

**U.S. Department of Health and Human Services  
National Institutes of Health  
65th Meeting of the National Advisory Council on Minority Health and Health Disparities (NACHMD)**

Virtual Meeting

February 2, 2024

11:00 a.m. EST - Adjournment

**Meeting Minutes**

**Council Members Present**

Eliseo J. Pérez-Stable, MD, NACMHD; Director, National Institute on Minority Health and Health Disparities, NIH

Samuel E. Adunyah, PHD, Chairman, Department of Biochemistry, Cancer Biology, Neuroscience and Pharmacology, Meharry Medical College

Emma Aguila, PHD, Sol Price School of Public Policy, University of Southern California

Jose Arturo Bauermeister, PHD, MPH, Department of Family and Community Health, School of Nursing, University of Pennsylvania

Lisa M. Cacari Stone, PHD, Department of Family and Community Medicine, College of Population Health, University of New Mexico

Kendrick E. Curry, PHD, MDIV, Senior Pastor, Pennsylvania Avenue Baptist Church

Valerie Blue Bird Jernigan, DRPH, MPH, Director, Center for Indigenous Health Research and Policy, Oklahoma State University

Frank J. Penedo, PHD, Associate Director, Cancer Survivorship and Translational Behavioral Sciences, Sylvester Comprehensive Cancer Center, University of Miami

Mario Sims, PHD, Department of Social Medicine, Population and Public Health, University of California at Riverside

Chau Trinh-Shevrin, DRPH, Director, Division of Health and Behavior, Department of Population Health, New York University School of Medicine

**Ex Officio Members**

Xavier Becerra, Secretary, U.S. Department of Health and Human Services

Crystal Henderson, EDD, Veterans Health Administration, Department of Veterans Affairs

Donald Shell, M.D., Office of the Assistant Secretary of Defense, Defense Health Headquarters

Jane Simoni, Ph.D., Office of Behavioral Sciences Research, NIH

**Representatives Present**

Monica S. Webb Hooper, Ph.D., RDN, Deputy Director, NIMHD

Kimberly Allen, MA, Executive Officer, Office of Administrative Management

Rada Dagher, PhD, MPH, Health Scientist Administrator, Division of Clinical and Health Services Research, NIMHD, NIH

Rina Das, PhD, Division Director, Integrated Biological and Behavioral Scientists Administrator, NIMHD  
Tilda Farhat, PHD, MPH, Director, Office of Science Policy, Planning, Evaluation, and Reporting, NIMHD, NIH

Nathan Stinson, Ph.D., M.D., MPH, Director, Division of Community Health and Population Science, NIMHD

**Executive Secretary**

Paul Cotton, Ph.D., RDN, Director, Office of Extramural Research Activities, NIMHD

**Presenters**

Monica M. Bertagnolli, MD, Director, NIH

Sandro Galea, MD, MPH, DRPH, Dean, School of Public Health, Boston University

Deborah Linares, Health Scientist Administrator, Division of Integrative Biological and Behavioral Sciences, NIMHD, NIH

LCDR Michael J. Banyas, USPHS, MPA, Health Specialist, Division of Community Health and Population Science, NIMHD, NIH and Rada Dagher, PhD, MPH, Health Scientist Administrator, Division of Clinical and Health Services Research, NIMHD, NIH

Triesta Fowler, MD, Scientific Diversity Officer, Office of the Director, NIMHD, NIH

## Call to Order and Welcome

Dr. Pérez-Stable called the open session to order at 11:00 a.m.

## Roll Call, Minutes Review

<https://videocast.nih.gov/watch=54075&start=550>

Dr. Cotton called the roll and invited members and staff to introduce themselves. The council unanimously approved the minutes of its September 2023 meeting and announced the next in-person meetings of NACMHD on May 31 and September 6, 2024; the 2025 meeting dates are February 4, May 16, and September 5. Members were reminded that NIH policy allowed them no more than one absence per calendar year, and that they were prohibited from serving on NIH peer review panels while on the council.

## NIMHD Director's Report and Discussion

<https://videocast.nih.gov/watch=54075&start=800>

Dr. Pérez-Stable greeted the council and provided a report on NIMHD-related activities since the September 2023 council meeting.

- [Dr. Monica Bertagnoli](#) was confirmed by the U.S. Senate as the 17th Director of NIH on November 7, 2023. She is the first surgeon and second woman to hold the position, having previously served as Director of the National Cancer Institute. She plans as NIH Director to emphasize equity, bringing more members of the public into the research enterprise and rapidly apply data analytics in clinical care to data that include everyone. She also hopes to harness the power of artificial intelligence to advance research and protect early career investigators.
- [Dr. Steven Rosenberg](#), a pioneer in cancer research, was awarded the National Medal of Technology and Innovation by President Biden on October 24, 2023, for transforming the way cancer is treated using immunotherapy, being the first scientist to use genetically engineered immune cells known as Chimeric Antigen Receptor (CAR) T-cells.
- [Dr. Kimryn Rathmell](#) was selected by President Biden to be the Director of the National Cancer Institute on December 18, 2023. She is an influential leader in cancer research and a kidney cancer expert, having previously served as the Physician-in-Chief and Chair of the Department of Medicine at Vanderbilt University Medical Center.
- [Dr. Tara Schwetz](#) was selected as the Director for Program Coordination, Planning, and Strategic Initiatives in the NIH Office of the Director. She oversees the Common Fund and every office in the Office of the Director. In addition to serving since 2019 as the NIH Associate Deputy Director and then Acting Principal Deputy Director of NIH, she was the co-chair of the Rapid Acceleration of Diagnostics-Underserved Populations (RADx-UP) Initiative in 2020.

- On September 26, 2023, Dr. Pérez-Stable announced that people with disabilities are to be designated as a population with health disparities. A [Notice of Funding Opportunity \(NOFO\)](#) was published by NIMHD to enhance and expand research in people with disabilities.
- NIH launched the [RADx Tribal Data repository](#), which is to be owned and run by Native investigators. The project will be led by Stanford University in partnership with the Native Biodata Consortium, and the repository will include RADx data for researchers interested in working with data provided by American Indian/Alaska Native (AIAN) research participants.
- NIH launched the [Community Partnerships to Advance Science for Society \(ComPASS\)](#) program to study ways to address structural factors within communities that affect health, enabling research into solutions that promote health equity to create lasting change. It includes 25 awards to community organizations and one coordinating center at Drexel University, totaling \$171 million over 5 years.
- The data on NIMHD's budget through FY23 was shown as Congress has yet to approve a federal budget for FY24, so NIMHD/NIH is operating under a continuing resolution. NIMHD had seen incremental growth in its budget, keeping pace with NIH's budget increases over the years, until a jump in FY21 when discretionary funding began to be devoted specifically to NIMHD. The hope is for FY24 to be no worse than flat. Dr. Pérez-Stable also went into depth on NIMHD's funding distribution and FY23's R01 and R21 grant awards.
- After briefly discussing the previous five years' trajectory for Career Development (K) Awards, Dr. Pérez-Stable noted other funding accomplishments in FY23, including:
  - 81 Loan Repayment Awards
  - \$56 million for Multiple Chronic Diseases Research Centers
  - [Community Engagement Alliance \(CEAL\) awards](#) that support 21 CEAL Teams plus Community Engagement for Climate Health
  - \$12 million through the [John Lewis NIMHD Research Endowment Program](#)
  - Funding partnerships with the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) for the APOLLO Clinical Centers with the National Heart, Lung, and Blood Institute (NHLBI) for the Epidemiological Cohort Study among Asian Americans, Native Hawaiians and Pacific Islanders (NHPI)
  - 6 new awards through the [Understanding and Addressing Misinformation NOFO](#)
- [Senator Ben Cardin](#) visited the NIH campus to review building and facilities concerns and was briefed by Dr. Monica Webb Hooper, NHLBI Director Dr. Gary Gibbons and NIDDK Deputy Director Dr. Gregory Germino on health disparities research at NIH.
- Dr. Pérez-Stable detailed his travels in October 2023 on behalf of NIMHD with visits to Vanderbilt and the Meharry-Vanderbilt Alliance and the University of Pittsburgh.
- The American Public Health Association (APHA) Annual Meeting took place in November 2023 in Atlanta.
  - In addition to over 30 presentations and events at the APHA Annual Meeting, NIH CEAL held its first in-person annual meeting to discuss research outcomes, community engagement activities, successes, and its impact over the previous year.

- NIMHD offered presentations on intramural research and RADx-UP, as well as promoting workforce development and sharing resources and training opportunities.
- Dr. Pérez-Stable participated in a panel discussion on the economic burden of health disparities both from race and ethnic and educational attainment perspectives. The discussion was based on a paper published in the Journal of the American Medical Association (JAMA) and included two other co-authors and leaders from CMS and CVS .
- CEAL is broadening its scope of research beyond the response to COVID-19 to include other topics, including maternal health, climate health, community-engaged primary care research, AIAN-NHPI Enrichment Initiatives, and the Health Knowledge Monitoring and Response System. The American Journal of Public Health published a special issue in [January 2024](#) with 27 articles highlighting community-engaged research conducted by CEAL teams and included a commentary by the CEAL Co-Chairs.

### ***Science Updates***

- The Kaiser Family Foundation's [survey](#) on racism originally done in 2015 had been recently updated, finding that 10% to 18% of AIAN, African American, Asian American, and Latino individuals reported they were treated unfairly or with disrespect by healthcare clinicians or staff because of their race or ethnic background. This was a significantly higher rate than the 3% of White individuals reporting this.
- Dr. Webb Hooper did a [study](#) on applying group targeting or individual tailoring on ethno-cultural factors, utilizing seven principles that take into account variability, the size of the populations, and how realistic it is to create certain messaging. Dr. Webb Hooper also [published](#) work she completed at Case Western University on Cognitive Behavioral Therapy (CBT) compared to General Health Education intervention for smoking cessation among African American, Latino, and White adults. African American participants were less likely than White participants to quit, as were persons with lower education and income; however, socioeconomic status (SES) positively predicted abstinence among racial and ethnic minority participants, but not White participants.
- A [study](#) examined if positive parenting interventions could buffer biological age acceleration associated with exposure to early-life adversity in children with developmental delays. These children showed a reduction of biological aging with more positive parenting practices, suggesting that positive parenting may promote resiliency, slow biological age acceleration, and potentially mitigate poor mental and physical health outcomes in children.
- It was discovered in a [study](#) published in Nature Mental Health that discrimination may contribute to enhanced food-cue reactivity and brain-gut-microbiome disruptions that can promote unhealthy eating behaviors leading to increased risk from obesity. It evaluated neuroimages in response to food cues and an analysis of fecal metabolites, concluding that higher racial discrimination is linked to increased reactivity to unhealthy foods, compromised frontal processes involved in self-regulatory responses to unhealthy foods, and increased glutamate-pathway metabolites involved in oxidative stress and inflammatory responses.

- A National Health Interview [Survey](#) found that although the absolute volume of alcohol consumed may be equal or lower in Latino populations than in Whites, there is a higher prevalence of binge drinking, which showed variability based on race and sex. Afro-Latina women were more likely to binge drink than White Latina women, and Afro-Latino men were less likely to binge drink than White Latino men.
- Another National Health Interview [Survey](#) found that Latinos with a high level of perceived neighborhood cohesion had lower odds of having type 2 diabetes than those who did not report a high level of neighborhood cohesion. The level of food security was associated with diabetes and neighborhood cohesion did not moderate the association, but neighborhood cohesion may be a community-level resource used as a coping mechanism for food-insecure people.
- A [socio-cognitive behavioral therapy](#) for suicidal behaviors (SCBT-SB) showed reductions over time in suicidal ideation and depressive and internalizing symptoms in Latino/Hispanic teens aged 13-17. SCBT-SB has potential as a psychosocial treatment for suicide attempts in Latino/Hispanic youth.
- A pilot [digital intervention](#) for immigrant survivors of intimate partner violence, particularly immigrant women, found that there was need for team member support on the web/app and text interventions. Being an immigrant and intimate partner violence survivor makes it necessary to design interventions that account for culturally specific safety strategies.
- 14 [older diverse adults](#) were asked to share photos with their clinicians to highlight their issues with food. This resulted in enhanced communication and clinical recommendations, and it strengthened patient-clinician connection. Photo-based intervention could be a way to enable clinicians and patients to work together to create care plans that consider the context of patients' lives and assess previously hidden factors that affect how patients manage multiple chronic conditions.
- An [analysis](#) of nearly 56 million randomly sampled tweets from a decade of tweets (2011-2021) examined geographic and temporal trends in sentiments toward racial and ethnic minoritized groups in the United States. Support Vector Machine, a supervised machine learning model used one or more of 90 race-related keywords for sentiment analysis and found a 16.5% increase in negative sentiments for tweets referencing racial and ethnic minority groups reference at the national level, with the highest negative sentiments referencing Black and Middle Eastern people.
- A [study](#) found that siblings of Latino sexual minority men can motivate their brothers to use PrEP for HIV prevention and can be engaged in HIV PrEP promotion. A large number were willing to take PrEP as well to make their sibling worry less or get them started on the therapy.
- A [study](#) found coping responses to racial discrimination may be age dependent. It examined the role of age in the association of racial discrimination, internalizing concerns, and rumination among Black youth. Racial discrimination was directly and indirectly associated with rumination, and its indirect effects on depressive symptoms were most pronounced among older ruminating adolescents. Rumination is a developmentally sensitive pathway by which racial discrimination harms mental health and there is a need for interventions that provide healthy and effective coping strategies for Black youth in response to racism during adolescence.

- Food insecurity and health care use in the past year increased psychological distress among immigrant populations, while employment decreased it. Increased psychological distress is associated with less life satisfaction and there is a need to improve social needs and mental health within this population.
- A [study](#) from Kelvin Choi's lab found that cannabis use was associated with changes in the level of societal concern over issues such as police brutality, school shootings, and discrimination among Hispanic/Latino youth.

Dr. Pérez-Stable commended the NIMHD group that attended the APHA, as well as the 2024 William G. Coleman, Jr. Research Innovation Awardees. A brief discussion among the council members followed Dr. Pérez-Stable's presentation that focused on food insecurity and food as medicine and as a relational experience that can be used to influence structural factors that could lead to higher neighborhood cohesion and better health outcomes for individuals.

## **Presentations**

### **NIH Director's Introduction - Monica Bertagnolli, MD**

<https://videocast.nih.gov/watch=54075&start=4590>

Dr. Pérez-Stable introduced the 17th Director of the National Institutes of Health, Dr. Monica Bertagnolli, who was nominated by President Biden and confirmed by the Senate in November 2023. Dr. Bertagnolli had previously been a surgical oncologist and researcher in Brigham and Women's Hospital in Boston and the Director of the National Cancer Institute for a year. She described her upbringing in rural Wyoming, family life, and professional development, as well as her own struggle with breast cancer.

Dr. Bertagnolli spoke about the Advisory Committee to the Director (ACD) Working Group on Re-Envisioning NIH-Supported Postdoctoral Training, which focuses on early career scientists and recommended increasing pay and benefits, as well as accelerating strategies and programs to give them more support and facilitating the transition to their next career stage. She then moved on to the budget, which will be contracting in 2024. Dr. Bertagnolli hopes that Congress can avoid drastic cuts to NIH and its sibling agencies, but a flat budget will still have a serious impact on NIH's continuing efforts to fund the best science and develop the next generation of researchers.

Dr. Bertagnolli then spent time highlighting the declining health in the U.S. population. Already low in comparison with peer high-income nations and despite spending enormously more on our health system per capita with worse outcomes, the U.S. is seeing an increase in mortality among working adults. This trend began before the COVID-19 pandemic and continues after it, and the main drivers are a rising number of deaths related to drug poisonings, alcohol-related causes and suicides, and a slowing of progress in reducing cardiovascular and cardiometabolic diseases fueled by an obesity epidemic. This

problem of increased mortality is much worse in many of the populations and communities that NIMHD particularly serves. Dr. Bertagnolli said that in her first 100 days as Director, she is working with Institute, Center, and Office directors throughout NIH to shape an overall strategy to approach this critical issue. The rigorous scientific approach to answering questions and solving problems will serve as a guiding principle as well as embracing the community as a partner in ensuring the populations NIH serves live longer, healthier lives.

Further planning involved better integrating primary care with research, allowing NIH to engage care providers and patients on the frontlines of health in developing ways to overcome challenges of the core drivers of ill health; increasing research capabilities and efficiency with innovative study designs relevant to individual communities; using electronic health records as a research tool, with all appropriate standards to ensure privacy; and rapidly disseminating evidence to guide patient and provider decisions. In addition to advocating for workforce development and continuing education, Dr. Bertagnolli closed her presentation by emphasizing the need to expand biomedical research data, increase capacity for data hosting, and enable broad, low-cost access by making use of advanced analytics and computational power in a federated architecture for data sharing.

After her presentation, council members had individual questions for the NIH Director. Dr. Trinh-Shevrin asked for Dr. Bertagnolli's thoughts about social determinants of health and where they fit in her vision. She replied that, primarily, it's essential to find and engage those communities as those adverse social determinants of health are often through a lack of participation in health care generally, and to commit to improving their whole health and address all their problems, not individual issues for the limited amount of time provided for in a grant or a study. She spoke with Dr. Sims about implementation science and getting the communities NIH works with involved from design phase to execution to build trust, and with Dr. Adunyah about the effects of the pandemic, long COVID, and breaking down barriers to access for cancer immunotherapy treatment. Finally, she emphasized primary care networks with accompanying studies for different communities with Dr. Cacari Stone, and cross-national comparisons with Dr. Aguila.

**Within Reason? Ensuring Public Health Matters in Coming Decades, Sandro Galea, MD, MPH, DrPH, Dean and Professor, Boston University**

<https://videocast.nih.gov/watch=54075&start=8085>

Dr. Galea began his presentation by noting that it is the optimal time to re-examine the response to COVID-19, because we have just passed the acute phase of the disease but are still close to it in time. At least seven million people died directly from COVID, essentially reversing gains in life expectancy over the previous ten years. In the U.S., COVID was the third-leading cause of death in 2020 and 2021, behind heart disease and cancer. The effects of COVID were also unevenly felt, with People of Color in particular experiencing COVID much more severely than White people; Black Americans had about a three-year drop in life expectancy, and Native Americans had a six-year drop in life expectancy, which is the largest drop in life expectancy for any single ethno-racial group in this country for the past 100 years.

Dr. Galea argued that other forces beyond the novel coronavirus made COVID what it was and allowed it to have the dramatic impact it had. Three aspects that he believes contributed were underlying structural inequities, pre-existing poor health, and disinvestment in what could have helped. For example, the instinctive national response to a disease transmitted person to person was to instruct people to work from home, if possible, but in 2019, while greater than 60% of people in the top 25% of income earners were able to work remotely, in the other three quarters only a minority of people were able to do so. The message was effectively that we are going to privilege protecting from risk those who have a higher income and expose those with a lower income (public transit workers, truck drivers, health care providers, childcare workers, grocery workers, and others; disproportionately Black and Latino workers) to the disease. Additionally, COVID was also more for those with underlying health issues like heart disease and diabetes, which are also spread unevenly in this country based on race and ethnicity and SES. And finally, the U.S. has been disinvesting in state and local public health workforce for the past 20 years before COVID.

Dr. Galea noted the precipitous drop in trust in the country for institutions like NIH, particularly among Republicans and young people, where the drop is most pronounced, and he questioned where public health went wrong during the pandemic. He highlighted false certitude, contradictions without acknowledgment, and intolerance of disagreement. He pointed out that much of this related to communication among the public and from experts to the public, as opposed to within the scientific community itself, which was more aware of the ambiguous and often shifting nature of knowledge and best guidance in the context of a rapidly developing event like a global pandemic.

Dr. Galea then tried to answer why public health fell short and attributed it to the complexity of systems dealt with, biases and privileged perspectives, and groupthink. He used examples from the school reopening process and pointed out the disparity of social situation for decision makers in Congress and academia that led to public health guidance that disproportionately harmed Black and Brown populations with lower educational attainment. To conclude, he offered a way forward through epistemic humility, radical compassion, and reform through reason. He described public health as the paradigmatic liberal project that relies on the upholding of certain fundamental principles like using human reason and respecting the rights of individuals to promote health for all and narrow health gaps.

**Improving Patient Reported and Clinical Outcomes in Hispanic/Latino Cancer Survivors, Frank J. Penedo, PHD, FABMR, FSBM, Professor, University of Miami**  
<https://videocast.nih.gov/watch=54075&start=10930>

Dr. Penedo spoke about the work he's been conducting improving patient reported outcomes in Latino cancer survivors. There are currently around 20 million cancer survivors in the United States, which is expected to rise to around 26 million in 2040, accounting for five percent of the population with one in five being Hispanic. Despite the unprecedented growth in the number of cancer survivors in the United States over the last several decades, there are many challenges cancer patients face. These include a provider shortage and care fragmentation, aging-related and comorbid illness-related effects, interpersonal disruptions, psychological conditions, and financial cost.

Speaking specifically of Latinos, Dr. Penedo pointed out that Latinos are 18.5 percent of the U.S. population, and cancer is the second-leading cause of death in the community, accounting for 21 percent of deaths. Latinos have a higher risk for cancer associated with infections like cervical, stomach, and liver cancers, and there are data suggesting that they present with more advanced diseases and poorer outcomes, likely due to their being the population with the lowest coverage of health insurance, leading to late diagnosis and poor treatment adherence to things like follow-up care and appointments. There are also studies that Latinos tend to report lower optimism with cancer, which can directly impact treatment adherence, as well as quality of life and emotional well-being. Dr. Penedo also emphasized the gaps in research on psychosocial and sociocultural factors, with most studies limited by homogenous samples and geographic location and typically biased towards lower SES Hispanics, which are not representative of the broader Latino community.

The studies that are available consistently show that Latinos have greater unmet needs (transportation, child care, elevated levels of psychological distress, financial concern) compared to previously published norms in White samples. Twenty percent of patients with cancer coming in through ambulatory clinics say they need more support in terms of how to cope with cancer and manage cancer-related stress, and a large meta-analysis looking at 21 studies from 18 data sets documented moderate effect sizes of ethnicity and race on stress, depression, social quality of life, and general quality of life among Hispanics relative to other groups. Some of these effects could be due to cultural factors like social rules and strain, familism, and fatalistic attitudes, but it hasn't been well documented.

Dr. Penedo discussed some of the work being done in Cognitive Behavioral Stress Management (CBSM) interventions, which are commonly applied interventions that are evidence-based and used to improve quality of life and other patient-reported outcomes in cancer survivors. Patients are provided with psychosocial skills and techniques to reduce anxiety, provide relaxation strategies, facilitate emotional expression, and reduce risk behaviors to improve emotional and physiological adaptation, and in turn, quality of life and health outcomes. These interventions vary depending on specific disease-related factors like early stage versus advanced and metastatic, ethnicity, and language. These techniques were found to improve sexual function, reduce stress and anxiety, and enhance emotional well-being. Dr. Penedo spoke specifically about interventions with men suffering with late-stage prostate cancer, and development by Dr. Betina Yanez, who developed an app that facilitates self-delivered intervention for women managing hormone therapy-related symptoms.

Touching briefly on the effect that Hispanic cultural factors like machismo, fatalism, and familism have on cancer-related symptoms and care, Dr. Penedo then moved on to an intervention he and his team are currently delivering and about to finish, pairing standard CBSM to a culturally adapted CBSM intervention. These interventions are adjusted to consider gender roles, taboos, and stigmas about cancer or talking about sexual functioning and sexual desire using a peer story as a frame of reference. Dr. Penedo noted that he always hears from his participants that they would like to have a therapist that they can relate to, which they are not funded to provide.

He concluded by speaking about ongoing work on the first Hispanic/Latino cancer survivorship cohort study of 3,000 Latinos across Miami and San Antonio over a six-year period and an investigator leveraging the family system to delivery-healthy lifestyles among Latina cancer survivors by optimizing the use of technology and embedding an intervention within intergenerational relationships in the family system. He also spoke about the platform Scan 360, which visualizes cancer incidence, mortality, and other social determinants of health, which has been used to identify high breast cancer mortality by area deprivation index, along with gene expression and DNA methylation that may explain things like disease severity and progression. Finally, he and his team are also working with federally qualified health centers to disseminate and implement knowledge in survivorship care within a primary care setting in very disenfranchised communities to navigate them to tertiary safety net hospitals for care. Dr. Penedo finished his presentation by answering questions from other members about resiliency within the Latino community, wellness checks, technology-based interventions, and community outreach.

## **Approval of Concepts**

**Environmental Health Disparities Centers Renewal; Presenter: Dr. Deborah Linares**

<https://videocast.nih.gov/watch=54075&start=13700>

The concept for Environmental Health Disparities (EHDs) Centers Renewal will support multi-disciplinary research, research capacity building, and community-engaged approaches on understanding EHDs with an explicit focus on environment health action, which is researching, documenting, and addressing the disproportionate environmental burdens and benefits associated with social inequality. EHDs are inequities in population health which are mediated by disproportionate adverse exposure associated with the physical, chemical, social, and built environment. Integrating the environmental contributions into health disparities is a critical step for reducing and preventing health disparities, and they are the most amenable to intervention and prevention strategies.

NIMHD started [EHD Centers](#) with the Environmental Protection Agency in 2011 to address these disparities and partnered with the National Institute of Environmental Health Sciences (NIEHS) in 2015 to fund five Centers. The current Centers conduct environmental justice research, capacity building, and training across diverse disciplines and backgrounds, documenting the benefits and disproportionate environmental burden associated with inequality among populations experiencing health disparities. They are comprised of three cores: the administrative, which provides project oversight and evaluation; community engagement and dissemination, which sustains relationships with community-based organizations and partners; and the investigator development core, which provides research and training and oversees the pilot project program. Each center supports one to three research projects addressing questions relevant to environmental health disparities, with numerous publications, almost

200 presentations, and 24 grants supporting 51 trainees from underrepresented groups in biomedical sciences.

Despite this productivity, Center research to date has primarily documented environmental health disparities with a limited emphasis on interventions addressing upstream social determinants of health. This renewal will facilitate an explicit focus on environmental justice research that acts or intervenes to address environmental health disparities. A portfolio analysis identified key research gaps including limited studies examining the interplay between the physical and social environment and studies examining cumulative risk among individuals with multiple marginalized statuses. Therefore, this initiative will solicit multidisciplinary, multi-level research and training, with an emphasis on environmental justice action, and will strongly encourage intervention and implementation research and use of translational frameworks to develop the evidence base.

Research priorities:

- Develop models to evaluate the interaction of various environmental exposures (chemical, physical, and/or biological stressors) with different social determinants of health on chronic diseases.
- Examine drivers for differential exposures (including social, built, and physical environment) to better understand how environmental contributions disproportionately impact health among populations with multiple marginalized statuses.
- Develop and test environmental justice-focused interventions addressing upstream social determinants of health.
- Implementation research with community partners to develop and test strategies of evidence-based or informed interventions for reducing or preventing harmful environmental exposures.
- Multilevel EHD interventions incorporating Indigenous Knowledge to promote wellbeing, resilience, and connection to environment.
- Develop and test models to evaluate environmental factors that may help communities recover from extreme weather events or heat exposures.
- Structural intervention studies to prevent and address long-term EHDs and factors related to maternal and child health disparities.
- Systems-level interventions to address place-based disparities in communities disproportionately affected by environmental exposures that are exacerbated by climate change.
- Examine the impacts of resource extraction on water or air quality exposures leading to health disparities among local Tribal and low-income rural communities.

Dr. Trinh-Shevrin commended EHD Centers as an impressive program with strong outcomes overall, but had several recommendations. She suggested Dr. Linares include immigrant populations as a priority population in urban and rural areas, given that they are more likely to live in under-resourced neighborhoods with poor housing and working conditions. She also encouraged applicants to consider applying the NIMHD health disparities research framework and NIEHS research translation framework

and to consider including as a research priority an explicit examination of the role of climate change in exacerbating already existing environmental exposures and impacts on communities and their built environment resilience. Dr. Linares also clarified for Dr. Adunyah the difference between EHD Centers, and administrative supplements offered under the climate change and health initiative, serving to complement them in their efforts to address environmental justice issues. Dr. Blue Bird Jernigan made a motion to move the concept forward. Dr. Trinh-Shevrin seconded, and the motion carried unanimously.

**Innovations to Eliminate Women's Health Disparities through SBIR/STTR Program; Presenter: LCDR Michael Banyas and Rada Dagher, PhD**

<https://videocast.nih.gov/watch=54075&start=14900>

The purpose of the proposed initiative for the Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) Program is to support entrepreneurial research, the development of innovative products that alleviate barriers in health research, and support interventions that focus on promoting the health of women experiencing health disparities throughout the life course. It will also create a pathway in NIH Institutes and Centers for developing commercialized solutions addressing health equity and reducing the burden of health disparities in women.

Historically, women's biomedical research and health policies mostly focused on reproductive health but have recently shifted to encompass research on a woman's lifespan ranging from pre-pregnancy to late adulthood. Through developing this concept, several research gaps were identified:

- Implementing successful interventions
- Unaddressed social factors (e.g. higher cervical cancer mortality among African Americans)
- Underrepresentation of women and minority women enrollment in clinical trials and research
- Deficit in health research investments into women's health
  - Among over 300,000 SBIR/STTR-funded projects in the last five years, only 150 focused on women's health, with 17 funded by NIMHD; less than 25% were focused on health disparities in women's health.

This concept will ensure that new innovations developed in the market reach fruition. The pillars of health disparities research are taken into consideration to promote female leadership and entrepreneurship, but also, and most importantly, to reduce mortality and morbidity and to improve societal outcomes within populations with women suffering from health disparities. The concept will also provide seed funding to ensure that entrepreneurs in this growing market develop commercialized health and research products that address health disparities, engaging small businesses and institutions from diverse backgrounds, such as engineering, science, business, and technology. It is one of the few NIH grants that you can apply to which does not require you be on the research track, welcoming ideas from a variety of professional disciplines.

Research priorities:

- Support multidisciplinary research focusing on evidence-based and patient-centered technology services, and products for early diagnosis, surveillance, and treatment for addressing women's unmet health needs.
- Develop targeted solutions-based approaches to address the continuum of a woman's health over her life course.
  - Pre-pregnancy, in utero, childhood/adolescence, adulthood, and late adulthood
- Utilize implementation science and community-engaged methods to ensure women's equitable inclusion in research, address social determinants of health, and promote implementation of evidence-based interventions that improve the quality of and access to care for women.

Dr. Aguila spoke in relation to the concept, describing the major demographic shift in the last half of the 20th century in the United States as married women and women with children entered the labor force in unprecedented numbers, and their longstanding and cumulative disparities in employment and work since then. Dr. Cacari Stone commended the presentation and offered her considerations on the subjects of heterogeneity, intersectionality, and community-engaged and participatory research. The concept was approved after a motion from Dr. Aguila, which was seconded by Dr. Curry.

**The Impact of Inclusive Excellence on Biological Research and Healthcare Teams Outcomes; Presenter: Dr. Triesta Fowler**

<https://videocast.nih.gov/watch=54075&start=15930>

The objective of the concept is to understand the impact of diversity on the outcomes of biomedical research teams in terms of their productivity, publications, and grants, and on the outcomes of healthcare teams in terms of patient outcomes and the reduction of healthcare disparities. It also looks to identify mechanisms through which diverse teams impact performance and to promote research that develops methodologies for measuring diversity and its impact in research teams.

Scientists and trainees that are from diverse backgrounds bring different perspectives from their life experiences that drive how they address scientific problems, and research has demonstrated that these different scholarly perspectives have a positive effect on innovation, decision making, and business performance. Diversity in health care teams has been linked to improved patient outcomes and increased use of preventative care for underserved populations. A gap identified in the review of the relevant literature was the consensus and methodology for measuring diversity in biomedical research and healthcare teams, partly because demographic diversity is not commonly surveyed when composing research and health care teams. Surnames as an indicator of ethnicity can be unreliable, but when used, have shown that diverse teams have increased numbers of citations, indicating productivity. Other gaps include research on the impact of biomedical and health care team diversity, examinations of the intersection of the different aspects of diversity on outcomes, and research on the impact of location on these teams.

For the purpose of the initiative, a broad definition of diversity will be used, as mentioned in the NIH-wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility (DEIA), which includes many communities, identities, races, ethnicities, backgrounds, abilities, and culture. The portfolio analysis was limited by the lack of specific terms that was best used for the purpose of this initiative. Text mining was used to search for applications that had some aspect of diversity. Research into this effort may include but not be limited to cross-sectional studies and longitudinal studies that will evaluate how to define diversity, determine the impact of diverse entities on biomedical research and health care team composition and team performance, and identify mechanisms by which diverse teams impact team performance.

Research priorities:

- Developing diversity measures in biomedical research and healthcare teams
- Investigating the elements of diversity that impact team composition and outcomes
- Exploring the impact of the intersectionality of the diversity factors on the function of teams, team productivity, and outcomes
- Investigating the impact of diverse individuals in scientific roles
- Investigating the impact of diversity on in-person vs. virtual teamwork
- Evaluating the impact of diversity on groundbreaking scientific innovations/advances
- Investigating the impact of diversity on research design settings and collaborators
- Investigating diversity of biomedical research and healthcare teams in various geographical areas and associated outcomes
- Assessing how team diversity impacts the quality of care and health outcomes in healthcare teams

Following feedback from members of the Council, the concept was approved after being duly moved and seconded.

### **Closing Remarks and Adjournment**

<https://videocast.nih.gov/watch=54075&start=16900>

After ascertaining that there were no public comments forthcoming, Dr. Pérez-Stable adjourned the meeting at 4:45 p.m.

END NOTE: REVIEW OF GRANT APPLICATIONS\_ CLOSED SESSION A portion of the meeting was closed to the public in accordance with the provisions set forth in Sections 552b(c)4 and 552b(c)6, Title 5 U.S.C. and 10(d) of the Federal Advisory Committee Act as amended (5 U.S.C. appendix 2). Dr. Pérez-Stable called the Closed Session to order at 1:00 pm, May 22, 2023. Dr. Cotton led the second level review of grant applications submitted to NIMHD programs. Council members and NIMHD staff members were instructed on conflict of interest and confidentiality regulations. Council members and staff absented themselves from the meeting room and discussions for which there was a potential conflict of interest, real or apparent. The Council considered 532 competing applications requesting an estimated

\$448,851,427 in requested total costs for year 1 for non-fellowship grants. Funding recommendations for all applications submitted in response to funding opportunity announcements were reviewed. Applications submitted in response to program announcements and special program review announcements were considered by the Council through En Bloc voting.

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Eliseo J. Pérez Stable, M.D. Date  
Director National Institute on Minority Health and Health Disparities, NIH

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Paul Cotton, Ph.D. Date  
Designated Federal Official National Institute on Minority Health and Health Disparities, NIH