

**U.S. Department of Health and Human Services
National Institutes of Health
National Institute on Minority Health and Health Disparities
57th Meeting of the
National Advisory Council on Minority Health and Health Disparities**

Virtual Meeting

May 25, 2021
11:00 a.m. – 3:30 p.m. EDT

Meeting Minutes

Council Members Present

Eliseo J. Pérez-Stable, MD, Chairperson; Director, NIMHD
Lisa L. Barnes, PhD, Rush University Medical Center
Marshall H. Chin, MD, MPH, FACP, University of Chicago
Giselle M. Corbie-Smith, MD, MS, University of North Carolina at Chapel Hill
Kimberly S. Johnson, MD, Duke University Medical Center
Joseph Keawe'aimoku Kaholokula, PhD, University of Hawaii at Manoa
Spero M. Manson, PhD, MA, University of Colorado Denver
Brian Mustanski, PhD, MA, Northwestern University
Amelie Ramirez, DrPH, MPH, BS, University of Texas Health Science Center
Joan Y. Reede, MD, MS, MPH, MBA, Harvard Medical School
Kenneth A. Resnicow, PhD, University of Michigan
William M. Southerland, PhD, Howard University
Carmen Zorrilla, MD, University of Puerto Rico

Council Members Absent

Neil S. Calman, MD, Icahn School of Medicine at Mount Sinai

Ex Officio Members Present

Judith A. Long, MD, VA Center for Health Equity Research and Promotion
Donald Shell, MD, MA, Office of the Assistant Secretary of Defense for Health Affairs

Representatives Present

William Riley, PhD, Office of Behavioral and Social Sciences Research, NIMHD

Executive Secretary

Thomas Vollberg, PhD, Director, Office of Extramural Research Administration, NIMHD

Presenters

Marshall H. Chin, MD, MPH, FACP, Richard Parillo Professor of Healthcare Ethics in the Department of Medicine, University of Chicago, Chicago, IL

Richard P. Woychik, PhD, Director, National Institute of Environmental Health Sciences, NIH, Research Triangle Park, NC

Richard Berzon, DrPH, Program Official, Clinical Sciences and Health Research, NIMHD

CALL TO ORDER AND WELCOME

Dr. Pérez-Stable, Director of the National Institute on Minority Health and Health Disparities (NIMHD), called to order the Open Session of the 57th meeting of the National Advisory Council on Minority Health and Health Disparities (NACMHD) at 11:00 a.m.

ROLL CALL, MINUTES REVIEW

Dr. Vollberg called the roll. Council members and others present introduced themselves and their affiliations. Dr. Vollberg brought the February 2021 meeting minutes before the Council, calling for a motion to approve them. The Council unanimously approved the minutes of the February 2021 Council meeting.

NIMHD DIRECTOR'S REPORT AND DISCUSSION

Dr. Pérez-Stable provided the report on activities relevant to NIMHD since the February 2021 meeting.

GENERAL UPDATES

- Xavier Becerra was confirmed as the 25th Secretary of the Department of Health and Human Services on March 19, 2021. He is the first Latino to hold the office and formerly served as the Attorney General of the State of California. Prior to his appointment, he served 12 terms in Congress as a member of the U.S. House of Representatives.
- Other HHS confirmations include Rachel L. Levine, MD and Vice Admiral Vivek Murthy, MD, MBA. Dr. Levine is the 17th Assistant Secretary of Health and is the highest-ranking MD within HHS. Vice Admiral Vivek Murthy is the 21st U.S. Surgeon General. He previously served as U.S. Surgeon General from 2014 – 2017.
- Dr. Courtney Aklin formerly the NIMHD Chief of Staff, is now serving as the Acting Associate Deputy Director of NIH in replacement of Dr. Tara Schwetz who moved to the White House Office of Science and Technology Policy. Under Dr. Larry Tabak she will be responsible for advising on a broad array of complex issues, strategic interactions, and management for the Immediate Office of the Director, NIH.

- Dr. Christopher Austin, the Director of NCATS, has departed after 10 years to become a CEO-partner at Flagship Pioneering. The former NCATS Deputy Director, Joni Rutter, PhD, will serve as acting director while a national search is underway.
- President Biden visited NIH on February 11, 2021. He addressed the NIH workforce, toured the Dale and Betty Bumpers Vaccine Research Center, and presented a policy speech at Natcher Auditorium.
- On March 16, 2021, Drs. Francis Collins, Anthony Fauci, and Eliseo Pérez-Stable attended a faith leader vaccine conference event at the Washington National Cathedral to promote immunization against COVID-19 and inspire confidence in the vaccines. The event was attended by faith leaders, local clinicians and other public health officials from across the DC including Howard University Hospital, the National Children’s Hospital and other local medical institutions and academic centers.
- The UNITE initiative was established to identify and address structural racism within the NIH-supported and the greater scientific community and reduce barriers to racial equity in the biomedical research workforce. This initiative facilitates research to identify opportunities, make recommendations, and develop and implement strategies to increase inclusivity and diversity in science. The primary goals of the initiative are reflected in the work of five committees:
 - U: Understanding stakeholder experiences through listening and learning.
 - N: New research on health disparities, minority health, and health equities.
 - I: Improving the NIH culture and structure for equity, inclusion, and excellence.
 - T: Transparency, communication, and accountability with internal and external stakeholders.
 - E: Extramural research ecosystem: changing policy, culture, and structure to promote workforce diversity.

NIMHD Deputy Director, Dr. Monica Webb Hooper co-chairs the “U” Committee, which has developed the plan to conduct listening sessions, focus groups, and interviews. This committee has completed two internal NIH listening sessions and issued a Request for Information which produced more than 1,100 responses, held an NIH Town Hall on Achieving Racial Equity which garnered over 7,000 live views, and are currently analyzing data from an Institute and Center Data Request on Diversity, Equity, Inclusion Activities.

NIMHD Scientific Director Dr. Anna Nápoles co-chairs the “N” Committee. This committee is using the Common Fund mechanism to issue FY21 Funding Opportunity Announcements (FOAs) for Transformative R01 Research projects to Address Health Disparities and Advance Health Equity stratified by Institutional

resources. The NIMHD Intramural program is working with the Clinical Center to consider the increased interest in social determinants of health (SDOH), more standardized measures both for grantees and within NIH. Currently, there is consideration on how to add this element to data collection of patients at the NIH Clinical Center. The committee is also engaging in collaborations with the Office of Disease Prevention (ODP), Tribal Health Research Office (THRO), Sexual and Gender Minority Research Office (SGMRO), All of Us, and other offices as well as investigating ways to create more standardized measures of social determinants of health.

NIMHD UPDATES

BUDGET

- NIMHD's budget has steadily increased since 2016, including an increase from 2020 to 2021 to fund research centers for multiple chronic diseases with health disparities. President Biden's FY22 proposed budget authority for NIH will be announced on May 26, 2021.
- Extramural funding trends showed a slight increase in awards funded, with the Consolidated Appropriations Act of 2020 allowing internal decision-making processes for extramural awards to be made more quickly and more responsively. The trend is also increasing for funding training awards, with a particular increase in K01 and K-23 awards. The T37 Minority Health and Health Disparities Research Training (MHRT) Program, which was modified to include both domestic and international experiences, was renewed in 2019.
- The Loan Repayment Program decreased modestly over the past four years as NIMHD diversified its priorities, but it is expected to increase if NIMHD's budget increases. As of 2020, all NIH ICs can fund health disparities research applications that are appropriate to their Institute. In the past, NIMHD was the only Institute to fund health disparities research applications. NIMHD's FY21 budgeted five million dollars for the Loan Repayment Program (LRP) to support awards and the operating expense of the NIH Loan Repayment program.

NIMHD PRESENTATIONS AND ACTIVITIES

- The Community Engagement Alliance (CEAL) Against COVID-19 Disparities is strategically expanding to focus on urgent community-engaged research and outreach focused on COVID-19 awareness and education among communities hardest hit by the pandemic. New awards were recently made to ten regions in the

Northeast and Midwest states as well as Puerto Rico. In April, interviews, and news stories about CEAL reached over 25 million readers and viewers.

- On April 27, 2021 Dr. Pérez-Stable conducted seven radio interviews in Spanish that reached more than 807,000 listeners. Drs. Gary Gibbons, Monica Webb Hooper, and George Mensah have also been active in media campaigns as individual scientists and clinicians who can address issues of importance to specific communities.
- To promote the *#VaccineReady* promotion, Vice President Kamala Harris and the second gentleman, Dr. Francis Collins, Dr. Anthony Fauci, and Dr. Griffith Rodgers received their second vaccinations at NIH.
- The “NIH Minority Health and Health Disparities Strategic Plan 2021-2025” was published in March of 2021. The Strategic Plan charts the way forward to advance the science of minority health and health disparities for the next five years and demonstrates NIH’s commitment to improving minority health and reducing health disparities. Dr. Deborah Duran was the primary producer of the plan, with contributions from many other NIMHD staff and other experts across NIH. Dr. Pérez-Stable placed particular emphasis on the plan’s reach goals.
- In March, Dr. Webb Hooper was recognized by the Office of Equity Diversity and Inclusion as part of National Women’s History Month for her leadership in the NIH COVID response.
- The Science of Health Disparities Research book was published after years of work by NIMHD scientists and national experts. The 26-chapter book on health disparities research methods defines the field of health disparities science, explains basic definitions, principles, and concepts, explores new directions in scholarship and research, and discusses population health training, capacity building, and multidisciplinary tools needed to advance healthy equity. The focus of this book is on the approaches and methods across the spectrum of minority health and health disparities research. Ligia Artiles and Dr. Richard Palmer from NIMHD were instrumental in finalizing the details of the book.
- Under the leadership of Dr. Webb Hooper, NIMHD published a viewpoint on vaccine hesitancy and diffusion in the Journal of General Internal Medicine in March entitled, *No Populations Left Behind: Vaccine Hesitancy and Equitable Diffusion of Effective COVID-19 Vaccines*.

LEGISLATIVE UPDATES

- Recent NIMHD congressional activities have included requests for town halls with US Representatives and their constituents around COVID-19, the CEAL Program, and vaccine hesitancy.
 - Dr. Monica Webb Hooper spoke on vaccine hesitancy at a town hall held by Rep Steve Cohen (D-TN) on March 8, 2021.

- Dr. Pérez-Stable spoke at several town hall events. These included a March 30th Town Hall that focused on farm and agriculture workers and their concerns with vaccine hesitancy, a Town Hall with Rep. Gregory Meeks (D-NY) on COVID-19, the CEAL Program, and vaccine hesitancy on April 27th, and a May 5th Town Hall with Rep. Emanuel Cleaver (D-MI) on COVID-19, the CEAL Program, and vaccine hesitancy
- On May 26, 2021 Drs. Pérez-Stable, Francis Collins, Anthony Fauci, Ned Sharpless, Diana Bianchi, Gary Gibbons, and Bruce Tromberg will participate in the FY 2022 NIH budget hearing before the Senate Appropriations Subcommittee.

NIMHD STAFF UPDATES

- Ms. Tricia Goldburn has joined the NIMHD Office of the Director as an Ethics Program Specialist, and Dr. Vanessa Marshall has joined the office as a Social and Behavioral Scientist Administrator and Project Manager working closely with Dr. Webb Hooper. Kimberly Allen is now the designated ethics official (DEO) for NIMHD with the retirement of Dr. Joyce Hunter last year.
- Julie Anderson is now the Chief Administrative Officer in the Office of Administrative Management, with Tamika Carney joining the office as an Administrative Officer and Lemel Johnson joining as a Budget Analyst.
- Dr. Ivan Navarro has joined the Office of Extramural Research Administration as a Health Scientist Administrator and Scientific Review Officer.
- Dr. Derrick Tabor retired after more than 16 years at NIMHD. Dr. Tabor served as the Program Director of Integrative Biological and Behavioral Sciences, where he managed a diverse portfolio of research, capacity building, and training grants. He was also the scientific contact for NIMHD Small Business Programs and the program director for the Research Centers at Minority Institutions and several NIMHD cooperative agreement awards.
- NIMHD is looking to hire Health Scientist Administrators (Program Officers). Dr. Pérez-Stable directed candidates to apply online via USAJOBS by May 26, 2021.

NIMHD HIGHLIGHTS

- NIMHD joined the Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC) Program in 2020. The first two awardees are Dr. Ayobami Akenroye from Johns Hopkins University, and Dr. Evan White from the Laureate Institute for Brain Research. As part of the RADx-Underserved Populations (RADx-UP), NIMHD allocated a significant amount of funding to the Safe Return to School Diagnostic Testing Initiative. This initiative is managed by National Institute of Child Health and Human Development (NICHD) and aims to generate data that will allow rational decisions about safely returning children to in-

person school in response to the pandemic. Initial funding of \$33 million over two years was allocated to 8 projects over 10 institutions across 8 states.

- The 2nd phase of RADx-UP is open and accepting applications. NIMHD is administering and working closely with the UNC/Duke Coordination and Data Collection Center to continue building the consortium. RADx-UP Awards to date totaling over 300 million dollars, cover institutions across most of the U.S., with some studies based in one institution covering populations in another state. For example, one study funds an institution that includes urban American Indians and Alaska Natives participants throughout the country.
- NIMHD published a Notice of Special Interest: Vaccine Hesitancy, Uptake, and Implementation among Populations that Experience Health Disparities (NOT-MD-21-008) with a special rapid turnaround. NIMHD funded five of the grants that include interventions that are community-based, health system-based, adapting interventions used in other behavior change contexts targeting African Americans, Latinos, and general low-income populations. The institutions awarded are: Northeastern University, University of California, San Diego, University of North Carolina at Chapel Hill, University of Michigan at Ann Arbor, and University of Massachusetts Medical School, Worcester. The first year is funded by the NIH Office of the Director with subsequent years funded by NIMHD.
- The Envisioning Health Equity Art Challenge, an event in celebration of the 10th Anniversary of NIMHD as an Institute, announced winners of monetary prizes in both adult and teen categories.

	Adults	Winners Teens
1st	Zarrin Tashnim, New York <i><u>In This Together</u></i>	Larisa Kachko, Maryland <i><u>A Playground Is Just a Small City</u></i>
2nd	Kirandeep Kaur, California <i><u>The American Dream</u></i>	Katie Bonilla, Georgia <i><u>Working Together to Bring Health for All</u></i>
3rd	Adam Vossen, California <i><u>Healthcare Access Pass</u></i>	Arielle Clark, Maryland <i><u>Medical Equality</u></i>

- The Immigrant Health Grantee Meeting from March 15-16, 2021 brought together 25 grantees in the field of immigrant health to share research results and discuss future research directions. The meeting focused on both etiological mechanisms of health observed among immigrants and on the “paradox” of immigrants having better health than expected based on socioeconomic status and interventions to promote sustaining health or begin addressing health problems. The NIMHD planning committee included Dr. Rina Das, Dr. Jennifer Alvidrez, Dr. Rada Dagher, and Dr. Deborah Linares.
- A special issue of Ethnicity & Disease titled “Structural Racism and Discrimination: Impact on Minority Health and Health Disparities” was published in May 2021. This NIMHD-sponsored and contained peer-reviewed articles and three invited

commentaries. The special issue supplement was the outcome of a workshop hosted by NIMHD in 2017.

- A funding opportunity announcement for “Understanding and Addressing the Impact of Structural Racism and Discrimination on Minority Health and Health Disparities” (R01 Clinical Trial Optional), RFA MD-21-004 calls for applications to be submitted by August 25th and a pre-application technical assistance webinar is to be held on May 26, 2021.
- As part of Asian American and Pacific Islander Heritage Month, the 2021 Vivek H. Murthy Distinguished Lecture Series for Public Health Leadership is scheduled for May 27, 2021. It will feature a fireside chat between Dr. Murthy and Dr. Victor Dzau, President of the National Academy of Medicine, moderated by Dr. Webb Hooper.
- The 2021 NIMHD Director’s Seminar Series has hosted three guest speakers with two more guest speakers presenting in June and November.

2021	Guest Speaker
February	L. Ebony Boulware, MD, Ph.D., Duke University
March	Ali H. Mokdad, Ph.D., University of Washington
April	Carol Mangione, M.D., University of California, Los Angeles
June	Chau Trinh-Shevrin, Dr.PH., New York University
November	Dolores Acevedo Garcia, Ph.D., Brandeis University

- The NIMHD Division of Intramural Research Health Disparities Interest Group monthly seminar series hosted three speakers. Dr. Sherman James, well known for work on John Henryism presented in February, Dr. Elizabeth Pathak presented in March on measuring COVID incidence in children and teens, and Dr. Leighton Chen presented in April on Disabilities and Disparities.
- NIMHD held meetings in collaboration with Tiffany Powell-Wiley from NHLBI on the Howard University Partnership with the National Institutes of Health for Equitable Clinical Trial Participation for Racial/Ethnic Communities Underrepresented in Research (HoPe-NET) program. This partnership is an opportunity work with community clinics in Washington, DC on community-engaged research via the NIMHD intramural program.
- NIMHD intramural research trainees were celebrated at the 2021 Virtual Postbac Poster Day. Postbacs recognized were

SCIENTIFIC ADVANCES

- A paper published in [AIDS and Behavior](#) examined over 6,500 HIV-infected people from the Ryan White Program in Miami, Florida (Dawit, R., et al., [AIDS and Behavior](#). 2021). The study found that the odds of achieving sustained viral

suppression were significantly lower for people with multiple co-occurring risk factors (mental health symptoms, substance abuse, multiple sexual partners, domestic violence, and/or homelessness) compared to those with none. Participants aged 50 years or older were more likely to be virally suppressed than those under 50 years of age. Thus, it is critical to work with our youth on these risk factors.

- A study in the International Journal of Environmental Research and Public Health examined the association of Anglo or Mexican acculturation to various facets of sleep health among those of Mexican descent at the US-Mexico border. Data was collected from 100 adults of Mexican descent in the city of Nogales, Arizona (AZ) (Ghani, S.B., et al, Int J Environ Res Public Health, 2020). Higher Anglo acculturation orientation was associated with less weekend sleep duration and efficiency, worse insomnia severity and sleep quality, and more sleep apnea risk and sleep medication use.
- In a study on depression, anxiety, and interest in mental health resources 580 high school students of which 79% were sexual and gender minorities, in 38 Gender Sexual Alliances schools (GSAs) across Massachusetts completed surveys in the fall and spring semesters (Poteat, V., et al., Prev. Sci., 2021). The study found high interest among these students for receiving information about mental health; GSAs may be an ideal venue for delivering mental health interventions.
- A study in the International Journal of Cancer highlighted the importance of disaggregating race and ethnicity data. Using data from the National Center for Health Statistics researchers looked at gastrointestinal (GI) cancers (esophageal, gastric, colorectal, liver and pancreatic) for the six largest Asian American populations (Asian Indians, Chinese, Filipinos, Japanese, Koreans and Vietnamese) using data from the National Center for Health Statistics between 2003-2017 (Huang et al., International Journal of Cancer, 2021). In aggregate, Asian Americans patients – not including Hawaiian and Pacific Islanders - had a lower mortality from GI malignancies than White patients. When the data were disaggregated by cancer type and national origin group, researchers found that while South Asian and Filipino patients had lower mortality rates, Korean and Japanese patients had the highest mortality rates of any race/ethnicity in the study.
- A paper in the Proceedings of the National Academy of Sciences examined anti - Black violence and association with more poor mental health days among Black and White individuals (Curtis et al., PNAS, 2021). The researchers looked at reports of anti-Black violence incidents over four years, particularly focused on police killings of Black civilians in relation to the timing and level of national interest based on Google searches and the number of poor mental health days by week for Black Behavioral Risk Factor Survey (BRFSS) respondents. External events, such as violence against a particular racial ethnic group impact the community, above and

beyond the immediate effects of family and friends, and are magnified through media. The study found that racial violence is a national stressor and is one way in which racism is a public health threat.

- An analysis of in-hospital mortality found a lack of difference in U.S. rural versus urban hospitals for ischemic strokes (Zhang, Donglan, et al., *Journal of Stroke and Cerebrovascular Diseases*, 2020). Crude stroke mortality was higher in weekend admissions than weekday admissions, and in-hospital mortality among hemorrhagic stroke patients was significantly greater for weekend admissions in both urban and rural hospitals, with a worse outcome associated with rural hospitals. Generally, rural mortality was lower than urban mortality for ischemic strokes after adjustment for other factors. Mortality is higher for hemorrhagic stroke compared to ischemic strokes with worse outcomes in rural compared to urban areas. Factors associated with the weekend association with hemorrhagic stroke mortality need further investigation to improve stroke care services and reduce hemorrhagic stroke mortality.
- A qualitative study conducted focus groups with 36 African American residents in urban and rural low-income communities in Alabama to examine perceptions of COVID-19 (Bateman et al, *Ethnicity and Health*, 2021). They examined prevention, coping, and testing barriers to COVID-19. Common responses included apathy, difficulty with social distancing, lack of information, mixed messages from authority figures and lack of PPE for prevention, food insecurity, mental health difficulties, economic hardships, education/children, technology and lack of access to church services and healthcare for coping, and, fear, mistrust, restrictions on/cost and location of testing availability, and misunderstanding for testing.
- A paper in *BMC Public Health*, “*States with fewer criminalizing immigrant policies have smaller health care inequities between citizens and noncitizens*”, looked at the impact of criminalizing immigrant policies on healthcare inequities (De Trinidad Young et al., *BMC Public Health*, 2020). They examined the association among state-level, immigrant criminalization policies, health care access, and citizenship status. Using data from the National Health Interview Survey, 2014–2015, that included Latino, White, Black, and Asian adults ages 18–64, researchers found that an increase in the level of state criminalization policies was associated with a significant population-level decline in health care access. This difference between U.S. citizens and non-citizens and citizens increased with greater numbers of criminalization policies.
- The NIMHD Division of Intramural Research conducted a study identifying malignant colorectal cancer risk (CRC) profiles and differences in survivorship (Montiel Ishino, F.A., et al. *Front Public Health*, 2021). They used survivorship profiles using 525,245 individuals from the Surveillance, Epidemiology, and End Results (SEER) cancer registries to identify four survivorship populations. While

accounting for social determinants of health, the interactions of multiple individual factors may help identify drivers of CRC disparities.

- Dr. Kelvin Choi's laboratory in the NIMHD Division of Intramural Research, examined variations in substance use and disorders among sexual minorities stratified by race/ethnicity (Freitag et al, Substance Use & Misuse, 2021). They found that gay/lesbian and bisexual Latino and Black adults had higher prevalence of tobacco use disorder (TUD) compared to heterosexual counterparts. Bisexual White individuals also smoked more than their heterosexual counterparts. Bisexual Latino, Black, and White heterosexual adults often had higher prevalence of alcohol use disorder (AUD) and cannabis use disorder (CUD) than their gay/lesbian counterparts. Effective interventions tailored to race/ethnicity and sexual orientation may be needed.
- A paper published by Dr. Pérez-Stable's laboratory evaluated measures of smoking susceptibility and tobacco media engagement in predicting smoking among youth never smokers (Coreas S.I., et al., Pediatrics, 2021). Using data from the Population Assessment of Tobacco and Health Study, they determined that responding in the affirmative to any of a series of four susceptibility questions about smoking increased participants' odds of having experimented with cigarettes three years later by a factor of seven. The study showed that asking these susceptibility questions helped to predict smoking experimentation which is directly related to ongoing smoking later in life and may be considered for use by clinicians in routine preventive care visits with adolescents.
- The NIH established a planning committee to advance a multimorbidity framework and identify gaps in research (Salive, ME, et al. Medical Care. 2021. E-pub ahead of print). The planning committee reviewed the literature and developed a guiding framework that incorporates the concept of concordant and discordant comorbidity, and includes potential causes, interactions, and outcomes. This framework informed workshop presentations and discussion on identifying and selecting the best available multimorbidity instruments.
- Dr. Pérez-Stable presented an overview of CDC data on COVID-19 weekly cases by race/ethnicity adjusted for population size. He highlighted the disproportionate number of cases among Latinos in the U.S. Data from the CDC's Morbidity and Mortality Weekly Report. (National Syndromic Surveillance Program, MMWR-April 16, 2021; 70(15);566-569) The report showed higher numbers of emergency department visits for COVID-19 in 13 states among Latino/Latina compared to White persons, with high numbers for African American and American Indian/Alaska Native (AI/AN) people as well. A similar effect was seen for age-specific differences between percentages of COVID deaths and population distribution. While vaccine hesitancy has been discussed at length in relation to vaccine uptake, there are

many structural factors that contribute to differences in uptake between races/ethnicities.

- Data from the Association of American Medical Colleges on medical school enrollment and graduates by race/ethnicity and year showed that improvement is gradual for African American and Latino/Hispanic representation in these categories. The number of AI/AN U.S. physicians in 2018 had decreased in comparison to 2013. Improvement in African American and Latino/Hispanic representation is very gradual with fifteen percent of medical school enrollment in 2020 from these two groups and this is an increase in enrollment for the two groups that is about five percent of the total enrollment and graduates. Similar numbers were reported for U.S. STEM PhD's for underrepresented groups in 2019. Most concerning is the number of American Indian and Alaska Native physicians that has decreased by almost 1,000 individuals in 2018 compared to 2013.

PRESENTATIONS

Research for the Roadmap to Advance Health Equity

Marshall Chin, MD, MPH, FACP, Richard Parrillo Family Professor of Healthcare Ethics, Department of Medicine, University of Chicago

Dr. Chin summarized current knowledge about healthy equity and shared a model for advancing health equity, identified key research questions, and proposed how we might improve our national health equity research portfolio, and discussed his own relevant research. He defined equity using both the Robert Wood Johnson Foundation (RWJF)'s and the World Health Organization's definitions and noted that the WHO's definition includes an element of social justice.

Academy Health's Paradigm Project aims to revise and improve the current health services research, which is inadequate to address current challenges. As part of this project Dr. Sivan Spitzer-Shohat and Dr. Chin wrote a paper looking at other disciplines, in particular musicology, digital humanities, and law, to learn how those fields have transformed themselves and apply those lessons to health services research. From this paper they developed a conceptual framework centered on research disciplines that examined how those disciplines are affected by a variety of internal and external factors, such as opposing views within the discipline and social and political forces from the outside. While some fields have bounded knowledge, others are able to undergo disruptive innovation, which changes the DNA of the discipline and results in true transformation.

Dr. Chin spoke about the NIMHD Research Framework, which incorporates levels and domains of influence. He noted the NIMHD Research Framework has many strengths but that one limitation is that it does not show how the pieces fit together and where the

associations and pathways exist. Dr. Chin's Framework for Advancing Health Equity is built on the idea that progress will not be made unless organizations and society truly commit to the mission of maximizing the health of diverse individuals and populations and intentionally advance health equity.

This involves a Roadmap to Advance Health Equity and creating a culture of equity. The former includes identifying disparities, conducting root cause analyses, and designing and implementing care interventions to address root causes in conjunction with the community. The latter involves understanding personal biases and identifying system structures that may bias against and oppress marginalized populations. For these two processes to be successful in improving individual and population health and improving health and health care equity, every worker in an organization should know how to operationalize advancing health equity in their daily jobs. Payment reform should support and incentivize care transformation that advances health equity, and cross-sectoral partnerships should address medical and social drivers of health. Dr. Chin noted he has shared the model with a variety of audiences and the response has been uniformly positive. He attributed this to the model resonating with personal lived experiences.

Dr. Chin shared his journey to developing this model. He partnered with the MidWest Clinicians' Network, a consortium of health centers across the 10 Midwestern states. This partnership led to a series of research studies to improve diabetes care, including an R01 quality improvement collaborative with 20 health centers. Around this time, HRSA's initiated the Health Disparities Collaborative (HDC) in health centers involving quality improvement, the Chronic Care Model, and learning sessions. Dr. Chin and his team evaluated clinical outcomes, economic outcomes with societal cost-effectiveness analysis and business case analysis, organizational outcomes and implementation science outcomes. They found that hemoglobin A1c levels of participants decreased after four years; that the intervention was societally cost-effective but from the perspective of individual health centers the balance of costs and revenues did not clearly improve. In addition, participants felt that Collaboratives drew time, energy, and resources away from other health center activities; however, participants also thought there were spillover benefits in the quality of care for chronic conditions that were not an emphasis of the Collaborative. Throughout this process Dr. Chin learned to find the right partners, to ask about the practical implications of the work, and to become an expert on a topic and then use multiple research methods to study it from different angles.

Concurrently with the HDC, Dr. Chin worked on another initiative to improve diabetes care and outcomes on the South Side of Chicago. Co-led by Dr. Monica Peek, the team's long-term goals were to strengthen partnerships between the community and the University of Chicago, empower communities to address diabetes, and to be sustainable. Their

conceptual model combined community partnerships, patient activation, quality improvement, and provider training. The study evolved over time to address health systems factors and community factors within the sociopolitical environment. The team used a program of culturally tailored patient empowerment and education. They worked extensively with the community, including a farmer's market, supermarket, pharmacy, and the local media. The program improved hemoglobin A1c levels and behavioral outcomes of participants and community outreach, participation, and engagement were successful. Participants and collaborators thought that integrated healthcare-community partnership was the right thing to advance health equity, but that the health care system and payment system were not aligned to support such partnerships.

In a project funded by the Agency for Healthcare Research and Quality, Dr. Chin and his team looked at how to improve shared decision-making among clinicians and LGBTQ people of color. They interviewed over 200 LGBTQ people of color to examine how complicated intersectional issues around race, ethnicity, sexual orientation, and gender identity impact their interactions with clinicians and the health care system. This was illustrated by one Latinx masculine gender-nonconforming participant who explained that because it was so rare to have a clinician that's a person of color, they did not disclose their gender identity for fear.

Dr. Chin summarized a research fellowship in Aotearoa, New Zealand for a paper comparing national healthcare equity policies. Colleagues from Aotearoa, New Zealand, some of whom were Māori, stressed the importance of having free, frank, and fearless discussions about structural racism, colonialism, and social privilege. These discussions are difficult because power is ultimately the issue, who has control over resources, the historical narrative, and the framing of healthy equity. Dr. Chin's paper in *Academic Medicine* with Drs. Monica Peek and Monica Vela outlined practical lessons for teaching about race and racism, including ground rules, language and communication, social constructs, intersectionality and bidirectional biases, and structural racism, solutions, and advocacy.

Dr. Chin explained that his career trajectory changed when he was asked to lead one of RWJF's national health care disparities programs, the current Advancing Health Equity (AHE) program: Leading Care, Payment, and Systems Transformation. He presented his lessons learned working with frontline organizations in AHE and concluded that model programs and the overall evidence base are helpful, but ultimately interventions must be tailored to particular contexts. Operational decisions frequently need to be made in the present based on incomplete data. Multiple factors described in the NIMHD Research Framework are important. Implementation issues are critical within and across organizations, and patient-centered, community-centered, and provider/staff-centered

approaches are vital. An organization's technical capabilities, culture, and values are important, social determinants of health and structural racism must be addressed, and equity should be framed as a moral and social justice issue.

Dr. Chin concluded by positing that much current health equity research does not optimally advance the field. He made several recommendations: emphasize transdisciplinary approaches; discard the hierarchy of research design; design studies that reflect the complexity of the real world; employ rigorous mixed methods; move beyond "safe" ideas that are meant to address conservative, narrow study sections and only incrementally advance the field a small amount; incorporate multiple ways of knowing and the lived experience; ask how research can be useful to end users; and fund an ethics research agenda for health equity.

Dr. Chin thanked the Council for the opportunity to present and addressed a few questions and comments.

Promoting Precision Health: Integrating the Exposome with the Genome

Richard P. Woychik, PhD, Director, National Institute of Environmental Health Sciences, NIH

Dr. Woychik gave an overview of his Institute's environmental health science research and its interactions with minority health and health disparities. The National Institute of Environmental Health Sciences' (NIEHS) mission is to discover how the environment affects people to promote healthier lives, and its vision is to provide global leadership for innovative research that improves public health by preventing disease and disability. He emphasized NIEHS' focus on prevention and outlined their strategic plan for 2018-2023, which includes advancing environmental health science (EHS), promoting translation of data to knowledge and then to action, and enhancing EHS through stewardship and support. NIEHS studies a variety of risk factors and exposures found in homes, workplaces, and communities, and their research includes exploring how these exposures affect health disparities.

Dr. Woychik summarized a recent conceptual shift in the field of EHS: whereas before the focus was on acute, high-level exposures, researchers have now come to recognize that they also need to focus on chronic, low dose exposures that disrupt the control of development and function and cause common diseases and disabilities. The timing of exposure is critical, and windows of exposure are used to correlate environmental exposures with adverse health effects. Often exposure occurs early in life or during gestation and this predisposes an individual to negative health effects later in life. EHS researchers have also realized that exposures do not occur singly, and combinations of

exposures need to be examined. Another concept of interest is the microbiome and its composition, which is associated with health and disease and influenced by environmental exposures.

Dr. Woychik explained that NIEHS and the EHS community are moving towards a more sophisticated framework, the exposome, to study the impacts of environmental exposures. Developing the exposome, which aims to capture the totality of exposure, which would include psychosocial stress associated with health disparities, will involve innovative new tools for measuring individual exposures and robust IT tools to manage the data science.

NIEHS is also interested in individual differential susceptibility to environmental agents. In collaboration with other ICs, the Genes, Environment, and Health Initiative explored the possibility of gene variants associated with different environmental exposures. He gave a specific example of differential responses to environmental exposures (drugs and environmental toxicants) by showing data from different inbred strains of mice and individual humans. These experiments clearly showed the variability in toxicity responses between differing inbred strains and between individual humans, which illustrates how the genetic, epigenetic and biological background can influence how individuals respond to the environment. NIEHS is working to integrate environmental exposures into the International Common Disease Alliance (ICDA), an emerging global program involving multiple NIH ICs and the global genetics/genomics community. The goal of the ICDA is to increase global collaboration and allow seamless integration of data across tens of millions of genetically diverse individuals. This includes developing the tools to map gene variants associated with the complex traits underlying common diseases. NIEHS is working to ensure that exposures associated with health disparities are included in the ICDA, with the goal of finding the networks of gene X environment influences associated with common diseases, environmental exposures, and health disparities.

Dr. Woychik explained that EHS researchers now understand that it is possible to change the expression of genes through epigenetic mechanisms, which are influenced by chemical exposures, psychosocial stress, and a variety of other factors. He presented multiple studies illustrating the influence of epigenetics on the variability of a yellow coat color in a line of mutant mice, as well as a study where researchers found that treatment of mice with a well characterized pesticide (rotenone) during pregnancy can affect the expression of numerous genes across the genome in the offspring at 6, 12 and 18 months of age. This illustrates the importance of studying environmental exposures during pregnancy. Another paper by Dr. Ken Olden's lab presented more evidence that social, physical, and chemical impacts associated with health disparities can impact the epigenome. Dr. Woychik commented that it is highly likely that these epigenetic changes

influence the expression of genes in a way that predisposes individuals to adverse health effects.

Dr. Woychik summarized NIEHS' history with environmental justice and said that they have come to recognize that there are differential impacts from environmental exposures, and that these are based on social, political and economic factors that play a role in creating health disparities. He said that the EHS community is now suggesting that structural racism is an environmental toxin for health, with racialized social structures determining differential access to opportunities, risks, and resources that drive health. Studies have found that toxins such as phthalates, metals, and pesticides, particulate matter 2.5 (PM2.5), ambient air pollutants, and other toxicants disproportionately and systemically affect people of color. Dr. Woychik said that the hope was that these studies will help to guide national, state, and local stakeholders to design policies to reduce the environmental inequities that give rise to health disparities.

Dr. Woychik shared insights from a recent talk by Dr. Sacoby Wilson, an NIEHS grantee, on the interaction between science and community-engaged research. Community members are essentially subject matter experts on their lived experiences, and their input is critical. Researchers need to move beyond just documenting their findings and start applying them to the real world. Dr. Wilson coined the term “inpowerment,” which includes a focus on helping community members to connect with resources and scientific knowledge as a source of power to take action. Dr. Woychik explained that NIEHS works with tribal communities to embrace cultural norms and social support systems as well as tribal ecological knowledge to enhance resilience. One example of this is an “app” that researchers developed to communicate fish consumption advice to Native Americans in the upper Great Lakes region, to minimize consumption of environmental toxicants. Another community-based intervention, the Green Heart Study, will assess the impact of green space on air quality and health in urban communities. In Louisville, Kentucky, researchers will examine air quality, mental health, social cohesion, and cardiovascular disease risk before and after 8,000-10,000 mature trees and shrubs are planted in the community.

Dr. Woychik thanked the Council for the opportunity to present addressed a few questions and comments.

RECOGNITION OF RETIRING NACMHD MEMBERS

Dr. Pérez-Stable thanked the following Council members for their service.

- Amelie Ramirez, DrPH, MPH, BS, University of Texas Health Science Center
- Giselle Corbie-Smith, MD, MS, University of North Carolina at Chapel Hill
- Marshall Chin, MD, MPH, FACP, University of Chicago

- Spero M. Manson, PhD, MA, University of Colorado Denver

CONCEPT CLEARANCE

Innovative Multi-Level Approaches and Strategies to Prevent, Test and Treat HIV among Health Disparity Populations within Primary Care Settings in Geographic Hotspots: Richard Berzon, DrPH, Program Official, Clinical Sciences and Health Research, NIMHD

The objective of this initiative is to support R01 projects that examine innovative approaches and strategies to prevent, test and treat HIV infection among health disparity populations or subgroups within primary care settings located in geographic areas with a high rate of new infections. In alignment with the Ending the HIV Epidemic Initiative, this initiative will target resources to the 48 highest burden counties, Washington, D.C., San Juan, Puerto Rico, and seven states with a substantial rural HIV burden. Out of the approximately 38,000 new infections that occurred in the U.S. in 2018, 69% occurred in gay and bisexual men. African American and Latino men who have sex with men (MSM) accounted for 70% of new diagnoses of HIV. Racial and ethnic disparities continue to exist among gay and bisexual men.

Primary care settings are important but underutilized venues to prevent, test for, and treat HIV. Patients in primary care settings benefit from established care, with rapid transition into care for those who test positive and prevention services for those who are at risk and test negative. Clinicians are well-positioned to offer pre-exposure prophylaxis (PrEP) preventive treatment and other services. There are not enough practicing infectious disease specialists to meet the need for preventive services, and more research is needed to understand how to best deliver HIV-related services in primary care settings. Educating primary care clinicians, removing barriers to screening and increasing focused testing during primary care visits will advance prevention, testing and treatment strategies.

For this initiative, primary care settings may include general internists, family medicine and OB/GYN clinics, pediatric and adolescent medicine practices, school-based health centers, college and university centers, medical clinics within pharmacies, federally qualified health centers, and other similar venues. Observational studies that identify predictors of testing without evaluating intervention effects are not a priority. Priority populations include MSM and transgender women of color. Areas of special interest include: increasing engagement in primary care of high-risk populations without a usual source of healthcare; enhancing physician awareness and willingness to prescribe PrEP or antiretroviral therapy (ART); enhancing cultural competence of clinicians and reducing implicit bias; promoting patient engagement and treatment adherence in primary care settings through linkages with community-based programs and services; promoting patient engagement and treatment

retention through peer, family and community support; and expanding the provision of HIV prevention and care services within primary care settings across multiple domains. The initiative is aligned with high-priority topics for using HIV/AIDS-designated funds.

Comments from Council: Council members were very supportive for the initiative. The concept is strong in its focus on HIV research in primary care settings, the status-neutral approach of using testing as a gateway is aligned with many jurisdictional plans throughout the country and focusing on MSM and transgender women is central to ending the HIV epidemic. Implementation science and health services research are critical to scale up highly effective interventions with fidelity and attention to equity. Bisexual men who also have sex with women in minority populations should not be excluded.

Dr. Vollberg called for a motion to move the concept forward for Funding Opportunity Announcement (FOA) development. The motion was made, seconded, and approved unanimously.

OTHER BUSINESS

Dr. Webb Hooper announced that Drs. Pérez-Stable and Gary Gibbons were selected as joint finalists for the Partnership for Public Service's Samuel J. Heyman Service to America Medals (the "Sammies") in the COVID-19 Response category. This selection recognizes Drs. Pérez-Stable and Gibbons for their tireless work and national impact in addressing the persistent disparities experienced by racial/ethnic populations and other underserved communities during the COVID-19 pandemic. The winners of the 2021 Sammie Awards will be announced in the Fall of 2021.

PUBLIC COMMENTS

There were no public comments.

CLOSING REMARKS AND ADJOURNMENT

With no further business, Dr. Pérez-Stable adjourned the meeting at 3:25 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), 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 24, 2021

Dr. Vollberg led the second level review of grant applications submitted to NIMHD programs. Council Members and Staff were instructed on conflict of interest and confidentiality regulations. Members and Staff absented themselves from the meeting room and discussion for which there was a potential conflict of interest, real or apparent.

The Council considered 400 competing applications requesting an estimated \$225,233,045 in 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.

Eliseo J. Pérez Stable, M.D. Director National Institute on Minority Health and Health Disparities, NIH	Date
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Thomas M. Vollberg, Ph.D. Designated Federal Official National Institute on Minority Health and Health Disparities, NIH	Date
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