U.S. Department of Health and Human Services National Institutes of Health National Institute on Minority Health and Health Disparities 58th Meeting of the National Advisory Council on Minority Health and Health Disparities

Virtual Meeting

September 10, 2021 11:00 a.m. – 4:00 p.m. EDT

Meeting Minutes

Council Members Present

Eliseo J. Pérez-Stable, MD, Director, NIHMD; Chair
Emma Aguila Vega, PhD, University of Southern California
Lisa L. Barnes, PhD, Rush University Medical Center
Neil S. Calman, MD, Icahn School of Medicine at Mount Sinai
Nitza Milagros Escalera, EdM, JD, MPA, MS, John Jay College of Criminal Justice
Kimberly Johnson, MD, Duke University Medical Center
Joseph Keawe'Amimoku Kaholokula, PhD, University of Hawaii at Manoa
Brian Mustanski, PhD, Northwestern University
Joan Y. Reede, MD, MS, MPH, MBA, Harvard Medical School
Kenneth A. Resnicow, PhD, University of Michigan
William M. Southerland, PhD, Howard University
Carmen D. Zorilla, MD, University of Puerto Rico School of Medicine

Council Members Absent

None

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

Priscila Grant, JD, Chief Grants Management Officer, Grants Management Branch Larissa Avilés-Santa, MD, MPH, FACP, FACE, Director, Clinical Sciences and Health Research Rada K. Dagher, PhD, MPH, Program Official, Division of Clinical Sciences and Health Research Dorothy Castille, PhD, MA, Program Official, Community Health and Population Sciences Michael H. Sayre, PhD, Director, Integrative Biological and Behavioral Sciences

CALL TO ORDER AND WELCOME

Eliseo Pérez-Stable, MD, Director of the National Institute on Minority Health and Health Disparities (NIMHD), called to order the Open Session of the 58th meeting of the National Advisory Council on Minority Health and Health Disparities (NACMHD) at 11:00 a.m.

ROLL CALL, MINUTES REVIEW

Thomas Vollberg, PhD, Director of the Office of Extramural Research Administration (OERA), NIMHD called the roll. Council members and others present introduced themselves and their affiliations. The May 2021 meeting minutes were brought before the Council, and a motion to approve was called. The Council unanimously approved the minutes of the May 2021 Council meeting. Members were reminded of the future council meeting dates for 2022 and 2023 which appeared in the Meeting agenda, and that requirements allow for no more than one absence per calendar year. It was also stated that while serving on the Advisory Council, members cannot serve on any peer review panels.

NIMHD DIRECTOR'S REPORT AND DISCUSSION

Eliseo Pérez-Stable, MD provided the report on activities relevant to NIMHD since the May 2021 meeting.

GENERAL UPDATES

The Department of Health and Human Services (DHHS) has appointed Chiquita Brooks-LaSure, MPP as the Administrator for the Centers for Medicare and Medicaid Services (CMS). She is the first African American woman to lead the CMS. Previously, she served as a policy official who played a key role in guiding the Affordable Care Act (ACA).

The Department of Health and Human Services (DHHS) has appointed Miriam E. Delphin-Rittmon, PhD as the Assistant Secretary for Mental Health and Substance Abuse and the Administrator of the Substance Abuse and Mental Health Services Administration (SAMHSA). Dr. Delphin-Rittmon previously served as the Commissioner of the Connecticut Department of Mental Health and Addiction Services and as an Adjunct Associate Professor at Yale University.

Michael M. Gottesman, MD will be stepping down after 29 years as the NIH Deputy Director for Intramural Research at NIH. He has been a transformational leader for the intramural program at NIH. Dr. Gottesman will return to his NIH laboratory and remain in the position while there is a nationwide search for a replacement.

UNITE, the NIH's commitment to ending structural racism will continue and the five committees continue to move forward. Monica Webb Hooper, PhD is the co-chair for the "U" committee on understanding stakeholder experiences through listening and learning. The "U" committee has received hundreds of comments in response to the published request for information (RFI). Anna M. Nápoles, PhD is the co-chair of the "N" committee on new research on health disparities and minority health and health equity.

This committee is helping guide the agency on the directions and the efforts which include a call to the institutes for renewed commitments and investments that increase research on minority health and health disparities. NIMHD is positioned well to help guide the other NIH institutes and centers in those activities. Other UNITE committees are progressing and the "E" committee, with a focus on the extramural research ecosystem is a critical one that will interface with the extramural community. Francis S. Collins, MD, PhD, Director of NIH along with the other co-chairs of UNITE co-authored a commentary on NIH's commitment to addressing structural racism in the biomedical research enterprise. The commentary was published in Cell.

NIMHD UPDATES

The NIMHD reorganization has been finalized. The Institute's administrative team led by Kimberly M. Allen, MA, saw to the extensive documentation that then required departmental and Congressional clearances. The reorganization aligns the extramural program into logical organizational structures of three program divisions for advancing the science of minority health and health disparities. It also maximizes productivity and increases efficiency and timeliness in four areas: extramural and intramural research, science policy and planning, communications, and administrative services.

LEGISLATIVE UPDATES

On May 26, 2021, Eliseo Pérez-Stable, MD was one of several Directors who joined NIH Director, Frances Collins, MD, PhD, for the FY2022 NIH budget hearing before the Senate Appropriations Subcommittee on Labor, Health and Human Services (LHHS). The other NIH Institute Directors were Anthony Fauci, MD, Director of the National Institute of Allergy and Infectious Disease (NIAID), Ned Sharpless, MD, Director of the National Cancer Institute (NCI), Diana Bianchi, MD, Director of the National Institute of Child Health and Human Development (NICHD), Gary Gibbons, MD, Director of the National Heart, Lung, and Blood Institute (NHLBI), and Bruce Tromberg, PhD, Director of the National Institute of Biomedical Imaging and Bioengineering (NIBIB). Eliseo Pérez-Stable, MD contributed to addressing several questions that involved health disparities, social determinants of health, and workforce diversity.

On June 30, 2021, Eliseo Pérez-Stable, MD, Director of the NIMHD, participated with Frances Collins, MD, PhD, Gary Gibbons, MD, and Shannon Zenk, PhD, MPH, RN, FAAN, Director of the National Institute of Nursing Research (NINR) in a briefing for the Congressional Black Caucus on health disparities and the NIH Community Engagement Alliance (CEAL) Against COVID-19 Disparities.

NIMHD STAFF UPDATES

Judith Arroyo, PhD has joined NIMHD from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and will work directly with the Director and Deputy Director of NIMHD on selected initiatives, most notably, the Health Disparities Research Institute (HDRI) and oversight of prospective applicants for K-awards.

Simrann Sidhu, MPH, a critical contributor to the NIMHD scientific programs has transitioned from a contractor to a federal employee and joined NIMHD as a Public Health Analyst in the Clinical and Health Services Research Division (CHSR).

Lieutenant Commander Michael J. Banyas, MPA, of the Public Health Service Commissioned Corps has joined NIMHD as a Health Specialist in the Community Health and Populations Science Division (CHPS).

Antoinette Percy-Laurry, DrPh, MSPH, a Commissioned Corp member, was recruited from NCI and has joined NIMHD as a Health Science Administrator in the Office of Science Policy, Planning, Evaluation, and Reporting (OSPPER).

Karen Nieves-Lugo MPH, PhD joins NIMHD from the Center for Scientific Review (CSR) as a Scientific Review Officer in the Office of Extramural Research Administration (OERA).

Richard Palmer, PhD, JD a scientific review officer in OERA and also a main point of contact for the (HDRI) has departed NIMHD to accept a position in the National Library of Medicine (NLM).

Jennifer Alvidrez, PhD, a program director in the Community Health and Populations Science Division (CHPS) moved from NIMHD to the Office of Disease Prevention (ODP) in the NIH Office of the Director to lead a new program on advancing health disparities in prevention and intervention.

Nishadi DeAbrew Rajapakse, PhD, MHS a program director in the Integrative Biological and Behavioral Sciences Division (IBBS) left NIMHD to join the NHLBI in the Implementation Science Center.

Michael H. Sayre, PhD is retiring at the end of September after 22 years at NIH including almost 10 years at NIMHD. As the Director of the Integrative Biological and Behavioral Research Division (DIBBS), Dr. Sayre oversaw a broad research portfolio focused on minority health and health disparities, including research on the potential of precision medicine to address health care gaps for underserved populations. Prior to joining NIMHD, Dr. Sayre, served as the deputy director of the Division of Research Infrastructure in the NIH's former National Center for Research Resources (NCRR).

NIMHD welcomed Gargya Malla, MD, PhD, a recipient of the Judy and Peter Blum-Kovler Foundation Intramural Fellowship Award, as a fellow in the Divison of Intramural Research (DIR) where she will work on the CEAL program promoting community engagement. The one year award is supported by a donation from the Blum-Kovler Foundation through the Foundation at NIH (FNIH), and provides mentorship and training from NIMHD leadership and minority health and health disparities researchers. Dr. Malla recently received her doctorate in philosopy with a concentration in epidemiology from the University of Alabama at Birmingham.

Eliseo Pérez-Stable, MD noted that the Institute seeks new hires through the use of posted vacancy announcments in <u>USA Jobs</u> and encouraged all interested persons to apply.

NIMHD PRESENTATIONS AND ACTIVITIES

The 2021 NIMHD Health Disparities Research Institute (HDRI) was held virtually this year. Of the more than 241 applications submitted, 62 early-stage career scientists from 28 states were selected to participate. The sessions and activities followed the model used in past years and focused on

presentations given by prominent health disparities scientists, an interactive mock review, group sessions to develop advanced skills in preparing to become an independent researcher such as grant writing, and networking events. The cohort consisted of a diverse group of participants with over 60 percent of the scholars self-identifying with an underrepresented racial or ethnic group, as well as representation from the sexual and gender minority community. Of this year's cohort, 85% were women, 85% of the participants were Assistant Professors or Postdoctoral Fellows, and 21% were physicians.

NIMHD partnered with the National Institute of Biomedical Imaging and Bioengineering (NIBIB) for a second year on the <u>Design by Biomedical Undergraduate Team (DEBUT) Challenge</u>. This is an annual contest for undergraduate teams to design creative new solutions to emerging healthcare problems. The idea is to have an inexpensive point of care technology. The NIMHD prize of \$15,000 went to the Leigh University undergraduate team. The team developed an inexpensive, point-of-care sickle cell disease (SCD) screening device that was designed to lower the staggering rate of infant death due to SCD. The target population is in low-income countries primarily in sub-Saharan Africa but may also be applicable in low-resource settings in the United States.

An update was provided on the Rapid Acceleration of Diagnostics – Underserved Populations (RADx-UP) initiative for which NIH has made approximately \$350 million dollars in awards. Over the last two years NIMHD has managed the Coordination and Data Collection Center (CDCC) with more than 350,000 participants enrolled (including electronic health records) with 35 projects submitting data to the CDCC, establishing 85 COVID-19 testing and Social, Ethical, and Behavioral Implications (SEBI) projects reaching across 56 states, territories, and the District of Columbia, and awarding 18 community collaboration grants and 9 rapid research pilot programs. Most Phase I and II projects are focused on multiple underserved groups, with many targeting the Hispanic/Latino (50 projects) and African American (45 projects) communities, which supported the goal to emphasize the impact of COVID-19 on these communities. There is also a strong presence and focus on American Indians or Alaska Natives (10 projects exclusively focused), Asian Americans (17 projects), Pacific Islanders (six projects), and Native Hawaiians (two projects) populations. Projects also address the needs of COVID-19 vulnerable populations, such as pregnant women (17 projects) and incarcerated individuals (one project).

Early in 2021, the RADX-UP Return to School program was launched in collaboration with the National Institute of Child Health and Human Development (NICHD). RADX-UP is funding additional research projects, across the country, to safely return children to in-person school by (1) addressing the needs of children with unequal access to COVID testing as well as children facing barriers to attending school remotely, and (2) identifying ways of safely returning students and staff to in-person school in areas with underserved and vulnerable populations. These projects reaffirm NIH's commitment to use evidence-based research to inform policy makers of effective ways to return to schools in underserved and vulnerable communities.

The <u>Community Engagement Alliance (CEAL) against COVID-19 Disparities</u> (CEAL) continues to be successful in reaching communities across the country. The CEAL Alliance conducts a variety of activities to engage communities to establish partnerships, address misinformation, increase trust in science, and accelerate uptake of beneficial interventions. CEAL has established approximately 200-300 community-based partnerships predominantly in the South, Midwest, and Western areas of the United States. A goal is to address misinformation with effective communication of reliable information. There have been an

estimated one billion views of CEAL materials via website visits, an E-Newsletter, social media, digital campaigns, news media, and by stakeholder and Congressional engagement.

Over the last several months, Eliseo Pérez-Stable, MD has participated in several virtual presentations, blog posts and podcasts. Dr. Perez-Stable presented at the MedStar Georgetown Surgical Disparities Grand Round, the Harvard University Center for AIDS Research (HU CFAR), a Reuters Digital Health Virtual Event, the 2021 North American Primary Care Research Group (NAPCRG) Practice Based Research Network, the National Academies of Science, Engineering, and Medicine Summit, the Latino Coalition Against COVID-19, and the SaludCon Tech Event. Dr. Perez-Stable also participated in a blog post on the "NIH Minority Health and Health Disparities Strategic Plan 2021-2025: A Path to the Future", and in two podcasts concerning health disparities exposed by COVID-19 and for the efforts at NIH to address these disparities.

The NIMHD (DIR) seminar series held three seminars this summer. MC Sage Ishimewe, MBBS, MPH, a NIMHD Rwandan scholar, presented on the *Etiology and Characteristics of Abnormal Glucose Tolerance in Africans*. Joshua Freeman, MD presented on *Racism, Health Equity, and the COVID-19 Vaccine in the US*, and Gilbert C. Gee, PhD presented on *Structural Racism: The Roots and Relations of Inequality*. These and other seminar series presentations can be found on the new website for the reactivated NIMHD Health Disparities Interest Group.

NIMHD participated in the <u>NIH 2021 Summer Research Presentation Week</u>. The summer program gives an opportunity for undergraduate students to spend six weeks working in a laboratory at NIH. This year, NIMHD accepted six undergraduate students: Caleb Colbert, Maryam Elhabashy, Tina Liu, Tuffour Kwaniyah, Sana Rhaman, and Jacquita Johnson.

SCIENTIFIC ADVANCES

Eliseo Pérez-Stable, MD highlighted findings from several recent publications as advances in the field of minority health and health disparities research.

In the American Journal of Transplantation, a study on the "Impact of Sociocultural Factors on the Kidney Transplant Evaluation Process" (Hamoda et al., 2021) looked at whether medical mistrust and perceived racism and experience in discrimination influenced patients with end-stage renal disease (ESRD) to initiate the evaluation for a transplant. The study included 528 patients referred to transplant centers in Georgia. It was noted that Black ESRD patients referred for kidney transplantation reported significantly higher levels of medical mistrust, perceived racism in healthcare settings, and experienced discrimination in healthcare compared to Whites. They were also less likely to initiate the transplant evaluation. The study concluded that a patient's perceived racism and discrimination impeded initiation of transplant evaluation among ESRD patients referred for kidney transplantation.

A paper on "<u>Health Literacy (HL) Affects Health Behaviors Among Rural Appalachian Middle School Students</u>" (Reid et al., J. School Health, 2021) included a survey of 854 seventh and eighth graders in rural Appalachia, Virginia and noted that limited HL was associated with significantly higher risky behaviors such as consumption of sugar-sweetened beverages, junk food and more hours per day of

television less online education. HL has been closely correlated with years of education. A third of the youth were obese and another quarter were overweight. Adolescents with limited HL drank more sugar-sweetened beverages and consumed more servings of junk food per day. The paper recommended that school-based studies are needed to focus on intervetions to promote HL and reduced energy-balance health disparities.

A study analyzing the "Medicaid Work Requirements in Arkansas" (Sommers et al. Health Affairs, 2020), examined the second-year impacts of Arkansas's 2018 Medicaid work requirements. The authors used cross-sectional survey data from low income adults between the ages of 19 and 64 years in Arkansas, Kentucky, Louisiana, and Texas. The study found that most Medicaid coverage losses in 2018 were reversed in 2019 after a court order halted the state work requirements. Work requirements did not increase employement over 18 months of follow-up. In addition, 50% of people in Arkansas between 30-49 years of age who lost Medicaid coverage in a previous year reported serious problems paying off medical debt, delayed care and medication because of cost.

Larissa Aviles-Santa, MD, MPH (NIMHD Division Director of CHSR) co-authored a paper in Nature Genetics (Chen et al, 2021) on behalf of the Hispanic Community Health Study/Study of Latinos (HCHS/SOL), titled, "Ethnic Diversity in Research Identifies More Genomic Regions Linked to Diabetes-Related Traits." The Meta-Analysis of Glucose and Insulin-related Traits Consortium (MAGIC) coordinated the reanalysis of data from 200 cohorts to identify novel genetic variatiants linked with blood glucose and other diagnostic markers for Type 2 diabetes-related traits. This large-scale study included a diverse, multi-ethnic sample with participants of European, East Asian, South Asian, Hispanic/Latino, African American, and Sub-Saharan African ancestries. The study identified 99 new human genomic locations and variation that could contribute to a person's risk for diabetes and 24 new variants were identified due to an unusually diverse pool sample.

The paper "Body Mass Index, Obesity, Body Competition and Mortality Among Black Breast Cancer Survivors" (Bandera et al., JAMA Oncology, 2021), reports an epidemiological observational study of 1,891 women between 20 and 75 years of age with stage 0 to IV breast cancer who self-identified as African American or Black. The authors looked at the association of different measures such as Body Mass Index (BMI) using waist circumstance, waist to hip ratio, and body composition. BMI's are more frequently used in clinical practices, however they are not associated with mortality. In this study, central obesity and higher adiposity were associated with higher all-cause and breast cancer-specific mortality among Black Women. Women in the highest quartile of waist to hip and waist circumstance had an inceased risk of dying from any cause or from breast cancer and had a worse overall survival. The authors found that there is an association between waist-to-hip and all-cause mortality which tended to be more substanial among women with estrogen receptor-negative tumors.

Hepatic steatosis (HS) is an inflammatory mechanism that may be the cause of chronic liver disease and potentially liver cancer. This study, "<u>Hepatic Steatosis is More Prevalent in Mexican Americans Than Other Latinos</u>" (Shaheen et al., Hepatology Communications, 2021), analyzed data from <u>NHANES</u> between 2017-2018 on 5,492 individuals over the age of 12 and of Mexican American or other Latino descent and compared it to other racial and ethnic populations. The study characterized the prevalance of HS as mild (S1), moderate (S2), and severe (S3). Risk Factors for S2 and S3 include older age, male sex,

higher waist to hip ration, a BMI over 25, and high triglycerides. They found that severe hepatic staetosis or S3 was highest among Mexican Americans, compared to other Latinos and Whites.

A study on "Diabetes and Health-Related Quality of Life Among American Indians" (Scarton et al., Quality of Life Research, 2021, examined functional social support, emotional support, coping, resilience, post-traumatic stress disorder, and health-related quality of life among American Indian persons with diabetes (DM). The study analyzed data on 953 participants collected from the Cherokee Nation Survey between 2017-2019 and found that American Indian persons with DM were more likely to be older than 55 years old, have a lower income, higher mean BMI, and had not completed college education. They also rated their functional social support and coping slightly lower and were more likely to report 15 or more days of poor physical and mental health in the previous month. American Indian individuals reporting dissatisfaction with life were more likely to have poor overall health and more days with poor mental health.

A study published in <u>SSM Population Health</u>, Nguyen et al. 2021, "<u>Association Between Twitter-Expressed Area-Level Racial Sentiments</u>, <u>Hate Crimes</u>, <u>and Prejudice in the U.S.</u>" evaluated area-level racial sentiment, as referenced by Twitter messages, associated with 1) race-related hate crimes and 2) existing measures of prejudice at the state level. The state level data were merged and analyzed with hate crime data from the FBI Uniform Crime Reporting Program, implicit and explicit racial bias indicators from Project Implicit, and racial attitude questions from different surveys such as the General Social Survey (GSS). The authors reported that living in a state with 10% higher negative sentiment in Tweets referencing Black persons was associated with lower endorsing that Black-White disparities in jobs, income, and housing were due to discrimination, higher chance of endorsing the belief that disparities were due to lack of will, and higher explicit and implicit racial bias.

In the science of nutrition, there is still discussion in areas both stemming from research conducted in laboratories versus public health policy. In <u>JAMA</u>, Wang et al, 2021 "<u>Trends in Consumption of Ultra-processed Foods Among U.S. Youth Aged 2-19, NHANES</u>" looked at trends for all ages, sex/gender and racial and ethnic groups. The authors observed no difference in consumption based on education and income level for youth. Ultra-processed food – junk food – accounted for greater increases in calories for Black and Mexican American youth compared with White youth. The biggest jump in ultra-processed consumption came from ready-to-heat and -eat dishes, which accounted for about 11% versus 2% of calories in 2018 versus 1999.

The paper, "Assessing COVID-19 Vaccination Intent in Adults Residing in Puerto Rico" (Lopez- Cepero et al., Human Vaccines & Immunotherapeutics, Epub., 2021), used the Health Belief Model to develop an online survey to assess perceptions, beliefs, and attitudes of COVID-19 vaccination intent for people living in Puerto Rico. A total of 1,911 adults completed the survey between December 2020 and February 2021. Overall, 82.5% reported an intent to get vaccinated, 6.5% had no intent, and 11% were unsure about getting vaccinated. The study found that individuals were more likely to not get vaccinated or were unsure if he/she did not perceive their chances of getting COVID-19 were high, did not agree complications from contracting COVID-19 were serious, and believed that getting vaccinated did not decrease the chance of getting COVID-19 or having complications.

In the NIMHD Division of Intramural Research (DIR), a paper was published examining patterns of breast cancer burden for women 18 years and older by whether the woman lived in an Appalachian County. "Assessing health disparities in breast cancer incidence burden in Tennessee: geospatial analysis" (Salmeron et al., BMC Women's Health, 2021) used ArcGIS to geospatially evaluate distribution patterns from Tennessee Cancer Data Registry data between 2005 to 2015. The Spatial analysis revealed geographic differences between Appalachian and non-Appalachian counties.

Another study published by the NIMHD DIR evaluated the association of different risk behaviors. "Racial Differences in the Association Between Alcohol Use and Cigarette Smoking" (Harris et al., Alcohol and Alcoholism, 2021), explored the association between drinking and smoking in 796 self-identified Black or African American participants and 896 White participants in the NIAAA intramural national history clinical protocol. Alcohol Use Disorder (AUD) diagnosis and current smoking were more prevalent in Black or African American participants than White participants. Additionally, among participants with AUD, there was a correlation between the AUD Identification Test (AUDIT) score and age of smoking their first cigarette that differed by racial group. There was no association among Black or African American participants and inversely related among White participants when looking at the AUDIT test score.

"Social Support in Adolescence and Its Impact on Health Behaviors in US Adults" (Harris et al. Alcohol and Alcoholism, 2021), a paper published by the NIMHD DIR conducted a secondary analysis of The National Longitudinal Study of Adolescent to Adult Health (ADD Health) data. ADD Health, which is managed by NIA and co-supported by NIMHD, is one of the only databases that follows participants from adolescence into adulthood. Findings from this study showed that regardless of sources or amount of emotional support, individuals who obtained less than a bachelor's degree were less likely to utilize healthcare than those that received a bachelor's or higher degree. Individuals whose parents obtained a high school diploma, or the equivalent were more likely to utilize healthcare than those with parents who received less than a high school diploma, regardless of sources of support. Black individuals were also more likely to utilize healthcare regardless of sources of support. One of the authors, Koya Ferrell was an NIH Postbac Poster Day 2021 Outstanding Poster Awardee and a 2021 Annual Biomedical Research Conference for Minority Students (ABRCMS) Attendance Awardee.

PRESENTATIONS

NIMHD Statement of Understanding Priscilla Grant, JD, Chief, Grants Management Branch, OERA, NIMHD

Priscilla Grant, JD, Chief of the Grants Management Branch at NIMHD outlined the statement of understanding between NIMHD and the Council. The Council is responsible for advising, consulting with, and making recommendations to the Director of NIMHD on matters relating to NIMHD's research activities and functions. Council members serve as a national resource in setting the Institute's policies and research priorities. Special working groups can be formed at the request of the Council to examine critical issues of importance to the Institute. NIMHD is responsible for informing the Council of current scientific, budgetary, or legislative issues that could impact NIMHD and its constituents. The contents of open sessions were summarized, including discussion of scientific and policy issues, concept clearances, and closed sessions, including secondary review of grant applications. Also discussed was

review and resolution of appeals, administrative decisions and actions that do not require Council recommendation, and options available to the Council when reviewing grant applications and concept clearances.

Vision for NINR Nursing Science - Shannon N. Zenk, PhD, MPH, RN, FAAN Director, National Institute of Nursing Research (NINR)

Shannon Zenk, PhD, MPH, RN, FAAN, Director, National Institute of Nursing Research presented the vision of nursing science at NINR. Dr. Zenk shared her research focus on the role of community environments and health equity, how resources and risks are distributed across communities, the resulting health impact in the communities and the resulting implications for health policy. Approaching people about healthy eating is difficult when there is a more fundamental need for decent and stable housing, a safe environment, and closer access to healthy foods. The research team leveraged new developments in GIS technology to generate evidence that revealed injustice in the distribution of food and built-environment resources across communities. As one of the early studies in food deserts, the team found that healthy food options are less available in low-income communities of color and the balance of healthier to unhealthy options is worse in low-income Black communities. A wide variety of other resources that are unequally distributed across communities include jobs, municipal services, access to schools, pharmacies, recreational infrastructure and clean air and water. Likewise, low-income communities of color are often subjected to more risks such as greater availability and marketing of tobacco, alcohol, and junk food, monitoring by police and immigration officials, pollution, and toxic substances.

Most recently, the team has gathered evidence in two studies to show that these variations in environment effect behavior, especially diet, physical activity, and obesity risk. In one study, they looked at environment and obesity risk over seven years in over 3 million veterans using electronic health record (EHR) data obtained from the United States Veterans Administration. In another study, Dr. Zenk employed the concept of activity space to enrich the characterization of environmental exposures beyond solely where people live. The study found stronger associations with behaviors in activity space environments compared to residential environments. In considering the question of how one can right the historic and contemporary wrongs of racism and race-based residential segregation that produced and perpetuated racial inequities and access to resources and health, it is critical to have scientific evidence on what policies and investments are effective in increasing access to resources and removing risks in communities of color as well as improving health behaviors and outcomes among people of color. The research team studied the effects of policy changes that target the community supply of healthy foods, including the 2009 WIC Food Package Revision, which was designed to improve nutrition of WIC clients. They found that the policy benefitted WIC clients as well as maternal and child nutritional health and was associated with improvements in the community food environment. Studies like these can provide promising approaches to improve health outcomes in communities of color.

Recent public health challenges and the pandemic over the past two years are but two of many pressing health issues, including persistent health inequities and the impact of racism on our society. It was emphasized that nursing science is people-centric since nurses interact with people in a variety of clinical

and community settings. With a holistic perspective to nursing, advancing health and health equity requires the development of prevention and treatment strategies that are responsive to realistic living conditions. According to the findings of the Future of Nursing Report that discusses the influence of systemic racism and social factors and health inequities. Nurses assume a leading role in eliminating the persistent health inequities in society with close interactions with people. The report calls for new nurseled models to address social risk factors and social needs and includes a review of nurse licensing to enable greater health equity through independent practice and affirmed NINR's interest in increasing training and opportunities for nurse-scientists to lead interdisciplinary teams to fill the described provider gap.

NINR's principles for setting research priorities were shared including maximizing the impact of nursing science, engaging a holistic approach to address social determinants of health, and directly impacting health disparities and equity. The research of Suzan Carmichael, PhD on the roles of social disadvantage, maternal weight, and racial disparities on severe maternal morbidity to address health disparities and health equity as an example of NINR's historic support of health disparity and health equity research was highlighted. There have been over 20 papers published with one study showing that severe maternal mortality is increasing among all racial and ethnic groups with the highest rate being among Black women. Another study showed that differences in hospitals where women gave birth did not explain the increased risk or several maternal morbidities among women of color. A separate study showed different risk levels for severe maternal mortality among Pacific Islander women suggesting the importance of considering sub-group risk factors.

NINR has funded several new studies addressing health disparities and health equity, including the SINCERE Intervention to address COVID-19 Health Disparities Project, the Alive Blood Pressure Project, and the Home Food Delivery for Diabetes Management in Patients of Rural Clinics Project. The SINCERE project examines whether the use of community services among those identified as having a need for them has improved COVID-19 health outcomes. This is vitally important in understanding how outcomes during this pandemic can be improved given the disproportionate impact on racial and ethnic and underserved communities. The Alive Blood Pressure project engages African American persons with uncontrolled high-blood pressure in a familiar setting such as a church. The intervention includes pastorled bible study and behavior change groups lead by church members. The Home Food Delivery for Diabetes Management in Patients of Rural Clinics project provides healthy food deliveries to food insecure, rural patients with Type 2 diabetes. Because rural communities face particularly high levels of food insecurity, addressing food insecurity has the potential to improve rates of diabetes in rural areas.

The majority of NINR's research is people-centric with over 75% of funding supporting clinical research and more than 33% of the budget supporting prevention research. Eighty-one percent of funded prevention studies address primary prevention compared to 66% for NIH overall. Currently 32% of NINR funding focuses on research to eliminate health disparities and 16% towards funding women's health. A collaboration of NINR, NIMHD, NIMH, the Office of Research on Women's Health (ORWH), and the Tribal Health Research Office (THRO) to participate in a NIH Common Fund initiative on Transformative Research to Address Health Disparities and Advance Health Equity Initiative was discussed. This program will explore the social, behavioral, and economic health impacts of COVID-19 and the impact of climate change on human health.

In closing, Dr. Zenk, announced that her new laboratory in NIMHD will focus on the understanding of the complex pathways by which the environment effects behaviors and health in African American communities and identify the health impacts of structural interventions in the community. She invited members to provide feedback and comments while NINR is currently engaged in strategic planning. NINR is in an important position to help improve NIH's efforts to address health disparities and health equity and the Institute's research is critical in generating an evidence base needed for nursing interventions and achieving the future of nursing's goals relating to health equity.

The Council was thanked for the opportunity to present and address questions and comments.

Researchers and Community Leaders Standing Together Against COVID-19 Michael Cohen-Wolkowiez, MD, PhD, Kiser-Arena Distinguished Professor of Pediatrics, Duke Clinical Research Institute, Duke University

Michael Cohen-Wolkowiez, MD, PhD, Kiser-Arena Distinguished Professor of Pediatrics at Duke University, presented to the Council a high-level overview of the RADx-UP Program and the importance of gathering COVID-19 data given the higher impact of the pandemic on racial and ethnic minority groups to craft public health initiatives that address health disparities both presently and in other areas through community-engaged research. Data gathered on COVID-19 mortality in racial and ethnic subgroups was shared and the importance of this kind of specific data to craft targeted and more impactful public health policies and procedures emphasized. At the center of the program are academicians who partner with communities who have had success in addressing COVID-19 mortality and morbidity in racial and ethnic minority and underserved communities. Real-time data was reviewed from among the 35 projects currently funded through RADx-UP. The program's two grant mechanisms to look at new COVID-19 testing technologies in diverse populations were outlined and it was remarked that 20 papers have already been published from researchers within the program. The program's procedural coordination, enrollment numbers, the diversity of both populations and the COVID-19 topics being studied was emphasized. The goals of the various funded projects, which specifically study unique aspects of leveraging existing partnerships with community organizations to increase testing among underserved communities were reviewed.

A study from Baltimore evaluated what communities can do to conduct COVID-19 testing among the Latino community in partnership with religious leaders and community health workers; the positivity rate among Latino participants was approximately 20% higher than among White people. A study from Washington University in St. Louis examined the feasibility and advantages/disadvantages of COVID-19 testing for students with intellectual and developmental disabilities; the study found that the positivity rate of testing in schools was only 0.3% higher than the broader community testing. A study in Brooklyn evaluated the impact of racial and ethnic disparities on vaccination access by examining the changes in vaccination site availability alongside the racial makeup of the neighborhood; the study found a proportionally lower number of vaccination sites among neighborhoods with a White population of 40% and lower. A district with the highest poverty level and lowest White population was found to have zero vaccination sites. Finally, a survey found that adults, regardless of racial and ethnic makeup and socioeconomic status, were highly motivated to order COVID-19 home testing kits, once available, and to provide them to neighbors in need when requested.

The Coordination and Data Collection Center (CDCC), which is geared towards operating as a cross-consortia initiative, was reviewed next and outlined the diversity of staff who support the various program projects, and detailed the three program focal points: testing, community engagement, and data science and biostatistics. The goals of these three focal points were examined.

In community engagement, the CDCC hopes to disseminate and support best-practices and resources for community-engaged research in underserved populations. The program has worked to develop a practice community among the various projects themselves and provides consultation services. The importance of meeting people where they are and fostering trust to advance these goals was highlighted.

In testing, the CDCC provides support to ensure that projects are using technologies that are fit to the appropriate context and some of the key lessons-learned, including: the importance of employing experts to address the nuances of the fluid, regulatory landscape created by a pandemic that necessitates adaptation and thoughtfulness in relatively short order.

In data science and biostatistics, the CDCC collects diverse types of data from across the consortium and works not only to standardize the data for accessibility, but also to link the data with external data sets to increase the impact of the program, particularly relating to the social determinants of health. The common data elements (CDEs) are data items collected across projects in a uniform format, developed by the NIH, and catalyzed by the CDCC. The program's belief is that data is at the core of providing an understanding of the nuances of health disparities between and within different communities. The CDE data access dashboard was demonstrated to the Council, and the tool's development, capabilities, and the data fields reviewed.

The discussion transitioned to how the knowledge and lessons-learned under the current RADx-UP initiative can be leveraged to address other health disparities and/or future pandemics. A strategic road-mapping process is being utilized to facilitate ongoing self-reflection on the RADx-UP focal points and is anticipated to energize community-engaged research. The Say Yes! COVID Test, a result of an NIH-CDC partnership that distributed home-based COVID-19 tests for use several times a week over the course of a month to identify potential index cases early, thereby isolating and preventing possible community transmission vectors early was reviewed. This initiative was an example of how the knowledge base developed under RADx-UP has been successfully employed in a distinct community-engaged research project.

Dr. Cohen-Wolkowiez thanked the Council for the opportunity to present and addressed questions and comments.

CONCEPTS AND INFORMATIONAL PRESENTATIONS

Innovative Healthcare Models for Persons with Multiple Chronic Conditions from Populations that Experience Health Disparities, Larissa Avilés-Santa, MD, MPH, FACP, FACE, Director, Clinical Sciences and Health Research

The objective of this initiative is to support innovative, collaborative, and multidisciplinary research designed to study the effective integration and implementation of recommended guidelines of care for

persons with multiple chronic conditions (MCC) from populations that experience health disparities. Studies under this concept should include more than one component within healthcare models, and/or more than one level of influence based on the NIMHD Minority Health and Health Disparities Research Framework. Studies may be performed within existing models of healthcare, and new models may be proposed. The primary goal of the initiative is to achieve optimal treatment and health outcomes goals moving towards health equity for all populations. The number of people in the U.S. with multiple chronic conditions is high and continues to increase, especially in populations that experience health disparities.

Challenges that are faced in health care for people with MCC occur in various settings and situations. Examples include delivery system issues, clinical guidance on single diseases, patient-centered priorities that are not accounted for, payment/reimbursement issues, the need to scale up interventions for all populations. The imposed challenge areas create opportunities to capitalize on evidence-based self-care management strategies, and to facilitate research to fill in knowledge gaps. Multiple models of healthcare have been proposed and tested however, research is needed to understand the effectiveness and success of these models for people with MCC especially those from populations that experience health disparities.

For this initiative chronic disease is defined as those most prevalent and associated with high morbidity and leading causes of death among populations that experience health disparities. While most literature on MCC are based on adults, this concept includes people of all ages.

The initiative's proposed research priorities include but are not limited to:

- Multiple-component, multi-level studies in existing or newly proposed healthcare models that explore
 the integration of guidance of care and its impact on attaining optimal health outcomes and increasing
 health equity based on patient characteristics (age, sex/gender, state of progression of coexisting
 diseases, social determinants of health) and health care setting characteristics (location, resources,
 personnel).
- Clinician decision-making and/or healthcare system prioritization strategies.
- Integration of guidelines of care for patients at greater risk for non-adherence or adverse events (patients with cognitive impairment, challenging housing, work related conditions).
- Testing and evaluation of hybrid healthcare models.
- Testing and evaluation of interventions that promote proactive health care delivery and emphasize
 patient self-management and agency, patient/caregiver and clinical shared decision making, and
 health technology and telehealth impact.
- Contextual factors outside of health care setting that mediate the effectiveness of health care models (community-level interventions or the impact of healthcare and non-healthcare policies).
- Impact of changes in individual health care insurance coverage (access to/affordability of needed pharmacotherapy; timely referral and evaluation by subspecialists).
- Health economic sub-analyses. Of importance is sustainability (actual or projected health care costs of fully implementing/integrating care guidelines, attainment of optimal of health equity, the cost of preventable complications, hospitalizations, quality of life, and payer policies related to subspecialty care).

Comments from Council: Members noted that care of patients may not occur in only one place and may involve multiple specialties with a need for approaches to resolve conflicting care guidelines. The initiative should be open to including proven models. Persons with MCC are mostly eliminated from studies that focus on one condition and this call is important for addressing a real-world problem. Dealing with MCC in an effective manner may involve greater use of resources, and so including studies on the contributions of an intervention to financial sustainability, such as reductions in emergency room use and in hospitalizations, may be important. The combined use of treatment guidelines for individual conditions adds a complexity (messiness) when studying people with multiple conditions and rather eliminating individual variables it will be of value to find ways to evaluate the comparative effectiveness and costs of different types of interventions, different models in this complex environment. The consideration of the individual, interpersonal and community-based contexts that are in this concept are well founded. Equity in health care and health outcomes should be the explicit goal of these studies. A minimum of five years may be necessary for proving effectiveness toward an equity outcome.

Thomas Vollberg, PhD called for a motion to move the concept forward for Funding Opportunity Announcement (FOA) development. A motion to approve the concept was made by Carmen Zorrilla, MD, was seconded by Neil Calman, MD and was approved unanimously.

Practice-Based Clinical Research Networks (PBRNs) to Improve Healthcare for Populations Experiencing Health Disparities. Rada Dagher, PhD, MPH, *Program Official, Clinical Sciences and Health Research*

The objective of this initiative is to support Practice-Based Clinical Research Networks (PBRNs) that provide care to a high proportion of patients from populations experiencing health disparities, are staffed by clinicians from underrepresented backgrounds, and maintain both a disease-agnostic focus and are in line with the NIMHD health equity research agenda. PBRNs have been shown to improve access to diverse patient populations, draw on the experience and insights of practicing clinicians and are ideal for research on patient-provider dynamics because of their community-based nature. While several PBRNs are funded by the NIH, they do not focus on minority health and health disparities research, do not maintain a majority of clinicians from underrepresented backgrounds, and are disease focused.

The initiative will prioritize research on primary care clinicians that serve a higher-than-average proportion of patients without insurance coverage, including Medicaid, Children's Health Insurance Program (CHIP), or Medicare dual eligibility. Privately insured individuals, for example, health care settings in tribal health clinics, academic health center, Federally Qualified Health Centers (FQHC), and staff at Health Maintenance Organizations (HMOs), Practice Based Research Networks (PBRN) that provide primary ambulatory care in various subspecialities such as family medicine, general internal medicine, pediatrics, cognitive subspecialities, rheumatology, endocrinology, geriatrics, cardiology, and gynecology will also be included.

The research priorities for this initiative include but are not limited to:

- Addressing emerging infectious diseases on disparities in access to quality care (e.g., COVID-19 pandemic).
- Developing and assessing innovative preventive or health promotion interventions.
- Test innovative models of health care delivery in rural areas.

- Developing and assessing initiatives to integrate social determinants of health within health care records and ambulatory care practice.
- Developing strategies to improve quality of healthcare, including evidence-based health care safety bundles, health improvement collaboratives, and innovative primary care models.
- Understanding and addressing factors that facilitate or deter engagement of patients in clinical care and interventions to enhance patient engagement to improve health outcomes.
- Developing and assessing strategies to increase health equity through the structure and organization of health care systems and health services utilization.
- Assessing interventions to reduce clinical and/or health care system bias.
- Understanding and addressing racism and other types of discrimination at multiple levels in the healthcare system.
- Evaluating community-level strategies and intersectional partnerships with healthcare system to address SDOH.
- Implementing evidence-based practices within community or clinical settings to meet the needs of patients with complex medical needs.
- Conducting comparative effectiveness research for the prevention, early diagnosis, and treatment of common diseases and symptoms in population affected by health disparities.

Comments from Council: Practice-based research networks are a powerful natural laboratory for studying multi-level interventions to improve healthcare delivery and outcomes. Highlights in this concept are the explicit focus of the initiative on minority health and health disparities, the diversity of patient populations served, and the representation of clinicians from underrepresented backgrounds. It is recommended that the concept operationalize the criteria of the PBRNs that can be included in the initiative and refine the metrics around clinical and leadership roles filled by providers from underrepresented backgrounds to ensure broad eligibility. This initiative is an opportunity to build and expand the capacity around innovative interventions and the dissemination of findings, how those are impacted by policies and practices, and how that interaction impacts health disparities, particularly around structural and/or operational biases and prejudices.

Thomas Vollberg, PhD called for a motion to move the concept forward for Funding Opportunity Announcement (FOA) development. A motion to approve the concept was made by Joan Y. Reede, MD, MS, MPH, MBA was seconded by Kimberly Johnson, MD and was approved unanimously.

Reissuance of Funding Opportunity Announcement for Research Centers in Minority Institutions (RCMI), Michael H. Sayre, PhD, *Director, Integrative Biological and Behavioral Sciences*

Michael Sayre, PhD gave an informational presentation to the Council on the RCMI Program, which was founded in 1985 in response to Congressional interest in expanding the national capacity for research in the health sciences by supporting institutions that offered doctoral degrees in health professions or related sciences and have a historical and current commitment to educating underrepresented students in those fields, as well as for institutions that provide services to medically underserved communities. The program's annual budget has risen approximately 41% since FY16, thanks to continued support from lawmakers and represented 22% of the NIMHD's total FY20 budget. The goals of the program are to develop an enhanced research capacity in diverse institutions that support biomedical, clinical, and

behavioral research, particularly on diseases and conditions that disproportionately impact racial and ethnics minorities, and other populations that experience health disparities. The institution eligibility requirements, recent awards, and how awards may be utilized for research, administration, professional development, and community engagement was discussed. There are 21 active U54 centers in the current funding program, including 12 HBCUs and eight Hispanic-Serving Institutions (HIS's). NIMHD intends to reissue the RCMI funding opportunity announcement as long as funds are available, that will enable institutions with expiring awards to compete for continued funding and to avoid a funding lapse.

Rapid Acceleration of Diagnostics (RADx) Tribal Data Repository (TDR), Dorothy Castille, PhD, MC, Program Official, Community Health and Population Sciences

Dorothy Castille, PhD provided an informational presentation to the Council on the NIH's work in support of research and projects that aim to increase an understanding of the impact of COVID-19 on American Indian/Alaska Native (Al/AN) people in response to the disparities in healthcare access and outcomes experienced by tribes during the pandemic. Funding for this program will be awarded in the amount of \$3 million per year for five years. In working to provide access to de-identified RADx and related data to researchers now and in the future, the NIH realized that the RADx data hub may not meet the cultural governance, sovereignty needs, or expectations of Al/AN people and has proposed the development of the TDR to meet those needs. The NIH has worked to obtain tribal consultation on this project and remains committed to finding an appropriate path forward that is both culturally sensitive and scientifically impactful. This work and the relevant collaborations were outlined, and the NIH's recognition of the challenges faced by underserved populations, as well as the commitment to protecting those participants in this data-sharing program reaffirmed. The RADx-TDR is envisioned to be an independent central data resource for researchers interested in working with tribal and indigenous people. The data are tribally focused and governed in collaboration with the RADx-UP CDCC and maintain tribal sovereignty.

PUBLIC COMMENTS

There were no public comments.

CLOSING REMARKS AND ADJOURNMENT

With no further business, Eliseo Pérez-Stable, MD adjourned the meeting at 4:00PM.

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).

Thomas Vollberg, PhD 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 552 competing applications requesting an estimated \$423,236,703 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.	Date
Director	
National Institute on Minority Health and Health Disparities, NIH	
Denise Russo, Ph.D.	Date
Designated Federal Official	
National Institute on Minority Health and Health Disparities, NIH	