

**U.S. Department of Health and Human Services  
National Institutes of Health  
67th Meeting of the National Advisory Council on Minority Health and Health Disparities (NACMHD)**

NIH Building 45  
Natcher Conference Center  
Bethesda, MD 20894

September 6, 2024  
8:30 a.m. EDT - Adjournment

**Meeting Minutes**

**Council Members Present**

Eliseo J. Pérez-Stable, M.D., Chairperson; Director, NIMHD  
Samuel E. Adunyah, Ph.D., Meharry Medical College  
Jose A. Bauermeister, Ph.D., MPH, University of Pennsylvania  
Lisa M. Cacari Stone, Ph.D., University of New Mexico  
Kendrick E. Curry, Ph.D., M.Div., The Pennsylvania Avenue Baptist Church  
Valarie Blue Bird Jernigan, DrPH, MPH, Oklahoma State University  
Frank J. Penedo, Ph.D., University of Miami  
Mario Sims, Ph.D., University of California at Riverside  
Chau Trinh-Shevrin, DrPH, New York University School of Medicine

**Council Members Absent**

Emma Aguila, Ph.D., University of Southern California

**Ex Officio Members Present**

Jane Simoni, Ph.D., Associate Director, Office of Behavioral and Social Sciences Research, NIH

**Representatives Present**

Larissa Aviles-Santa, M.D., MPH, Director, Division of Clinical and Health Services Research, NIMHD  
Rina Das, Ph.D., Director, Division of Integrative Biological and Behavioral Sciences, NIMHD  
Nathan Stinson Jr., Ph.D., M.D., MPH, Director, Division of Community Health and Population Science, NIMHD

**Executive Secretary**

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

**Presenters**

Richard Benson, MD, Ph.D., Director, Office of Global Health Disparities, NINDS  
Darrell Gaskin, Ph.D., Professor, Johns Hopkins University

Priscilla Grant, JD, Chief Grants Management Officer, NIMHD

Walter Koroshetz, MD, Director, NINDS

Priscah Mujuru, DrPH, Program Officer, NIMHD

## Call to Order and Welcome

Dr. Pérez-Stable called the open session to order at 8:46 a.m.

## Roll Call and Council Minutes Review

[NIH VideoCast - 67th Meeting of the National Institute on Minority Health and Health Disparities Council](#)

Dr. Cotton called the roll and invited members and staff to introduce themselves. The Council unanimously approved the minutes of its May 2024 meeting. Dr. Cotton announced future meeting dates of February 4, 2025; May 16, 2025; September 5, 2025; February 6, 2026; and May 19, 2026. The February 4, 2025; February 6, 2026; and May 19, 2026, meetings will be held virtually and the rest will be in-person. Members were reminded that NIH policy allows Council members no more than one absence per calendar year and that members are prohibited from participating on NIH peer review panels while serving on Council.

## NIMHD Director's Report and Discussion

<https://Videocast.nih.gov/watch=55092&start=380>

Dr. Pérez-Stable greeted the Council and provided a report on NIH and NIMHD-related activities since the previous meeting.

- [Dr. Josh Gordon](#) departed the National Institute of Mental Health in June 2024 after eight years serving as Director. He will be returning to Columbia University as Chair of the Department of Psychiatry and Director of New York State Psychiatric Institute. [Dr. Shelli Avenevoli](#) has been appointed as Acting Director. She has served as Deputy Director for the last seven years. Dr. Carolyn M. Hutter is the new Director of the NIH Common Fund. She is the former Director of Division of Genome Sciences at NHGRI and has over 20 years of experience.
- The [Simplified Review Framework](#) will be in place now going forward for any grant application due on or after January 25, 2025. After May 25, 2025, there will be updates on the common forms for biographical sketch, and current, and pending (other) support. The most important update is on the Research Project Grant applications which will mitigate biases related to reputation and institution. More information can be found from the [Center for Scientific Review](#) (CSR).
- The success rate for NIMHD program announcements or NOFOs and the corresponding application numbers for the last five years are all above a 10% success rate. The four NOFOs with the most applications are Health Services Research, Immigrant Populations, Social Epigenomics, and Surgical Disparities Research. In the past two fiscal years an overwhelming number of applications have been in response to program announcements.
- NIMHD has grown significantly, though the program is still understaffed and still recruiting, particularly in the scientific programs. NIMHD is at 117 full time employees. This does not include the Intramural Research Division trainees which typically has 30 fellows and students.

- Dr. Pérez-Stable had a good meeting with the [Association of Minority Health Professions School](#). He also had a meeting with the leadership of the [Morehouse School of Medicine](#) on the NIH campus, a meeting with the [National Hispanic Medical Association Foundation](#), and a meeting sponsored by the [Doris Duke Foundation](#) through the [National Academy of Medicine](#) discussing the inclusion of race in clinical algorithms.
- Dr. Pérez-Stable delivered [CUNY Medicine's commencement address](#) for the 2024 graduating medical school class, where he was awarded the H. Jack Geiger Icon Award.
- Dr. Monica Webb-Hooper, NIMHD Deputy Director, has been involved in a variety of leadership engagements at [Wake Forest Institute for Regenerative Medicine](#), the [Interagency Committee on Disability Research](#), the [University at Buffalo Health Sciences](#), and she presented to the [American Association of Physician Assistants and Physician Assistants Education Association](#).
- [Jimmy Do](#) has been selected as the new Chief of the Financial Management Branch, referred to as the Budget Officer, after serving as the Acting Executive Officer for NIDCR. Mr. Do founded the [NIH Federated Asian Network](#) and served as President for the [NIH Asian Pacific Islanders American Organization](#).
- [Dr. Tilda Farhat](#) has departed after almost 10 years with NIMHD. Dr. Farhat has been the Director of the Office of Planning, Evaluation, and Reporting since 2020. She is now serving as Senior Executive and Principal Advisor for the [Office of Translational Research for the White House](#). NIMHD is actively searching for her replacement.
- On June 25, Dr. Pérez-Stable, Dr. Webb-Hooper, and Dr. Luca Calzoni had a briefing with the staff for [Senator Martin Heinrich](#) (D-New Mexico) on issues related to artificial intelligence and bias in AI.
- On July 17, Dr. Pérez-Stable and Dr. Webb-Hooper briefed the staff from the [House Appropriations Committee's Labor, Health and Human Services Subcommittee](#) on the [Research Centers in Minority Institutions Program](#) and discussed how NIH has allocated the funds that Congress had provided.
- A highly successful workshop was held in June 17-18 to enhance understanding of mechanisms linking interpersonal biases to health disparities outcomes and strategies for future research. Research gaps were discussed for the need to measure societal level bias linked to individuals, intersectionality in qualitative research, prioritization of cross-disciplinary collaborations, and incorporating patient perspectives on bias exposure in healthcare. The workshops are available on [videocast](#).
- NIMHD was very involved in the [UNITE Workshop on Interdisciplinary Approaches to Understanding and Addressing Structural Racism and Health](#), which garnered nearly 3,000 virtual participants. The workshop was meant to bring in scientists, thought leaders, researchers, all from disciplines that typically are not at the table discussing healthcare and health issues. Dr. Pérez-Stable thought that the most significant perspective for him was the law and criminal justice speakers.
- The [2024 Health Disparities Research Institute](#) meeting in August was highly successful, with 51 early-stage career scientists representing 22 states and the District of Columbia in attendance.

[Dr. Jorge Rodriguez](#) was awarded the 2024 NIMHD Early Career Investigator Award at the meeting.

- NIMHD continues its collaboration with the [National Institute of Biomedical Imaging and Bioengineering \(NIBIB\)](#) on DEBUT to provide awards for innovative solution proposals for emerging healthcare problems from college undergraduates. This year's winner was a [rapid lead detection saliva test](#) designed by students at Cornell University.
- The [HDPulse Interventions Portal](#) was launched in collaboration with the [Office of Minority Health in the Department of Health and Human Services](#). The portal will provide access to interventions vetted by the NIMHD to successfully improve minority health or reduce health disparities.
- The following science advances were made with the help of grants funded by NIMHD:
  - In their paper "[A Critical Review on the Complex Interplay between Social Determinants of Health and Maternal and Infant Mortality](#)," Dr. Rada Dagher and Dr. Deborah Linares present their findings that Black mothers and infants have the highest mortality rates, likely due to accumulation of social determinants of health experienced as a result of structural racism experienced across their lifetimes. The paper received the Best Paper Award by the Journal *Children*.
  - There is a publication forthcoming by Dr. Farhat and other members of the OSPER staff that examines the NIMDH portfolio of 675 funded unique grants from 2019-2023. The four categories evaluated by the publication include Participants Sociodemographics, Type of Study, Healthy People 2030 Domains, and Most Studied Topics.
  - A Special Issue published in [JAMA Network Open](#) has 11 articles authored by NIMHD grantees under the Social Epigenomics initiative. The articles focused on the field of social epigenomics, its importance and its progress through NIMHD-led programs. Dr. Arielle Gillman, Dr. Pérez-Stable, and Dr. Rina Das published an editorial for this issue.
  - "[Sleep Problems and Health Outcomes Among Urban American Indian and Alaska Native Adolescents](#)," a study by Dr. Wendy Troxel, discusses how sleep in adolescence may be protective against chronic disease burden among American Indian and Alaska Native (AI/AN) youth. The study was done with 142 AI/AN adolescents from urban areas in California. The study found sleep quality and duration associated with mental, behavioral, and cardiometabolic health outcomes in AI/AN adolescents.
  - "[Prenatal Maternal Occupation and Child Epigenetic Age Acceleration in an Agricultural Region](#)," by Dr. Saher Daredia, discusses how identifying social factors that accelerate early-life biological aging in vulnerable communities can inform disease prevention efforts. Farm workers/field workers play a critical role in U.S. society in helping make fresh food available to much of the United States, but the environmental exposures the workers face do not get as much attention as they should. This study is from the Salinas Valley in California.
  - "[Ethnic/Racial Identity, Adolescent Sleep, and Somatic Health: Discrimination and Stress Responses as Mediating Mechanisms](#)," a paper Dr. Mingjun Xie, found discrimination and stress may explain links between ethnic and/or racial identity exploration and

adolescent sleep/somatic health. Coping with discrimination requires additional resources; building commitment and connection to ethnic/racial community may help. The study was conducted with 279 adolescents, the majority of which were female.

- "[Factors Associated With COVID-19 Vaccination Among Racial/Ethnic Minority Groups With HIV in South Florida](#)," a study done by Dr. Daisy Ramírez-Ortiz, found that fully vaccinated participants were significantly less likely to be Black, less likely to endorse COVID-19 vaccine misconceptions, and reported more vaccination encouragement. Delivering accurate and positive messages about vaccines and engaging social networks helped to promote COVID-19 vaccination among people with HIV. The study surveyed 299 Latino and Black adults with HIV/AIDS.
- "[Trends in American Indian/Alaskan native self-reported stroke prevalence and associated modifiable risk factors in the United States from 2011-2021](#)," a study led by Dr. Tyria Heath, found the persistent disparity in stroke prevalence from 2011 to 2021 leaves AI/AN adults more susceptible to incident and recurrent stroke. The decrease in stroke incidence is one of the successes in U.S. health, though in the last 10-15 years mortality has increased which is of great concern to the scientific community.
- "[State-Level Indicators of Structural Racism and Severe Adverse Maternal Outcomes During Childbirth](#)," a study by Dr. Jean Guglielminotti, found state-level structural racism indicators of Black-to-White inequalities in unemployment and incarceration significantly increased odds of severe maternal morbidity.
- "[The influence of nativity/birthplace, neighborhood cohesion, and duration lived in the neighborhood on psychological distress](#)," a study by Dr. Lohuwa Mamudu and Dr. Faustine Williams et al., reinforced the importance of strong social cohesion in neighborhoods for mental well-being. Dr. Pérez-Stable noted an important research question: what is the role of a good neighborhood and how is this measured?
- "[Burden of liver cancer mortality by county, race, and ethnicity in the USA, 2000-19: a systematic analysis of health disparities](#)," a study by Dr. Anna María Nápoles and Dr. Pérez-Stable et al., found the importance of implementing targeted and locally tailored programs and policies to reduce the burden of cirrhosis at local levels. Among Asian populations improvements have been seen in cirrhosis mortality. The progress varies across the country with big problems in the Southwest and the Southeast.

NIMHD celebrates the poster presentations by ten summer interns who dedicated eight weeks to working with one of the Intramural scientists.

Dr. Pérez-Stable ended his report by encouraging anyone listening who is interested in a career at NIH to apply to NIMHD because the organization needs scientists for its programs and the Institute welcomes applications from anyone.

## **Presentations**

**Ending Unequal Treatment; Presenter: Dr. Darrell Gaskin**

<https://Videocast.nih.gov/watch=55092&start=3735>

Dr. Darrell Gaskin presented on ending unequal treatment in U.S. healthcare. He began by going through the history of U.S. reports and studies on healthcare inequities. While national attention on inequities dates back to the late nineteenth century, recent efforts can be traced to the [1985 report from the Secretary's Taskforce on Black and Minority Health](#), also known as the Heckler Report, which resulted in several actions being taken to address this issue. In 2003, the Agency for Healthcare Research and Quality's (AHRQ) [National Healthcare Quality and Disparities Report](#) found that inequities in the quality of healthcare received by minoritized populations persisted even after accounting for social economic position. The AHRQ report made several recommendations to address healthcare disparities. Following the initial report, the Agency has produced an annual National Healthcare Quality and Disparities Report. For the past two decades, the U.S. has seen the proliferation of health and healthcare equity in executive orders and other official policy mitigation tactics. Chief among them, Dr. Gaskin said, was the [Affordable Care Act passed in 2010](#). This was a major policy achievement and the most comprehensive federal legislative instrument for healthcare reform. Still, inequities persist across all states, even in states with better health systems. Research shown in Dr. Gaskin's report indicated that inequities contribute to millions of premature death, resulting in the loss of productive life and economic activity, and costing the United States close to a trillion dollars annually. The National Academies of Science, Engineering, and Medicine recently convened an [expert committee](#) to revisit the 2003 report, tasked with examining the major drivers of health inequities, study interventions, note gaps in the research, and strategize methods to close these gaps.

The committee's study methodology began with conducting a review of the literature relevant to its task. To supplement the literature review the committee commissioned three papers documenting:

- Evidence on racial and ethnic inequities in healthcare measured by access, use, and quality of care
- The evolution of the U.S. healthcare and civil rights laws since 2003 that pertains to the study's task
- Policy initiatives that have been effective in reducing racial and ethnic inequities in healthcare

The committee also conducted virtual public workshops to obtain insight on racial inequities in healthcare and current approaches to alleviate them. A [publication](#) summarizing the discussions was published by the National Academies Press in January 2024.

Dr. Gaskin went through key report terminology including but not limited to disparities versus inequities, inequitable versus unequal treatment, and racially and ethnically minoritized groups, as opposed to racial and ethnic minorities. After which he discussed the healthcare system itself, reviewing four key intersecting domains identified by the committee: healthcare laws and payment policies, healthcare delivery system, discovery and evidence Generation, and accountability. All four domains are critical

points in the healthcare system that can allow the system to perpetuate inequities and have impacts within local communities.

Dr. Gaskin explained that the ultimate outcome of this work is to create an accountable system that delivers equitable healthcare to achieve optimal health. The report "[Ending Unequal Treatment: Strategies to Achieve Equitable Health Care and Optimal Health for All](#)," detailed eight overarching conclusions, five goals, and 17 recommended implementation actions. Racial and ethnic inequities remain a fundamental flaw of our healthcare system which by its very design delivers different outcomes for different populations. The poor performance of the system affects everybody, but disproportionately impacts racial and ethnic minoritized populations. Eliminating these inequities is achievable, feasible, and improves the level of care for everyone. The five goals of the report are to: 1. Generate Accurate and Timely Data on Inequities, 2. Equip Healthcare Systems and Expand Effective and Sustainable Interventions, 3. Invest in Research and Evidence Generation to Better Identify and Widely Implement Interventions that Eliminate Healthcare Inequities, 4. Ensure Adequate Resources to Enforce Existing Laws and Build Systems of Accountability that Explicitly Focus on Eliminating Healthcare Inequities and Advancing Health Equity, and 5. Eliminate Inequities in Healthcare Coverage, Access, and Quality. The first goal addresses how aspects of U.S. healthcare that go un-measured cannot be managed. The second goal responds to how the healthcare system has failed to adopt improvements that stem across the continuum care. The third goal confronts how slow and incremental progress in addressing healthcare inequity has been due to historic underfunding of health equity research. The fourth goal addresses how many existing regulations are not enforced. The fifth goal calls attention to the significant structural differences in payment for the same services among insurance payers. Dr. Gaskin said this is one of the major barriers that prevents implementation of work that would fix inequities in the healthcare system. Our current healthcare system allocates resources based on affluence, not on health needs. An example of this is price discrimination in the insurance industry.

Dr. Sims asked how the system can be rebuilt in a stepwise fashion. Dr. Gaskin said it does not need to be rebuilt, but on the coverage side the expansion of Medicaid and the equalization of payment between Medicaid and Medicare needs to be completed. Laws and regulations must also be enforced to hold people and institutions accountable. Dr. Adunyah commented that some of these issues require the involvement of Congress, which can be very slow-moving, and asked how that issue can be overcome. Dr. Gaskin said he tries to look at these situations with a glass half-full attitude, appreciating the current reality by acknowledging that we are not where we need to be, but we are not where we were 20 years ago. It is not a one-year fight; it is a generational fight.

**Advancing Neurological Health Equity: NINDS Strategic Priority Setting; Presenter: Dr. Walter Koroshetz and Dr. Richard Benson**

<https://Videocast.nih.gov/watch=55092&start=6875>

Dr. Walter Koroshetz and Dr. Richard Benson presented on the work of [the National Institute of Neurological Disorders and Stroke \(NINDS\)](#) and its efforts to address health disparities. The Institute's



mission is to seek fundamental knowledge about the brain and nervous system and use that knowledge to reduce the burden of neurological disease for all. Dr. Koroshetz began by explaining how NINDS balances its goals with the resources it has available. NINDS' main goal is to work with the healthcare systems to get affordable solutions implemented that work with the system. One example of a success Dr. Koroshetz shared is work done by Kaiser Permanente that erased healthcare disparities related to [hypertension care in Northern California](#). Dr. Koroshetz highlighted the benefits of looking at a system and finding workarounds that allow for continuous progress.

Dr. Benson provided an organizational overview the NINDS and the intramural research it supports. NINDS is aware that certain populations have borne an excess of negative outcomes associated with neurological disorders. Among the discussed populations Dr. Benson noted the importance of including intersectionality between overlooked groups, including those with limited English proficiency. To assess lives lost to inequities, NINDS researchers conducted a mortality analysis, looking at the data to excess mortality due to neurological disease by race and ethnicity. NINDS has noticed a decrease in the stroke rate in the United States, but they are starting to see an increase again, particularly in younger age groups in certain populations such as African American populations. By expanding the data to all populations of Americans, NINDS can better pinpoint the issues being faced by certain groups, as opposed to just comparing them to White Americans. A [working group](#) of the NINDS Council that was established to study the topic of health disparities in the NINDS mission area issued 18 high-level recommendations that were then presented to the National Advisory Council. From these 18 recommendations NINDS created an implementation plan with four overarching goals: expand support for health equity research, promote community engagement with populations that experience health disparities, develop a health equity research workforce, and expand communication and outreach. NINDS established a partner working group with community organizations, Historically Black Colleges and Universities (HBCUs), and multimedia platforms. In an effort to advance community-engaged health equity research and foster collaboration, [NINDS created the Community-Engaged Health Equity Research in Neuroscience \(HERN\) initiative](#).

Dr. Valerie Blue Bird Jernigan asked how NINDS encourages trainee neurological physicians who want to work in tribal land or rural locations given the fact that tribal populations have very limited access to neurologists. Dr. Koroshetz said he was not aware of any current programs that did that but asked if Dr. Jernigan had any ideas of how it could happen. She said one example was how Oklahoma State University opened the [College of Osteopathic Medicine at Cherokee Nation](#) to train and encourage physicians to stay in these rural locations. Dr. Benson said that NINDS has been discussing other training opportunities and noted that the [NIH Helping End Addiction Long-term \(HEAL\)](#) program might be an avenue for collaboration on this topic. Dr. Lisa Cacari Stone spoke about the [ECHO model being used at University of New Mexico](#) and how it could be used as a possible collaboration to do what Dr. Jernigan was describing. Dr. Pérez-Stable said Dr. Jernigan's challenge could be addressed by leveraging telemedicine modalities. Dr. Koroshetz spoke about the success of telemedicine with treating stroke cases in New England.

**The Role of Behavioral and Social Sciences in the Nation's Health; Presenter: Dr. Jane Simoni**  
<https://Videocast.nih.gov/watch=55092&start=9350>

Dr. Jane Simoni began the presentation by comparing how U.S. health compares to other high-income countries. The U.S. ranks last in healthcare outcomes, administrative efficiency, and access to care. In a word, Dr. Simoni describes U.S. healthcare as poor. This can also be seen in U.S. infant and maternal death rates, obesity and multiple chronic conditions, deaths from assault, and overall life expectancy, all of which U.S. ranks the worst in. It is not just that U.S. health is not good, it is that there are major, preventable disparities by race, ethnicity, and socioeconomic status (SES). The U.S. is spending almost double what other comparable nations spend on healthcare, with worse outcomes to show for it. By using the [Neighborhood Opportunity Index](#) one can understand and predict the health disparities faced in individual communities. Behavioral and social sciences research (BSSR) is a systemic study of observable interactions relevant to physical, mental, and social wellbeing. High-quality BSSR can address health disparities. Dr. Simoni spoke about the importance of engaging with marginalized communities. Marginalized communities are not hard to reach, but hardly reached. By integrating insights from BSSR, public health efforts can be more targeted, effective, and equitable, ultimately helping to reduce and eventually eradicate health disparities. The NIH expanded the phrase "biomedical research" to "biomedical and behavioral research," which caused a real shift and increased grant applications. Dr. Simoni discussed the new strategic plan, and its priorities based around a cross-cutting theme of health equity. As she explained the priorities, she highlighted which aspects can be enhanced by artificial intelligence and machine learning advances and how this will impact the field of BSSR. Dr. Simoni ended her presentation with a call to action, explaining how BSSR can push forward all NIH mission areas.

Dr. Adunyah pointed to the chart showing how the U.S. has the worst life expectancy rates compared to other high-income countries and asked if the diversity in the U.S. combined with the systemic inequities is contributing to the low life expectancy rate. Dr. Simoni replied that she thinks it does.

### **Statement of Understanding**

<https://Videocast.nih.gov/watch=55092&start=11415>

Dr. Priscilla Grant outlined the Statement of Understanding (SOU) between the NIMHD and Council, which summarizes how interactions between NIMHD and the Council will proceed over the next year. Dr. Grant gave overviews on four sections of the SOU, including open/closed sessions, appeals, administrative decisions, and actions that do not require Council recommendations, and options available to Council when reviewing applications in a closed session. In closing, Dr. Grant reminded Council members of her contact information in case they have any questions.

### **Approval of Concepts**

**Advancing Data Science Approaches to Address Health Disparities through AI/ML and Community-Engaged Research; Presenter: Dr. Luca Calzoni**

<https://Videocast.nih.gov/watch=55092&start=11915>

As the use of artificial intelligence and machine learning (AI/ML) and other data science advances continues to grow, community-engaged research has the potential to help mitigate or prevent potential biases in these technologies. While AI/ML can offer solutions and useful tools for researchers, the current models available can have inherent biases that exacerbate health disparities. These disparities can result in diagnostic errors, suboptimal treatment recommendations, and unequal access to healthcare. The biases present in current AI/ML models stem from three main issues: inadequate representation of diverse population in training data, design flaws in the algorithms, and issues in their implementation. AI/ML-informed disparities can become perpetuated in the cyclical nature of data use, from real-world cases to inform AI models on how to make recommendations that affect real-world cases. Sample biases lead to imbalanced designs in AI/ML models which then deploy biased solutions and are monitored through a biased lens. One example Dr. Calzoni found is how AI-driven dermatology has led to dark-skinned patients having skin lesions misdiagnosed because the AI/ML models are trained on light-skinned individuals. To ensure equitable outcomes in healthcare, these biases need to be addressed. One of the ways this can be done is through community-engaged research. The objective of this initiative is to address biases and health disparities by integrating AI/ML with community-engaged research in ways that foster inclusivity, cultural sensitivity, effective health interventions, and to empower communities to take an active role in shaping their healthcare landscape.

Research priorities:

- Development of new AI tools/machine learning models to address health disparities by focusing on specific social determinants of health
- Epidemiological, behavioral, social applied, and surveillance research to understand the impact of social determinants on health disparities
- Preventive, screening, diagnostic, and therapeutic/behavioral health interventions aimed at reducing health disparities
- Validation and enhancement of existing AI tools/machine learning models
- Focus on chronic disease by using ML models to predict disease progression, identify risk factors, and personalized treatment plans for conditions like diabetes and hypertension, which affect marginalized communities.
- Focusing on mental health, building prediction models and early intervention strategies for mental health issues and substance abuse
- Tools that enhance disease surveillance for monitoring infectious diseases like COVID-19 and HIV
- Tools that analyze environmental data and assess health risks in marginalized communities exposed to things like pollution.

Dr. José Bauermeister said he was enthused by this concept, believing it is a much-needed step toward developing more equitable healthcare technologies. He found the integration of the technology and

community research to be very innovative that presents of forward-thinking approach. Dr. Bauermeister said it may be warranted to expand the concept in two areas: ensuring an emphasis of intersectionality of identities when developing and refining these tools and addressing both the provider and system level processes that may contribute to bias, for example, via omitted data. Dr. Bauermeister said the concept ensures that the advancement of the science is not only technically proficient through these interdisciplinary collaborations but also highlights the importance of grounding this work among those that are most impacted by systemic health inequities. Dr. Cotton noted the concept encourages the development of self-agency and empowers communities, particularly those of color, to actively participate in developing a rich healthcare landscape. The science of building trustworthiness and truth is important in terms of community engagement. The project does well in trying to collaborate with the community, but it is important to also focus on community empowerment. After the collection of data, it is important to bring the concept of trust to the clinical decision-making portion of the care. Dr. Cotton also advised NIMHD to be intentional with behavioral matters such as trauma-informed strategies that go along with mental health and research priorities. It is important to get underneath the symptoms of illnesses such as depression and see what lived experiences are affecting that, and to then use this data to inform AI/ML. Dr. Simoni asked how researchers, community members, and AI technology developers will be involved together in this process. Dr. Calzoni said this will be done through capacity-building initiatives. H acknowledged the challenges but said they are making progress. Dr. Simoni said she loves the concept and is interested to see how it will work since the concept will bring together groups of people who do not traditionally work together on NIH-funded research. Dr. Pérez-Stable discussed with Dr. Kendrick Curry and Dr. Bauermeister the potential use of AI/ML in clinical decision-making and whether race and ethnicity should be factored into those algorithms.

Dr. Cotton called for a motion to move the concept forward for notice of funding opportunity development. Dr. Bauermeister so moved, and Dr. Curry seconded. The concept was approved unanimously.

**Novel and Innovative Commercial Tobacco Cessation Interventions in Populations that Experience Health Disparities; Presenter: Dr. Priscah Mujuru**

<https://Videocast.nih.gov/watch=55092&start=13620>

Cigarette smoking remains the leading cause of preventable disease, disability, and death in the U.S., including 25% of all cardiovascular disease death and 30% of all cancer death. The proposed initiative would support novel and innovative intervention research to address tobacco-related cessation among populations that experience health disparities. Progress has been made over the last 60 years in driving the rates of cigarette smoking down, however this success is not seen equally across all U.S. populations. The proportion of U.S. adults reporting nondaily smoking has risen, from 19.2% in 2005 to 25.0% in 2018. As of 2021, the prevalence of combustible tobacco use was 14.5% overall, with estimates varying by race and/or ethnicity: Black or African American, 16.4%; White, 15.9%; Hispanic or Latino, 9.9%; Asian, 7.0%; and Others 18.0%. Other racial groups are not shown in the same 2021 data used by the National Health Interview Survey because of the survey's small sample size. However, other reports showed a prevalence among American Indians or Alaska Natives at greater than 20%. Among Native

Hawaiians and Pacific Islanders, the prevalence of combustible tobacco product use is also higher. Dr. Mujuru noted that disparities in quitting tobacco use seen in rural populations, individuals identifying as a sexual and gender minority, and those who experience severe psychological or mental health issues. When it comes to quit rates, Black or African American people have very low quit rates compared to other racial groups. Again, Dr. Mujuru noted the data on American Indian or Alaska Natives were statistically unreliable because of the small samples. Quit ratios is defined in this study as the percentage of people who have smoked 100 or more cigarettes in their lifetime who have quit smoking. Similarly, data on those in rural populations, those of the sexual and gender minority, and those who experience severe psychological or mental health issues is underreported, but the information that exists shows the rates of these groups is quite dire. To understand what NIMHD is currently funding a portfolio analysis showed that a majority of the awards focus on studying biological, behavioral, and social factors influencing the cause of tobacco use. Very few of these studies focus on the evaluation of smoking cessation interventions and none focus on nondaily smoking. This highlights the need for novel strategies to address health disparities in populations disproportionately impacted by cessation disparities. This initiative will support intervention studies that:

- Develop, implement, and evaluate innovative interventions to help people who smoke tobacco products successfully quit, including non-daily smoking
- Use data science approaches, including AI/ML, to customize treatment plans, deliver just-in-time interventions more effectively, and to predict relapse risks
- Test evidence-based linkage models of care delivery via different platforms such as telemedicine, mobile units, and community organizations to facilitate tobacco cessation interventions
- Understand and address the impact of national and local policies on populations who experience the greatest tobacco use burden and cessation treatment disparities

#### Research priorities

- Address gaps in scientific knowledge and support research on health disparities from tobacco exposure, use, and cessation treatment
- Address multilevel factors and mechanisms that facilitate or challenge effective tobacco cessation
- Support sustainable innovative strategies to improve health and health outcomes with populations disproportionately affected by tobacco use and exposure

Dr. Sims said he thinks this is an important initiative, and called special attention to how few awards are currently focusing on what this initiative was proposing. Dr. Sims said the strengths of this proposal are seen in the research priorities, though he does feel some of them could be expanded more, including contextualizing the holistic cessation intervention on a scale that considers systemic contextual individual level basis. The need to consider social determinants of health in designing intervention is another aspect of the proposal that Dr. Sims pointed out as a strength, as well as the AI/ML and community-based clinics aspects of the proposal. Dr. Sims said there is an opportunity for an intersectionality approach in looking at various identities. He also emphasized the importance of

including other forms of discrimination, including structural forms of discrimination, and even going as far as to looking at the different dimensions of discrimination, such as colorism and internalized racism. In discussion how to best have a culturally tailored holistic study, Dr. Sims recommended NIMHD consider if they should create separate initiatives for the historically understudied demographics or if it should unpack them within one initiative. He also noted the importance of built environments and how they contribute to cessation interventions. Cessation efforts among those who use vaping products is under-studied area that might be of benefit for this proposal. Dr. Chau Trinh-Shevrin underscored the comments of Dr. Sims regarding the use of intersectionality frameworks. She points out that the data in the presentation notes Asian Americans' combustible tobacco use is cited as 7% nationally, but outside data shows there's a survey bias for underreporting smoking rates given many of the surveys are conducted primarily in English or Spanish. Dr. Trinh-Shevrin said utilizing intersectionality frameworks has implications for many other communities that might experience language barriers or limited English proficiency rates. She also encouraged taking a life course and intergenerational approach since most tobacco users begin as youth or young adults. She acknowledged the benefits of using machine learning but cautioned that ML is only as good as the data available. In this case, inherent omissions and systemic biases can lead to underrepresentation and exclusion. Dr. Trinh-Shevrin agreed with Dr. Sims that this is an area where NIMHD could really advance the science to support research that accounts for social and structural factors that include the built environment. Dr. Simoni said she hopes this study will look at policy level aspects, such as the impact tax increases have on tobacco use. Dr. Adunyah continued Dr. Simoni's point about taxation, speaking about how this mitigation strategy differs across the country and across communities.

Dr. Cotton called for a motion to move the concept forward for notice of funding opportunity development. Dr. Sims so moved and Dr. Trinh-Shevrin seconded. The concept was approved unanimously.

#### **Closing Remarks and Adjournment**

<https://Videocast.nih.gov/watch=55092&start=15050>

After ascertaining there were no public comments, Dr. Pérez-Stable closed the meeting by thanking everyone for their work and attendance. Dr. Pérez-Stable adjourned the meeting at 2:06 p.m.