices, both at the NIH and at institutions supported by NIH funding,
3) collection, examination, and publication of information regarding underrepresented minority employee retention and satisfaction

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

AUGS strongly supports focused efforts addressed at this objective. We endorse resource application dedicated to the following:

1) Understanding how to mitigate the root causes of health disparities that may result from structural racism and discrimination,
2) Developing potential solutions to reduce and/or address health disparities,
3) Creating opportunities for implementation of community partners in clinical care which may lead to greater access to care for underrepresented and underserved populations
4) Supporting and engaging in community based participatory research that will lead to an enhanced understanding of barriers to care and treatment in various underrepresented and underserved populations

## Comments: Advance DEIA Through Research

AUGS supports DEIA workforce research that includes the following:

1) Recruitment, retention, and satisfaction reports for underrepresented members of the workforce,
2) Career development opportunities specifically aimed to enhance workforce equity,
3) Transparent reporting of criteria for promotion with demographics and qualifications of considered candidates
We also support DEIA health research that includes the following:
4) Examination of internal systematic biases that create disproportionate barriers for applicants from underrepresented and/or less-privileged backgrounds,
5) Support of large, multicenter trials and qualitative studies to investigate medical literacy and sociocultural perspectives amongst underrepresented and underserved populations as it pertains to PFDs,
6) Funding for large, multi-center trials centered around evaluating current educational resources and determine gaps in patient knowledge in diverse populations as it pertains to PFDs,
7) Emphasis placed on research proposals that ensure outcomes and interventions are demonstrated to be equitable across diverse populations,
8) Expansion and enhancement of career development funding and opportunities that foster the development of future leaders from underrepresented backgrounds or who are committed to serving underrepresented populations

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Transgender scientists should be considered in the Framework for the NIH-Wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility (DEIA)

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Transgender scientists should be considered in the Framework for the NIH-Wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility (DEIA)

## Comments: Advance DEIA Through Research

Transgender scientists should be considered in the Framework for the NIH-Wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility (DEIA)

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Please acknowledge that transgender and non-binary applicants are underrepresented in science and disadvantaged in general, and make opportunities available to underrepresented minorities also available to trans and non-binary folks.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Please acknowledge that transgender and non-binary applicants are underrepresented in science and disadvantaged in general, and make opportunities available to underrepresented minorities also available to trans and non-binary folks.

## Comments: Advance DEIA Through Research

(Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 Current definitions of diversity do not include gender (specifically: nonbinary or transgender) or sexual orientation diversity, yet these groups have been historically excluded. Some might be concerned that "LGBTQIA+" encompasses a broad and amorphous spectrum or that it would be difficult to verify "membership." However, wouldn't it be better to recognize the historical exclusions of this entire spectrum and work to better include these humans, even if it means accepting that a few people might take advantage of a broad definition? I hope the NIH will recognize the need to better include gender and sexual orientation diversity in its definitions of diversity, for both hiring and funding practices.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Current definitions of diversity do not include gender (specifically: nonbinary or transgender) or sexual orientation diversity, yet these groups have been historically excluded. Some might be concerned that "LGBTQIA+" encompasses a broad and amorphous spectrum or that it would be difficult to verify "membership." However, wouldn't it be better to recognize the historical exclusions of this entire spectrum and work to better include these humans, even if it means accepting that a few people might take advantage of a broad definition? I hope the NIH will recognize the need to better include gender and sexual orientation diversity in its definitions of diversity, for both hiring and funding practices.

## Comments: Advance DEIA Through Research

Current definitions of diversity do not include gender (specifically: nonbinary or transgender) or sexual orientation diversity, yet these groups have been historically excluded. Some might be concerned that "LGBTQIA+" encompasses a broad and amorphous spectrum or that it would be difficult to verify "membership." However, wouldn't it be better to recognize the historical exclusions of this entire spectrum and work to better include these humans, even if it means accepting that a few people might take advantage of a broad definition? I hope the NIH will recognize the need to better include gender and sexual orientation diversity in its definitions of diversity, for both hiring and funding practices.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Include LGBTQIA2S+ people in what counts for Diversity Supplement for trainees and F31/F32/K awards, etc. Include LGBTQIA2S+ people in measurements of DEIA in STEM.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Include LGBTQIA2S+ people in what counts for Diversity Supplement for trainees and F31/F32/K awards, etc. Include LGBTQIA2S+ people in measurements of DEIA in STEM.

## Comments: Advance DEIA Through Research

Include LGBTQIA2S+ people in what counts for Diversity Supplement for trainees and F31/F32/K awards, etc. Include LGBTQIA2S+ people in measurements of DEIA in STEM.

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Institutional policy with strict rules, regulations and guidelines are hard to infuse with 'bottom-up' fresh ideas. There must be a space/place and opportunity for breaking the institutional norm. This culture of listening and piloting and allowing creative 'out-of-the-box' thinking will be the very key to allow us to move forward in health in the USA.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

Please consider more 'open' applications for research from those outside the usual network. Prize and grant points for developing new programs with different researchers. Consider the study of the social determinants of health, and prioritize not bench or cellular level science, but population-based science studies. Create a call for studies which improve the Sustainable Development Goals and work with the other branches of government to improve our country. For example, vision and motor vehicle accidents, or children's learning impacted by disadvantaged home situations, access to assistance, or support to bridge gaps in individuals' ability to maximize their human potential either caused by health problems or other problems causing health problems. We are heavy into bench science, but we need to expand more into people and community science. It has been ignored in our country except for a few examples.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 ( Submitter left answer blank )
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

(Submitter left answer blank )

## Comments: Advance DEIA Through Research

My first recommendation concerns the lack of expertise on existing study sections. Last summer, NIH issued an RFA examining structural racism. Despite the excitement generated by this RFA, I was keenly
disappointed to peruse the study section roster from November of 2021. The majority of reviewers on this study section had little to no expertise on racism despite NIH updating its study section criteria in October of 2021. The updated criteria states that Expertise is the paramount consideration when developing/updating a roster. Yet, the majority of reviewers reviewing proposals submitted in response to structural racism were not experts in racism. This may be one mechanism that fosters the racial disparity in funding that afflicts scholars of African descent. Study section rosters need to be diversified to ensure that the appropriate expertise is present on study sections to review proposals accordingly. Specifically, Black scholars need to be recruited to serve on existing study sections. The expertise needed to review proposals submitted by Black scholars may not be present on standing study sections since Black scholars are systematically less likely to be awarded R01s (Erosheva et al., 2020; Ginther et al, 2011; Hoppe et al., 2019). This process becomes cyclical and self-perpetuating, and is the very definition of institutional racism. If NIH ensures that Black scholars serve on existing study sections, this might eliminate the funding disparity involving Black scholars. McFarling (2021) describes a troubling pattern in response to recent funding opportunities to study racial inequities in which researchers with little or no background or training in health equity research, often white and already well-funded, are rushing in to scoop up grants and publish papers, referring to them as health equity tourists. Diversifying study sections is one way to mitigate this issue.
My second recommendation is that NIH should revise the conflict of interest policy. There is a dearth of underrepresented scholars in higher education. According to the U.S. Department of Education, 75\% of full-time faculty were White and 6\% of full-time faculty were Black (U.S. Department of Education, 2020). One aspect of the policy states that reviewers cannot review proposals if they have collaborated within the past three years. Among Black scholars, this policy has the effect of reducing an already small pool of reviewers who have the expertise to properly review proposals. For example, my research agenda examines the impact of racism on the mental health of Black adolescents. There is a small pool of scholars who have the expertise to properly review my proposals given the nuances required in conducting research among a historically marginalized and victimized population who has been hurt by the scientific enterprise (e.g., Tuskegee Syphilis Experiment, the research exploitation of Henrietta Lacks). This policy also reduces the number of scholars who have the scientific expertise and cultural knowledge to accurately and comprehensively review my proposals. For this reason, this policy must be revised to acknowledge the historic and systemic racism that negatively affects Black scholars in order to provide equitable outcomes during the review process.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

The Harvard Medical School JCSW responses below are a combination of direct quotes and overall views of our members, who are a range of staff and faculty from instructors to full professors. These individuals hold MDs, PhDs, BA/BS, MA/MS degrees, with most carrying MDs or PhDs. 9 of our 19 affiliated institutions are represented below with direct comments.

Our members feel there are many institutional barriers for women including conscious and unconscious bias. The NIH can help tremendously by requiring dashboards of gender equity to be maintained by all institutions that receive NIH funding, and to hold these institutions accountable for their metrics as part of funding decisions or indirect funding rates. NIH has tremendous leverage which it could use to change behavior at our institutions. If academic medical centers cannot meet metrics that demonstrate equity with real data, they should not be able to access NIH funding. More research should be required to demonstrate diversity, equity or inclusion and potential impact. Meeting speakers should be diversified with respect to race, ethnicity, and gender.

Additionally, institutions do not support researchers with hard money therefore presenting great challenges to the financial security of women with childcare obligations. The NIH should also pay close attention to clinical research faculty who are on soft money and the special circumstances that relate to grant proposals. Because of the lack of hard money, these PIs need to allocate more of their own effort to the grant and need larger budgets in general for grants, or can afford less work/people with modular grants. The negative impact on the work of clinical faculty is exceptionally high. These challenges are even more daunting for underrepresented populations. The NIH should pay special attention to these vulnerabilities in grant supplements and additional specific opportunities.
Funding mechanisms to support women with childcare responsibilities is also key. Additional funding for more female researchers and including them on study sections would be helpful to establish more opportunities for women. Part-time options for research and in $K$ and $R$ grants should be implemented to support workforce flexibility. RFAs for mid and late career women would be further effective implementations. Please give women a chance by taking into consideration their life cycle including childbearing.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Our members recommend a strategic plan to foster diversity and inclusion built on a strong foundation of partnership and engagement with the community at large. Engaging communities, such as schools, especially in districts that are less funded, and giving talks by faculty members, especially by women and/or underrepresented groups will grow a more diverse scientific community at the roots. Increasing partnerships with schools for summer internships in laboratories in academia is another essential step to build a strong and diverse community. Additionally, members of the science community must be encouraged to be role models and mentors with institutional requirements fostering these activities. Our members recommend opening up opportunities for leadership and visibility to women. Furthermore, providing flexible academic "clocks" during years of family expansion and accepting realistic time gaps beyond small 90-day extensions for maternity leave without negative impact on funding is imperative. Junior career building in research directly competes with the decision to build a family and adjusting young investigator status to address this will be impactful. There has been inadequate recognition of the impact of the COVID pandemic on early career investigators, especially female physician scientists who have had increased childcare responsibilities and increased clinical care responsibilities during the pandemic. There needs to be cost extensions of early career awards. It is also critical to recognize the value of female physician scientists on a part-time track and provide a myriad of options to support quality research.
Our members suggest updating budgets with improved pay lines and collaborating with local government and institutions to ensure this. Due to diminished fiscal buying power of grants, women with caregiving responsibilities often drop out or move to industry that is secure and supportive in terms of financial safety.
Requirements for preliminary data collection for K23 applications should be examined so as to not disproportionately create greater challenges for female physicians, during early faculty years (which may also coincide with early child rearing years with children under 10 for many women). Additionally, revising the K23 eligibility criterion for female MD Pls, in terms of extending the time limit since post fellowship training at the time of application from the current 5-year mark to a suggested 10-year mark would play a big role in drawing more early career women physicians toward a career in clinical/ translational research. Currently, such an extension requires more paperwork and requests for waivers, but it would help a lot if this was made a default criterion to begin with. Supplements similar to those provided for K awards would be helpful for R01 awards as well.

## Comments: Advance DEIA Through Research

For workforce research, we recommend collection of data on who is funded for NIH grants with further examination of if men are funded more than women, despite having the same h-index and how this can be improved. Additional research evaluating gender inequities in the research workforce and investigating strategies to mitigate them is critical.
For health research, we recommend examining if, how, and why mental health disorders affect women differently and which treatments are more/less effective for women. Another query into if relational strengths women often cultivate affect different aspects of health and lifecycle such as heart health, pregnancy, and aging. We would like to see research on why certain autoimmune diseases seem to be more common in women (lupus, for example) and what this means during reproductive years. Whether and why the immune system differs in women and men and across the lifespan. How health and access to health care differs among diverse populations of women for example, differences in race, ethnicity, rural/urban, people of different sexual orientations and identities. And lastly, how health effects of climate change are likely to affect women and children.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 Potential benefits of implementing organizational practice to center and prioritize DEIA in the workforce include more effective workforce planning and implementation. Instead of referring to DEIA as a lens (that can be removed), centering and prioritizing DEIA in the workforce will help permeate the content and compassionate curiosity involved in navigating DEIA issues and make it the norm. When we prioritize something we determine the order for dealing with a series of items or tasks according to their relative importance or designate or treat something as more important than other things. As an example, racism has been declared a public health crisis by over 200 health/public health entities, city/town councils, county boards, education entities, governors/mayors, or state legislatures across the nation. Before 2020, the connection between racism and health was not amplified nor acknowledged with the level of urgency seen now. Continued, sweeping efforts and actions analogous to that will make it clear that DEIA is expected in the NIH workforce and across institutions supported with NIH funding. Illustrating interconnectivity between local and national efforts and how each has power and influence to set the tone for DEIA (i.e., expectations for respecting and uplifting DEIA culture) is another potential benefit of this objective. By highlighting parts of the implementation plan that work universally, versus those that function uniquely in different communities, we are leading by example.Potential challenges for this objective are addressing diversity fatigue, overwhelm, or cynicism and identifying and reporting adequate qualitative and quantitative metrics to tell stories for different audiences. Diversity fatigue is a general term used to describe a broad subset of pieces of diversity that people take issue with. Diversity fatigue could describe someone who is dissatisfied with inaction, feeling as though they have no more compassion or empathy to give, or infuriated with lack of progress. Every strong strategy has intentional goals. By developing goals that are specific, measurable, achievable, relevant, and time-bound (SMART goals) we ensure that the metrics that follow provide insights and information that reflect integrity, progress, and continued growth opportunities.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

A potential benefit of growing and sustaining DEI through structural and cultural change include reconceptualizing the vision of who can become or is a researcher, making success and provision of support an expectation and not an exception. As we implement structural and cultural change in this way, we ensure that transparent current state or environmental analysis is conducted and shared to enable reliable development and iteration of SMART goals and metrics. Viewing this objective through the stewardship tenet, identifying who or what will conduct, supervise, and manage growth and
sustaining of DEIA through structures, will be both a potential benefit and challenge. There is an opportunity to empower administrative staff to play a role in reinforcing new cultural norms and expectations (i.e., serving as intermediaries between researchers, aspiring researchers, and staff). Identification of current partnerships and engagements will help shape current state analyses, too. Current partnerships will help institutions and systems understand why, how, who or what is missing, and what next steps could or should be. The same analysis should be done for engagements. Under the accountability and confidence tenet, it will be important to recognize that most researchers speak, understand, and respect quantitative data. This objective will provide an opportunity to bridge the gap between quantitative and qualitative data for improved data storytelling and building of a business case for understanding why DEIA is imperative in the NIH/scientific workforce. Holding researchers accountable for their willingness or lack of willingness to translate, mentor, and support expectations of success is both a benefit of this objective and tenet and potential challenge. These insights also apply to the management and operations tenet of this objective.
Potential challenges for this objective include, broadly, alignment and communicating. For partnerships and engagement, going through the exercise of defining what a partnership is, who qualifies as a partner based on the partnership definition, and ensuring accountability for all parties involved will lay the foundation needed to assess current state and plan for equitable inclusion in the future. Delineating rights and responsibilities, while acknowledging and communicating conditions under which those rights and responsibilities may change throughout the partnership, will help mitigate conflict and barriers to progress and learning. With sensitivity to the accountability and confidence tenet, aligning accountability to roles, with acknowledgement of how power and influence is driven by hierarchy, will be instrumental in whether DEIA both grows and is sustained through structural and cultural change. Another growth opportunity within this insight is the duty to explore and understand what emboldens someone or something with confidence and ensuring that confidence is equitable (in relation to power and circumstance).

## Comments: Advance DEIA Through Research

Potential benefits for the third objective, advancing DEIA through research, are layered. When we are curious and ask questions that havent been asked and plan to gain insights to possibilities about why certain outcomes persist, we are heading toward unforeseen enlightenment. This same curiosity and urgency applies to research on the workforce and health. By understanding nuances in workforce and health experiences and amplifying why even though the nuances may not be scientifically significant, when dealing with people who are fluid, those anomalies are worth exploring as much as data that is easily digested. From the health research perspective, acknowledging how research or lack of research has exacerbated health disparities will undoubtedly be an asset under this objective.
A potential challenge for this objective is ensuring that research is culturally respectful. In other words, we have a history of research that was conducted and widely published to support unjust, discriminatory, and bias rhetoric. Those ideas and ideals were infectious and have caused much of the chaos that underserved, minoritized, and marginalized communities experience today. As we encourage more scientific exploration of diverse communities, we must prioritize trust-building or rebuilding and assurance that participation in research is done in good faith and with utmost professional integrity, centering humanity.

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Initially and overall, we are glad to see that this effort is happening at NIH but see a critical need for clearer definitions, objectives, goals, and metrics.

Regarding objective 1, we suggest reviewing and evaluating existing policies at NIH to ensure that hiring practices are equitable, increasing diversity on hiring committees and providing training and education for search community members so that they have the skills to access candidates without bias. There is certainly a need for training to support the professional advancement of scientists from historically underrepresented $(\mathrm{HU})$ and disadvantaged backgrounds but we also want to note that this is only one piece of the solution. The factors that contribute to both the existence and persistence of the lack of diversity in the workforce exist in our institutions and our collective attitudes and behaviors fueled by racism and bias. All members of the workforce require training, especially for those in leadership positions, across NIH and the health sciences. There is a lot of work to be done at predominantly White academic institutions to cultivate a sense of belonging for all trainees and earlystage faculty in addition to providing them the tools for academic success (pilot awards, publications, grants).
NIH already supports HU investigators through a range of programs [i.e. Research Supplements to Promote Diversity in Health-Related Research, Building Infrastructure Leading to Diversity (BUILD) Initiative, Faculty Institutional Recruitment for Sustainable Transformation (FIRST)] and can additionally promote the success of HU investigators by making grants more equitably accessible, ensuring diversity among reviewers and expanding trainings to reviewers to minimize bias in grant application review.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

There is need for a comprehensive approach across the activities of NIH to update policies that restrict accessibility and create those structural changes that lead to environments/cultures that are psychologically safe and embrace diverse perspectives (e.g. change policies rooted in white supremacy culture, active anti-racism, radical accessibility). Barriers may include lack of resources and leadership not prioritizing or recognizing the critical need for fiscal, administrative, and instrumental support of initiatives to advance DEIA. Systems and psychologically safe environments need to be created to change the culture of promotion from one defined by historically male, White, values, to cultures that embrace diverse perspectives.
In fact, the groups that bear the burden of bias, often are forced to also bear the work of improving culture and climate to create the urgency required. NIH policies have the potential to hold institutions accountable and rapidly shift the burden/responsibility of climate and culture change to rest on the predominantly white male leadership establishment. For example, the NIH Office of Research on Womens Health (ORWH) funded 14 R01 grants and germinated the grassroots collaborative, the Research Partnership on Women in Science Careers. The ground-breaking work culminated in many recommendations (Carr, 2019). In particular, they recommended that at the policy level, funding agencies should make grant funding contingent on institutional gender and minority equity plans and we add, results. We urge the NIH to consider putting such policies in place.
NIH is key to needed shifts across the nation. Currently, there is a lack of mainstream knowledge or interest in DEIA and a common belief that the work, while important, does not necessitate immediate action. NIH can change that with clear guidance and expectations for extramural funding including requiring community partnerships, transparent and equitable institutional policies, commitment to DEIA hiring processes especially for leadership roles, and supporting common DEIA objectives and evaluation metrics. NIH could be a model by promoting institutional self-reflection, including continued and ongoing substantive recognition of historic wrongs, building relationships with and opportunities for people who have been historically disenfranchised to compensate and repair those wrongs, and building structures that protect people from ongoing disenfranchisement.
Carr PL, Helitzer D, Freund K, et al. A Summary Report from the Research Partnership on Women in Science Careers. Journal of general internal medicine. 2019;34(3):356-362

## Comments: Advance DEIA Through Research

Overall, we need to prioritize funding for research on the science of diversity to develop evidence-based solutions for promoting the success of HU scientists, anti-racist cultural change, and advancing health equity and community-engaged research. There is also a need to prioritize studies that build on the strengths of marginalized communities in improving community health. NIH could require that the research funds given to community stakeholders for their participation be large enough to enhance sustainability of the research programs, including hiring representative community members as staff. Regarding the problem of research redundancy (too many scientists doing small scale studies) and under-populated samples, NIH could help mitigate waste in research design and implementation by creating better collaborative tools to be shared between researchers, across institutions and funding sources. Additionally, we need mechanisms to allow communities to inform and drive research as well as the interpretation of results to increase the value and impact of the research. NIH could help researchers build Health Equity evaluation tools, akin to the Health Equity Research Impact Assessment (Castillo \& Harris, 2021), including evaluation rubrics and a library of validated common metrics and measurement tools.
We would also argue that NIH could recognize and reinforce that health equity research must prioritize social justice, community engagement, interdisciplinary and multilevel approaches including a life course perspective and an acknowledgment of racism as a fundamental driver of health disparities. Castillo, Enrico G., and Christina Harris. Directing Research Toward Health Equity: A Health Equity Research Impact Assessment. Journal of General Internal Medicine 36, no. 9 (September 2021): 28038. https://doi.org/10.1007/s11606-021-06789-3.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

There continues to be a stark under-appreciation of the contributions of intensive mentoring, education and research training provided by those leading NIH sponsored training grants. For those leading this work, their labs are often smaller in size. Typically, they have one large R01 grant to sustain their research. Their research laboratories serve as both centers for cutting-edge research and training grounds for the next-generation under-represented in STEM (many are undergraduates). Although recognition by grant reviewers (my colleagues) about the extensive time and energy and excellence in mentoring that those of us doing this work are investing, I remain irritated by the comments of low or modest productivity. Too many look only at numbers of publications and do not inspect them to assess the depth of the work and whether they were mechanistic in nature. We need grant review assessment mechanisms to quantify the impact that those of us who are trying to do high-level research while at the same time training the next-generation who come from under-represented backgrounds. Perhaps for the Investigator review, language about this fact--is the PI a director of a DEIA training grant and the need to take a closer look at their publication output within this framework. The above profoundly affects those of us with multiple intersecting identities-women-minority-activities for promotioneditorial service-work/life and the differential impacts of COVID and its post-effects. Again, there is greater recognition of the disparities, but the problem of quick snap judgements without countering of such views remain a problematic issue. The availability to DEIA Researchers of gap funding ( 6 months- 2 yrs ) to have a cushion to complete research would be very helpful. Thank you for the opportunity.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

(Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce INTRODUCTION:

The Global Health Technologies Coalition (GHTC) is the premier advocacy organization focused on research and development (R\&D) of global health technologies. As a coalition of 40 organizations based around the world focused on developing new drugs, vaccines, diagnostics, and other global health toolsmany working in partnership with the National Institutes of Health (NIH)we strongly recommend that in its diversity, equity, inclusion, and accessibility (DEIA) strategy, NIH recognizes global aspects of DEIA and commit to reducing global inequities and disparities in who leads and benefits from biomedical research.
The inequities and disparities in global health biomedical research are rooted in racism, sexism, ableism, ageism, classism, histories of colonialism, and other forms of bias and oppression that intersect. Like other social injustices, they are harmful and will persist without acknowledgment and action by many stakeholders, including NIH and other major funders of biomedical research. We recognize that NIH, including the Fogarty International Center, has taken steps to both acknowledge these global research inequities and disparities and to rectify them, such as by providing training to scientists and ensuring that NIH programs with a focus in other countries are led by researchers based in those countries. These are welcome steps in the right direction but are broadly recognized as insufficient for addressing the challenges we face. In its DEIA strategy, we ask the NIH to go further and to uphold its place as a leader in the biomedical research ecosystem by setting an ambitious strategy for improving DEIA in biomedical research for global health.
*In addition to our submission below for objectives 2 and $3, *$ GHTC also strongly supports the RFI submission of the Federal AIDS Policy Partnership, including the following main points:
Objective 1:
Enhance existing programs developed to diversify the researcher base that have failed or have not been evaluated.
Objective 2
NIH capacitation programs for young researchers of color. To help navigate the rigorous NIH grant application process, the NIH should develop resources and trainings that are targeted to young researchers of color.
Pipeline project with Historically Black Colleges and Universities (HBCUs).
Establish a comprehensive system of mentorship networks.
Evaluation of previous or existing DEIA efforts undertaken by NIH.
Review and amend existing NIH policies, procedures, or practices that may perpetuate racial disparities or bias in NIH funding mechanisms.
Objective 3:
Develop a community-based participatory approach to research.
Increase support for researchers and research institutions based in Africa.
Diversify HIV clinical trial participants.
Improving DEIA in biomedical research is not only the right thing to do, but it also will lead to more impactful discoveries and health products in the future for all people. As the largest funder of research for global health, it is critical that NIH uses its DEIA Strategy to recognize and plan to address the global inequities and disparities specific to the field. We thank you for considering our recommendations toward this end.
Please do not hesitate to contact Jamie Bay Nishi at jnishi@ghtcoalition.org if you have questions or need additional information.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

For objective 2, here we include several sub-priorities relevant to partnerships and engagement that we recommend NIH include in its strategy:
Increase funding for research and training in low- and middle-income countries (LMICs): Several NIH programs have been models for how global power inequities in biomedical research can be rebalanced, such as the Medical Education Partnership Initiative (MEPI) and the Human Heredity and Health in Africa (H3Africa) program. In its strategy, we ask NIH to commit to increasing support for programs like these and to prioritize local leadership of global health research in other countries.
Reimagine scientific capacity-building: Capacity building is often used to describe US investments in the research ecosystems of other countries. GHTC asks NIH in its strategy to recognize that many capacity building investments, however, lead to reciprocal innovation and mutual capacity building, in which ideas, products, and people flow back to the United States and benefit the US biomedical research ecosystem. We ask NIH to include in its strategy plans to continue funding programs for research exchange, mutual capacity strengthening, and reciprocal innovation. As part of this, NIH should prioritize partnerships both between institutions based in LMICs and between institutions based in the US and LMICs. In these partnerships, NIH should emphasize that scientists and institutions based in LMICs should be leading or co-leading the projects that are relevant to their communities.
Make it easier for scientists around the world to apply for NIH grants: The US Agency for International Development (USAID), as part of its new administrator-led mandate for inclusive development, has committed to steering more of its funding directly to local partners in LMICs. To facilitate this process, USAID launched www.workwithusaid.org, a free, user-friendly website to train potential partners on how to work with USAID. We encourage NIH to create a similar portal or resource to better facilitate grant applications from researchers and institutions around the world.
Build a broad coalition to develop DEIA best practices for global health research: GHTC encourages NIH to use its position as the global leader in global health R\&D by working with a broad coalition of stakeholders to develop guidance, principles, or best practices for improving DEIA or rectifying power inequities in global health research. This could include developing models for funding global health research that center leadership and decision-making power to researchers and institutions in LMICs. Acknowledge diversity across and within countries: NIH partners with institutions around the world and should recognize in its strategy that DEIA challenges are dynamic and vary by geography depending on different power structures and local histories and cultural contexts. The strategic priority for partnerships and engagements should recognize that initiatives may need to be tailored to address context-specific DEIA challenges.

## Comments: Advance DEIA Through Research

For objective 3, here we include several sub-priorities relevant to the health research priority: Center the voices of people in affected communities: In the United States, patient advocacy movements have pushed the biomedical R\&D ecosystem towards patient-focused medical product developmenta paradigm that puts patients at the center of every phase of biomedical R\&D. We encourage the NIH to align with and advance this movement in global health by prioritizing consultation, engagement, and the centering of affected individuals and communities in global health-related research.
Strive for more equitable scientific publication practices: For academics, success is typically determined by a positive feedback loop between publications produced and funding received. Many researchers based in LMICs, unfortunately, face an extra hurdle of overcoming explicit and implicit bias against them, their ideas, and their research. NIH and the Fogarty International Center have taken steps to improve recognition of the work of scientists in LMICs, but inequity still existsas evidenced, for instance,
by researchers in high-income countries (HICs) being disproportionately placed in the most respected authorship positions on publicationsand this challenge should be recognized in the NIH DEIA Strategy. Prioritize women, pregnant and lactating individuals, and minorities in global health research: The biomedical research sector has a history of excluding women, pregnant and lactating individuals, and minorities in research, both as researchers and as participants in clinical trials. The problem of inequitable gender representation in clinical trials has been recognized in legislation and in previous NIH research policies, which have helped drive some progress. From 2009 to 2019, most fields of biomedical research improved their inclusion of women. Still, in 2019, the gap remained shocking, with women participants included in only 49 percent of biomedical research studies. Even more disappointing, the field of pharmacology actually included fewer women as research participants in 2019 compared to 2009. In a 2020 analysis, the US Food and Drug Administration found that of 293,000 participants in clinical trials globally, more than three quarters were white. The products produced through global health R\&D often reflect these disparities, with many first-generation medical products for neglected diseases not being suitable for the populations most at risksuch as pregnant and lactating individuals and children. NIH must continue and redouble its efforts to improve diversity across all clinical trials so that cohorts of trial participants better reflect the populations of end-users.
Ensure research conducted in low-resource settings adds value to local communities: Parachute research when a researcher goes to a community to gather data and then leaves without any current or future benefit to the communityis a particular challenge in global health, where it is unfortunately still common for researchers from HICs to visit low-resource settings without reciprocating any long-term value to those communities. NIH could mitigate this trend by providing guidelines requiring demonstration of how the research will add value to local communities or requiring its grant recipients who are conducting research in low-resource communities in other countries to partner with, be advised by, or work under the supervision of local researchers, institutions, or community members.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Workforce at Institutions Supported by NIH Funding
Recommendation 1: Recommend that the NIH partner with our nation's premier biomedical research institutions to create a national bridge between high school and college programs for underserved students to more seamlessly be introduced and successfully progress into Science, Technology, Engineering and Mathematics (STEM) careers. A national NIH Science Technology \& Research Scholars (STARS) Bridge Program would build partnerships between NIH supported institutions and faculty with high schools with significant populations of underserved students across the country. High school students would be paired with outstanding investigators and laboratories to learn about science and STEM careers. These relationships would continue throughout a student's high school years and serve as stepping stones to help ensure that students continue toward undergraduate education leading to scientific careers. CSHL's Dolan DNA Learning Center (DNALC) is the nation's first science center dedicated to public genetics education. Each year, more than 32,000 students from more than 200 Long Island and New York City area schools visit the DNALC, where they perform a variety of hands on experiments and computer-based bioinformatics and other exercises. We have implemented a local STARS program and encourage the NIH to work with us and other premier research institutions to create a national STARS program in order to have a meaningful national impact.
Recommendation 2: Recent NIH DEIA initiatives, such as the one announced by NOT-OD-22-057 Administrative Supplements to Recognize Excellence in Diversity, Equity, Inclusion, and Accessibility (DEIA) Mentorship, are wonderful opportunities to encourage NIH supported Principal Investigators to team with trainees from diverse backgrounds to develop plans to leverage strong research
environments and mentorship opportunities to foster the development of future scientists. The breadth and impact of this opportunity was limited and curtailed by the requirement to have had mentorship plans already included in the existing research award. The NIH website identifies the NIH Research Project Grant (R01) as the original and historically oldest grant mechanism used by NIH. R01s do not routinely contain mentorship plans and were consider ineligible for NIH DEIA supplements. We have many new faculty at our institution who recently secured or renewed their initial R01s and were very interested in responding to this NIH initiative. Many are from diverse backgrounds and want to help make a difference to broaden participation, however, their R01s were determined to be ineligible for this NIH DEIA opportunity. My staff and I directed them to work with their NIH Program Officers to submit conventional diversity focused administrative supplements. I applaud this new NIH DEIA approach and encourage NIH to develop additional strategies by which all conventional R01s can be leveraged to serve as excellent mentorship opportunities to develop a more diverse generation of future scientists.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Objective 2: Grow and Sustain DEIA through Structural and Cultural Change
Stewardship Priority setting, scientific review process and communication
Recommendation: Recommend that the NIH should more actively engage the full spectrum of the administrative research community, with strong representation of under resourced and less researchintensive institutions, as part of a standard practice for the development of new or modification of existing policies and procedures governing research applications, review, award, and reporting requirements.
This practice will allow the agency to proactively identify unintended obstacles, consequences and biases prior to policy and practice implementations that would negatively impact investigators from many institutions, particularly those with limited research, administrative and financial resources to adequately address them. Time and cost analyses to develop and maintain compliance requirements should also be performed by the NIH to determine the potential disproportionate impact on under resourced and less research-intensive institutions that may require financial assistance in order to properly implement them.
Recommendation: Encourage applicants and study sections to note and emphasize the importance of health disparities research and add this criteria to the evaluation of a projects significance when applicable.

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

ASHP is the collective voice of pharmacists who serve as patient care providers in hospitals, health systems, ambulatory clinics, and other healthcare settings spanning the full spectrum of medication use. The organizations more than 60,000 members include pharmacists, student pharmacists, and pharmacy technicians. For 80 years, ASHP has been at the forefront of efforts to improve medication use and enhance patient safety.
ASHP and its members have long been committed to eliminating racial and ethnic disparities in healthcare. ASHP further seeks to help eliminate racism, discrimination, and inequities that impact other minority and underrepresented populations and to help improve diversity, equity, and inclusion in healthcare and society more broadly. Because of these efforts, ASHP convened a Task Force on Racial Diversity, Equity, and Inclusion (DEI). The Task Force drafted a series of recommendations on how to
enhance DEI efforts across the organization and healthcare. We urge the NIH to adopt a similar approach, as outlined in each of the objective areas requested.

NIH Workforce/ Workforce at Institutions Supported by NIH Funding
ASHP encourages the NIH to continue to recruit women, BIPOC, and LGBTQ+ candidates for all positions, including leadership positions.
ASHP encourages NIH to reduce bias in workforce application screening tools and to update their recruitment processes to include more women, BIPOC, and LGBTQ+ candidates.
ASHP encourages the NIH to provide continuous professional development and training to leaders and staff on diversity, equity, and inclusion (e.g., unconscious bias, cultural awareness, humility training, or other relevant topics). Further, NIH should provide educational resources on diversity, equity, and inclusion education to all supporting institutions.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

ASHP recognizes that organizational changes must be accompanied by systematic efforts to ensure that women, BIPOC, and LGBTQ+ candidates have an opportunity to participate, lead, and be heard. Therefore, ASHP has provided several recommendations, to encourage the NIH to use its influence to expand diversity, equity, and inclusion across healthcare.

Stewardship
ASHP encourages the NIH to identify and implement ways to increase the presence of women, BIPOC, and LGBTQ+ candidates, including those who practice in diverse or smaller institutions, through NIH awards, grants, and other recognition programs.
ASHP encourages the NIH to collect demographic data to understand specific disparities among research grant applicants, recipients, and the grantees institutions.

Partnerships and Engagements
ASHP encourages the NIH to seek ways to help partners prioritize and align their diversity, equity, and inclusion efforts with those of the NIH, with the goal of increasing women, BIPOC, and LGBTQ+ presence in hospital and health-system practice at the national, state, and local levels.
ASHP encourages NIH to provide ongoing funding, education and training opportunities to partners to appreciate diversity of the populations we serve and the value of cultural competence in improving health outcomes of underrepresented minorities.
ASHP encourages the NIH to partner with healthcare associations, healthcare leaders, and institutions with a high service to BIPOC or LGBTQ+ patients to expose health inequities and propose meaningful solutions.
ASHP encourages the NIH to appoint more diverse candidates for all committees, volunteer/partner commitments, councils, advisory groups, task forces, and other volunteer or expert bodies that influence governance and strategic decision making.

Accountability and Confidence
ASHP encourages the NIH to implement metrics, evaluation systems and model practices related to health disparities in the BIPOC and LGBTQ+ community and partner with healthcare organizations, healthcare associations, health systems, and HBCUs to advance and standardize these processes. ASHP recommends that the NIH develop partner resource and mentorship programs that encourage successful growth of research, programs, and initiatives focused on addressing structural racism. ASHP encourages the NIH to join and support intraprofessional and interprofessional organizational collaborations to identify health disparities and develop an awareness of and solutions for correcting these disparities

Management and Operations

ASHP encourages the NIH to identify opportunities and implement efforts to increase women, BIPOC, and LGBTQ+ members on the editorial, grant review, and other boards and committees across the organization.
ASHP encourages the NIH ensure that all communications, promotions, and marketing are reflective of a strong desire to be an organization that is inclusive of women, BIPOC, and LGBTQ+ partners.

## Comments: Advance DEIA Through Research

A diversity of experiences, perspectives, and ideas will ensure that research and scholarship address the needs of all patients. It is imperative that the NIH support workforce and health research that emphasizes on the needs and perspectives of women, BIPOC, and LGBTQ+ health workers, patients, and communities.
ASHP has the following recommendations for advancing DEIA through research:
Workforce Research
ASHP encourages NIH to continue to increase and refine its efforts to collect demographic data to understand specific disparities in the healthcare workforce.
ASHP encourages the NIH to identify opportunities and implement efforts to increase the numbers of women, BIPOC, and LGBTQ+ authors who submit written works for consideration by NIH, and provide guidance and support to enhance scholarship and scientific contributions by a diversity of authors.

Health Research
ASHP encourages NIH to continue to increase and refine its efforts to collect demographic data to understand specific disparities in the healthcare delivery.
ASHP encourages the NIH to study issues surrounding BIPOC and LGBTQ+ health professionals and their impact on healthcare and patient outcomes, including:
whether healthcare outcomes of BIPOC and LGBTQ+ patients are improved by care by a BIPOC and LGBTQ+ healthcare professional,
the effects of institutional and systemic racism on social determinants of health, and trust among BIPOC and LGBTQ+ communities regarding aspects of healthcare (e.g., vaccinations).

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 DEIA has focused on issues of race, gender, and sexuality. However, there's huge gaps in the awareness around disability. Disability is often not a discussion point and making things accessible for the disabled is treated as a burden. Why is it ok (socially, culturally) to complain about making something work for the blind, when it would NOT be ok to say that, "no people of (any specific) ethnic group need to look at it. They aren't (insert field) scientists anyway."
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

What is going on with the HHS 508 scanning? The program is just on hold.... for years? We have no way on the IC level to make content and websites accessible to the disabled.
My supervisor also has NO IDEA that his ideas of what make "proper" leadership are discriminatory against the autistic (hello, spectrum!) or ADHD employees on the team.

## Comments: Advance DEIA Through Research

According to our scientists, there are no disabled scientists.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

We applaud the NIH for recognizing that a diverse, inclusive, equitable and accessible workforce is the cornerstone of a strong biomedical enterprise. As stated in the AAMC's response to the UNITE initiative, the dearth of tenure track faculty from underrepresented groups is a multidimensional and complex issue one that arises from the nexus of a history of permitted overt discrimination, implicit bias, microaggressions, and unique (and often unmet) cultural needs. As such, efforts to bolster diversity of the biomedical workforce must likewise address inclusion, community, and equity without which even the most well-strategized and funded initiatives are at risk. Below we describe two models the cohort model and cluster hiring method that we believe will be effective in helping the intramural and extramural research community achieve greater DEIA.
Cohort Model
As previously referenced, building and utilizing a cohort model to connect underrepresented trainees and faculty funded by the same mechanism (e.g., F31) can promote a sense of community and mitigate the isolation experienced by scarce racial and/or ethnic representation at home institutions. The NIH Distinguished Scholars Program is one example of a cohort-building program that could be used as a model to scale up across the country. The AAMC commends the NIH for the newly established MOSAIC program, which is testing the added value of building a multi-institutional cohort to the successful transition to and retention in research faculty positions. The AAMC is excited to be one of NIH's inaugural MOSAIC Cooperative Agreement (UE5) partners, to engage the MOSAIC scholars in a curriculum that includes skills-building, mentorship, and other leadership and professional development activities. Other successful programs that integrate this national community-based cohort model are the Gilliam Fellowships for Advanced Study and the Hanna H. Gray Fellow Programs sponsored by the Howard Hughes Medical Institute and the Meyerhoff Scholars Program at the University of Maryland, Baltimore County, targeted to promote diversity in the trainee and early career scientific workforce. Cluster Hiring
Cluster hiring is a relatively new approach in which multiple faculty members engaged in related scholarship are recruited concurrently. Cluster hiring can promote interdisciplinary research and can also have a transformative effect on community building. Preliminary research shows that cluster hiring can lead to a more diverse, inclusive research environment. The AAMC commends the NIH for investing in the Faculty Institutional Recruitment for Sustainable Transformation (FIRST) cohort model to transform culture at NIH-funded extramural institutions. By supporting institutional efforts to hire diverse, early-career faculty cohorts and sustain cultures that benefit from the full range of scientific talent in the United States, the AAMC believes that FIRST, which was recently awarded in FY 2021 to seven institutions, is a mechanism that will foster DEIA in the workforce. As FIRST progresses, we urge the NIH to partner with smaller and/or less resourced institutions as they may be less able to hire as many positions concurrently.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

As mentioned extensively in the AAMCs response to the UNITE initiative, an emphasis on mentoring is not required uniformly across all funding mechanisms introducing variability and leaving blind spots in the continuum of mentoring. To modify this, we propose increasing mentoring initiatives and codifying mentoring and sponsorship requirements in R level grants. Funding more K awards and adding childcare funds to existing grant mechanisms beyond the T award are strategies that can retain and promote scientists (especially from underrepresented groups) along the pathway to the professoriate. Lastly, the composition of study sections is largely homogenous and lacking in representation.
Partnerships and Engagements

For good reason, a considerable amount of attention and resources are given to graduate student, postdoctoral and professor level training programs. A focus on the continuum of science education, starting from K-12 settings, is an important component to building a pathway for underrepresented students to enter scientific areas of study in college and graduate school. As the AAMC has previously reccomended2, we urge the NIH to collaborate to fund programs with other federal science agencies such as the National Science Foundation and Department of Energy.
The AAMC Principles of Trustworthiness heralds the community not simply as passive bystanders, but rather, as informed and engaged experts. As such, we urge the NIH to catalyze the wisdom and lived experiences of those who have experienced barriers to inclusivity, equity, belonging, and accessibility. Listening to voices, both from established organizations and individual perspectives, is key.
The AAMC response to the COSWD RFI emphasizes that partnerships within the biomedical community must thoughtfully integrate the international population, which provide an immeasurable contribution to our scientific enterprise.
As previously referenced2, the NIH should consider cross institutional collaborations with Historically Black Colleges and Universities (HBCUs), Hispanic-Serving Institutions (HSIs), Tribal Colleges and Universities (TCUs), racial equity organizations, and professional societies as essential partners to reach its goals of increasing diversity in the biomedical research workforce. Existing programs such as Bridges to the Doctorate Program, Innovative Programs to Enhance Research Training (IPERT), and Institutional Research and Academic Career Development Awards (IRACDA), are viewed by the research community as extremely effective at the graduate and postdoctoral level.
Accountability and Confidence
By implementing measures of accountability, the NIH can effectively narrow the schism between written strategies and the actual reforms. Confidence is beholden to and cannot extend beyond an institution's culture. To bolster confidence, we urge the NIH to invest in meaningful conversations and mechanisms (e.g., the NSF ADVANCE program) to measure culture. A focus on culture can allow the NIH to prevent the over-fixation on measurable outcomes (e.g., number of women faculty) without true transformation of culture (e.g., end to sexual harassment, prevalence of manels, etc.).

## Comments: Advance DEIA Through Research

Workforce Research
As previously noted, while collecting additional workforce data is essential, readily available data is plentiful and can be used to inform current efforts. For example, a massive amount of evidence demonstrates that the COVID-19 pandemic has disrupted the careers of women in STEMM fields, the effect of which has been especially acute for academic mothers. We therefore urge the NIH to think about how workforce research, in the context of the NIH DEIA SP, will be conducted and evaluated in the context of a national pandemic. The NIH must have mechanisms in place to help individuals from groups that are disproportionately impacted by the pandemic.

## Health Research

The economic, racial, and social roots of health inequities are multiple and interconnected. This demands a shift in our science to a paradigm that (a) centers community wisdom, recognizing the lived experience of people who for decades and centuries have navigated health injustice, and (b) incentivizes team science with partners whose expertise spans entire sectors. Medical care and public health are necessary, but insufficient partners if we are to identify and spread local solutions on a national scale. The process of this science is as important as the product of the research itself, so we urge NIH to ensure communities can partner on the development, implementation, and dissemination of health equity research. This includes the facilitation of fiscal readiness so that organizations can pay community partners in a timely manner, as well as codifying expectations about authentic, bidirectional community engagement and scientific co-creation. Funding for community-based, population heath equity research
must be increased so that it is commensurate with the scale and intransigence of health injustice. Finally, NIH and the organizations it funds must work to demonstrate they are worthy of their nations and their communitys trust as without it, discovery will be limited and advances unsustainable. We therefore urge NIH to explore the AAMC Center for Health Justices Principles of Trustworthiness, as referenced earlier in this letter, and to encourage funded investigators to delve into the tenets and actions described in the Toolkit with their teams and their community partners in an iterative and ongoing way.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

A diverse and inclusive scientific workforce is critical to eliminating inequities in the biomedical research enterprise and disparities in health care. Increasing diversity, equity, and inclusivity will also yield a more productive and innovative workforce with the capacity to investigate the health challenges of all people, including those who currently are subject to disparities. While many factors contribute to the lack of diversity within NIHs workforce and the broader scientific community, bold structural reforms are needed to achieve change. UCSF urges the NIH to consider the following actions to address the systemic inequities within the scientific workforce:
Targeted programs should be designed and implemented to preclude underfunding of research grant applications from Black, Latinx, Native American, and other historically underrepresented scientists. Notably, the burden of systemic racism on Black scientists in particular was quantitated in a 2011 study, but this disparity has changed little in the ensuing decade. NIH should seek and test multiple bold ideas, such as those recently put forward, in tandem as appropriate.
The NIH should increase its extramural and intramural support for the hiring, retention, mentoring, and professional development of faculty from historically excluded groups by increasing funding for the NIH FIRST program, diversity supplements, and other training programs dedicated to historically excluded investigators.
The NIH should increase the proportion of underrepresented minorities at all levels, including the Office of the Director, the Center for Scientific Review administration, and among scientific review officers and program officers/directors, with the goal of achieving parity with U.S. demographics.
The successful Early Stage Investigator program that addressed disparities between early career scientists and established investigators should be replicated to help correct racial workforce disparities. Perhaps all Black, Latinx, Native America, and other historically excluded principal investigators could have an ESI-likestatus.
The K23 salary gap/cap disproportionally impacts many historically excluded physician-scientists conducting health equity research work in the public sector. Significantly increasing the salary cap to at least $\$ 150,000$ would encourage more physician-scientists from historically excluded backgrounds to pursue research.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

We appreciate that the NIH is establishing a system of accountability to measure the NIHs process towards ending structural racism in the biomedical research enterprise. UCSF offers the following recommendations for structural changes within NIH:
Develop concrete metrics, a defined timeline and resources, and a transparent plan for public progress updates, and propose how NIH will invest in understanding the impact of racism in the NIH grant review process.
Formalize the criteria by which program directors nominate projects for selected pay across Institutes; these criteria must include investigator diversity (such as the National Institute of Biomedical Imaging
and Bioengineering Expanded Opportunity Zone policy. The narrative and process for select pay should be standardized NIH-wide, formalized, transparent, and featured on each Institute website.
Create an interactive Racism in Research and Sciencetraining, analogous to the Responsible Conduct of Research training required of all NIH employees and federally funded researchers.
Create and enforce equity and diversity standards for all human participant research, such as a requirement for study recruitment materials in multiple languages.
Require annual training on anti-racist research principles and methods for any IRB reviewing NIHsupported research.
Expand the UNITE data dashboard to include the race, ethnicity, primary language, and other demographic characteristics of participants enrolled in NIH-funded clinical research studies.

## Comments: Advance DEIA Through Research

We also appreciate the NIHs commitment to evaluating the policies and practices that have perpetuated systemic racism and a lack of inclusivity and diversity among extramurally supported researchers. UCSF encourages the NIH to consider the following actions to address disparities through research: sociological research, including human-centered design methodologies to improve the capacity and competence of the review process for research proposals using anti-racism frameworks.
Encourage and empower program officers/program directors to re-evaluate applications from Black, Latinx, Native American, and other historically excluded principal investigators with scores that fall outside of the funding range and bring selected applications forward to the council for funding in an effort to counter the existing implicit bias during review.
Develop formal guidelines for scoring proposals on criteria of anti-racism research.
Make diversity of the investigator team a scorable criterion in NIH grant review and priority for funding, warranted by the data-backed understanding that diversity increases innovation.
Include more Black, Latinx, Native American, and other historically excluded principal investigators on study sections and publish a timeline for increasing the minimum number of historically excluded reviewers on each panel that eventually aligns with U.S. demographics.
Mandate all Institutes to adopt and engineer diversity-targeted funding mechanisms that have been adopted by some institutes, such as the R21, the K01/K-suite, including PAR-19-222 and PAR-18-486. Finally, the NIH must work to address the health disparities that have resulted from systemic racism and a lack of diversity and inclusivity among the scientific community. While we appreciate that the NIH has made new investments in health disparities research, robust and sustained investments in health equity research are needed. UCSF encourages the NIH to consider the following strategies to support health equity research:
Promote and support anti-racism research that contributes to the understanding and uprooting of racial hierarchies and their consequences for health, including RFPs using a learning health system framework for studies addressing health system equity priorities.
Provide extramural grants to develop research programs and mentor trainees in research and create health equity research programs at each Institute.
Fund research and programs to eliminate health care disparities, including funding for implementation science solutions so that all can benefit from NIH -funded advances.
Expand the portfolio of research grants focused on the impact of structural racism on public health, health disparities, and health outcomes.
NCATS should make anti-racism research pilot awards an essential function of all CTSA programs, with prioritization of CTSA funding to support this activity (e.g., CTSA supplemental awards).
Provide grants to create a dedicated, sufficient, and sustained funding base for community engagement activities (like PCORI engagement awards) to allow for longer term, non-transactional relationships with underrepresented communities that are not solely dependent on grant funding or ongoing research.

# Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce (Submitter left answer blank) 

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

For the establishment of collaborations with external institutions, it would be beneficial to provide and publicize approaches by which such entities can reach out to the COSWD and collaborate in the communication and implementation of evidence-based practices. It would also be helpful to provide additional information about the planned speaking engagements to external audience, including intended frequency and distribution of summaries. The availability of such information will facilitate the planning of DEIA activities by external institutions using summaries and other data provided by the NIH.

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

DEIA at NIH covers two distinct populations the NIH-employed workforce and the broader scientific workforce at institutions and projects supported by NIH grants. The DRRC has previously submitted comments focused on the former population in response to the recent RFI on the COSWD strategic plan. Our comments here focus on the latter, as well as the portion of the NIH workforce that is contracted and thus not included in existing demographic and disability status reporting requirements at NIH. DRRC believes that the biomedical research workforce should more fully represent the broader population, especially those which NIH research aims to serve. We also note that 21st century research practice increasingly recognizes the importance of breaking down the division between researchers and their subjects, in order to create more equitable and meaningful research. In the Strategic Plan, we urge NIH to prioritize diversity, equity, inclusion, and accessibility among its own workforce, its grantees, clinical trial participants, public advisors, and the stakeholder groups with which NIH engages, including individuals with disabilities. NIH should explicitly include language around scientists with disabilities in the Strategic Plan.
Additionally, the Strategic Plan can and should include language directing Institutes and Centers, including sub-offices, to regularly report progress towards measuring and ameliorating systemic barriers in accessing benefits and opportunities within these agencies. Collection and reporting of data on the disability status of grant applicants, awardees, and their project staffs would be particularly useful to better understand such progress, and to identify where additional efforts to solicit and enhance diversity in the research workforce would be most effective. It would also be useful to collect and report data on disability status and other demographic factors among the NIH contract workforce, particularly scientists.
DEIA efforts at NIH addressing training and mentorship programs among its contract workforce and similar programs operated by NIH grantees must include individuals with disabilities and chronic conditions. We urge NIH to include in the Strategic Plan a goal to develop and equitably fund predoctoral and post-doctoral training programs for researchers with disabilities, and to encourage grant applicants to disclose the disability status of team members. NIH should also ensure that mentorship programs supported by the Institutes are inclusive of individuals with disabling conditions, both among the mentor and mentee populations. Supporting a diverse and inclusive scientific workforce will not only
begin to combat long-existing barriers to access and inequities in the biomedical research pipeline but will lead to more responsive research and dissemination strategies and maximize the impact of NIH's critical work for all populations.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

The DRRC fully supports the President's Executive Orders 13895 and 14035 on diversity, equity, inclusion, and accessibility, and appreciates NIH's focus on advancing DEIA within the agency. We recognize that the definition of equity in EO 13895 includes people with disabilities as an equity population and urge NIH to formally adopt this definition in its entirety throughout the Strategic Plan. The Plan must explicitly include people with disabilities as a target of DEIA efforts throughout the Plan and all initiatives within NIH, its Institutes and Centers, and grantees. People with disabilities have always faced structural inequities in health (and access to health care), employment, community participation, and numerous other aspects of society. Disparities faced by people with disabilities are also quite prevalent in the scientific workforce, underscoring the need for the DEIA Plan to include the disability population. Additional work is necessary to shed light on the extent to which people with disabilities have long been underrepresented in the NIH contract workforce and the field of NIH grantees.
NIH has undertaken numerous initiatives over the past year (and beyond) to advance DEIA in addition to the development of the Strategic Plan, including a March 2021 Request for information on advancing racial equity, diversity, and inclusion in the workforce and advancing health disparities research; the development of the next strategic plan for the Chief Office of Scientific Workforce Diversity, and the creation of the Advisory Committee to the NIH Director Working Group on Diversity (ACD WGD) Subgroup on Individuals with Disabilities. The DRRC is deeply invested in the totality of this work, but these efforts will only reach their full potential if they are viewed as complementary to each other and not siloed, individualized efforts. We urge NIH to include in the Strategic Plan a plan to ensure that leadership systematically reviews existing efforts and recommendations and works to implement them throughout the agency.
Further, NIH should consider expanding the scope of the Subgroup, or creating a new standing committee with broader authority, to focus on all disability-related issues within NIH, including celebrating the work of staff and grantees with disabilities, encouraging disclosure of disability information for reporting in grant applications and awards, and identifying additional strategies to support people with disabilities throughout NIH and the broader workforce.
Regarding accountability for DEIA-related funding programs, NIH should work with COSWD to review existing programs and ascertain the extent to which there is appropriate participation by individuals with disabilities, including with regards to goals, benchmarks, disaggregation of data by disability status, progress reports, and proactive efforts to address any disproportionate participation (or lack thereof). Given the additional focus in Executive Order 14035 and in the Strategic Plan on accessibility as part of DEIA, it is incumbent for NIH to ensure that opportunities provided to individuals with disabilities are as effective and meaningful as those provided to others. The Plan should include specific initiatives and language focused on accessibility and usability of communications, including accessibility and usability of platforms, notifications, conferences, and more.

## Comments: Advance DEIA Through Research

DRRC urges NIH to recognize the intersectionality between race and disability in its efforts to advance equity, diversity, and inclusion within all facets of the biomedical research workforce and expand research to eliminate or lessen health disparities and inequities. Such research can help build further understanding of the mechanisms in which disability status, racial and ethnic minority status, and social determinants of health interact to compound health disparities and societal inequities. NIH-funded
research should always be cognizant of these factors and the Strategic Plan should encourage specifically targeted research to better understand their collective and overlapping impact. NIHs own Notice of Interest in Diversity highlights individuals with disabilities as a group underrepresented in the biomedical, clinical, behavioral, and social sciences.Despite this broad awareness, people with disabilities are not designated as a U.S. health disparity population by NIH and the National Institute on Minority Health and Health Disparities (NIMHD). Based on the current research into the numerous disparities faced by people with disabilities, we join the National Council on Disability and other advocacy groups in recommending that this omission be resolved. Such a designation would open new avenues for NIH to better examine and understand the broad impacts of disability beyond condition-related health status. The Department of Health and Human Services already recognizes people with disabilities as a health disparity population through the Healthy People 2030 initiative; this designation should be replicated at NIMHD and NIH should invest targeted funds into researching disability disparities as an additional focus of existing health disparities research. It is critical that these efforts be supplemental, rather than supplanting or repurposing resources devoted to other health disparities research.
We also urge NIH to adopt policies to ensure that people with disabilities and other traditionally underserved communities are also represented across the stages of NIH-conducted and -funded research. DRRC has in the past called for all Institutes and Centers within NIH to adopt the community engagement requirements used by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) and the Patient-Centered Outcomes Research Institute (PCORI). Similar guidelines should be adopted to ensure participation and engagement from other traditionally underserved communities. It is time that many or most (if not all) research studies sponsored by NIH should include a relevant, representative, and diverse body of stakeholders in research development, data collection, analysis and interpretation, and the dissemination and utilization of research findings. Finally, the COVID-19 pandemic has underscored the lack of reliable information on people with disabilities at the federal, state, and local levels. As a critical component of ensuring DEIA and addressing the disparities faced by people with disabilities, we urge NIH to work with other federal partners, including the newly formed Equitable Data Working Group, to ensure that disability status is included as a mandatory demographic component in all data collection efforts advanced through NIH. Standardizing and collecting uniform measures of disability, along with other demographic categories such as race and ethnicity, is critical and clearly necessary to improve research impacting underserved communities.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Our group would like to acknowledge the wonderful strategically intentioned plans and efforts of the NIH that help to set a good example for the foundational changes to be addressed during the long-haul effort. We appreciate the opportunity to comment on this great effort. As the Research Action Committee, we suggest the inclusion of the community and no scientific entities in candid conversations on what can be changed, supported, or enhanced and how. This would require including these entities in developing and planning scientific research and NIH internal DEAI plans and activities.
It is crucial to disseminate those promising practices among the non-scientific community (health providers, public health services, community health organizations, academics (college and high school and elementary), nonprofit organizations, advocacy groups, etc. In other words, those entities on the front lines or in the community stand to benefit from the increased level of cultural and racial diversity in the scientific community.
Intersectionality must also be considered. For example, a person may identify as Latino, LGBTQ, and immigrant. Understanding the intersectionality will help identify more profound efforts on DEIA. The
way to get at this is by engaging with diverse populations and communities. Also, this effort could benefit from open and honest engagement with past, current, and future staff.
It would also be essential to consider the impact of future generations on workforce development. Getting their input can help plan future efforts for sustainable DEIA work. Need to remember the universities are only reaching those who had adequate stability and support to make it there--- but how many are missing that opportunity due to socioeconomic barriers but yet may have the same, or even better, talent? After all, these non-scientific entities are the source of future scientists but are also at the front lines to better understand the various barriers and opportunities youth experience that can impede or enhance their abilities to finish college and go into science and academics. Multiple models and prior efforts can be used to learn from the past and build upon them. We need to start building that diverse and equitable workforce pipeline early on (middle school, high school) and not wait until college. NIH should serve as an example to create pipelines programs and strategies that involve sincere collaborations with local entities to grow these new scientists from the various cultural, racial and ethnic communities they serve daily.
Also, the efforts could be more inclusive by adding different options and not only scientific research. That may scare off some beloved community and local health partners from participating in helping build career pipelines for these future scientists. We suggest consideration of funded FOAs that are focused primarily on relationship building (actual community engagement) as first steps (R01 type of models) that are measured by the level of increased trust, interaction, and collaboration while helping these front line/community- based entities to build their internal capacity to help grow future scientists and health.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Cultural change cannot happen if the community is not involved in understanding what, why, when, and how they define equity and inclusion. Our group appreciates the plans and concepts the NIH developed and the self-reflection and transparency evident in the document. Still, there is a need to include the community and non-science/non-NIH advisors (community or professional representatives) as guidance. The scientific community was the only group mentioned in the document. Still, we believe the community could help advise in the efforts to address time constraints, geographical barriers, language barriers, etc. It takes a collaborative effort from the community and the researchers to achieve cultural humility by creating opportunities for knowledge sharing where each person at the table brings expertise that respond to actual needs. This type of conversation will decrease power dynamics and guide strategies that respond to changes in circumstances. It would also be valuable to include DEIA embedded as a core competency during the career development phase of a student.

## Comments: Advance DEIA Through Research

Research that can be implemented should benefit the community it is serving. Our group suggests including the community to fully collaborate in the research planning and development process. To include the community is essential to consider the knowledge non-science partners have and collaborate in an inclusive way, where resources are shared, and partners are compensated and benefit from the gain of skills and newly added knowledge (co-Pis, etc.). The NIH can secure this type of collaboration by requiring funded research entities to fully collaborate with local non-science partners. It is also essential to require inclusive dissemination of the gained knowledge, where both the community and the funded entities can set the foundation for future partnerships and collaborations to address issues identified by the communitys needs.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Objective 1: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Initial steps in addressing organizational DEIA should include reviewing NIH diversity initiatives to evaluate success in promoting DEIA in the NIH research workforce. These reviews should focus on gaps in DEIA, and where NIH can direct support and resources to address these gaps. Additional review should be conducted to evaluate diversity of faculty and researchers at NIH funded institutions, and DEIA in the workforce. Surveys suggest that clinical institutions have especially poor retention if staff identify failures in DEIA policy. Improvements in DEIA in NIH-funded institutions are critical to developing a diverse and robust workforce.
To further promote DEIA in the workforce, support must be provided early in the training pipeline to those pursuing research careers. Students, trainees and researchers from underrepresented populations must be given resources early in their education to facilitate transitions across the stages of their careers. Financial challenges and lack of mentorship for students from underrepresented populations at various stages limits recruitment and retention. Groups like first generation students and researchers are highly underrepresented in research and medicine because they aren't given the needed resources and opportunities to succeed. This is especially true for first generation students who want to pursue training as physician-scientists. A study found that first generation physician-scientists are less likely to apply to MD-PhD than to MD programs, often due to a lack of social, cultural and financial capital. This failure of inclusion perpetuates a systemic lack of diversity and accessibility in the physician-scientist workforce, which in turn limits overall expansion of the physician-scientist workforce and DEIA considerations in patient care and clinical research. Targeted initiatives are needed to provide crucial support and resources necessary for students and researchers from underrepresented backgrounds to successfully advance through the training pipeline into the workforce. Recommendations to strengthen DEIA in the workforce include:
Create early career reviewer programs at NIH-funded institutions for investigators and physicianscientists from populations that are underrepresented in science and medicine.
Provide stronger support for mentorship programs targeting underrepresented and first-generation students.
Support institutional funding directed to areas not traditionally covered under grants, such as childcare costs, to improve retention of researchers and students and make research more accessible.
Provide more funding opportunities for early-stage investigators from underrepresented groups, such as the predoctoral F31 NRSA Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research mechanism. Similar initiatives could increase retention of underrepresented students. Support initiatives that fund high school and college research fellowships and provide resources for application preparation and test preparation for those applying to post-graduate medical and science programs (particularly for those interested in physician scientist/MD-PhD programs who need to take the MCAT and pay for school application fees).
Attach stipends to federal funds to support travel to conferences and leadership training.
Develop or restructure federal funds to be directed to Clinical Transitional Science Awards (CTSAs) and institutional grants which support clinical and translational scientific training and career development.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Objective 2: Grow and Sustain DEIA through Structural and Cultural Change
DEIA must be an institutional priority. Commitment to DEIA requires resources, funding and support for NIH -funded institutions. Additionally, it requires structural changes centered on improving representation of underrepresented groups at all levels of research through collaborative efforts. Recommendations to grow DEIA through structural and cultural change include:

Increase federally supported programs at academic and other NIH-funded institutions (particularly institutions in underserved regions or communities) to send early career researchers, graduate students, and physician-scientist trainees to underrepresented and underserved communities. These initiatives facilitate mentorship and encourage individuals from underrepresented populations to pursue careers in healthcare and research.
Foster increased collaboration among federal agencies, research institutions and community-based organizations with expertise in health disparities to develop and inform strategies to improve mentorship programs and career support for underrepresented minorities during training. Collaboration across agencies can improve the overall uptake of effective DEIA initiatives.
Support initiatives and funding that give chief diversity officers (CDOs) or diversity steering committees at NIH-funded institutions the resources needed to implement DEIA initiatives. Work with these institutions to ensure they have structural policies and institutional bodies in place to effectively address DEIA.

## Comments: Advance DEIA Through Research

Objective 3: Advance DEIA Through Research
Research should hold DEIA as a central tenant, especially when working with underrepresented populations and communities. Mistrust of research in underrepresented populations stems from failures in transparent communication by researchers and investigators. When communities engaged in research such as clinical trials are not engaged as partners, it creates mistrust and limits the impact of these studies. Mistrust can also dissuade students in underrepresented communities from pursuing careers in research.
Research aimed at identifying and addressing gaps in DEIA is critical. By supporting research that identifies disparities in workforce DEIA, targeted initiatives can be developed more effectively. Furthermore, research funding can be used to facilitate mentorship, training, and funding opportunities for underrepresented trainees and students. Recommendations to advance DEIA through research include:
Survey demographics of NIH investigators and study section participants with the goal of increasing representation of underrepresented groups in research. After survey and review, implement initiatives that address DEIA gaps in study sections and ensure that study section participants include individuals from underrepresented backgrounds and who understand the unique challenges encountered by trainees. Diversifying study sections helps ensure appropriate review of research applications. Fund studies that evaluate the impact of strategies and programs aimed at improving DEIA in faculty, students, and trainees at research institutions for effectiveness.
Support research that seeks to build a better understanding of DEIA in the healthcare and research workforce, including what policies and initiatives designed to advance DEIA have proven effective, what gaps exist in DEIA efforts, and what barriers those seeking to join the workforce encounter.
Fund research with a focus on interdisciplinary, collaborative work to foster team science approaches in applied research that encourage inclusion and accessibility.
Facilitate training for researchers engaged in clinical trial studies targeted at underrepresented communities that encourage transparent communication and collaboration with the communities with whom they work. Include training for culturally competent communication through diverse communities.
Embed training funds into large clinical trial funding to allow for broader experience and mentorship for younger researchers. Additionally, attach training grants for researchers and students from underrepresented groups to large, multi-institutional grants.

IDSA welcomes continued collaboration on the NIH Strategic Plan for DEIA, and any other DEIA initiatives or planning. If you have questions about these comments or would like to connect, please contact Amanda Jezek, IDSA Senior VP, Public Policy and Government Relations at ajezek@idsociety.org.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Diverse patient populations are most effectively served by a workforce that reflects and represents their communities and culture and can help identify and break down barriers for different populations. The National Kidney Foundation supports efforts and initiatives within NIH to create and support a diverse internal workforce and believes the focus on developing a strong pipeline must occur at all career levels. Further, diversity must be a priority in Study Section review panels to provide the best understanding and opportunity for research grant proposals.
Similarly, diversity among researchers at institutions that receive NIH funding must be a top priority. A well-balanced research workforce can help identify and address disparities in research and outcomes. This is especially important in chronic kidney disease and related comorbidities, whose patients disproportionately consist of racial and ethnic minorities.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Partnerships and community engagement with stakeholders is a critical component of improving access to research and care, especially among diverse populations. The National Kidney Foundation urges NIH to maximize partnerships with non-profit organizations, patients and caregivers, and community organizations to identify patient priorities and help promote improved understanding of the benefits of clinical trial participation among marginalized populations to help ensure a broad, diverse patient population for research. Patients can help researchers understand what is most important to them in their disease management and quality of life concerns.
Many patients do not have access to academic centers but could participate if opportunities are made available in other settings. Expanded access to telemedicine and the use of mobile devices or online support also can help researchers obtain input from underrepresented communities.
Measures to ensure implementation and dissemination of research advances are equally important. Too often, marginalized populations do not have access to innovative treatments.

## Comments: Advance DEIA Through Research

Our nations population is increasingly ethnically and racially diverse. Certain racial and ethnic minority populations experience a more rapid progression of chronic kidney disease are at a significantly higher risk of advanced chronic kidney disease than Whites. Blacks/African Americans represent one-third of the ESKD population and are more than 3 times as likely to develop kidney failure than Whites, and Hispanics/Latinos are 1.3 times more likely to develop kidney failure than Whites. Low-income populations also are more likely to develop irreversible kidney failure.
The development and implementation of programs to increase diverse communities understanding of and to promote confidence in research participation is a critical component of expanding research accessibility. Different communities respond to disease diagnosis, medical information, and intervention in various ways. A key barrier for one group might be vastly different than that for others and efforts to expand patient engagement in research must address these unique barriers. Language, educational (including literacy) level, economic challenges, and transportation challenges require attention by investigators and the community in efforts to include a broad diversity of patients in research.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Our comments relate to establishing additional primary objectives:
Urgency, Accountability, Reach
While the NIH is making a concerted effort to incorporate values, both structurally and culturally, of diversity, equity, inclusion, and accessibility, it is necessary to commit to:

Working faster
Implementing concrete accountability measures
Collaborating with global partners to foster workforce DEIA around the world, and particularly in low and middle-income countries (LMICs)
We believe that each of these objectives merit their own section in the framework and the subsequent strategic plan.
Working Faster: As a leading force in the domestic and global research ecosystem, NIH should set the standard for not just working steadily, but working aggressively and rapidly, to affect change in the composition of the research workforce such that it reflects the diverse demographics of the US. Doing so is not just the right strategy, it is a pragmatic imperative. If we dont align our workforce with the composition of our population, workforce shortages across the R\&D ecosystem are inevitable. Our national and global community need to build out R\&D capability to address existential threats, and critical to that need is achieving workforce DEIA. The Institutes should break new ground, launch new strategies, and act with urgency, and these commitments should be clearly stated in the strategic plan framework and in the plan itself as an innovation and acceleration objective.
Collaborating Globally: Objective 2 includes partnerships and engagements, but we believe there should be a distinct objective for global collaboration. Global workforce DEIA serves the public good and the national interest. Again, US and global security hinge on a robust research workforce that extends far beyond our borders. Partnering with LMICs to build capacity is, in and of itself, a DEIA strategy, and the Institutes intention to do so should be clearly stated in the DEIA framework. Not only should the Fogarty Center be resourced to build out its critical work, but every institute and center should foster global workforce DEIA collaborations.
Emphasizing Accountability: We recognize that accountability is referenced in objective 2 , but firmly believe it should stand as a separate objective. Part of gaining buy-in and truly influencing change across the ecosystem is to prioritize the establishment of accountability measures. The DEIA framework should include language that establishes NIHs intention to set ambitious and quantifiable objectives, establish milestones, adhere to strict timelines, and create meaningful outcome measures.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

(Submitter left answer blank )

## Comments: Advance DEIA Through Research

(Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Research institutions have taken many steps to increase opportunities and diversity in our research workforce. In some cases, these activities have been ongoing for several years. Examples include increasing recruitment of faculty, staff, and students from diverse groups, creating and expanding inclusive environments, extending external partnerships, creating DEI-focused positions, and providing
more diverse educational offerings. As a result, we do not see the need for additional regulation for the grantee community.
Michigan State University: https://president.msu.edu/initiatives/dei-plan/dei-report-and-plan.html
University of Michigan: https://diversity.umich.edu/strategic-plan/dei-2/
Brown University: https://diap.brown.edu/about
University of Wisconsin: https://diversity.wisc.edu/reports-policies/\#diversity-framework

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

COGR has offered some of these suggestions in the past. However, we strongly believe that engagement with the large cross-section of the research community will yield better results as NIH continues to engage the community for feedback on new policies and programs. We suggest routine and regular evaluation and harmonization of existing policies, procedures, and practices with an external advisory group comprised of researchers and research administrators, including broad representation from under-resourced and less research-intensive institutions, including R2 and R3-level institutions. These are essential perspectives and will help funding agencies appreciate the obstacles they may uniquely face in implementing policies.
Further, emerging research institutions, including Historically Black Colleges and Universities (HBCUs) and other Minority Serving Institutions (MSIs), are disproportionately impacted by the 26 percent administrative cap applicable to F\&A cost reimbursement. While all research institutions are adversely affected by the 26 percent administrative cap, emerging research institutions do not benefit from economies of scale associated with large-scale research operations, nor do they have reserve resources, and therefore are more significantly disadvantaged.
Scientists from diverse backgrounds are often interested in biomedical problems that disproportionately affect their communities. This offers NIH the opportunity to encourage applicants and study sections to note and emphasize the importance of these lines of research and add them to the evaluation criteria of a projects significance.
Thank you for the opportunity to provide some suggestions on these important issues. Please contact Michelle Christy at mchristy@cogr.edu if you have further questions.

## Comments: Advance DEIA Through Research

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Provide access to research for more funding to support collaborative work researchers are doing. Example for clarification: a researcher from a smaller college may not have access to significant collaboration within their own college. Build/consider building possibilities for groups that are marginalized or with disparity. Typically people who get funded are already excelling.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Consider admin supplements to Universities that are not research based.

## Comments: Advance DEIA Through Research

Be an advocate for breaking down hierarchy. Example for clarification: All published works are valuable, but journals with high impact are given more value.
Promote opportunities that are truly supportive according to those recognized as needing support. Decolonize policy and procedures, create novel opportunities that deviate from current policies and procedures.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

We acknowledge the related announcement, Inviting Comments and Suggestions on the Draft NIH Chief Officer for Scientific Workforce Diversity Strategic Plan for FYs 2022-2026, but stress that disability must be part of the DEIA Strategic Plan and not only a part of the NIH mission to advance scientific knowledge to enhance health, lengthen life and reduce illness and disability. Disability is not a pathology but an important population group that should be represented in this work and as an integral part of the NIH workforce.

The NIH is encouraged to collect data on the demographic of disability within the workforce, not viewing it solely as a health condition.

The NIH Strategic Plan for DEIA should address representation at institutions supported by NIH funding. Specifically, demographics at funded institutions should reflect the demographics, including disability, of the State or US Census MSA where theyre located.
Other:
Disability should be explicitly included within diversity for all NIH activities and disability should be broadly defined as under the Americans with Disabilities Act. Namely, disability should refer to (A) a physical or mental impairment that substantially limits one or more major life activities of such individual; (B) a record of such an impairment; or (C) being regarded as having such an impairment.

The NIH-Wide Strategic Plan should acknowledge the intersectionality of disability with race, sexual orientation, immigration status, and all other historically marginalized identities. The impact of multiple marginalizations, layered disadvantages and discrimination, should be acknowledged and addressed throughout the Strategic Plan. Efforts must collect demographic information across studies to understand health disparities stemming from urban or rural location, sexual orientation, race/ethnicity, and disability.

AUCD reaffirms the importance of inclusive science. Efforts to advance DEIA must extend beyond the NIH workforce and organizational practices to ensure that people with disabilities are included in substantive ways at every part of the research process. Inequities present in the current process must be deconstructed to allow greater access for people with disabilities. This deconstruction should seek to better understand root causes of health inequity as understanding underlying reasons and origins is critical for intervening and correcting these issues. Reference to the inclusion of persons with disabilities in research should explicitly appear in the IRB approval process, informed consent, and study hypotheses generation and design, among other parts of the research process. Funded researchers and partners should be required and/or encouraged to conduct emancipatory and participatory research.

Knowledge Translation and Implementation Science must include people with disabilities as key constituents. AUCD accepts and supports the need for peer-reviewed articles, but also believes that people with disabilities and their families must also have access to scientific advances in alternative formats that are relevant and understandable. Examples of how to make information more accessible include having a layperson section in peer-reviewed articles with a non-technical/medical explanation and video abstracts.

The NIH should fund a Technical Assistance (TA) Center for the IDDRCs to support their work on inclusive science and involving people with disabilities.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Consistent definitions across the NIH for key terms, like equity and disability, would help ensure the work occurs consistently across the NIH and funded organizations. The ADA definition for disability should be adopted across the NIH, as it is a broadly inclusive definition.

Funding partnerships between historically white and minority-serving institutions provides a way to promote partnerships advancing DEIA. Previous such relationships funded by the Administration for Community Living (ACL) have had a significant positive impact, with funded institutions becoming champions of DEIA and changing their approach to inclusive partnerships.

The NIH should require the inclusion of disability within funded and partner organizations. In doing so, the NIH should include meaningful engagement of people with disabilities in its peer-review process as an independent section of its scoring rubric, as do other HHS funding agencies, including the National Institute on Disability, Independent Living, and Rehabilitation Research. The federal government should take the lead in ensuring the inclusion of people with disabilities.

The NIH should provide training and technical assistance about how to best support people with disabilities in all aspects of the research process. Such trainings should be based on guidance from people with disabilities and could include topics such as plain language, ADA basics, and reasonable accommodations. People with disabilities will not be included in grants if researchers do not know how to serve these populations. Historically, research has not been inclusive so high-quality and extensive training will be needed to ensure future research is inclusive and based on disability as an identity and not a pathology.

The NIH should require a budget line to fund accessibility needs in its own budget and in the budget of all funded projects. The NIH should have, and require of all grantees, an accommodations plan and a Language Access Plan with the necessary funds to implement plans.

## Comments: Advance DEIA Through Research

The NIH should lead in expanding the definition of who can be a researcher. Many IRB staff and research personnel do not understand how people with disabilities can be researchers. The NIH can set an example for more inclusive research. NIH can also contribute to growing the population of scientists with disabilities. We strongly encourage the NIH to target specific funding opportunities within the existing Research Career Development Awards (K grants) program for researchers who identify as disabled.

A continuous process improvement is necessary for advancing DEIA through research so that methods can be adjusted and improved moving forward. One way this could be done is by improving the diversity of the peer-review process. Including people with lived experiences of what is being studied is important for advancing DEIA and this model has been employed by the ACL. Lived disability experience should be required expertise on review panels. The NIH should consult further with the ACL for details on their processes.

The NIH needs to acknowledge the historical context and harm from previous research. This historical knowledge must inform research and outreach moving forward.

The NIH is encouraged to support diverse forms of research, including participatory action research, in order to collect diverse forms of evidence.

The NIH is encouraged to evaluate their research grant award process to improve equity and the ability of newer researchers to receive funding. There have been concerns that grants related to diversity research have gone to more established researchers that do not necessarily have experience in diversity research but have numerous prior grants and publications. This has crowded out researchers who study diversity and/or identify as a marginalized group member but have fewer publications and less grant funding due to systemic discrimination and the fact that this work was not mainstream until recently. These inequities could be addressed by capacity-building grants, like this funding opportunity for research and capacity building for minority entities from NIDILRR.

NIH-funded research should demonstrate a commitment to understanding the economic and health impact of employment, the role of direct support professionals (DSPs) in supporting the well-being of individuals impacted by disability, and the demographic features and working conditions of the direct support workforce. Even before the COVID-19 pandemic, the DSP workforce had high turnover and low wages and the pandemic has stressed an already burdened workforce.

NIH-funded research should rely on strength- or asset-based models rather than deficit-based or medical models, consistent with upholding disability as a demographic and not solely as a health condition.

The NIH should focus on health, wellness, and the sustainability of health, consistent with the NIH mission. Many people with disabilities are not inherently sick but require multiple, vital supports to achieve and sustain good health.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Zebra CARE Initiative, a new student and volunteer-led nonprofit startup, has a focus on medical equity and accessibility for marginalized medical communities such as, rare disease, disabled, and medically complex/undiagnosed.
Issue: Most of us do not have access to doctors who are educated on our conditions therefore we cannot obtain appropriate medical care.
Solution: HCPs and Allied HCPs must have access to formal education on commonly misdiagnosed/under-diagnosed conditions while in medical school and maintain practical accreditation post medical school on these conditions, and as they update, to prevent delayed diagnosis and/or treatment for such conditions when medically complex patients arrive. Potential applications for solutions:

1. Starting at the higher education level and providing at least one week of medical school dedicated to commonly misdiagnosed/under-diagnosed conditions, if not more time. (Currently HCPs receive only paragraphs and are told they will not run into these "medical zebras".)
2. Creating a national database for commonly misdiagnosed/under-diagnosed conditions as a differential diagnosis and provide national access to all health care providers to this information so they have more tools in their toolkits.
3. Providing practical accreditation through mandatory continuing education credits for commonly misdiagnosed/under-diagnosed conditions.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Issue: Living with a disability, rare disease, and/or chronic illness is often misunderstood with a misconception that having one of these identities sets someone apart from the rest of society and further isolates them.
Solution: Un-isolate these marginalized medical communities by providing medical education as it relates to the culture of rare disease/disability.
Issue: How will the NIH really be able to identify the accessibility needs of the people without creating more engaging ways for public comment?
Solution: Bring those with disabilities, medical complexities, and/or rare diseases on the board of NIH to represent and get first hand data on what is needed for change in the workforce. It's a tight-knit community but those who are ambitious to make changes may feel that they don't have access to the current options for public comment.
Issue: Not everyone has accessibility from Day 1.
Solution: Make business a mindset for accessibility first with organizational policies and structure to follow.

## Comments: Advance DEIA Through Research

Issue: Not everyone requires the same accessibility accommodations. For example, someone may be sighted and hearing but unable to read due to dyslexia so they need recorded video or audio accommodations; While another may be hearing and sighted and unable to comprehend video or audio accommodations and need transcripts.
(Example: I went to the lab at a speciality hospital and in order to sign in, you had to use a large touch screen computer. 5 other people who signed in while I was there got stuck on the screen because it was not user friendly. There was a small orange arrow at the right side of the screen that is naturally missed. One lady had ataxia and couldnt use her hands to sign in so I helped her. Each of these individuals complained about the sign in process at a specialty hospital that should have inclusive design for their patients with medical conditions but they did not.)
Solution: User Experience and inclusive design must be part of every website, every application, every check in at the doctors office, hospital, or lab, every structural design, and anywhere that people will be utilizing space whether mentally or physically.
Issue: Accessibility is assumed and often assumed incorrectly and people shouldn't have to wait for accommodations.
Solution: Make accessibility an inclusive part of design. Get the right people on your research team to identify what barriers there may be and remove those barriers from Day Zero!

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

The American Geriatrics Society (AGS) appreciates the opportunity to comment on this Request for Information (RFI) on the National Institutes of Health (NIH)-Wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility (DEIA). Our comments on this RFI are intended to go more towards the types of activities that would fall under implementation of the framework.
NIH Workforce and Workforce Supported by NIH Funding: The American Geriatrics Society (AGS) suggests ensuring DEI is included in all career development activities and that NIH continue to work with stakeholders to recruit, support, and retain a diverse biomedical workforce which will help build trust in this workforce and contribute to increasing the diversity in study populations.

NIH should also consider how to better align policies to support the increasing gender diversity in the workforce. In particular, NIH should focus on policies that support all researchers to be fully present for their families. Innovative ideas to consider include allowing for flexible time frames for career development awards that reflect awardees may be starting families at the same time that they are embarking on careers focused on research. We appreciate that NIH currently allows for no-cost extensions of grants but believe that there is room for more flexibility at the time an award is made. For some early career development awards, the \% of time that an awardee is required to devote to the research is often far greater than the award funding. NIH should explore whether this impacts the career trajectory of diverse researchers given competing demands on their time.
Workforce at Institutions Supported by NIH Funding: NIH could lead an interagency review of the differing ways in which awards programs are created to better align requirements and criteria across federal agencies. We recognize that there is not a one-size fits all approach to grants and awards but believe that, particularly for career development awards, there needs to be more alignment between award requirements across agencies so that we are building the academic workforce that we need.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Partnerships and Engagements: The American Geriatrics Society (AGS) agrees with NIH efforts to establish new or existing influences, partnerships, or collaborations. We recommend that the NIH consider partnerships deep within communities where people live, work, pray and age. Partnerships should prioritize enabling and building an infrastructure that centers around community-based entities, thus ensuring research is designed with their access needs and limitations as a priority. Moving beyond academic institutions only would bridge the ability for a full range of translational research. An example of the consequences of a lack of community-based research infrastructures in 2020 was the lack of access to COVID-19 trials and therapeutics beyond large hospitals and academic medical centers. Partnerships must create a nexus of connection points that truly link representative aspects of underserved and vulnerable communities (including highly disadvantaged areas, nursing homes, rural communities).
Management and Operations: Making it easier to apply for diversity supplements to grants, and moving beyond pathway models as a singular solution is key. The barriers are multifaceted and so too must the solutions be.
Management and Operations: The American Geriatrics Society (AGS) suggests reconsidering the way indirects flow which can discourage partnering with other institutions. For example, center grants (P30 or R24) tend to be at large institutions with well-established research enterprises. Many have pilot mechanisms. You cannot currently budget indirects on the first 25 K for the prime, as well as budgeting for anticipated indirects to an external institution for years 2-5 since specific projects and institutions are not named. This creates a disincentive for big centers to give money to outside institutions that were not named with specific projects when they wrote the grant. While not specific to outside institutions that have less well-funded research enterprises, it overall creates a barrier for big centers to engage investigators from less resourced institutions.

## Comments: Advance DEIA Through Research

Workforce Research and Health Research: One best practice the American Geriatrics Society (AGS) proposes is to invest in the network capacity that is needed so that investigators from different institutions can work collaboratively using the same data. The additional advantage of this investment is that researchers from other institutions will also be able to conduct additional analysis on data generated by another institution.
Health Research: AGS believes one key issue for racial and gender equity for NIH funded research is access to resources at research institutions that help investigators to incorporate diversity into their
studies and do that well. As an example, translation of materials into other languages is costly and requires expertise in principles of cross-cultural research time consuming, and there are not easily accessible resources in many places. If the NIH could both encourage institutions to share resources through allotment of funding to create resources and, also ensure that development of these types of resources is funded through its grants, that would ensure researchers have the appropriate tools when working with diverse populations.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

To ensure accountability, it will be important that the NIH clearly identify and state how progress on each objective will be measured and the plan to communicate this progress to the broad NIH community.
It would be helpful to know the statistics surrounding DEIA at the NIH and have this information be accessible in a simple format. For example, it would be helpful to know the distribution of ethnicity and race, sex among trainees, faculty, patients by departments and how this has changed over time. This information should be updated annually. There is currently a great deal of information about initiatives, but accessible data seems to be difficult to come by. If however, this data exists, perhaps an effort to clearly identify how and where it can be accessed would be useful.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

To ensure accountability, it will be important that the NIH clearly identify and state how progress on each objective will be measured and the plan to communicate this progress to the broad NIH community.
This comment may apply across all areas: After areas of improvement are identified, it would be helpful if the NIH could then provide specific steps and strategies that can be taken by all levels of staff and trainees. For example, providing concrete steps for leadership, mentors, trainees, etc. to address areas of need and who needs to be engaged in addition to leadership.

## Comments: Advance DEIA Through Research

To ensure accountability, it will be important that the NIH clearly identify and state how progress on each objective will be measured and the plan to communicate this progress to the broad NIH community.
A potential challenge is lack of community engagement such that the members of the community (patients, families) that we would like to participate in this research are sometimes hard to engage. Thus, specific strategies for doing so will be extremely important and should include having researchers or NIH representatives from diverse backgrounds to work on this. Critical to this goal would be to have representatives included early in the research process to work with researchers to help develop the most clinically meaningful and feasible studies.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

The implementation of the organizational practices must focus on the policy development that emphasize and prioritize the integration of DEIA in all aspects of the workforce as key mandatory component of the organization structural variables for an inclusive and just organization with a positive image with the spirit of belonging.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

In order to reach the NIH' s objective of diversity, equity, inclusion, and accessibility, it is paramount to develop and enhance these goals through the integration of the cultural component for a comprehensive structural change management .
The impactful growth and sustainable DEIA can be strongly effected with structural and cultural changes through the removal of biases in all areas of the organization and operations with fair and open dialog with all stakeholders for unity and strength.

## Comments: Advance DEIA Through Research

The achievement of the organizational DEIA objectives must begin with review of existing policies by evaluating what is lacking to reach these objectives by designing programs based on the research Framework, theories, protocols that will bring innovative ideas, insights for solutions to challenges and obstacles to a more inclusive, equitable, accessible, and diverse organization by breaking all barriers . There is urgent for increased community participatory research for positive outcomes

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 I am responding to the Strategic Plan for DEIA, rather than the three objectives, as the Strategic Plan has more specific details. I am looking at the description of how diversity is defined and pleased to see that disability is included in addition to underrepresented racial and ethnic groups and women. What I recommend and would like to see is inclusion of the LGBTQIA+ community in these types of initiatives. I have noticed that NIH's operationalization of gender as male and female (or even male, female, other) is non-inclusive of the trans, non-binary, and gender non-conforming communities. I think it is important to promote greater involvement of the LGBTQIA+ community in decision-making and policy-making related to health initiatives and health research.
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

I am responding to the Strategic Plan for DEIA, rather than the three objectives, as the Strategic Plan has more specific details. I am looking at the description of how diversity is defined and pleased to see that disability is included in addition to underrepresented racial and ethnic groups and women. What I recommend and would like to see is inclusion of the LGBTQIA+ community in these types of initiatives. I have noticed that NIH's operationalization of gender as male and female (or even male, female, other) is non-inclusive of the trans, non-binary, and gender non-conforming communities. I think it is important to promote greater involvement of the LGBTQIA+ community in decision-making and policy-making related to health initiatives and health research.

## Comments: Advance DEIA Through Research

I am responding to the Strategic Plan for DEIA, rather than the three objectives, as the Strategic Plan has more specific details. I am looking at the description of how diversity is defined and pleased to see that disability is included in addition to underrepresented racial and ethnic groups and women. What I recommend and would like to see is inclusion of the LGBTQIA+ community in these types of initiatives. I have noticed that NIH's operationalization of gender as male and female (or even male, female, other) is non-inclusive of the trans, non-binary, and gender non-conforming communities. I think it is important to promote greater involvement of the LGBTQIA+ community in decision-making and policy-making related to health initiatives and health research.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

The American Association of Nurse Practitioners, representing more than 325,000 nurse practitioners, appreciates the opportunity to comment on this RFI. AANP is committed to empowering all NPs to advance high-quality, equitable care, while addressing health care disparities through practice, education, advocacy, research, and leadership (PEARL).
As you know, NPs are advanced practice registered nurses (APRNs) who are prepared at the masters or doctoral level to provide primary, acute, chronic and specialty care to patients of all ages and backgrounds. Daily practice includes: assessment; ordering, performing, supervising and interpreting diagnostic and laboratory tests; making diagnoses; initiating and managing treatment including prescribing medication and non-pharmacologic treatments; coordinating care; counseling; and educating patients and their families and communities. NPs practice in nearly every health care setting including clinics, hospitals, Veterans Affairs and Indian Health Care facilities, emergency rooms, urgent care sites, private physician or NP practices (both managed and owned by NPs), nursing homes, schools, colleges, retail clinics, public health departments, nurse managed clinics, homeless clinics, and home health. NPs hold prescriptive authority in all 50 states and the District of Columbia and complete more than one billion patient visits annually.
Nurse practitioners are essential health care providers for all patients, including those in underserved communities, both rural and urban. NPs provide a substantial portion of the high-quality, cost-effective care that our communities require. In fact, a recent study found that NPs are significantly more likely than primary care physicians to care for vulnerable populations. Nonwhites, women, American Indians, the poor and uninsured, people on Medicaid, those living in rural areas, Americans who qualify for Medicare because of a disability, and dual-eligibles are all more likely to receive primary care from NPs than from physicians.NPs are the second largest provider group in the National Health Services Corps and the number of NPs practicing in community health centers has grown significantly over the past decade. As NPs represent a diverse group of clinicians, and provide care to patients in all communities, we strongly recommend that NIH consider the following policy to ensure NIH programs better reflect the diversity of the student, clinician, and research populations.
Researcher Background: We encourage NIH to expand its acknowledgement of researchers to include recognition of the role of non-PhD researchers. These professionals, who may have clinical doctorates, such as Doctor of Nursing Practice (DNP) degrees or Doctor of Education (EdD) degrees, are critical populations for workforce expansion. The specialized knowledge that is developed by these experts such as translational research, implementation science, and overall application of new evidence into practice are often overlooked or underfunded. Supporting health professionals with the application of evidencebased resources to ensure advancement of innovative treatment and reimbursement models is paramount for NIH diversification efforts.
AANP looks forward to continued partnership on NIHs focus on advancing DEIA throughout the NIH workforce, and at institutions supported by NIH funding. Removing barriers for nurse practitioners, and other qualified healthcare professionals, will ensure a more diverse workforce.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

AANP is committed to empowering all NPs to advance high-quality, equitable care, while addressing health care disparities through practice, education, advocacy, research, and leadership (PEARL). We
commend the NIH focus on advancing DEIA through workforce and health research, and strongly recommend greater inclusion of NPs within NIH research studies.
NPs have a particularly large impact on primary care as approximately $70 \%$ of all NP graduates deliver primary care. In fact, they comprise approximately one quarter of the primary care workforce, with that percentage growing annually. As of 2019, there were more than 163,000 NPs billing for Medicare services, making NPs the largest and fastest growing Medicare designated provider specialty. Approximately $40 \%$ of Medicare patients receive billable services from an NP and approximately $80 \%$ of NPs are seeing Medicare and Medicaid patients. In the 2022 Report to the Congress, the Medicare Payment Advisory Commission recognized the growing role of NPs in the Medicare program, and noted that NPs are providing an increasing amount of primary care to beneficiaries.
Advancing DEIA through NIH health and workforce research has been a challenge due to many factors, including research practices which are not inclusive of NPs. For example, NP office-based practices have often been excluded from certain types of research studies. We strongly encourage NIH to ensure that workforce and health research work is inclusive of nurse practitioners in all geographic locations and practice settings. With the expansion of telehealth and other remote technologies, patients are increasingly able to receive health care from a wider variety of clinicians and practice settings and this needs to be reflected in research studies and surveys. A shortage of adequate practice information on nurse practitioners, including the lack of a centralized database of nurse practitioner practices, further contributes to the lack of inclusion. The above-referenced statistics underscore the importance of including nurse practitioners in future NIH research.
While AANP is in the process of assembling a national database of NPs, researchers continue to use proprietary list generating companies and the NPI file to assess current NP workforce volume and future workforce projections. Disparate information is often reported out on workforce characteristics across federal agencies who conduct survey research such as the Census Bureau (American Community Survey), the CDC (National Ambulatory Medical Care Survey [NAMCS]) the Bureau of Labor Statistics (Employer Surveys), and the Health Resources and Services Administration (National Sample Survey of Registered Nurses [NSSRN]). This creates confusion for policy makers, researchers, students, and practitioners trying to navigate and understand local and regional shortages, job availability, and state health workforce supply. While AANP recognizes the approaches of each of these agencies is not necessarily in alignment with NIH, guidance from NIH could be a catalyst for a more cohesive approach to workforce research to ensure inclusiveness and accessibility.
NPs play a critical and growing role in providing the care our communities need. We appreciate the NIHs focus on DEIA, and look forward to continued partnerships in order to address healthcare equity.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Systemic challenges and barriers affecting the NIH workforce and the NIH-supported biomedical community hinder the progress necessary to support true health equity, and as a global leader in biomedical research, the NIH appropriately acknowledges its responsibility in addressing these factors. ASCO seeks to partner with the NIH to accelerate programmatic work in equity, diversity, and inclusion (EDI), which includes new and expanded programs in research, professional development, public policy, education, and cancer care delivery.
In August 2020, ASCO issued a formal policy statement on cancer disparities and health equity calling for bolder, more aggressive steps to achieve equity for all patients. Focusing broadly on four areas including ensuring equitable access to high-quality care; ensuring equitable access to research; addressing structural barriers to equitable care; and increasing awareness and action, this statement serves as ASCOs blueprint for achieving health equity in cancer care.

ASCOs three mission pillars are research, education, and quality of care. Our efforts to address disparities are best considered through these three parallel areas of work:

In the research domain, Conquer Cancer has awarded grants focused on addressing disparities in cancer care, and developed programs to launch and nurture the careers of investigators from diverse populations.

On the education front, ASCO has integrated health equity content throughout its meetings and educational programs.

To drive quality of care and optimal outcomes, ASCO advocates for equitable access to cancer care through the development of public policy and statements articulating ASCOs recommendations for reducing disparities, as well as continuous efforts to protect and enhance safety net programs, such as Medicaid, through the Clinical Treatment Act that is now a federal law.
In response to the RFI, ASCO offers the following comments regarding planned approaches to advancing equity, diversity, and inclusion in biomedical research and advancing equity in care: Biomedical Workforce
Workforce disparities are reflected among health researchers, few of whom identify as non-white, which results in additional downstream effects on research into health equity. For example, inequitable research funding remains a barrier for Black researchers, who are less likely than White researchers to be funded by the NIH. One of the underlying causes of this funding gap is driven by research topic. Specifically, research focused on the community and population level, such as health equity research, which Black investigators are more likely to propose, is much less likely to be funded than is research focused on cellular and molecular science. ASCO established and implemented the Diversity in Oncology Initiative, which includes a series of programs aimed at increasing the number of minority physicians in oncology and improving the training of the oncology workforce to meet the needs of diverse patients with cancer. Last summer, ASCO launched the Oncology Summer Internship program, which is an immersive summer program at select medical schools for rising second year medical students from populations that are underrepresented in medicine. This summer will be the second year of the program with plans to expand to more schools.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Achieving equity requires broad approaches, which include addressing social determinants of health, and community-engagement strategies are an essential way to do so. ASCO plans to offer tools and expertise to support states and local communities in their efforts to increase screening and access to treatment. ASCO is implementing a pilot project in Montana demonstrating potential for the hub and spoke model to enhance access and quality of cancer care in rural settings. This initiative establishes a collaborative partnership between Bozeman Deaconess Hospital Cancer Center (the hub) and Barrett Hospital and HealthCare (the spoke), allowing patients to receive cancer care in the communities where they live with access to their oncologist via telemedicine. Such efforts to enhance community capacity building include partnering with and expanding collaboration with local health professionals and health care teams, community health workers, and other community leaders. These efforts can assist in identifying strategies to address the social determinants of health (SDOH) and can promote and sustain the infrastructure, policies, and implementation activities that are crucial to reducing disparities and understanding the role of SDOH on cancer care and outcomes. Importantly, the National Cancer Institutes Cancer Center Support Grants renewal process now explicitly includes requirements related to catchment area (e.g., related to clinical trial recruitment populations) and community outreach and engagement. ASCO encourages NIH and other institutions to similarly prioritize health equity in these requirements to better fund and enable lasting relationships with community partners. ASCO supports the ability of every individual to have a fair and just opportunity to be as healthy as possible and recognizes the need to address the uneven distribution of healthcare services, which
contribute to inequities in the cancer care delivery system and disparities in outcomes for patients. ASCO partnered with the Community Oncology Alliance (COA) to issue a new set of standards for the Oncology Medical Home (OMH) to guide practice transformation and support new models of valuebased reimbursement (Woofter et al, 2021, JCO). A core element of the standards centers on equitable and comprehensive team-based care. In 2021, ASCOs Board of Directors adopted a set of equity, diversity and inclusion (EDI) strategic priorities. One of the three pillars of these priorities seeks to address the uneven distribution or limited resources needed to support the delivery of high-quality equitable care across diverse populations. This roadmap calls for the development of a sound and reliable scoring system to assess the delivery of equitable care in cancer centers in order to identify and enact needed quality improvement initiatives. Several efforts have been made to identify measures of health disparities, health inequities, and social determinants of health, but there is still a need for a singular framework for use in the cancer care setting in order to assess the quality-of-care delivery and identify the gaps in or drivers of health service access and utilization. To that end, ASCO is currently endeavoring to develop a framework to allow cancer centers to measure the equity of their care delivery and organizations.

## Comments: Advance DEIA Through Research

ASCO continues to pursue increased science on health disparities and inequity in several ways: highlighting solutions through presentations at the ASCO Annual Meeting; increasing opportunities for health disparities-based awards for researchers; advocating for the adequate funding of the National Institute on Minority Health and Health Disparities and the Office of the Assistant Secretary for Minority Health; and prioritizing public and private research on cancer care disparities through collaboration with key stakeholders such as the National Institute on Minority Health and Health Disparities and the Patient Centered Outcomes Research Institute. In ASCOs 2017 Charting the Future of Cancer Health Disparities Research: A Position Statement From the American Association for Cancer Research, the American Cancer Society, the American Society of Clinical Oncology, and the National Cancer Institute, several recommendations touch on improving the way disparities research is conducted and disseminated. This includes recommending the cancer health disparity research community agree on a standard set of race and ethnicity as well as sociodemographic measures. These core measures should be included in clinical registries and in research protocols funded by the NIH, private foundations, and pharmaceutical companies regardless of the hypothesis being tested. The report also recommends best practices be designed and used to ensure underserved patients are informed and included in research studies and clinical trials.
ASCO and the Association of Community Cancer Centers (ACCC) have partnered to identify and implement novel strategies and practical solutions to increase clinical trial participation of racial and ethnic minority populations that continue to be under-represented in cancer research. One of the workstreams of this partnership includes addressing structural barriers by including implicit bias training and cultural sensitivity training for the biomedical workforce.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

The American Society for Transplantation and Cellular Therapy (ASTCT) is pleased to offer comments on the NIH-Wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility (DEIA) request for information.
The ASTCT is a professional membership association of more than 3,000 physicians, scientists and other health care professionals promoting blood and marrow transplantation and cellular therapy through research, education, scholarly publication, and clinical standards. The clinical teams in our society have
been instrumental in developing and implementing clinical care standards and advancing cellular therapy science, including participation in trials that led to current FDA approvals for chimeric antigen receptor T-cell (CAR-T) therapy.

Given ASTCTs experience with specifically BMT and cellular therapies, our members have experienced ways in which improvements can be made for further diversity and inclusion within our field. Throughout this process, it will be critical to prioritize objectives, and within each objective individual priority areas. These priority areas will be able to inform a realistic timeline and embedded milestones with metrics of success, in order to appropriately track progress. An additional priority area to include in workforce considerations, both within the NIH and at institutions supported by NIH Funding, is pay equity for all staff and potentially added requirements for DEIA values and institutions supporting underserved communities.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

More clarity is needed to define these structural changes, including clarifying the roles of leadership, which is different than stewardship. DEIA needs to be prioritized among current leaders, alongside a plan for mentoring new leaders, including those from underrepresented backgrounds, for a sustainable pipeline. On the topic of Engagement, a broader engagement should include all stakeholders, including patients, caregivers, and professional societies in order to support efforts and serve as a vehicle for communication to the wider scientific and practice stakeholders. An external advisory board with this level of stakeholder representation would be an effective way of engaging these stakeholders in the process. Other priority areas for consideration in this objective are communication, dissemination, and a more robust process for how individuals and institutions will be held accountable to these changes.

## Comments: Advance DEIA Through Research

While the proposed objectives are critical pieces to the overall framework, more clarity needs to be included in the areas listed under Objective \#3: workforce research and health research. Specifically, clarity on if DEIA within clinical trials will be included in the Health Research objective, and if so then adding an additional objective of Health Services Research as a priority area will be important.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

I strongly recommend that transgender/nonbinary individuals be considered by the NIH as an underrepresented group. I have transgender and nonbinary colleagues and a transgender trainee. This group of individuals leaves academic research at a high rate and is truly underrepresented. Access to diversity fellowships and supplements would improve retention. In my experience, my transgender colleagues bring new, innovative perspectives and approaches to a variety of scientific questions. Mechanisms that value this diversity will strengthen the scientific workforce. In addition, NIH has a FOA targeted at Sex and Gender. I have twice served on the study section for this mechanism and my experience reading these applications has taught me that the perspective of transgender researchers is crucial; both for this mechanism and for all studies in transgender health care. The language, rationale, and desired outcomes in this area must consider transgender stakeholders. Some of the applications and language that I have read from both extramural researchers and the NIH are truly embarrassing and could potentially harm the vulnerable community it is theoretically intended to serve.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

(Submitter left answer blank )

## Comments: Advance DEIA Through Research

(Submitter left answer blank )

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce
Enhance existing programs developed to diversify the researcher base that have failed or have not been evaluated.
In the years since the ACD Working Group on Diversity in the Biomedical Research Workforce made its recommendations, there has been modest progress in many areas. The FAPP RWG applauds the NIH for addressing the recommendations, including the development of programs that train and mentor BIPOC scholars. However, there are many steps that still need to be taken to achieve parity in the research enterprise and advance DEIA. The FAPP Research Working Group recommends:

Comprehensive review and evaluation of the effectiveness of existing programs intended to increase the diversity of researchers.

Offer substantial support for recipients of NIH-funded minority scholar programs, including financial stipends that incorporate cost of living, health insurance

Assess reasons for disparity in grant awards.
Develop and invest in programs that sparks interest in STEM in grades K-12 and beyond. Make bold, multi-year awards to enhance diversity at under-resourced institutions.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

The NIH must consider resourcing strategies that directly facilitate relationship building between researchers of color and NIH programs, as well as equitably shift resources to attract bright, young talent from these communities:

- Establishing NIH Capacitation Trainings for Young Researchers of Color

To help navigate the rigorous NIH grant application process, the NIH should develop resources and trainings that are targeted to young researchers of color. Such trainings would be essential for capacitybuilding and preparation for particularly young investigators of color to have a deeper understanding of the NIH research proposal solicitation processes, orient applicants to the vast number of NIH institutions and opportunities, align research interests with the potential funding streams, support investigators to submit robust applications, and enhance transparency on selection criteria and policies that improves the odds of candidates receiving funding from the NIH.

- $\quad$ Pipeline Project with Historically Black Colleges and Universities (HBCUs)

The FAPP RWG recommends fostering new and productive collaborations between the NIH and Historically Black Colleges and Universities (HBCUs), Hispanic-Serving Institutions (HSIs), and Tribal Colleges and Universities (TCUs). This collaborative relationship is important in recruiting, mentoring and nurturing BIPOC researchers and future providers directly from institutions that are often left out of competitive NIH grant opportunities, as well as providing federal resources to universities serving BIPOC and Latinx communities that have previously been shut out. A simple search of the NIHs own grant award database finds very few to almost no HBCUs, HSIs, or TCUs in the top 20 recipients of NIH funding.

- Establish a comprehensive system of mentorship networks

The FAPP RWG recommends the NIH establish a robust nationwide system of BIPOC and whiteidentified researchers that can serve as mentors for young BIPOC students interested in pursuing research at predominantly white institutions. Additionally, NIH should also leverage its network of Centers For AIDS Research (CFARs) as a valuable recruiting and mentoring venue to bring in local researchers across 17 localities, many of which represent some of the hardest-hit jurisdictions by HIV.

Doing so, could deepen the bench of BIPOC researchers focused on HIV research, which would correct a worrisome trend of seeing fewer young researchers of color applying for HIV research grants in the past few years.

- Evaluation and Reporting of Previous/Existing DEIA Efforts Undertaken by NIH:
- Nominate a BIPOC Researcher to Lead the NIH:

RWG strongly recommends nominating a candidate that reflects intersectional identities and/or the needs of marginalized communities disproportionately impacted by health disparities. These include Black and Latinx researchers that focus on HIV/AIDS, tuberculosis, viral hepatitis, and other health disparities. Researchers who identify as LGBTQ, Black and Latinx women, people living with HIV and other health conditions.

- $\quad$ Review and amend existing NIH policies, procedures, or practices that may perpetuate racial disparities/bias in NIH funding mechanisms.


## Comments: Advance DEIA Through Research

- Develop Community-based participatory approach to research

The NIH must develop and prioritize a framework for a community-based participatory approach to research, where researchers and community stakeholders engage as equal partners in each step of the research process. This framework questions power relationships inherent in the process of the researchers and the researched as well as advocates for power to be shared with community stakeholders. This approach is especially useful when working with key populations that have experienced marginalization by lifting their voice and valuing their contributions. However, a recent study found that Black scientists are less likely to be funded by NIH due to grant reviewers scoring researchers that centered community interventions poorly.
We encourage the NIH to build out an intentional and purposeful community engagement component that centers the lived experience of marginalized and impacted communities in the NIH research agenda. Also, the NIH needs to reexamine their rubric for reviewing grant applications to include and prioritize applications that include community-level interventions. Doing so, would greatly benefit all NIH-funded research priorities, particularly research issues like HIV, TB, viral hepatitis and STIs where strong community engagement strategies can and has led to critical gains and breakthroughs.

- NIH has funded groundbreaking HIV prevention and care research based in Africa and such funding should be prioritized and increased.
- Diversify HIV Clinical Trial Participants

There are many action steps that the NIH can pursue to ensure that HIV clinical trials are truly inclusive and address barriers to recruiting diverse participants.

NIH should address the lack of information about available research studies by utilizing social media and partnering with community-based organizations and the media to advertise.

NIH needs to institute and enforce policies and practices that pause trials in NIH-funded networks such as HVTN, HPTN until diverse populations are recruited if there is not the appropriate proportion of BIPOC, Latinx, women, and other demographics relevant to the study.

NIH should mandate that all funded trials disclose the demographics of all study participants in all medical journal publications and presentations.

NIH needs to prioritize intersectionality of research that integrates pregnant, lactating and breastfeeding women.

NIH must ensure there is an investment in community engagement efforts that begin early in the process, aligned with the Good Participatory Practice Guidelines, and require specific diversity promoting outreach activities as part of study protocols. It is also necessary to hire diverse outreach workers at clinical trial sites that reflect communities of color in order to enroll and retain participants.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 (Submitter left answer blank )
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Hello, my name is Jewell Singletary. I am the founding owner of Gratitude Griot LLC, a certified MWBE wellness service business that is accessible to all, ages, abilities, and backgrounds. I use trauma-informed yoga, somatic meditation, and therapeutic art to create wellness programs for the Fibromyalgia Care Society of America, and other nonprofit partners, community organizations, private institutions, and government entities.
After battling with Lupus and Rheumatoid arthritis for nearly 30 years, I started this business to teach people and organizations holistic wellness tools to destress and improve their mental health and wellbeing.
As part of my wellness work, I interview women of color living with autoimmune illnesses such as lupus, fibromyalgia, and MS. Women of color develop autoimmune illnesses at a dispropriate rate to our caucasian counterparts. It often takes us longer to get diagnosed and our symptoms are typically more severe.

## Comments: Advance DEIA Through Research

More research needs to be done to determine the disparity and the contributing factors to the severity of our autoimmune illness such as trauma and other social and environmental factors. We would also like to see the implementation of more holistic wellness treatment options. The meditations that many of us have to take for the majority of our lives are oftentimes more damaging than the illness itself.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

NIH Workforce: ASPET recognizes the need to bring more underrepresented populations into the biomedical and health sciences. Accomplishing this within the NIH workforce will require scholarship and trainee funding. Trainees from underrepresented populations will need additional resources for programming, networking, leadership training, and mentoring. The overall goal would be to create more opportunities for marginalized populations to train at NIH and then to provide an inclusive environment for them to thrive and develop as leaders and scientists. This would include increasing the diversity of advisory panels, webinars, symposia, and training sessions. A systemic benefit of this is that all trainees at NIH would see a greater representation of diversity throughout their training experience. The UNITE program targets creating a strategically planned and inclusive environment.
ASPET also supports efforts to be inclusive of persons with disabilities so that they have equal opportunity to pursue careers in the biomedical sciences. Persons with disabilities are significantly under-represented in STEM fields relative to the general population, and those who are already researchers may be reluctant to identify as such due to stigmatization, stereotyping, and perceived negative impacts to career prospects. NIH can encourage persons with disabilities to feel comfortable pursuing STEM careers by recruiting current researchers with disabilities to advisory boards, emphasizing and funding mentorship programs that connect persons with disabilities to established researchers who have overcome similar challenges, and conducting outreach to the disability community by highlighting the career paths and achievements of researchers with disabilities. In addition to increased representation, more education on the challenges faced by persons with
disabilities is needed. Many patient advocacy organizations provide resources for employers on how to support persons with disabilities in the workplace. These guides offer legal and compliance information, as well as practical information on how to accommodate and communicate respectfully with an employee with a disability. Labs are unique workplaces that present many challenges, so working with these organizations to create lab-specific guides or recommendations for a more inclusive and accessible working environment may be helpful.
Workforce at Institutions Supported by NIH funding: NIH leads by example. Once increased diversity initiatives for under-represented populations and for persons with disabilities are implemented, these can be shared as best practices with institutions that receive NIH funding so that they may create a more inclusive environment. Professional societies like ASPET can assist by highlighting and distributing these resources to membership.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Stewardship: As part of its DEIA strategic plan, ASPET encourages NIH to more fully explore the interrelation between culture and medicine. The use of natural products to cure ailments and diseases is well-documented, and modern methods of drug discovery that isolate active compounds owes a great debt to this cultural knowledge. But the use of natural products in drug discovery poses many challenges (e.g., diversification of possible therapeutic lead compounds by the derivatization of a promising isolated natural product compound), and their use by large pharmaceutical companies has been in decline for decades. This decline is occurring despite the screening of only a fraction of the planets biodiversity for biological activity. There are very likely many natural products that can contribute to our understanding of human health and development of therapeutics, and we can draw on the experiences of other cultures to guide us in our search for new ways to fight disease. NIH can be a leader on this front by prioritizing outreach to historically marginalized communities like the Native Americans and Indigenous people of Hawaii, Alaska, and the Pacific Islands. Inviting representatives from these cultures to share their knowledge of natural products in workshops and seminars may lead to unexpected collaborations that help further advance our knowledge of diseases and therapeutics.
Partnerships and Engagements: NIH actively partners with the researchers it supports and their institutions. Most educational institutions are actively trying to identify ways to improve their own DEIA climates. A national consortium headed by NIH could be created. The Clinical and Translational Science Award (CTSA) program required that the grants be prepared and submitted by two universities, with awardees participating in a national consortium. A similar model could engage universities and minority serving institutions in a program to transform the biomedical workforce.

## Comments: Advance DEIA Through Research

Workforce Research: Annual data released by the National Science Foundation in its Survey of Earned Doctorates continues to show an enormous disparity in graduate debt between white doctoral degree recipients and black doctoral degree recipients. Black doctoral recipients reported a mean graduate debt of $\$ 63,087$ vs. $\$ 20,451$ for white doctoral recipients. When adding in undergraduate debt, the gap widens, with black doctoral recipients reporting a total debt load of $\$ 88,206 \mathrm{vs}$. $\$ 31,878$ for white doctoral recipients. And from 2015-2020, black student debt rose faster than white student debt by a 2-to-1 margin. The impact of student debt on the biomedical research workforce is largely unexplored, however the prospect of a significant debt burden may be discouraging. NIH should prioritize workforce research that explores the impact of debt on diversity in the biomedical workforce, as well as the impact of potential debt on the choice of undergraduates from underrepresented groups who may elect not to pursue graduate education in the life sciences at all.
Health Research: As a professional society with members who conduct translational and clinical research, ASPET is always thinking about the application of basic science research to real world issues.

One area where DEIA principles are needed is in the enrollment of patients for clinical trials. Consideration and inclusion of diverse genetic, ethnic, metabolomic, and proteomic backgrounds is important to best understand what constitutes a healthy state for an individual and for investigating the safety and effectiveness of interventions in a population. Using DEIA principles in experimental design could ensure clinical trials are sufficiently diverse and representative and include considerations of how genetic polymorphisms influence drug metabolism and/or efficacy (genetic diversity in metabolizing enzymes or receptor targets). But these considerations can be challenging in practice. Recruiting a diverse clinical study cohort is often very difficult, and there may be a limited understanding of the influence of ethnic backgrounds on drug metabolism or receptor polymorphisms. There may also be linguistic, religious, cultural, and educational barriers to outreach. ASPET is aware of the NIHs study on Oversight Processes to Ensure Diversity Among Human Subjects Enrolled in Clinical Trials to be released in 2023, but encourages the NIH to address diversity in clinical trial representation in its upcoming strategic plan by researching these barriers and how best to overcome them.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Ensure that all who are putting in high amounts of efforts into various projects, volunteering for projects within and across ICs are equally recognized and performance rated fairly. Currently, in my observations, it is mainly those who are program officers, scientists, physicians, and those in senior leadership positions who are recognized for going above and beyond their duties. However, there are also equally competent non-scientists participating/volunteering in many projects, going above and beyond, and being what appears to be intentionally overlooked by senior leadership and their achievements/efforts minimized. In many instances, instead of leadership celebrating their staff achievements and efforts across positions, the response is to move the recognition/ratings "goal posts" when non-scientists go beyond their duties, thus creating barriers to awards, proper recognition and fair performance rating. The whole idea of inclusion also means INCLUDING those from different career backgrounds and having those perspectives at the NIH "table." In fact, that is how public health best works and participation should be encouraged and recognized.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

(Comment letter segmented across the three objective input fields)
The National Postdoctoral Association and its 23,000 members are committed to eliminating barriers that restrict or prevent the ability of scientists with diverse backgrounds and across all disciplines from being engaged, retained, and/or successful in the U.S. research enterprise. To this end, we are invested in the development and implementation of Diversity, Equity, Inclusion, and Accessibility (DEIA) initiatives. Recently, the NIH has put forth a request for information regarding the framework for its strategic plan to promote DEIA. This strategic plan is, in part, in response to the executive order put forth by President Biden in 2021 and represents the latest development in the ongoing efforts of the

NIH to address the persistent discrimination and marginalization of many demographics within American society that have similarly perpetuated in the scientific disciplines.
The NPA applauds the intent of the proposed NIH DEIA framework. We further urge that particular attention be paid to support postdocs of diverse backgrounds, particularly those from underrepresented minority (URM) groups. Several challenges disproportionately affect URM candidates in academia, and thus perpetuate the leaky pipeline metaphor for postdocs, of which a significant portion are URM, who opt-out of an academic career. Although this pattern can be seen at all levels of the academic hierarchy, the postdoctoral stage is a critical time because it represents a crucial inflection point that can determine an individuals career trajectory. A lack of support during this time can be crippling to advancement within academia. Many institutions lack equitable, data-driven structures and policies to onboard, support, and retain postdocs in general and URM postdocs in particular. Unlike faculty hiring or student admissions, postdoc hiring is not necessarily standardized within an institute and hence it becomes hard to measure equal opportunity within this sector. The NIH can be a key player in reducing these inequalities and their impact. Postdoc recruitment and retention should be an established goal for all institutes.
We strongly recommend that the individual approaches to achieve the outlined DEIA framework objectives are chosen judiciously and with diverse community input, including from the postdoctoral community. In addition, proper authority must be granted to DEIA offices within NIH to execute the vision. Likewise, it is critical to build in metrics for success and hold institutions, programs, and leaders that fail to meet these goals accountable.
In summary, we are encouraged by and supportive of the NIH development of an institution-wide DEIA framework. While there is still work to be done to fill in the details, we are prepared and willing to collaborate with the NIH to advance DEIA across the academic and postdoctoral communities.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

(Comment letter segmented across the three objective input fields)
The National Postdoctoral Association and its 23,000 members are committed to eliminating barriers that restrict or prevent the ability of scientists with diverse backgrounds and across all disciplines from being engaged, retained, and/or successful in the U.S. research enterprise.
A concern of the NPA is that the NIH framework, in its current form, is vague and lacks specifics of what each objective will entail. More detailed objectives would be useful to better understand the intended outcomes of the framework. For example, the 2012 Report by the NIH Biomedical Research Workforce Working Group recommended that the NIH create a pilot program for postdoctoral offices to apply for funding in order to enrich and diversify postdoctoral training. Crowdsourcing diversity initiatives in this way could lead to creative solutions that may be specific to localities and specific institutes. This program is something that could be implemented under Objective 2 of the NIH DEIA framework (Grow and Sustain DEIA through Structural and Cultural Change).
From a practical standpoint, the NPA also endorses the recent statement released by the Association of American Medical Colleges (AAMC) regarding how to best advance DEIA initiatives at the NIH and encourages the NIH to use these suggestions as a source for providing additional detail and structure in their framework. It is currently unclear how the proposed framework fits in with the many other diversity-related efforts of the NIH that have been established in the last 20+ years, such as the UNITE initiative, the Working Group on Diversity in the Biomedical Workforce, the Chief Officer of Scientific Workforce Diversity Office, and the Diversity Program Consortium. The NPA recommends a stronger focus to coordinate these DEIA efforts, evaluate which are most effective, and identify and eliminate any redundancies to streamline their efforts. The creation of a cohesive, centralized division that oversees all DEIA initiatives may be prudent to produce meaningful lasting change.

## Comments: Advance DEIA Through Research

(Comment letter segmented across the three objective input fields)
The National Postdoctoral Association and its 23,000 members are committed to eliminating barriers that restrict or prevent the ability of scientists with diverse backgrounds and across all disciplines from being engaged, retained, and/or successful in the U.S. research enterprise.
The NPA also encourages the NIH to direct increased funding for programming that has demonstrated success in transitioning graduate students and postdocs from diverse backgrounds into faculty positions, such as the NIGMS Institutional Research and Academic Career Development Awards (IRACDA) (K12) program. These programs support the crucial transition of diverse talent during the postdoctoral stage. This is critical since many of the current DEI efforts across diverse institutions have been less successful at supporting this transition, as indicated by the nine-fold increase in diversity among Ph.D. holders that has yet to translate into increases in faculty diversity.
The NPA has long advocated for competitive increases in salaries and more comprehensive benefits packages for postdocs that better reflect economic realities and the burdens that exist for postdocs and those they support. URM postdocs have higher financial burdens, such as student debt, reduced resources, and family obligations. Furthermore, the average national starting salary of an undergraduate ( $\$ 55.3 \mathrm{k}$ ) is higher than the NIHs NRSA stipend for a year one postdoc ( $\$ 52.7 \mathrm{k}$ ), pointing to significant deficits in postdoctoral compensation and dissuading many potential scientists to pursue advanced degrees and postdoctoral work. Increased compensation would increase the ability for URMS, who share disproportionate financial burdens, to pursue careers in biomedical research, thereby increasing the diversity of trainees.
The National Postdoctoral Association (NPA) is a nonprofit membership organization representing the interests of more than 70,000 postdoctoral scholars and 230 research institutions in academia and industry across the United States. Founded in 2003, the mission of the NPA is to improve the postdoctoral experience by supporting a culture of inclusive connection. At the individual, organizational, and national levels, we facilitate enhanced professional growth, raise awareness, and collaborate with stakeholders in the postdoctoral community. The NPA is committed to promoting diversity and ensuring equal opportunity and inclusion for all postdocs regardless of race, ethnicity, and national origin.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

It is important for NIH to remove all types of inequities for career advancement and promote diversity and inclusion education programs that provide all faculty, staff, and institutional leaders with the opportunity to engage in and adopt antiracism principles. All these initiatives will attract and foster success among underrepresented minority faculty and trainees. This proactive approach will also aid in the retention of underrepresented minority faculty already employed.
All NIH departments should commit a portion of their budgets to enhance diversity, inclusion, and equity, including supporting financially faculty who dedicate time toward diversity, equity, and inclusion work. Such efforts must be intentional and targeted, rather than the simple passive expectation to attract and hire the right candidates.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

It is essential that peer-reviewed study sections include equitable representation of scientists from diverse ethnic backgrounds, genders and career stage that are underrepresented in science. It is also critical that NIH expand opportunities for early career professionals to participate in study sections.

Current NIH funding is required to participate in a study section. We recommend that NIH explore removing the NIH funding requirement for ad hoc reviewers to participate on study sections so that more diverse researchers and clinicians are eligible to serve. This will provide mentoring opportunities, an expansion of the number of underrepresented individuals serving on study sections and expand the pool of those eligible to serve on study sections.
It is important that NIH reduce gender-biases by assuring gender parity in the employment of the internal NIH research team and for external grant recipients.
NIH currently funds on-site clinical fellowships at the NIH Campus. NIH should consider taking the laboratory into the community. For part of their training, NIH fellows could be placed into communitybased medical centers and local clinics to partner with mentors and treat underserved communities. This could enhance training, get much-needed medical care to community health centers, and help build trust between patients and clinicians. A potential long-term impact of this could be an increase in diverse students selecting careers in science and medicine and greater trust between underserved populations and the medical community. This could also help NIH with efforts expand the diversity of clinical trials and increase the number of diverse patients participating in clinical trials. Special fellowships and/or research grants could support such community outreach.
The NIH K99/R00 BRAIN Initiative Advanced Postdoctoral Career Transition Award to Promote Diversity is a program that supports mentored research/diversity in neuroscience. This could be a model program for other specialty areas.
NIH should also expand the R25 Research Education Programs for Residents \& Fellows grant program, as well as the T32 Educational Grant Program, and partner with institutions and professional societies to create expanded workforce development programs.
The Network of Minority Health Research Investigators is a strong program that has a small relative reach. Consideration should be given to holding this in different locations at different times during the year so that more scientists can participate and/or the one event should be expanded to increase participation. This program could also be better promoted through professional societies and institutions because there is a current lack of visibility and knowledge about this program.

## Comments: Advance DEIA Through Research

NIH should implement and activate more educational programs for diversity and anti-racial culture at the elementary/middle/high school/collegiate levels. The Short-Term Research Experience for Underrepresented Persons (STEP-UP) and NIDDK Diversity Summer Research Training Programs (DSRTP) are good programs and NIH should explore additional opportunities for community-based partnerships to encourage younger, more diverse younger people to explore careers in science. Additionally, these programs are not widely promoted. Additional resources should be allocated to ensure that high school and undergraduate students are aware of these programs. Special effort to link with career counsellors at high school levels can also help steer more minorities or underrepresented groups into science and medical careers. Additional resources are needed to include international investigators without a permanent residency or US citizenship. Longer lead time between training and applying for the first educational NIH grant should be considered since a diverse workforce has different timelines for achieving immigration status. Currently, individuals who have student/ work visas (eg F and J1 visas) are not eligible for NIH educational grants such as T32. Employer may also sponsor permanent residency for all professionals. Federal and State Governments have the power to establish regulations on licensing systems to overcome underemployment or unemployment of professionals. Promotion and tenure are highly impacted by the ability to secure research funding. Due to limited NIH research funds, it is taking scientists longer to be awarded RO1 grants, thus impacting early career researchers ability to establish labs and obtain tenure-track positions. NIH should explore funding more lead grants for these researchers, and specifically target some of these grants to those conducting research in underserved
communities, at HBCUs, and at other institutions that do not have a significant number of NIH-funded initiatives. This could be accomplished by encouraging multi-disciplinary, multi-institutional grants/research collaborations.
NIH-funded institutions should be mandated to include DEIA in their promotion, recruitment and retention policies. DEIA should be included in the metrics of promotion and in assessment of the individual and the institution. Creating metrics on DEIA activities that are comparable to activities in education, clinical and research efforts. Implicit bias, mitigation, and bystander training are necessary to support an inclusive community.
A more holistic approach to assessing applications to include the individualjourney and distance traveled should be practiced in order to include scientists from less traditional backgrounds. NIH-funded institutes should remove the barrier to teaching the important scientific aspects by the second language faculty members to the medical/graduate students. Disparities in promotion and salary range should be removed by the NIH-funded Institutes.
NIH should foster partnerships with specialty groups focused on supporting underrepresented racial and ethnic groups encouraging careers in science and focus on health inequities. Partnerships with organizations like the American Thyroid Association are essential to addressing health disparities in patient care and cultivating a diverse talent pipeline. Through partnerships, NIH can demonstrate that it is creating a climate to support all research and researchers.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Much NIH research, especially biomedical research, necessarily operates most effectively within silos. Systemic research needs to be unsiloed so that multiple systemic inputs to multiple population developmental health outcomes can be examined in conjunction. This also affords the identification of developmental trade-offs such as the John Henry effect (Gupta et al., 2019). Identifying upstream structural and systemic factors that are expressed in multiple, diverse outcomes is crucial, because big population effects are where potential policy big winsreside.

NIH has multiple mechanisms to launch a major initiative. Because population developmental health models focus simultaneously on overall population outcomes, the reduction of disparities within the population, and the developmental mechanisms that generate PDH, a clear portfolio (managed jointly, perhaps, by NIMHD and NICHD, whose work encompasses various features of PDH) that targets systemic and structural factors would be essential. Special Emphasis Panels to evaluate these nontraditional NIH research programs would be needed, with clear priorities regarding methodological legitimacy (Lewis, 2021) and interdisciplinary, actionable research (Barbot et al., 2020). Ideally, a new or revised study section to consider this broader interdisciplinary research agenda would enhance the longevity of this approach.

Because it is essential to address the credibility revolution in the social and health sciences, a major initiative should be to develop multiple longitudinal databases that are accessible and easily useable, for external validity checks on outcomes, and linked policy directions they support. Lewis (2021) notes the opportunity costs of studies focusing on single or few inputs and outcomes, using nonrepresentative samples, that promote quick-fix solutions rather than effective solutions for social change (p. 1330).

As valuable as data archives are, they are not sufficient on their own. Creating a resource for extensive use of secondary data sources, embodying FAIR principles (Findable, Accessible, Interoperable, and Reusable), is essential for carrying out systemic research and for enhancing DEIA advances in the extramural NIH workforce. Specific, targeted funding to expand this model, with a potential goal of embodying it in a Common Fund approach, is needed to move beyond mere archiving of data sources.

Targeted and substantial grant support for using existing secondary data is needed to expand the scope of systemic research on DEIA related issues. Beyond addressing Objective 3 concerns, this mechanism would enhance the DEIA workforce goals). These topics are often of the greatest interest to minoritized scientists. Lewis (2020, p. 1330) noted that Black scientists are less likely to receive NIH funding due to the topics they are interested in studying, including disparities in health and development.

Specific funding efforts for individual researchers or teams of researchers at non-R1 institutions who may not have adequate local research support could dramatically enhance this workforce. Much of this work could occur within a virtual collaboratory, thus the potential to develop interdisciplinary teams across multiple institutions would be enhanced. Many minoritized researchers at non-R1 institutions are doubly blocked from NIH funding, by the topics they would choose to study and by the differentials in research resources at those institutions.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

(Submitter left answer blank )

## Comments: Advance DEIA Through Research

First, we need a conceptual framework for health disparities research (Objective 3) that effectively addresses crucial links among research on (a) societal structures that generate systemic racism, discrimination, and inequality; (b) how these structural and systemic processes are expressed as exposures and experiences that impact developmental health throughout the lifespan; (c) on the biodevelopmental mechanisms that underlie these outcomes in mental, physical, and social health; and (d) on the population impacts of these processes. There is now substantial evidence that those upstream, systemic factors drive downstream consequences in health and development. Systemic racism, discrimination, and income/wealth inequality have been identified as exacting lifelong harm to developmental health, especially among minoritized populations and/or those who are economically distressed in a nation with rampant inequality (Keating, 2016; Lewis, 2021). The focus on early life stress (ELS) and adversity (ELA) has yielded increasingly robust outcomes on lifelong population developmental health, including structural legacies such as Black-White wealth disparities arising from severe housing discrimination practices, and underlying biological mechanisms involving synaptic pruning in brain development and epigenetic modifications arising from developmental exposures and experiences. What is critically needed is prominent and targeted NIH support for integrative research on this full dynamic system, from structural features and their impact on developmental exposures (e.g., residential segregation and lead toxicity) and experiences (e.g., maternal stress and prenatal development, or lack of societal support for parental nurturance), to the biodevelopmental pathways of those proximal factors (e.g., biological embedding of stress dysregulation), and in turn to their downstream expression in health and development. The necessity of such an approach has been identified in multiple recent publications focusing on gaps in disparities research (Keating, 2016; Lewis, 2021; Neville et al., 2021; Roberts \& Rizzo, 2021; Song et al., 2020). A recent Manifesto for new directions in developmental science (Barbot et al., 2020) highlights challenges to research that can make a meaningful difference for a wide range of health outcomes, in that it needs to be integrative, inclusive, transdisciplinary, transparent, and actionable (p.136). These challenges will require a focused and dramatically enhanced commitment to support research on the interconnected features of health disparities, confronting the credibility revolution in the social sciences, and addressing the battle for methodological legitimacy (Lewis, 2021, p. 1323).
To be effective, such an initiative must focus not only on isolated links between one or a few specific aspects of developmental adversity and one or a few specific outcomes in developmental health (physical, mental, social). Although such research is essential and requires continued, indeed enhanced,
funding, it does not by itself capture the actionable upstream aspects that drive major health disparities at a population level (Keating, 2016), including structural factors like income inequality and investment in human development.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Recommendation 1: Balance the NIH-wide research portfolio across domains and levels of influence according to the NIMHD Research Framework
Racial disparities in NIH award rates have persisted for at least the past decade, despite attempts to address them $[1,3]$. Naming systemic racism as a cause of these continued inequities, developing the UNITE initiative, and seeking public input are all steps in the right direction for the NIH. However, these moves must be followed by further bold and swift action by the agency to address these disparities. According to Hoppe (2019), one source for racial funding disparities that should be immediately addressed by NIH is bias against investigator topic choice: Black investigators are more likely to propose research on topics that receive lower award rates, such as research involving human subjects and studies investigating health disparities and patient-focused interventions [2]. Therefore, to help address racial funding inequities, we echo the calls of the many scientists and organizations for the NIH to expand support for human subjects, social, and health disparities research. A roadmap for achieving this expansion lies within core concepts of the National Institute on Minority Health and Health Disparities (NIMHD) research framework, which organizes health determinants by domains (biological, behavioral, physical/built environment, sociocultural environment, health care system) and levels (individual, interpersonal, community, society) of influence, and which encourages determinants to be investigated holistically and in conjunction with one another to avoid forming research knowledge that is incomplete [4]. Alvidrez (2019) mapped a sample of 90 NIMHD R01 awards onto the framework to determine the inclusion of research across domains and levels of influence, found a heavy bias toward individual level determinants, and stated that NIMHD plans to analyze minority health and health disparities grants across the NIH using the framework and hopes that other NIH institutes and centers and other health research funders conduct their own analyses as well [4]. To our knowledge, these analyses have not been performed.
Therefore, to promote systemic change capable of achieving health equity and reducing the racial funding gap, we propose that the NIH perform an agency-wide analysis of awards to determine areas of research in the NIMHD research framework in need of further emphasis. Following this analysis, we propose that the NIH balance its agency-wide portfolio across the framework. The act of balancing the portfolio may necessitate a shift in funds (or earmarking of new funds, for example, through the NIH Common Fund) for research involving human subjects and investigating health disparities and social determinants of health, which may in turn partially address the racial funding gap.
As a part of this process, expertise in these underprioritized areas of health determinants must be present in study sections and on advisory councils. Funds must also be earmarked for training and early career mechanisms. Lastly, we encourage NIH to be transparent with these efforts by publishing detailed funding allocation data to allow independent bodies to track progress and maintain accountability.
References

1. https://doi.org/10.1126/science. 1196783
2. https://doi.org/10.1126/sciadv.aaw7238
3. https://doi.org/10.7554/elife. 65697
4. https://dx.doi.org/10.2105\%2FAJPH.2018.304883

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Recommendation 2: Provide more resources for research engagement to enhance reciprocal relationships with underrepresented and disadvantaged groups
Although Federal law and NIH policy mandate the inclusion of women and minorities in clinical research, lack of enforcement and prioritization in strategic planning, and inadequate or exploitative engagement practices remain as barriers to participation from underrepresented and vulnerable populations [5,8]. In addition to failing to meet the needs of health disparities research, consequences of these practices include increased risk to study participants and communities and exacerbated health disparities [7,9]. We therefore recommend that the NIH:
A. Enforce the NIH Policy on the Inclusion of Women and Minorities as Subjects in Clinical Research more strictly to ensure non-white subject participation in research studies [5]. Strengthen compliance, reporting, and transparency, and evaluate and restructure grant review processes that allow exclusion to take place with weak justification [7].
B. Extend the NIH Policy on the Inclusion of Women and Minorities as Subjects in Clinical Research to research involving any human biospecimen, including post-mortem tissue and cell-based experimental systems [5]. Limiting this policy to research that meets the NIHs definition of clinical research leaves out important investigations that could otherwise make use of these resources and has caused demographic disparities in biobanks such as the NIH NeuroBioBank [5,10,11].
C. Replace inadequate engagement and protections practices with community-based co-leadership in project development. Community engagement must prioritize minimizing risk to research participants and be intentional, culturally sensitive, language appropriate, reciprocal, mutually agreed upon, and evaluated regularly $[7,12,15]$.
Recommendation 3: Create an NIH-wide ELSI program and strategic plan for research to promote safe, ethical biomedical research
Current NIH-wide support for bioethics or ethical, legal, and social implications (ELSI) research is either only available as an administrative supplement or requires proposals to compete for funding with nonethics proposals. At a 2020 National Academies workshop on emerging bioethical issues, David Castle said, It is not enough to simply add on a bioethicist as an afterthought and call it interdisciplinary [16]. Biomedical research needs a cultural shift to bring bioethics considerations to the forefront. This is especially clear given vast racial disparities in health outcomes but the continued failure of researchers to name racism as a cause or to commit to justice. To achieve this shift toward more rigorous ethical considerations, we recommend that the NIH:
A. Establish an agency-wide ELSI program, including funds for independent ELSI research and training and early-career mechanisms, as well as plans to increase bioethics expertise on NIH staff, on advisory councils, and in study sections.
B. Develop an agency-wide ELSI strategic plan for research to determine areas in most need of immediate attention and provide direction for the next five years.
C. Require a full year of rigorous ELSI coursework in all doctoral and postdoctoral training programs. References
5. https://grants.nih.gov/policy/inclusion/women-and-minorities.htm
6. https://doi.org/10.1097/acm. 0000000000002027
7. https://doi.org/10.1016/j.molmed.2020.11.004
8. https://doi.org/10.1038/s41576-019-0161-z
9. https://doi.org/10.1038/s41588-019-0379-x
10. https://grants.nih.gov/grants/glossary.htm\#ClinicalResearch
11. https://neurobiobank.nih.gov/
12. https://doi.org/10.1038/s41467-018-05188-3
13. https://doi.org/10.1007/s12687-017-0316-6
14. https://doi.org/10.1038/s41576-020-0228-x
15. https://doi.org/10.1016/s1470-2045(19)30307-9
16. https://www.ncbi.nlm.nih.gov/books/NBK560365/

## Comments: Advance DEIA Through Research

Recommendation 1: Balance the NIH-wide research portfolio across domains and levels of influence according to the NIMHD Research Framework (See response to Objective 1)
Recommendation 3: Create an NIH-wide ELSI program and strategic plan for research to promote safe, ethical biomedical research (See response to Objective 2)
Recommendation 4: Support human-based biological and mechanistic approaches to better integrate diversity in basic research and enable multilevel analyses
Conducting research entirely within one cell in the NIMHD research framework may result in research knowledge that is incomplete because it does not address the cumulative or interactive effects of multiple determinants [4]. Biological and mechanistic investigations missing insight from other domains or higher levels may fail to account for social determinants and even exacerbate existing health disparities. Therefore, in research investigating biological domains and individual levels of influence, we recommend dramatically increasing funding for the development and use of human-based models, tools, and technologies capable of multilevel analyses in order to incorporate social contexts and include an accounting of demographic and other social determinants. Non-human, animal-based experimental systems are incapable of providing necessary social contexts. Throughout the federal government, research agencies have acknowledged the limitations of animal-based experimental systems in replicating human biology and health outcomes [1719], but little has been done agency-wide at the NIH to achieve a shift toward more human-based research strategies.
We therefore recommend that the NIH develop an effective human-based research portfolio that integrates human diversity across levels and domains, for example, in the following ways:
A. Fund outreach and engagement efforts to underrepresented communities to encourage culturally attuned organ and tissue donation.
B. Fund research to develop human cell atlases representative of the multifactorial diversity of human patient populations.
C. Redirect funding of the development of "diverse" animal models to studies using human-based samples or human subjects from diverse populations.
D. Fund research aimed at developing appropriate methodologies and technologies for improving analyses of diverse human cohorts.
References
4. https://dx.doi.org/10.2105\%2FAJPH.2018.304883
17. https://www.gao.gov/products/GAO-19-629
18. https://ncats.nih.gov/tissuechip
19. https://www.epa.gov/research/administrator-memo-prioritizing-efforts-reduce-animal-testing-september-10-2019

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

## Potential benefits

Opportunities to create and implement research leadership pathways for individuals with racial/ethnic, economic, and other under-represented identities in research leadership positions Drawbacks or Challenges

Lack of systems that respectfully collect and maintain confidentiality of workforce identity information

Problematic aggregation into large and diffuse racial/ethnic categories currently required by NIH/OMB

Lack of more NIH funding/grant pathways beyond diversity supplements to support the successful independence of diverse investigators

Specific and varied funding mechanisms and investments to support recruitment and retention of diverse investigators are needed

NIH funding not equitably distributed across institutions greater investment in institutions that already successfully recruit and retain diverse faculty and investigators may be a more efficient strategy

Variation across institutes in prioritization of candidate levels for diversity supplements. For examples, some institutes prioritize post-doctoral candidates while others do not typically support candidates at that level.
Other priority areas
Need for an explicit strategy to rectify the documented inequities in R01 level funding that disadvantages Black scientists. Creating an explicit focus on Black scientists, similar to the New Investigator Status, can help rectify the past underfunding of Black scientists compared with all other scientists that has been documented in the empirical literature, but inadequately addressed by NIH.

Need investment in diversifying the NIH-funded research workforce beyond investigators is needed

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

## Potential benefits

(Stewardship) Creating and disseminating tools for research organizations to implement structural and cultural change around DEIA, including better and ultimately best practices for implementing equity-focused and anti-racist practices, policies, and systems for conducting research; NIH has the opportunity to be a critical aggregator and disseminator of this information
(Accountability and Confidence) Ideally, NIH would require organization change plans with SMART goals focused on DEIA for all organizations that receive NIH funding, with the plans focusing on workforce, structural/cultural change, and other aspects of DEIA work (e.g., required education/training similar to the requirement for human subjects protection training)
(Accountability and Confidence) Need to establish metrics for institutes and funding benchmarks focused on research that identifies health disparities and solution-focused research on reducing or eliminating inequities; this should not be the responsibility only of NIMHD to support/fund diverse researchers or research
(Accountability and Confidence - research institution level) NIH requiring reporting at the research institution level the racial/ethnic, economic, and ability/disability identity information for participants engaged in NIH-funded research. Continued funding should be contingent on achieving agreed upon goals.
(Accountability and Confidence individual grant level) Require extramural grant applicants with human subjects research to demonstrate racial and ethnic as well as socioeconomic diversity in planned research participants in the proposal process, and make this a part of proposal evaluation criteria. Drawbacks and Challenges

Some of the potential accountability around DEIA might extend beyond the role/authority of NIH, but at a minimum set of evidence-based tools and better/best practices would be helpful

## Comments: Advance DEIA Through Research

Potential benefits

Supporting/funding research to identify evidence-based best practices for institutional structural and cultural change around DEIA within health research institutions

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 NIH WorkforceThe ATS commends the National Institutes of Health (NIH) for establishing the NIH-wide UNITE initiative to identify and address structural racism within the biomedical research enterprise, as well as to bolster the efforts of the NIH offices involved in DEIA. The ATS looks forward to collaborating with you and the leadership of all NIH institutes on development of this and other important efforts to continue to promote equity, diversity, and inclusion.
Myriad studies, data, and analyses exist that support robust DEIA efforts and the importance of minority representation in science and medicine. For example, see: Addressing the Elephant in the Room: Microaggressions in Medicine,Molina et al., Annals of Emergency Medicine, Volume 76, No. 4: October 2020; Diversity in Medicine: Facts and Figures 2019, Association of American Medical Colleges; and Beyond Research, Taking Action Against Racism, Gilligan, Health Affairs, February 2022, 41:2. Ongoing efforts are needed to diversify the workforce, strengthen multidisciplinary teamwork, and identify strategies to promote a healthy work environment. The ATS has long held that key socioeconomic barriers to success for diverse research scientists must be addressed, including low salaries, lack of salary adjustments to compensate for high cost of living in different geographic areas, and lack of childcare and supports including paid parental leave for working parents. The ATS recommends the following:
Adjustment of stipends based on regional cost of living; loan repayment assistance; institutional support for trainees with families
Childcare supplements for postdocs; maternity or parental leave; support from university/mentor; flexibility in work hours
Accountability of universities to retain minority faculty, reflected in NIH funding decisions
Emphasis from NIH/NHLBI to ensure that diversity supplement/fellowship awardees find and maintain a relationship with a mentor other than the primary investigator Diversity and Inclusion in Research Support and Administrative Staff
The ATS urges the NIH to develop specific policies, procedures, and initiatives to promote diversity and inclusion for scientific research administrative, laboratory and other support staff that maintain the research enterprise.
Workforce at Institutions Supported by NIH Funding
Expand Support for Research Training and Incentivize Mentoring
The ATS recommends that the NIH develop additional mechanisms for supporting research training, including ways to incentivize mentors. Mentor incentives are not currently incorporated in most NIH training grants, and the lack of these mechanisms is a barrier to training that may contribute to the underrepresentation of racial and ethnic groups. The NIHs Building Infrastructure Leading to Diversity (BUILD) Initiative and Faculty Institutional Recruitment for Sustainable Transformation (FIRST) programs provide such support, and we urge the NIH to continue to expand these programs and use them as models for the development of other programs and initiatives to support training, mentoring, and career path advancement for racial and ethnic minorities.

Comments: Grow and Sustain DEIA through Structural and Cultural Change
NIH Study Section Under-Represented Minority Participation and Reviewer Bias Training

The ATS recommends that the NIH prioritize minority representation on NIH study section panels. In addition, we recommend that the NIH consider programs to enhance study section panel member training on unconscious bias, diversity, and inclusion. While such training currently exists, we believe it should be enhanced.
In comments recently submitted to the NIHs Center for Scientific Review, the ATS described how varying proficiencies in spoken English may deter some reviewers from effectively participating in panel discussions, which may create biases such as their critique not being considered with as much weight. The ATS proposes evaluating different methods to ensure that all voices are heard and valued, such as requiring assigned reviewers to read the written brief summary of their critique (keeping to time constraints) as standardized practice. This practice would empower reviewers for whom English is a second language and promote more equal apportioning of discussion time, thus helping to create a culture of inclusion and fairness.
As required by federal law (42 USC Â§289a-2) and NIH policy, applications for clinical research that propose to involve human subjects must address the inclusion of women, minorities, and children in the proposed research. The NIH Inclusion Policy and Guidelines provide guidance to ensure that all NIHfunded clinical research will be carried out in a manner sufficient to elicit information about individuals of both sexes/genders and diverse racial and ethnic groups and, particularly in NIH-defined Phase III clinical trials, to examine differential effects on such groups. Valid analysis reporting in ClinicalTrials.gov is required for Applicable NIH-defined Clinical Trials (ACTs).
The inclusion policy falls short. Compliance with population composition does not ensure the ability to perform meaningful subgroup analysis for most smaller-sized clinical trials. In addition, this policy for the inclusion of valid sub analyses does not extend to other types of clinical research, including device trials, trials at other stages of the FDA process, or observational research. Efforts should be made to standardize strategies across the NIH and include processes through which to inform and train scientific review officers and program officers.
The ATS recommends that reviewers be critical of studies that fail to meet the inclusion mandate and consider well-designed studies attempting to meet this mandate. Reviewers should query whether the proposed study includes a representative sample of the population disproportionately burdened by the disease of interest. For example, asthma disproportionately burdens Black and Puerto Rican populations; studies of asthma should include adequate samples from one or both groups. Reviewers also need to assess minority inclusion plans and outreach initiatives, taking these into consideration when evaluating the scientific merit of the application and overall scoring. This would help ensure that minority populations are adequately represented in federally funded studies.
Barriers to involving under-represented minorities in NIH-sponsored clinical trials must be removed, including, those barriers that affect the quality of information provided to patients without regard to whether the patients are LEP or have communication disabilities.

## Comments: Advance DEIA Through Research

## Workforce Research

The ATS is committed to improving health equity throughout the U.S. To this end, for example, the ATS Fellowships in Health Equity and Diversity are designed to support the efforts of senior fellows, postdoctoral students, or junior faculty with research, clinical and policy endeavors to advance health equity for patients with respiratory disease, critical care illness or injury, and sleep disordered breathing. The ATS Fellowship can serve as a model for NIH institutes.
In an ATS Scholar article, Building a Diverse Workforce in Pulmonary, Critical Care, and Sleep Medicine, (https://doi.org/10.34197/ats-scholar.2021-0038ED), Dr. Juan Celedon describes opportunities to enhance sustainability and diversity of the physician-scientist workforce:

NIH funding for research exposure during residency training, while also expanding the NIH Loan Repayment Program and mid-career awards for physician-scientists devoted to mentoring to encompass basic research;

ATSs continued support of new and ongoing programs such as the Minority Trainee Development Scholarship, the Womens Forum and the Diversity Forum, grants on health disparities and diversity grants, and mentoring and apprenticeship programs; and,
divisional and institutional commitment to the career development of physician-scientists in vulnerable groups, including training mentors and mentoring teams, bridge funding, promotion, and appointments of female and under-represented minority faculty to leadership positions and implementing physician wellness programs to emphasize work life balance.
Furthermore, a more diverse workforce, particularly the expansion of the pool of minority principal investigators, helps build trust and improves the diversity of clinical trial participants, resulting in the greater understanding of safety and efficacy of new medicines in all populations.

## Health Research

To more immediately improve the inclusion of minorities in clinical research, the ATS recommends the following:

Score or raise the importance of the Inclusion of Women and Minorities section of the NIH grant application.

Invest in resources to support recruitment of minority populations.
Revise criteria in funding announcements to emphasize that recruitment should include racial/ ethnic minorities, particularly for diseases that disproportionately affect these populations.

Ensure that scientific review officers receive training to recognize bias in the study section and provide regular instruction to reviewers to reduce bias.

Ensure that clinical research, particularly research on diseases affecting minority populations, is adequately funded when awarded and is sufficiency powered to address differences among underrepresented minority groups.

Increase the availability of loan repayment programs or other policies that directly or indirectly remove the financial burden of pursuing clinical research endeavors for Black, Latinx, and indigenous trainees and early career faculty.
Addressing Equity in Access to Healthcare and Quality of Care Research
The ATS recommends the following research to address equity in access to healthcare and quality of care:

Conduct longitudinal studies of the impact of the ACA on diseases encountered in pulmonary, critical care, and sleep medicine among under-represented minorities and economically disadvantaged populations.

Develop and test culturally targeted interventions to improve adherence to treatment for pulmonary and sleep diseases in minority and economically disadvantaged populations, incorporating cultural norms, values, and beliefs, and addressing pragmatic barriers.

Design and assess educational interventions and multimedia programs to address low health literacy.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Americans eligible to participate in the process are necessary for the framework and program implementation. Presently, there is an omission of federal ethics and guidelines for a legitimate foundation for DEIA in government-funded projects. The absence creates a chaotic and invalid research process.

The workforce at Institutions Supported by NIH Funding is discriminating at the highest level based on biases, prejudice, and "institutional racism; and, until this is monitored and reported in a transparent way to hold individuals within the institutions accountable.
Additionally, there will be a future of professionals who are selected for positions to represent a climate of negative and discriminatory practices in key roles of major institutions. More importantly, the EEOC and other federal agencies that ignore the federal employee guidelines IAW DOL and SME Ethics are already positioned to incorporate a generation of a particular individual. DEIA is a divisive agenda and in an electronic automated process, provides no integrity to the equality for insurance the merit of the individual is represented or evidenced from past differentiators and experience.
To implement "organizations practices" there must be a policy at the Department level of NIH to ensure integrity in the process and strict guidelines for violating the rights of citizens denied opportunities that are qualities. DEIA must be a fair process that begins with federal employment guidelines for employment, contracting, and participation in the process. Across federal agencies and within institutions, the network of individuals who are in a position to make these decisions, are complicit in denying qualified Blacks, the most overlooked researchers, inevitably denying the necessary research that influences evidenced-based solutions

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Stewardship must be by selecting administrators with integrity; structural and cultural change in these diverse demographics must also be common sense without condoning or overlooking racists and other prejudiced individuals. The history of this growing need to adjust to the population changes, there must be a workforce to have a holistic strategy in providing opportunities to meet the needs of all; considering ethnicity, race, and more important citizenship as a preference and other government recognized preferences for equal opportunity in the fields of study.

Partnerships and Engagements - COVID presented obstacles for outreaching to communities and inperson engagement which resulted in selective partnerships influenced by politics and personal restrictions. Ethnicity, race, and electronic engagement provided a layer of barriers further challenging the existing opportunities and resources; thus resulting in silos that discriminated and eliminated eligible partnerships.

Accountability and Confidence are the consequence of the omission of both; NIH has not followed guidelines for being accountable or having transparency, therefore there is no confidence in the system. Fraud, racism, and individuals who assume entitlement has been aggressive in "stealing' from taxpayers; staging historical work, falsifying grants, and insiders who review grants with no intention of being fair to all who submit.

Management and Operations - The grant criteria are written with unexpected and particular criteria to rule out qualified orgs and individuals. The cultural change in America must have some expectation that the government can and will have fair access and can serve all Americans with research that is realistic and generalizable on the most significant topics. NIH. like all federal agencies do not have an enforceable transparent process to hold individuals accountable. https://www.nationalacademies.org/our-work/roundtable-on-the-promotion-of-healthequity\#:~:text=Description\ The\ mission\ of\ the\ Roundtable\ on\ the,and\ healt h\%20care

## Comments: Advance DEIA Through Research

Workforce Research - The VA is most dominant for research and has incompetent researchers and lacks a knowledgeable team for following protocols and research structure and has a closed-door to establish transparency. Research and experimentation must be distinguishable when lives are compromised by incompetent researchers, clinical trials, and in the processes of human subject participation.

Health Research - Health research is crucial for a DEIA strict policy; people die in research and clinical trials without proper oversight and enforceable policy. there are over 1300 Pubs in NIH on Diversity and my question is where is the plan of action.
To Comments: Advance DEIA Through Research, there must be institutional accountability in postsecondary and PhD programs. Enforceable policy and fair access to include Blacks who are victims to racist research; and within the institutional curriculum, IRBs, and procedural roles.
https://pubmed.ncbi.nlm.nih.gov/16856693/?format=pubmed
DOL Forum comments on Diversity from 31 Mar please review:
https://1drv.ms/w/s!AkwamBkx8jqQgbEphLjT1N5VVqMp5w?e=PeHbfE

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

We believe that the NIH could incentivize and prioritize DEIA in the workforce of institutions supported by NIH funding through the modification of (1) study sections and (2) supplemental funding practices.
(1) We recommend that the NIH modify its study section policies and procedures because these unintentionally perpetuate unequal access to funds, thus hampering DEIA at institutions supported by NIH funding. Through the (a) diversification of section reviewers, (b) term limits, and (c) the inclusion of patient representatives, we believe that the NIH would counteract some unconscious biases and structural inequities that are currently present.
(a) Study sections tend to be limited to doctoral degrees. Though NIH policy states that other provider types can apply for NIH grants, these non-doctoral investigators are not considered (and awarded) as frequently as their doctoral counterparts. Masters degrees and other such degrees are more economically accessible to diverse candidates than those of doctoral degrees. Thus, by including other provider types, such as genetic counselors, registered nurses, nurse practitioners, etc., in all study sections, the NIH may increase the diversity of those who receive grants. (b) Additionally, introducing term limits (or, at the very least, rotating terms) for study sections may limit the negative effects of unconscious biases and preferences. (c) We also believe that study sections should include patients from the intended communities. While ensuring that the relevant patient concerns and outcomes are considered when evaluating research proposals, objective patient representatives may blunt unconscious academic prejudice. Efforts such as these to reduce bias within study sections would encourage institutions to prioritize DEIA within their workforce in order to receive NIH funding. (2) Furthermore, we recommend that the NIH modify its requirements on supplements to incentivize DEIA hiring. As currently structured, these supplements preclude the hiring of truly disadvantaged candidates from underrepresented populations. Currently, a hire must be made before supplemental funds can be awarded. Without assured funding, many investigators cannot make a job offerno matter how qualified the candidate. Without assured funding, economically disadvantaged candidates cannot take the risk of a relocation or any other necessary efforts to accept such a position. Only candidates with some financial privilege (or other means of support) are able to make use of these supplemental awards for DEIA, which defeats the purpose of such funds. If such a supplement could be awarded before a hire is made, the NIH program officer could then approve the hire of a qualified candidate at the institution before releasing funds. Furthermore, given the financial needs of many underrepresented candidates, we believe that the amounts for these supplemental awards should be commensurate with their needs. For example, despite a supplemental award, the cost of living in San Francisco could discourage financially disadvantaged, underrepresented candidates from applying to a position at an institution there in the first place. Addressing these structural issues within existing NIH supplemental awards would further encourage, facilitate, and prioritize DEIA within the workforce of institutions receiving NIH funds.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

We would recommend re-evaluating the current categories used to measure and increase diversity since such categories may be somewhat out of date. Taking sexual orientation, gender identity, race/ethnicity, and socio-economic status into account may require more up to date ways to measure the diversity across these dimensions.
Thank you for your time and consideration. We are immensely grateful for the NIHs leadership and commitment to DEIA.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

NIH Workforce:
Diversity, Equity, Inclusion, and Accessibility (DEIA) cannot be influenced from just one place in an organization, but rather is a result of reflection and behavior change across the entire organization. Use a measurement model that differentiates drivers between those that can be led from the top-down, and those that can be influenced from the bottom-up. Both approaches are equally important to address when taking action to improve diversity, equity, inclusion and belonging in an organization.

Qualtrics global studies of government customer experience show that organizations seeking to create an inclusive workplace need to walk the talk by involving employees in solutioning. Listening to employees, uncovering the root causes of their negative experiences, and visibly showing them the specific actions you are taking to improve workforce DEIAthose are the ingredients to transforming your organization into an inclusive workplace that fosters a sense of belonging.

Qualtrics research shows that it is the combination of diversity and inclusion that creates higherperforming teams not just one or the other. Inclusion is the critical KPI of the Diversity, Equity, Inclusion, Belonging (DEIB) model and comprises three components: equity, belonging, and authenticity. Qualtrics DEIB solution will show organizational leaders which of the six drivers of inclusion identified from our global research they should focus on to drive improvements. To pinpoint experiences of inclusion, analysis should assess the correlation between indicators of inclusion and each demographic characteristic, as well as the intersectionality of identities. Organizations that separate inclusion assessments from diversity data are only getting half the picture.

Inclusion cannot be influenced from just one place in an organization, but rather is a result of reflection and behavior change across the entire organization. Our model differentiates drivers between those that can be led from the top-down, and those that can be influenced from the bottom-up.

Workforce at Institutions Supported by NIH Funding:
Culture is not merely shaped by internal policies and behaviors. It must also consider the external forces. A holistic XM approach takes into account both internal and external stakeholders. Policies, messaging, and the organizations overall commitment to DEIA should be very clear to the contractor and supplier workforce. They should also be pulsed for their outsider perspectives on the effectiveness of current policies. This promotes buy-in and offers additional data points to inform decisions.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

## Stewardship:

True stewardship comes not only by aligning with mandates and offering inclusion training, but by embedding DEIA initiatives and feedback mechanisms throughout the entire employee lifecycle. DEIA should be communicated as a top priority from day one, measured and analyzed through employee feedback continuously, and actively monitored for potential changes to ensure all inclusion gaps are being addressed.
Partnerships and Engagements:
Holding partners to a high DEIA standard will ensure that NIH funding is going to organizations that share its beliefs and values, and also serves as an additional way to show your DEIA commitment to employees. Every organization will likely be starting at a different place; therefore, a single requirement or measurable may not work for all. We recommend organizations start where they are and gradually mature their DEIA solutions, using validated frameworks to track and measure progress and areas for growth. This ensures that those within the NIH partnership network are actively working on improving feelings of inclusion amongst their workforce.
Accountability and Confidence:
Our research shows that only 70\% of employees say their organizations have made sufficient progress toward greater Diversity, Equity, Inclusion, and Belonging (DEIB). Fewer (67\%) say that senior leaderships actions show they are genuinely committed to building a diverse and inclusive company. In addition, those who self-identify as non-binary/transgender view the DEIB efforts at their company as much less favorable overall. This, without a doubt, points to a lack of confidence amongst employees that their organizations are truly committed to DEIB. Despite these findings, employee perceptions of DEIB efforts and corporate social responsibility have improved year-over-year. In other words, employees recognize and appreciate the efforts organizations have made over the past year and a half. The challenge will be sustaining these efforts and ensuring that this focus isnt temporary. Make sure DEIB is part of your continuous employee listening program. Listen to what your people are telling you and then take action on them. Its critical to set bold, but achievable targets. Most importantly, make sure your stakeholders are held accountable for achieving them. Be very clear with your workforce of what opportunities for improvement were uncovered and how you will be addressing them.
Management and Operations:
Too often employee feedback data remain siloed within HR or organizational leadership. Without a detailed plan of action, even the most insightful employee feedback data can result in no major change. The best way to combat this common hurdle is to design a change management plan that allows for frontline managers and those tasked with the leadership of day-to-day operations to receive feedback that is specific to them. This should provide a detailed breakdown of their teams specific strengths, weaknesses, and how they measure up to organizational averages when it comes to DEIA measurements. Growing and sustaining DEIA amongst management and operations is best achieved by empowering them directly with the tools they need to help lead the charge. Modern employee experience programs can achieve this, automating the delivery of detailed results and recommended actions.

## Comments: Advance DEIA Through Research

Workforce Research \& Health Research:
Qualtrics Research Services is an internally driven market research firm with over 200 passionate personnel, devoted to running world-class research projects for corporations, academia, and other institutions. We manage all aspects of research for you, from designing your study to finding respondents, fielding, and reporting on the results were with you every step of the way. We have a strong strategic network of both domestic and international samples that use our world-class

Experience Management software to give our clients the best access and capabilities when it comes to reaching even the most niche respondents in $1 / 3$ of the time it could take elsewhere.
Qualtrics Research Services has executed over 55,000 research projects, including over 100 global brand trackers. In addition, Qualtrics Research Services maintains quick access to over 100 million panelists. Dedicated PMs: Build and deploy research faster
Live reports and dashboards: Get results in real-time
Process \& data transparency: Make adjustments on the fly
CAPHS approved since 2020
Access experts and a flexible
engagement model to scale your
team and expertise
Access to 75+ experts, XM scientists and research managers to help you with design, analytics, reporting and respondent sourcing
Research Services can help support with as much or as little support as needed, including:
Design and Build
Data Collection
Data Processing
Advanced Analytics
Custom Reporting

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Significant relevance to COVID and workforce mental health. Implement organization wide socioemotional learning (SEL) training (inclusive of leadership) offered at greater than annual frequency. Transdisciplinary/holistic approach to normalize workplace mental wellness. Research science is a stressful occupation and reportedly has a high incidence of depression. Utilize programs that reduce grief (using the CDC 2020 definition) and grief recovery (Nolan, 2018) to improve workplace mental health (Goetzel, et. al., 2018). Add Cultural intelligence (CQ) training (Livermore, 2015) to enhance DEIA to equip existing organization talent with knowledge needed for an increasingly diverse society.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Underrepresented populations (Strategic Plan Draft, page 10) talent pool development begins prior to entry into the workforce. Collaborate with the P-12 education community to establish short-, medium-, and long-term goals to grow and sustain scientific workforce diversity. Focused support in the area of socio-emotional skills development. For individuals to succeed in the workplace, Spring (2015) indicated that soft skills along with technical or professional knowledge and cognitive skills are necessary in a globalized market. Mental health remains a neglected part of global efforts to improve health (WHO, 2019). In 2019, William Frey, a Brookings Metro Senior Fellow, indicated according to 2018 U.S. Census Bureau data, the majority of school students under the age of 15 years was an ethnic minority. Mentoring, collaboration, and culturally intelligent educators may over the long term facilitate developing diverse students towards scientific research careers.

## Comments: Advance DEIA Through Research

SEL training that is financially sustainable. Address DEIA from a quadruple bottom line perspective which would include culture in addition to social, economic and environment. Culture determines how diverse individuals engage in global society (Hofestede, 2011), including the workplace. Evaluating certain
underrepresented population preferences in particular scientific specialties. Costs of talent churn due to burnout.

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce Inequities in academic research are manifested in many different ways. This is why, in March 2020, we created an Inclusion \& Diversity Advisory Board, which brings together the expert and thoughtful contributions of leaders from across the international research and health community. The Board aims to impact diversity and inclusion in research across gender, race and ethnicity, and geographical dimensions and ensure that research is conducted and reported in the most equitable and inclusive manner possible.
We encourage NIHs Advisory Committee to the NIH Director Working Group on Diversity together with the Chief Officer for Scientific Workforce Diversity to develop standards, best practices, and evidencebased initiatives to improve inclusion and diversity in the workforce and in career progression. We encourage NIH to build on its accessibility policies, ensuring adherence to the latest standards and enabling these policies to be embedded across the agency. In particular, NIH can equip employees with accessibility awareness training and offer a structured training program to all employees; convene steering groups to advance accessibility policies; and reward and recognize colleagues who uphold these policies. Additionally, we urge NIH to increase funding and better advertise NIH programs such as the NIH Directors Early Independence Awards that effectively shorten the time to scholarly independence. NIH sought comments on the draft Chief Officer for Scientific Workforce Diversity Strategic Plan for FYs 2022-2026, so ensuring alignment across NIH plans as they are finalized is important. We encourage NIH to set metrics and goals for DEIA in the workforce in order to measure progress year over year, increase accountability, and identify any barriers that need to be overcome.
At Elsevier, we are examining the make-up of our own Editorial Boards and actively working to create better gender balance and diversity across our journals. In August 2019, the Lancet Group made a public pledge to increase the representation of women on their external advisory Boards. This has led to the increase of women in International Advisory Boards of The Lancet Groups 23 journals from 30\% in early 2019 to 53\% at the end of 2021. In February 2020, Cell Press research and reviews journals committed to a gender equity goal of $50 \%$ representation of women on their external Advisory Boards and pledged that all journals will reach a level of at least 30\% women on their Editorial Boards by the end of 2020. By the end of 2021, the aggregate across journals was 39\% women.
In 2021, Elsevier spearheaded, alongside the Royal Society of Chemistry and including dozens of publishers, a joint commitment for action on inclusion and diversity in publishing. As described recently in Nature, we are working together to develop a universal global gender identity and race and ethnicity schema for authors, reviewers, and editors to self-report this data to journals when authoring, reviewing, or editing manuscripts, with the goal of full adoption across participating publishers in 2024. In establishing this schema and collecting this data, we will be able to measure our progress and provide greater transparency and accountability.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

As one of the worlds largest funders of health research, NIH through its policies and practices, influences the participation and career advancement of researchers; the makeup of study populations; and the types of research studies conducted and their focus areas, which in turn can determine the populations helped most by the scientific discoveries and therapeutics made possible by NIH funding.
We encourage NIH to continue to advance DEIA and consider enhancements to the following efforts as part of the Strategic Plan for DEIA:

Aim to achieve gender balance in funding investigators across age groups and career stage. Set goals and measure progress towards more balanced funding of investigators by race, ethnicity, disability, age, and career stage.

Compose NIH scientific review panels that reflect diversity in career stage, geographic region, and demographic characteristics as articulated in the NIH-Wide Strategic Plan for Fiscal Years 20212025.

Publish an annual report to highlight areas of progress and summarize the actions taken to improve inclusion and diversity in the intramural and extramural research NIH supports as well as the workforce supported by NIH funding.

Report in a centralized location on the NIH website (such as the NIH Data Book) more detailed information on the NIH funded research workforce, including comprehensive data by gender, race, ethnicity, and disability.

Ensure inclusive language is used in funding opportunities, notices, and on NIH webpages.
Partner with research leaders, publishers, funders, and higher education institutions to drive gender, racial and ethnic equity across the STEM academic career path.

Harmonize DEIA efforts with those of other Federal research agencies.
Include gender, race, ethnicity, age, career stage, sexual orientation, disability, and geography when defining DEIA in the plan.

## Comments: Advance DEIA Through Research

At Elsevier, we want to be recognized as not only a catalyst for change, but also an active agent of change, working closely with our partners and other stakeholders to create a more inclusive research and health ecosystem. An example of this collaboration is that we embedded the SAGER Guidelines, developed by the European Association of Science Editors (EASE), in our editorial guidelines, providing a comprehensive procedure for reporting of sex and gender information in study design, data analysis, results and interpretations. We are committed to helping to define indicators of greater equity in research and health; striving for better inclusivity and balance in our research teams, departments, and editorial boards; and promoting greater creativity in research and a more rounded approach to formulating and addressing research challenges.
As NIH considers how to advance DEIA through research, we offer the following recommendations for your consideration:

Ensure inclusion in the scientific review of grant applications and consider our peer review practices as one approach to draw from to advance this recommendation. At Elsevier, inclusive peer review includes providing best practice guidance to editors to diversify the peer reviewer pool and invitations issued. Expertise and diversity in the peer review process ensures reducing bias, which in turn enhances research integrity and reproducibility.

When deciding what research to fund, consider the relevance of the health research in terms of the demographic groups that would be impacted and strive for greater balance.

Establish scalable and sustainable open science policies across the research workflow and support researchers in adhering to these policies. Open Science practices support objectives affiliated with DEIA, enhance research integrity and reproducibility, as well as widen access to research.

Collaborate with the research community, including publishers, to understand how best to integrate DEIA practices into research throughout the research process.

Mentor, educate and train early career researchers for success. At Elsevier we established the Researcher Academy which offers professional development for every step of the research cycle.

Incorporate inclusive language in funding opportunities and notices.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

NIH WORKFORCE
CommunicationFIRST is the nations only human and civil rights organization led by and for the estimated five million people in the United States who need methods other than natural speech to express ourselves. The tools and support we use are referred to as augmentative and alternative communication, or AAC. Even compared to the broader population of people with disabilities, the unemployment rate of people who use AAC is abysmal. This is due to persistent and unwarranted assumptions that we are unemployable and have no skills or desire to pursue careers. Nothing could be further than the truth. To challenge such ableism and its consequences, we encourage NIH to:
(1) Survey its workforce to determine what percentage of its employees currently use AAC, as well as to gather information on their characteristics, careers, and aspirations;
(2) Seek the advice and insights of these NIH employees and others using AAC pursuing careers in the sciences and other fields on the qualities of model employers;
(3) Study, elevate, and apply lessons that can be learned from the careers of Dr. Stephen Hawking and others who have relied on AAC in their work; and
(4) Work with the U.S. Departments of Education and Labor to support strategies to increase learning and career opportunities in the sciences for persons who require AAC and others with disabilities. WORKFORCE AT INSTITUTIONS SUPPORTED BY NIH FUNDING
Over the last decade, less than $2 \%$ of NIH-funded researchers reported having a disability. Statistics like this reflect deep-rooted biases and unwarranted assumptions. They also raise disturbing questions as to such grantees and contractors compliance with the Rehabilitation Acts nondiscrimination and affirmative action provisions for individuals with disabilities under Sections 504 and 503. The lack of disability diversity across this group of researchers who are looked to as on the cutting edge in their fields also poses barriers to creating the diversity of perspective and experience that NIH views as integral to its mission and to conducting world-class research. NIH must invest considerable leadership efforts and resources in remediating these flaws. It should require and provide technical assistance and support to its research networks to carry out actions that are similar to the ones outlined above. Under Section 503, NIH-supported initiatives also must take affirmative action to employ individuals with targeted disabilities, including those who rely on AAC for speech-related disabilities.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

More than other populations, people with disabilities can experience either significant benefits or devastating harms from bomedical research. This is especially true for people who must rely on augmentative and alternative communication (AAC) due to speech-related disabilities. Both due to the paucity of NIH researchers with disabilities, and the fact that we are rarely if ever, are invited to help set research priorities, review and rank research proposals, serve as active participants rather than research subjects, or otherwise be seen as having rich lived experience, underscores the tremendous work that must be done on these fronts.
To be effective in ameliorating these shortcomings that, if left untreated, will undercut its efforts to promote and strengthen a true enterprise-wide DEIA culture, NIH should partner with the disability community to identify the factors that contribute to this lack of representation and the actions that must be taken in order to reverse it.
The NIDCD in particular should strengthen the methods it utilizes to seek, value, and incorporate the insights as well as lived and professional expertise of people who require AAC at all stages of the research process. This includes their meaningful participation in setting research priorities, reviewing and rating proposals, co-designing and leading research projects, serving as active participants rather than just research subjects, as well as evaluating and critiquing research results.

To be successful at all this, NIDCD and NIH must become leading practitioners and proponents of participatory action research.

## Comments: Advance DEIA Through Research

 WORKFORCE RESEARCHThe comments and recommendations above should be designed, implemented, evaluated, and continuously refined. We recommend that NIH undertake a comprehensive review of the research it has engaged in and funded that is participatory action research-driven.
HEALTH RESEARCH
It is imperative that people who need AAC be meaningfully engaged in every facet of research related to AAC and the health and well-being of those who need it. We are painfully aware that most people with speech-related disabilities who need AAC continue to be denied meaningful access to the communication tools and supports they need to be understood. We believe it is critical that people who use AAC today be engaged in all research affecting individuals who lack it. NIH must assure this because failure to do so deprives those who most need it of the benefits of the perspectives of those who most understand what it is like not to be understood by others and the terrible consequences that result.
Additional research is critically needed in the following areas:
(1) Improving the collection, analysis, and reporting of demographic data on people who require AAC. Currently there is no comprehensive data on this population in the United States. Being understood is an essential indicator of an individuals health and well-being. NIH must take the lead in closing this gap.
(2) Identifying and ameliorating the factors that result in people from racial, linguistic, and other minority communities being both more likely to have developmental and acquired disabilities that may make their use of AAC necessary and to face greater bias in accessing it. Limited research has been done on the reasons this is true or how to remedy the problem. More research on reducing these disparities is vital.
(3) Ensuring just in time access to AAC. Researchers are successfully introducing AAC to infants as young as 6 months, but most people arent given access to robust AAC until they enter school or even later (if ever). Late and inadequate introduction of AAC causes a vicious cycle, where students are given insufficient tools and support to communicate, and then are blamed for not having the capacity to learn to communicate using language. Additional research is needed to take these methods to scale and make them universally and equitably available.
Finally, we call on NIH to stop funding research that relies on methods that baselessly conflate lack of speech with intellectual disability. We know that speech is a motor function and language is a cognitive function, and that they are processed and generated in different parts of the brain. But researchers continue to assume, without anatomical basis, that someone who cannot speak or move their body reliably also has a language or intellectual disability. All current standardized measures of intellectual ability assume the person can either speak or move their bodies in intentional ways. NIH cannot continue to subsidize research that uses biased methods with lifelong discriminatory impacts. Doing so is almost certainly a violation of the Hippocratic Oath to do no harm.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce ( Submitter left answer blank )

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Getting employees more involved in the decisions that will affect them directly will increase confidence in the system and help management to operate efficiently, while allowing individuals, particularly highcontributors, to take charge of their own development.
Supervisors should have training to understand DEIA and take the matter seriously and incorporate it into their management system and outlook.

## Comments: Advance DEIA Through Research

Dedicate funding to communal based science and research, encourage scientists from minority backgrounds to do outreach and education within their respective communities. The goal is to help increase engagement, awareness, and access to the greater scientific community. In many ways these types of ties would be beneficial for numerous informational and practical purposes-including in times of disease outbreak or emergency-establishing trust via research opportunity can be an important link to consider.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

One of the benefits of the framework in this area is the opportunity to assess the diversity in the workplace at institutions supported by NIH funding. This is apparent in the first goal of the NIH DEIA Workforce Diversity Strategic Plan (Goal 1: BUILD the evidence), and in the UNITE initiative (EExtramural research ecosystem: changing policy, culture and structure to promote workforce diversity). While evaluation is a cross-cutting strategy in the Workforce Diversity Strategic Plan, there should be more emphasis on baseline assessment of diversity at academic institutions, including clarification of common terms, and translation of formative approaches for capturing these data across institutions. Given the complexities of DEIA, and the varying cross-institutional structures and demographics, establishing standard approaches for defining what will be captured and how at the institutional level is just as critical as the DEI data collected and translated. This can be accomplished by developing and accessing learning communities across academic institutions. While such an effort takes time, building collective capacity to generate the evidence in the extramural research ecosystem should be articulated in the plan for evaluation.
Best practices that are likely to foster positive culture change should be rooted in principles of community engagement (2011, NIH) and principles of trustworthiness (AAMC, 2022). Value in building the evidence must be established among all stakeholder sectors (Goal 2) to identify facilitators and barriers to implementing better organizational practices that foster a DEIA workforce. Often stakeholders are unaware of the reason for collecting data, and how it will be used. Also, Trochims (2011) process marker model for evaluating translational research provides a solid approach to laying out processes where one can identify gaps in processes that can be addressed.
Barriers that stand in the way to implement organizational practices and prioritize DEIA in the workforce at institutions supported by NIH funding are lack of understanding and support at multiple leadership levels. Part of this is establishing value for building the evidence (described above) and establishing and implementing communication plans to ensure collective understanding and buy-in across the leadership levels at any given institution.
For this effort, DEIA should focus on diversity as the necessary first step, and there should also be a field test the process of developing a common assessment process for mobilizing a learning community approach to this development. This process could then be refined as needed based on the $D$ experience and then rolled out to $E, I$, and $A$.
Metrics to measure progress should first be formative in nature. Understanding how value in building the evidence, how data will be collected and from whom, and how the information will be translated to
action to improve the DEIA workforce should all have measures of progress, in addition to the actual progress in expanding the DEIA workforce. Such efforts are necessary for building promising and best practices that can be ultimately shared (Goal 3) to help shift the workforce.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

The benefit of this area of the framework is that extensive content is dedicated to the space of growing and sustaining DEIA through structural and cultural change, from Goals 2 and 3 (disseminate and act on the evidence) and the three cross-cutting strategies (collaborations, accountability, and evaluation) to the five elements of the UNITE initiative. Since relationship building is the foundation for creating DEIA structural and cultural change, there should be a very clear statement about trust and trustworthiness embedded in the goals and strategies. There is a body of literature to support this.
Germane to addressing this objective is understanding the inherent burden faced by researchers at academic institutions called to advance this work. Often called the minority tax, these individuals are often on the front line to advance the institutional position in DEIA, with little to no compensation for the time and resources expended. There is also inadequate credit for this work in tenure and promotion reviews. The NIH DEIA Workforce Diversity Strategic Plan as well as the UNITE initiative need to openly call out this issue and emphasize, and even require, a plan that addresses this burden. This is not resolved by only increasing the numbers, but by supporting the current faculty and staff in their efforts. As in the feedback provided for Objective 1, community engagement and principles of trustworthiness must be considered. In terms of community engaged research, such recognition of this critical work, which often involves build relations and capacities through trustworthy channels, should be valued on par with traditional STEM research if we intend to see marked changes in this specific workforce. It is also important that initiatives in this area across the academic institutions and NIH itself avoid siloed approaches. For instance, the DEI Task Force of the Clinical Translational Science Awards (CTSAs) is developing DEI recommendations across the CTSA Consortium. This and other efforts should be identified to ensure awareness of other extramural initiatives and broaden our learning community.. Barriers include robust funding opportunities that support building capacity in the areas of stewardship, partnerships and engagements, accountability and confidence, and management and operations. While funds for engaged research exists, it is for the purposes of conducting research, not in building institutional infrastructure. There should be support that values this body of work as much as biomedical and clinical work.
As described in the feedback for Objective 1, DEIA for this purpose should focus on diversity as the necessary first step. The CTSA DEI Task Force is taking this approach to establish a baseline assessment of diversity across the Consortium.
Metrics that assess progress include measures of trust, length and depth of partnerships, perceived confidence in relationships built to promote DEIA, increased percentage of DEIA projects, DEIA-led projects, etc. It should be noted that incentive-driven approaches to successfully meeting DEIA-related goals is a constructive step to increasing the value of these constructs and in fostering structural change.

## Comments: Advance DEIA Through Research

One of the benefits of this area of the framework is that there is an existing body of health research that can serve as a springboard for modifying the approach to DEIA research efforts. Also, the NIH DEIA Workforce Diversity Strategic Plan emphasizes workforce research throughout all three goals, which will be critical for continuous quality improvement in DEIA at academic institutions funded by NIH.
As stated in the feedback on Objectives 1 and 2, there should be a clear emphasis on trust and trustworthiness as pillars in building relationships and changing institutional infrastructures to foster a DEIA culture.

In addition to metrics on progress in research and research methodologies, there should be metrics that examine institutional and administrative progress in support of the research infrastructure. Metrics that assess DEIA must account for the environment by which research is resourced and implemented.
Furthermore, there should be a call for frameworks, models, programs, initiatives, and research studies that represent promising practices, to showcase examples of success that can be replicated nationally.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Every institute, office, and program within NIH must prioritize DEIA in order to see equitable representation of people and perspectives within the agency and in the extramural activities that it funds and supports.
To center and prioritize DEIA in the workforce takes time and money. Many researchers at institutions supported by NIH funding care deeply about DEIA, but are already strained to the limit with research, teaching, and administrative responsibilities. In our experience, many are open to learning how they can increase DEIA of STEM, but have limited bandwidth to center and prioritize DEIA. Therefore, if NIH truly cares about DEIA, it must fund and reinforce organizational practices and changes at supported institutions accordingly. It must pay for the time and expertise that is necessary to make real changes within the institutions it funds.
For DEIA to be centered and prioritized throughout the medical research enterprise, NIH needs to model the value they place on DEIA. While DEIA should be a priority to every member of the NIH workforce, specific expertise will be necessary for leadership, design, implementation, and sustainability of organizational practices that center and prioritize DEIA. NIH will need to commit to the long-term support of the staff and programs required to meet this objective. Practices need to be implemented, run, and supported by staff specifically trained to do so who can draw other members of the workforce into the process to provide input and, with support, implement programs. NIH recruitment and training mechanisms might be reimagined to develop new mechanisms for finding, recruiting, and/or training valuable new members of the NIH workforce, and those of its supported institutions (see Beyond 2020: A Vision and Pathway for NIH; https://www.coalitionforlifesciences.org/beyond-2020-a-vision-and-pathway-for-nih/).

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

Structural and cultural change are difficult and take time to achieve, but are possible when actions and funding support stated values.
Stewardship: Diversity amongst an organization's leadership demonstrates to its current and future potential workforce that it values the professional development and promotion of diverse individuals. It sets the tone for the organization and demonstrates that different lived experiences are important for maximal team efficiency and productivity, can lead to the pursuit of new research priorities or approaches that benefit more people, can signal to the future workforce that people like them are welcome within an organization, and can foster the professional development of tomorrows leaders. Diversity at all levels makes it easier to identify, name, and change exclusionary practices. Partnerships and Engagements: To increase diversity in research, programs that support underrepresented populations at the most vulnerable career points are necessary. Every educational and career transition is uniquely challenging, and an individuals success can be largely influenced by their personal and professional networks, their geographical location, and/or the reputation of the institutions where they were trained. Individuals with the same strengths and skill sets might have vastly different opportunities. For example, undergraduates at institutions with a greater emphasis on teaching than on research, such as at many HBCUs which also have historically been underfunded might
have fewer research experiences than other candidates to top graduate/medical schools. But that fails to account for a persons potential, passion, and dedication to biomedical pursuits.
The current generation of trainees is passionate about DEIA, bursting with ideas for improvement. But, they do not always have the structural support or funding to develop and implement their ideas. The development of a funding and mentoring structure to empower todays students and postdocs to bring about some of the culture and climate changes so clearly needed should be seriously considered. Accountability and Confidence: It is virtually impossible to eliminate all biased and prejudicial attitudes from every individual within the research ecosystem. However, NIH can empower the research community to hold individuals socially (and professionally, as appropriate) accountable for their words and actions. For example, NIH can emphasize bystander training for researchers witnessing microaggressions and workshops for faculty on fostering an inclusive climate within their departments. Individuals from all backgrounds need to feel confident advocating for an equitable workplace, and inappropriate behavior cannot be swept under the rug.
Management and Operations: Changes are needed to address structural biases and support scientists from underrepresented backgrounds as they navigate educational/career transition points, e.g., the development of bold new approaches for making graduate/medical school admissions agnostic to an applicant's undergraduate opportunities and more focused on potential future success; new mechanisms for funding trainees independent of their institutions. Black and brown scientists must be adequately funded. NIH should take steps to recognize the harm of past and current biases in funding decisions (https://doi.org/10.1016/j.cell.2021.01.011): the research questions never answered, the trainees who werent supported, must be acknowledged as we move to a more diverse, equitable, inclusive, and accessible research future.

## Comments: Advance DEIA Through Research

Previous approaches to creating the structural and cultural changes necessary to grow and sustain DEIA in biomedical research have been insufficient. Further research to evaluate the success of programs is important to spread, replicate, and sustain programs with the greatest impact. Workforce research should strive to elucidate the stages at which participants in NIH-relevant research leave the field and understand the reasons for those choices (lack of mentorship, inadequate financial support, experiences of exclusion, family obligations, etc). By listening to affected individuals, NIH can support and implement solutions that address the barriers underrepresented individuals face. Similarly, NIH can look to disciplines or sub-disciplines that have greater diversity than others to identify successful approaches and methodology for further scaling.
NIH also needs to emphasize the importance of DEIA in health research. Clinical trials need to be more inclusive of both those conducting the trials and those participating. Efforts need to be made to better engage diverse participants through improved, evidenced-based recruitment and retention practices. Likewise, laboratory-based health research needs to better consider and incorporate the influence and impacts of DEIA in study design and execution.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

 (Submitter left answer blank )
## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

Here are my recommendations for NIH to include in the DEIA plan. 1. Evaluating NIH recommended measures for inclusivity/validation in diverse samples - NIH often recommends certain measures to be included in research studies because they are 'well-validated' and/or common data elements that can be used for harmonization. However, many of these measures have either not been validated in diverse samples (particularly older measures) or have not been examined more recently for inclusive language. Large studies may have the resources to do this on their own but smaller studies likely do not. In addition, if some studies modify these measures for inclusivity, they can no longer be used for harmonization efforts. NIH has the responsibility to ensure that any measures it recommends to researchers use inclusive language and are well-validated in diverse populations.
2. Responsible use of data for studying health disparities - NIH has been promoting data sharing for many years and the open science movement is now taking off. There has also been a renewed interest in health disparities research but not everyone interested in using available datasets for health disparities research understand how to do so responsibly. For example, analyses by race/ethnicity that do not take into account contextual factors that may influence differences may lead one to attribute differences to race rather than to structural or interpersonal racism (see Responsible Data Use section in Hoffman et al., 2022). The All of Us research program has put extensive resources into education, monitoring, and enforcement of responsible data use but very few research programs have this type of resource. NIH should adopt this model and make it available as a resource for other research programs to ensure that NIH supported open science is not intentionally or inadvertently used to harm communities of color.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

APA wholeheartedly agrees it is critical to building a workplace environment that promotes DEIA. The association also agrees that an intentional systemic approach to organizational and workplace DEIA is required. Accordingly, a DEIA approach should also engage all areas of the organization, thus incorporating a DEIA lens into all aspects of the workplace/organization. 345678
Through its work on its equity, diversity, and inclusion (EDI) framework, APA recognizes that advancing DEIA has tended to fall into the following broad categories: leadership and infrastructure; access, equity, and success; organizational climate; and core work of the institution. 910111213
The NIH and NIH-supported institutions must acknowledge and examine the culture of their respective organizations and workplaces. APA also agrees that structural and cultural shifts, particularly those in the workplace, will be crucial to creating meaningful change that will be sustainable across the research workforce, workplace, and organizations. Further, NIH's success in improving DEIA will require expanding its outreach beyond the traditional NIH stakeholders.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

APA commends the inclusion of proposed objective two and its attention to stewardship, NIH partnerships, accountability, management, and operations. A sustained and adaptive leadership committed to a diverse, equitable, and inclusive NIH requires the appropriate education, data, and accountability.
APA encourages NIH to prioritize partnerships with professional societies such as APA, which are uniquely positioned to assist NIH in achieving the goal of enhancing diversity in the biomedical and behavioral research workforce. In addition, research societies can play a significant role in eliminating potential barriers to individuals from national underrepresented backgrounds.
An example of a partnership is the National Institute for Digestive Diseases and Kidney Disease's Partnerships with Professional Societies to Enhance Scientific Workforce Diversity and Promote

Scientific Leadership Program, which focuses on professional societies' role in enhancing the scientific workforce. APA is a recipient of the program, which provides grants to professional associations focused on NIDDK mission areas to establish or expand training and career development programs for investigators from underrepresented backgrounds.

## Comments: Advance DEIA Through Research

Historically, recognizing the problem is not equated with progress toward DEIA goals. The outstanding questions and gaps in our knowledge regarding DEIA endure. The need for common data elements to identify problems and evaluate the progress made across the scientific enterprise remains. 14 Without these essential elements, there is a lack of reliable, standardized data to inform any progress made. APA applauds NIH's approach to addressing the lack of inclusion in the scientific workforce as a scientific problem to be solved as it continues to work to advance DEIA. It is vital that the strategic plan emphasizes that the agency and the NIH-supported research institutions promote an evidence-based approach through continuous evaluation and growth, development, and improvement orientation. 151617181920
The need for research is especially significant as there continues to be a lack of fundamental scientific tools, relevant metrics, and standardized data across a broad spectrum of educational institutions related to DEIA. These included the elements needed to evaluate the efficacy of diversity programs, comprising individual and group efforts and numerous programs aimed at effectively mentoring and retaining individuals throughout their careers. 21 Additionally, consistent approaches are necessary for tracking participation rates in the sciences of underrepresented minorities at different career stages. APA appreciates the creation of the recent draft NIH Chief Officer for Scientific Workforce Diversity (COSWD) Strategic Plan for fiscal years 2022-2026. It recognizes that many of the complex areas associated with DEIA will require additional research and evaluation to determine the effectiveness of programs. The association supports the strategic plan's aim to incorporate newly acquired evidencebased approaches to catalyze cultures of inclusive excellence. Similarly, APA endorses COSWD's approach to championing DEIA throughout the NIH-supported research enterprise to ensure NIH's commitment to DEIA is grounded in practical research. Finally, the association appreciates the attention to and research surrounding unintended consequences that can impact the implemented programs' effectiveness.
APA believes a systematic, logical, theoretical approach must underlie NIH's efforts to enhance DEIA. NIH must consider the implementation of a range of different data collection methods. A systematic approach to identifying areas where additional research is also required. Similarly, a more comprehensive, cohesive effort to track the actions of government, universities, scholarly associations, and private foundations remains. In addition to quantitative metrics, APA further believes it is essential that this research prioritizes qualitative research and shares its outcomes.
APA believes it is incumbent the NIH's process for analyzing the state of DEIA efforts are transparent and systematic and goes beyond individuals in the workforce and extends to evaluating the associated organizations and workplaces. These indicators of success should be reported at the institutional and individual levels. Additionally, NIH and NIH-supported institutions should report data already collected. The publication of this data can provide the basis for ongoing critical, evidence-based conversations that can promote continuous change and be helpful to those seeking to promote DEIA.

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce
Bolster the Employee Assistance Program (EAP)

The EAP is a great resource for staff, offering support, knowledge sharing, and other benefits to assist staff with managing their work and personal lives. We see areas in which the EAP can be improved, however, to better support DEIA.
While EAP counselors are well-trained and competent professionals, EAP should take steps to evaluate the diversity of its staff providing these important services. If diversity is lacking, as it is in other parts of the organization, measures should be taken to increase the diversity of EAP's counseling staff - and these measures and benchmarks should be made transparent to the NIH community. Ensuring diversity across EAP staff may improve employee's confidence in sharing their experiences and receiving support, as well as open dialog if counselors share a similar experience.
NIH should also consider developing a mechanism to ensure services offered by EAP are in line with staff needs. Such a mechanism could take the form of conducting a survey to understand staff needs for assistance and expanding services offered by EAP accordingly. Such a survey could also help understand the degree to which staff are aware of existing services provided by EAP. Alternatively, NIH could stand up a board of NIH staff members (ensuring diverse representation across demographic groups, positions held, and ICs) who can advise on issues related to the EAP, similar to the model used by the NIH Child Care Board.
Efforts to Streamline Demographic and Viewpoint Data Collection for Contractor Staff As the NLM Racial and Ethnic Equity Plan Design Committees were preparing NLM's Plan, we encountered a gap in contractor demographic and viewpoint data. The Committees recognize there are several constraints around collecting such data; however, given contractors' large presence within the workforce, we consider it important to have a mechanism to collect information on their demographic makeup and their experiences within the workforce. We therefore recommend the relevant entities at NIH coordinate with contracting companies to enable ICs - and NIH more broadly - better understand the experiences and needs of this essential part of our workforce. Develop a consistent NIH-wide framework for increasing transparency around recruitment efforts NIH should consider developing a framework for enhancing DEIA in recruitment efforts and strategies for all job postings across NIH. Such a framework can include: 1) standard channels for advertising job postings, ensuring these channels reach a diverse candidate pool; 2) evaluation of job postings to ensure inclusive and culturally competent language; 3) providing services and support for prospective applicants who need help navigating the application process; 4) widening the timeframe for applications; 5) raising awareness among hiring managers of NIH resources, such as consulting services provided by the Corporate Recruitment Unit. NIH should also consider developing a mechanism to collect applicant demographic data to understand the demographics of candidates who make cert and those who are ultimately hired. Collecting such data can further inform the framework described above. Each year, the Office of Human Resources or an equivalent body should create and disseminate an internal annual report evaluating elements of the framework and communicating improvements where necessary, with the ultimate goal of improving sourcing of diverse and qualified candidates. We acknowledge and encourage collaboration and support of the work of the NIH Anti-Racism Steering Committee and its subcommittees, particularly the Recruitment Recommendations Extramural (scientific) Subcommittee, Recruitment Recommendations Intramural (scientific) Subcommittee, Recruitment Recommendations Non-Scientific Subcommittee, and Recruitment and Retention/Recognition Subcommittee Healthcare.
Systematically conduct voluntary exit interviews to better understand staff experiences while at NIH All departing staff should be given the opportunity if they so choose to have a confidential exit interview with an outside entity to provide feedback on their experiences at NIH. Providing such a forum, facilitated through a neutral, third-party entity, may help uncover any disparities and inequities experienced or observed within the NIH culture.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

(Submitter left answer blank )

## Comments: Advance DEIA Through Research

Understanding the impact of socioeconomic and wealth disparities on the NIH workforce We recommend NIH investigate how socioeconomic and wealth disparities may impact the NIH's ability to recruit and retain a diverse workforce. Areas to investigate include the impact of: debt; student loan debt; the length of the job application process, including the length of the security clearance process, which could be a deterrent to choosing NIH as an employer; affordance of workplace flexibilities, given rental and housing prices in the DMV, as well as any obligations outside of NIH; time burden of need to take public transportation from areas of affordable housing. Investigation in these areas could inform policies, procedures, and practices to increase NIH's attractiveness as a potential employer and increase retention by supporting staff. Some ICs currently have strategies to address disparities, but there does not seem to be a consistent approach across the NIH; for under-resourced ICOs, NIH should consider a mechanism for providing the additional support necessary.
Understanding the impact of health disparities on the NIH workforce
According to the CDC: "The data show that racial and ethnic minority groups, throughout the United States, experience higher rates of illness and death across a wide range of health conditions, including diabetes, hypertension, obesity, asthma, and heart disease, when compared to their white counterparts." We recommend NIH investigate the impact of health disparities on the workforce, particularly how health disparities may affect staff's ability to fully participate. Investigation in these areas could inform development of new policies, procedures, and practices, as noted above.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

ASBMB recommendation: Use culture and climate surveys
The ASBMB recommends that NIH evaluate both its organizational culture and climate. This requires designing, deploying and analyzing surveys that provide information and feedback on how things are done and how people feel.
Learning how historically underserved investigators and trainees, in particular, characterize the organizational culture and feel about it is an important first step toward designing and using evidence-based tools, including but not limited to training, to end structural racism, ableism, sexism and other forms of discrimination in NIH programs. Given that the agency has eight diversity offices, we recommend that the NIH house all data produced by culture and climate surveys and by all of its other DEAI initiatives in a public, centralized database. Publishing all information in one location (such as COSWD) will make it easier for the STEM community and the public to keep track of and evaluate the outcomes of the agency's DEAI-related activities. The NIH must be transparent if it is to be perceived as a leader in DEIA in STEM.
Once the NIH has used itself as a testbed for culture and climate surveys, it can then roll out similar assessments to institutions receiving NIH funding.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

ASBMB recommendation: Create working group
focused on minority-serving institutions
The ASBMB recommends tasking a new or existing working group with engaging minorityserving institutions (MSIs) - with the ultimate goal of ensuring that they have the funds,
infrastructure and tools necessary to recruit and retain people from groups that have been marginalized in STEM. MSIs are leaders in training and producing diverse investigators, and they are an underutilized asset for strengthening the STEM enterprise.
The NIH has established advisory committees to the director and other working groups in the past to solicit external feedback and make recommendations so that the agency can develop policies and plans to address a multitude of issues, such as sexual harassment in STEM, diversity in STEM, and workforce development.
The working group focused on MSIs should solicit feedback from these valuable institutions and subsequently develop recommendations for what the NIH should do differently to fully prepare, retain and empower the next generation of diverse scientists.
Additional recommendation
The NIH must ensure victims of harassment
have opportunities to continue their scientific careers
The ASBMB recommends that the NIH modify its grant applications, fellowship applications and any other relevant programs to allow individuals to explain any discrepancies in their careers due to harassment. The NIH has made significant strides in addressing and mitigating harassment in STEM throughout its extramural research programs and by ensuring that the NIH has clear reporting paths. The ASBMB applauds the NIH for being a leader in this area. To continue this effort, the NIH should ensure that scientists whose careers have been affected by harassment have opportunities to continue their scientific research.

## Comments: Advance DEIA Through Research

ASBMB recommendation: Expand collection of data
about investigators and institutions and available data tools
The ASBMB recommends that the NIH expand its data collection to take into consideration intersectional identities and institutional classifications and produce useful data tools.
While the NIH Data Book publishes demographic data, it isn't always consistent in how it describes certain categories and should, in fact, contain additional categories. For example, it should not conflate sex and gender. The ASBMB recommends including gender identity and sexual orientation and using standardized language when collecting these data so that the agency will be better positioned to respond to issues facing LGBTQIA+ individuals.
The society also recommends collecting and publishing more institutional data, such as classification (using the Carnegie Classification of Institutions of Higher Education), so that the STEM community and public will be able to easily find out how much NIH funding each institution classification receives. Currently NIH does not have data visible comparing the funding to institutions outside of NIH reporter. Posting data on which institutions are receiving the most funding compared to others will allow NIH to decipher which institutions needs to be prioritized in diversity programs.
Finally, NIH should collaborate with other federal funding agencies, such as the National Science Foundation (NSF), to make data-exportation more accessible. The NSF's National Center for Science and Engineering Statistics, for example, has tools that could be implemented at the NIH. NSF's chart- and table-building tools allow investigators and policy experts to export data for use in studies and reports.

Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce
E. Supporting Researchers from Underrepresented Backgrounds

The Academy applauds goals for increased support for researchers from backgrounds underrepresented in science. We specifically call out that junior faculty and researchers need support and mentorship, including more opportunities for small grants to participate on study sections and network, particularly in an environment with limited budget and restrictions to human research.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

B. Generate Clinical Evidence to Improve Generalizability of Clinical Trials

At the outset, we note that despite nutrition's preeminence in preventing our most prevalent chronic diseases, nutrition research is woefully, chronically underfunded among federal agencies, including the NIH, which invested only $5 \%$ of its 2018 total budget on nutrition research. 8 More specifically, there is a great need to support and prioritize research that includes persons from traditionally underrepresented groups, especially in clinical trials related to illnesses or diseases that have high prevalence or mortality rates among underrepresented groups. Generalizability or effectiveness of interventions may vary across groups, especially if the characteristics of treatment-seeking individuals vary. This is particularly salient to weight and blood lipid management, where prevalence may be high in some racial and ethnic minority populations but characteristics such as initial weight, response to medications, etc. may differ. 9 10 Moreover, priority for clinical trials or other research that include significant numbers of persons from underrepresented groups need to include a patient-centered focus.

## F. Opportunities for Collaboration

Racial/ethnic groups, as typically categorized in the United States, are not monolithic and represent a diversity of cultures, nationalities, and languages and research must take this heterogeneity into account. The Academy encourages the NIH to include these intersectional considerations when addressing DEIA in its internal and extramural workforce, its structure and culture, and the research it supports. Targeted research focusing on specific racial and ethnic groups is essential for researchers and practitioners to have a better understanding of minority populations and to address the specific diseases that are predominate among these individual groups. Collaborations that could help address these disparities include strategic partnerships with organizations that have an interest in minority health outcomes such as:

- The Academy of Nutrition and Dietetics: The Academy is home to several member interest groups (MIG) that represent nutrition professionals from a variety of racial and ethnic minority background. The National Organization of Blacks in Dietetics and Nutrition (NOBIDAN) is the largest member interest of group of the Academy, with over 600 nutrition and dietetics practitioners who are African American or of African-decent. 34 The Latinos and Hispanics in Dietetics and Nutrition (LAHIDAN) MIG is the oldest member interest group of the Academy, devoted to the improvement of food, nutrition and health care for Latinos and Hispanics in the United States and its territories. 35 The Asian Americans and Pacific Islanders (AAPI) member interest group promotes culturally-relevant evidence-based nutrition and dietetics practice for people of Asian or Pacific Islander origin. 36 The Indians in Nutrition and Dietetics (IND) MIG brings together practitioners of [South Asian] Indian origin and those interested in learning more about this culture.
- National Minority Quality Forum: NMQF is a research and educational organization that aims to ensure that high-risk racial and ethnic populations and communities receive optimal health care. The organization integrates data and expertise in support of initiatives to eliminate health disparities. - National Medical Association: NMA is the oldest national organization representing African American physicians and their patients in the U.S.; this professional and scientific organization represents the interests of more than 30,000 African American physicians and the patients they serve.


## Comments: Advance DEIA Through Research

C. Diversity, Research Needs, and the Dietary Guidelines for Americans

The importance of this need for greater generalizability was made clear during the development of the 2020-2025 Dietary Guidelines for Americans in the midst of a once-in-a-century global pandemic. The pandemic disproportionately impacted certain minority and at-risk communities - specifically African American, Latino, and low socioeconomic status ("low SES") communities -in addition to the majority of Americans either with or at-risk of developing nutrition-related chronic conditions, such as overweight and obesity, 14 diabetes and prediabetes, 15 high blood pressure and other risk factors of cardiovascular disease,16 and compromised immunity. 17 The disparate impact underscores the need for research and guidelines applicable to all Americans; unfortunately, we note the Scientific Advisory Committee's repeated admonition that studies "may not be completely generalizable to the U.S. population as the result of differing participant characteristics," 18 because of studies not adjusted for "key confounders, such as race/ethnicity."19
The Dietary Guidelines Scientific Advisory Committee also recognized the extent to which the nutrition research it reviewed failed to reflect the diversity of the American population comprising the 'general public' and the concomitant need for well-implemented recommendations that address both health disparities and cultural variations in dietary pattern consumption. Their Scientific Report details that the evidence base for many analyses came from studies predominantly on white, upper middle class individuals that often failed to be adjusted for important "potential confounders, such as race/ethnicity [and] socioeconomic status." 20 Other Scientific Report conclusions include:

- For example, with regard to dietary patterns before and during pregnancy and GDM, the Scientific Report recognized, "Generalizability of the studies is limited to healthy White women who have access to health care. Women of other races and ethnicities and those of lower socioeconomic status are underrepresented in this body of evidence. A major reason for grading this evidence as "limited" was the lack of adequately powered randomized controlled trials, few cohorts contributing to the observational studies, issues with risk of bias including self-reported exposure and outcome, and limited generalizability."21
- With regard to gestational weight gain and dietary patterns consumed during pregnancy, the Committee found "[p]eople with lower socioeconomic status (SES), adolescents, and racially and ethnically diverse populations were underrepresented in the body of evidence." 22
- Similarly with regard to dietary patterns consumed during pregnancy and hypertension, the report concluded "[I]imited evidence in healthy Caucasian women with access to health care suggests dietary patterns before and during pregnancy higher in vegetables, fruits, whole grains, nuts, legumes, fish, and vegetable oils and lower in meat and refined grains are associated with a reduced risk of hypertensive disorders of pregnancy, including preeclampsia and gestational hypertension." 23
- Regarding supplementation during infancy and childhood, "[i]nformation on race and/or ethnicity of the participants was not provided in most of the studies. The countries of study origin were Canada, the United States, and Finland, but without knowing more about the characteristics of the participants, it is difficult to judge the potential risk factors for vitamin D deficiency that may have been present." 24 Specifically, for vitamin D, the Committee emphasized "[f]uture studies should be appropriately powered, include racially and ethnically diverse samples, and report baseline infant vitamin $D$ status, human milk vitamin D content, and sun exposure." 25
- The Committee also found "[e]vidence is insufficient to estimate the association between dietary patterns before and during pregnancy and risk of hypertensive disorders of pregnancy in minority women and those of lower socioeconomic status." 26
- The Committee's finding that "[a] distinct advantage of these structured patterns is the replication and comparability of study findings. On the other hand, these patterns may not represent all cultural or regional variations of dietary intakes." 27
- "Understanding the extent to which the entire population and various subgroups (e.g. age, sex, race and ethnic origin, food security status, income) achieve food group and food component intake
recommendations is the foundation for tailoring powerful public health communication strategies focusing first on food-based strategies..." 28
The Academy underscores the Committee's recognition that many of the studies relied upon in their Scientific Report only or primarily included white women with access to health care as study participants. 29 These limitations represent a critical impediment to the generalizability of evidence and recommendations. Unrepresented and unstudied demographics represent a majority of the population and the lack of relevant studies examining them raises questions as to their applicability to the general public.
For example, supplementation in infants is understudied, including iron supplementation for infants with iron deficiencies, 30 recognizing the frequency that iron supplementation is appropriate for breastfed infants, and more research is needed across a racially and ethnically diverse infant population to understand the impacts of iron supplementation on "growth, including potential effects on morbidity, the microbiome, zinc and copper status, and oxidative stress or lipid peroxidation." 31 In addition, there currently exists no standard reference for the nutritional value for human milk that spans the full course of lactation. 32 Needed research includes analysis of milk from a diverse population of women with children of varying ages. Samples should also be linked to data on maternal diet and relevant demographic characteristics such as age and parity to better understand how these characteristics affect milk composition.
We strongly encourage the NIH to work with USDA and HHS to initiate and fund a call to action for these and more research questions and study designs dedicated to accounting for underrepresented groups that also examine different family structures. The lack of evidence relevant to minority and low SES populations remains a weakness in the literature and needs to be elevated as a priority going forward. Related to health disparities, we urge the NIH to undertake, fund, or advocate for more research on minority groups and birth outcomes, such as the effects of vitamin D supplementation on birth outcomes in Black mothers.


## D. Supporting Health Equity

While exploring the areas of precision medicine and nutrition, it is important for the NIH to not lose site of the value of investing in interventions that have the potential to be received by those at the intersection of highest risk and lowest resources. Expensive medications and medical devices are not always accessible to the patients who need them. Research on interventions which are more costeffective but have long range impact on outcomes, such as increased access to healthy foods for pregnant women and children, need to be equally prioritized. Overweight, obesity and inflammation are root causes of many of the conditions broadly addressed by the NIH's research and thus the NIH should be focusing on improving the health of communities where these diseases are most prevalent and the causes of these diseases.

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

o Needs to be a slow and thoughtful approach to be meaningful.
o Implementing organizational practices at the lowest level and having genuine commitment from all levels. This can't be a top/down approach, the commitment needs to be from all levels.
o Ties into accountability - having the commitment through all levels. Tie to something people are passionate and committed to already. Let people hear about the positive differences we can make through DEIA.
o Increase transparency by sharing best practices and successes in building a diverse workforce

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

o Training - having a way of opening people's minds to new ways of approaching or thinking of promoting/enhancing DEIA. Being able to show the positive outcomes of more diverse, inclusive workforce.
o Listening sessions - being able to be "present" and vulnerable. Willingness to think a different way.
o Also needs to be a slow and thoughtful approach to be meaningful.
o Ensure psychological safety to allow for honest conversation without fear of reprisal.
o Invest resources to further DEIA programs, efforts and activities.

## Comments: Advance DEIA Through Research

o Promote diversity in all training and research programs to increase participation of underrepresented groups
o Training and career development to enhance workforce diversity
o Support research to reduce health disparities and inequities

## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

Ageism. Ageism is somewhat prevalent here at NIH. Staff is grandfathered into the system. Older people who are contractors are not.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

( Submitter left answer blank )

## Comments: Advance DEIA Through Research

( Submitter left answer blank )

[^5]investigators from diverse backgrounds, particularly Native Hawaiians, Pacific Islanders, and Filipinos as the increasing diversity in the United States should reflect the diversity in the biomedical research workforce. The NIH has strong programs to recruit and train individuals from diverse backgrounds, such as the Diversity Program Consortium (DPC)6 and the Diversity Supplement Program,7 but these could be expanded and strengthened from youth through master's levels through doctoral and post-doctoral and faculty research. Diversity should be viewed broadly, not just across race and ethnicity, but with regard to age, sex, sexual orientation, socioeconomic status, and NIH funding for biomedical research and training at the state level. A recent article in Science Magazine, entitled "Concrete steps to diversify the scientific workforce" (09 Apr 2021), states: "we can now build on some recent programs that have had notable success in training minority scientists who are now pursuing productive careers in research. These programs appear to have three key features: reducing the sense of isolation by using cohorts to create communities, making strong institutional and individual commitments to mentoring, and removing barriers to research careers by providing full financial support during training." 8 Such steps should be strongly considered by the NIH.

- Improve Mentoring the Mentor programs, by ensuring the inclusion of NHPI investigators as mentors and building on the National Research Mentoring Network (NRMN)9 program to do so. Students and researchers can significantly benefit from mentors who are trained to respond to them in a culturally sensitive way. Many researchers produce similar work to their mentors, so we need more mentors that value and encourage the diversity of others' opinions. The NRMN program "provides researchers across all career stages in the biomedical, behavioral, clinical and social sciences with the evidence-based mentorship and professional development programming that emphasizes the benefits and challenges of diversity, inclusivity and culture"10 and could be built upon to expand efforts to improve the mentoring skills of mentors.
- Increase the rate of funding and support for early-career underrepresented minority investigators and those from socioeconomically disadvantaged backgrounds. Doing so will help to engage these investigators to consider a long-term career in biomedical and scientific research. Examples of programs that could be expanded include STEP-UP, loan repayment, IDeA program, and the FIRST program.
- Expand research training opportunities for youth. We recognize that the NIH offers certain training opportunities for high school, undergraduate, and graduate students. 11 However, these types of programs could be expanded to youth of much earlier ages through NIH programs, including through programs focused on target areas such as disease prevention or health promotion. For example, the National Science Foundation (NSF) has multiple programs to "improve the effectiveness of STEM learning for people of all ages."
- Consider offering more funding opportunities for Indigenous innovation, through mechanisms such as the Intervention Research to Improve Native American Health (IRINAH) 13 program. We define "Indigenous innovation" as both the application of traditional Indigenous knowledge, practices, and methodologies to contemporary problems as well as the development of new knowledge, practices, and methodologies developed by Indigenous investigators for Indigenous communities. At the center of the emerging "Indigenous innovation" framework is the intention to support Indigenous communities in using their ancestral systems as the basis for contemporary innovation as well as encouraging the exploration of novel solutions to close the gap in health inequities. This strategic approach understands Indigenous communities as heirs to millennia of research and development that created systems specifically attuned to ecologic, social, and spiritual need realities of a people. This approach also understands that "restoration" is at the seat of "innovation", and directly addresses questions of equity, ownership, and dignity. Centering the Indigenous innovation framework to be applied to
biomedical research situates the community as "experts" and innovation to translate to restoration, and re-situate the University as allies and support. This reframing supports communities in healing from the generational impacts of colonization and systemic racism, now widely recognized within the fields of medicine and public health as fundamental social determinants of health. We posit that there is no intervention so effective in reducing health disparities and achieving health equity as the restoration of ancestral practices for Indigenous communities. The National Cancer Institute's (NCI's) "Intervention Research to Improve Native American Health" (IRINAH) program, which aims to "develop, adapt, and test the effectiveness of health-promotion and disease-prevention interventions in NA communities" 14 could be used as a model for other populations. Indigenous data sovereignty, a concept more developed in Native American and Maori communities, may be important to consider as funding for Indigenous innovation opportunities arise.
- Similar to the process to support Career Development (K) awardees, provide support through life transitions for investigators with other grant types. We know that many investigators, including minority investigators, may face significant life challenges that prevent them from successfully completing NIH grants. NIH recently put out a notice (NOT-OD-20-054) to support Career Development (K) awardees through critical life events that may occur during a project period, such as having a baby, adopting a child, or primary caregiving responsibilities for family members. 17 We recommend providing this type of life-transition support for all investigators on different funding tracks.


## Comments: Grow and Sustain DEIA through Structural and Cultural Change

- Adjust the resources distributed across the NIH and revise the peer review process to more highly prioritize applied sciences, such as behavioral and social sciences, which may be more common fields among minority investigators. Historically at the NIH, applied sciences, such as behavioral and social sciences, may be viewed as "soft sciences" and considered "less rigorous" than basic biomedical investigations, particularly by reviewers with traditional scientific backgrounds. However, community-based participatory research is, in fact, often more challenging than controlled experiments in a basic science laboratory, given the many complex relationships as well as social and cultural considerations to navigate while doing research in the community. Community-based applied sciences often have the benefit of more directly impacting and benefiting the communities where they work, thereby improving the true societal impact of the research. As many minority investigators do research in these types of applied sciences, these fields should be prioritized and rewarded. Additionally, reviewers from traditional scientific backgrounds should be provided with extra training to better understand what community-based applied science research is and its inherent challenges and impacts. - Include entities serving Native Hawaiian and Pacific Islander communities in the eligibility criteria for as many grant opportunities as possible, to the extent permissible by law. Certain funding opportunities, for example the Native American Research Centers for Health (NARCH) program, administered by the National Institute of General Medical Sciences (NIGMS), 15 do not permit entities serving Native Hawaiian and Pacific Islander communities to apply. We propose expanding the eligibility criteria for the NARCH program to allow the establishment of research centers for Native Hawaiian health.
- Consider longer durations of funding for grants with significant community engagement. While typical R01 grants are for five years, NIH should consider more extended funding periods for projects involving community engagement. For example, 11 years of support to allow three years for planning and community building, five years for implementation, and another three years for follow-up, dissemination, and sustainability.
- Ensure that application processes are not so arduous as to be overly burdensome for small institutions, which have less availability to pivot. The NIH should ensure that compliance and other rules, for example for community engagement, are not so intense and bureaucratic that only large institutions can readily pivot and manage to apply/demonstrate this engagement officially despite smaller institutions being deeply community engaged over a longer period. Additionally, minority investigators-who often prioritize community engagement-may not be able to meet the arduous compliance demands due to being already overburdened with existing tasks and responsibilities.
- Prioritize inclusion of early-career underrepresented minority investigators and those from socioeconomically disadvantaged backgrounds as well as community partners as coinvestigators. We recognize NIH's mandate to ensure the inclusion of women and minority groups in all NIH-funded clinical research in a manner that is appropriate to the scientific question under study. 16 NIH should consider including priority criteria throughout all funding opportunities for those applications that include minority investigators and community partners as true co-investigators (not merely as advisors). These co-investigators are critical for their perspectives and mentoring of the applicant investigators. Certain universities provide faculty status to selected community partners who are engaged in NIH-funded, community-engaged research. The NIH may consider championing these efforts and encouraging more universities to allow community members to serve as faculty.
- Incentivize the inclusion of peer reviewers from minority backgrounds, including Native Hawaiians and Pacific Islanders, and with knowledge of Indigenous peoples. We recognize the challenge of finding NIH peer reviewers given the time commitment required. Many minority investigators tend to be overcommitted with service and other important educational and research efforts, and thereby may not have time to serve as a peer reviewer. However, without minority investigators on peer-review panels, their important perspectives are absent. NIH processes could benefit from incentivizing the inclusion of a more diverse team of reviewers who have a familiarity and understanding of Indigenous communities and those populations facing significant health disparities. In particular, we recognize that there are few Native Hawaiian and Pacific Islander reviewers on NIH study sections, and we encourage the NIH to find ways to encourage more NHPI and other minority investigators to participate on peer review panels.
- Improve the orientation and training process for peer reviewers regarding diversity, innovation, and community-based participatory research. Reviewers should participate in an orientation and training on how to look for diversity and innovation across different types of projects. They should also be trained about the importance of community-based participatory research, and to highly value the inclusion of community partners as co-designers and true coinvestigators (not merely in an advisory capacity).
- For partnerships with Indigenous communities, require evidence that award recipients have strong connections and demonstrated engagement with community partners. Grantees should have a demonstrated plan, co-designed with community partners, to implement the research and disseminate research findings. Additionally, there should be a commitment of funding for co-learning to build community capacity to engage in the research enterprise. - Ensure meaningful engagement of community partners throughout all stages of a project, including whether they are included in the budget, as a component of the investigative team score. Meaningful engagement should mean co-design of the project and having an existing network and cadence of meetings with regional stakeholders so that they can help to articulate how the projects are framed, deployed, evaluated, scaled, and resourced. For example, the California Breast Cancer Research Program in California requires a 50/50 split of the grant
budget between academic and community partners, as shown in the table below:


## Comments: Advance DEIA Through Research

- Ensure that addressing systemic racism, health disparities, and health equity research is a priority for all NIH Institutes and Centers (ICs), not just the National Institute on Minority Health and Health Disparities. It should be recognized that the positioning of minoritized populations as experiencing disparities is really that they are experiencing health problems as diseases of "progress" or colonialization, rather than having a true health deficit. This concept could be better incorporated across the ICs.
- Consider increasing the number of specific study panels for health disparities. As earlycareer investigators are reviewed in a group on their own, a similar process should be considered for grant applications that are focused specifically on addressing health disparities and improving health equity among certain target populations (including NHPI populations).


## Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

1. Objectives 1 and 2: Providing access to research funding for scholars in smaller universities (particularly those scholars from marginalized groups) by creating programs that allow and encourage senior researchers from R01 universities to collaborate with scholars from smaller universities.
2. Objectives 1 and 2: Providing training opportunities in research, through administrative supplements, for undergraduate students (e.g., Career opportunities in Research) and particularly students from marginalized backgrounds who experience cultural, language and financial barriers.

## Comments: Grow and Sustain DEIA through Structural and Cultural Change

1. Objectives 1 and 2: Providing access to research funding for scholars in smaller universities (particularly those scholars from marginalized groups) by creating programs that allow and encourage senior researchers from R01 universities to collaborate with scholars from smaller universities.
2. Objectives 1 and 2: Providing training opportunities in research, through administrative supplements, for undergraduate students (e.g., Career opportunities in Research) and particularly students from marginalized backgrounds who experience cultural, language and financial barriers.

## Comments: Advance DEIA Through Research

3. Objective 3: The diversity grants are often for scholars from marginalized racial and ethnic groups. Consider expanding the definition of diversity to go beyond race and ethnicity and to include groups who experience financial, cultural and language barriers (e.g., first generation of immigrant students who are a growing population in US).

[^0]:    ${ }^{1}$ https://www.congress.gov/116/crpt/hrpt450/CRPT-116hrpt450.pdf
    2 https://www.federalregister.gov/documents/2021/06/30/2021-14127/diversity-equity-inclusion-and-accessibility-in-the-federal-workforce
    ${ }^{3}$ https://www.whitehouse.gov/wp-content/uploads/2021/11/Strategic-Plan-to-Advance-Diversity-Equity-Inclusion-and-Accessibility-in-the-Federal-Workforce-11.23.21.pdf

[^1]:    ${ }^{4}$ https://grants.nih.gov/grants/guide/notice-files/NOT-OD-22-061.htm
    5 https://www.federalregister.gov/documents/2022/02/11/2022-02972/request-for-information-rfi-inviting-comments-and-suggestions-on-a-framework-for-the-nih-wide

[^2]:    ${ }^{6}$ In the RFI Framework, Objective 1 was focused on advancing DEIA within the workforce. Due to feedback that NIH received on the proposed framework, the order of Objectives was revised in the final Plan so that the new Objective 1 is now focused on operations and culture change, the foundation by which NIH can advance DEIA within Objective 2 (Workforce) and Objective 3 (Research).

[^3]:    Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce
    While I agree that it's important to support women and their partners through childbirth and early childhood years, I've been encountering a lot of reverse discrimination in the form that stability/career projections are "less important" for individuals without children. Notably as a postdoc I was moved from a stable R01-funded project to risky R21 with only a year of funding left because "you can go anywhere and [other postdoc] needs more stability since they have a child." A bit of a slap in the face since I come from a low SES background and had to take on quite a lot of debt to move for a postdoc. Furthermore I am currently seeing a number of women's careers prioritized despite lack of productivity because "they need it most after the pandemic" which is not a merit based decision. Also recommend expanding

[^4]:    Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce ( Submitter left answer blank )

[^5]:    Comments: Implement Organizational Practices to Center and Prioritize DEIA in the Workforce

    - Establish a Native Hawaiian and Pacific Islander Health Research Office (NHPIHRO) in the Office of the Director, analogous to the Tribal Health Research Office. Recognizing the importance of research for tribal communities, the NIH in 2015 established the Tribal Health Research Office, in the Division of Program Coordination, Planning, and Strategic Initiatives in the Office of the Director (OD). 5 Its functions include coordinating tribal health research-related activities across NIH; coordinating and collaborating across NIH committees and Institutes and Centers; and managing the dissemination of key information related to tribal health research coordination. However, no such health research office exists for NHPI research and populations. We seek for the NIH to establish a Native Hawaiian and Pacific Islander Health Research Office (NHPIHRO), analogous to the Tribal Health Research Office in funding and scope. The NHPIHRO should include partnerships with at least two academic institutions with a proven track record of integrating and working closely with NHPI communities and NHPI-serving organizations, which are located in states with significant NHPI populations, to allow for the development of future researchers and scientists from these same communities. Ideally, the NHPIHRO could support efforts to increase the number of NHPI basic biomedical, clinical and behavioral researchers and the amount of NHPI research being conducted across the United States.
    Increase investments in NIH programs that support the pipeline of scientists and

