

**DEPARTMENT OF HEALTH AND HUMAN SERVICES  
NATIONAL INSTITUTES OF HEALTH  
National Institute on Minority Health and Health Disparities**

**52<sup>nd</sup> Meeting of the  
NATIONAL ADVISORY COUNCIL ON MINORITY HEALTH AND HEALTH DISPARITIES**

6700B Rockledge Drive, Conference Rooms A, B and C  
Bethesda, Maryland 20892

Tuesday, September 10, 2019  
8:00 a.m. – 1:30 p.m.

**Meeting Minutes**

**Council Members Present**

Eliseo J. Pérez-Stable, MD, Chairperson; Director, NIMHD  
Marshall Chin, MD, MPH, FACP, University of Chicago  
Joseph Keawe'aimoku Kaholokula, University of Hawai'i at Manoa  
Spero Manson, PhD, University of Colorado  
Fernando Sanchez Mendoza, MD, MPH, Stanford University  
Brian Mustanski, PhD, Northwestern University  
Joan Reede, MD, Harvard Medical School  
Gregory A. Talavera, MD, MPH, San Diego State University  
Carmen Zorrilla, MD, University of Puerto Rico, Medical Sciences Campus

**Council Members Absent**

Giselle Corbie-Smith, MD, MS, University of North Carolina at Chapel Hill  
Amelie G. Ramirez, DrPH, MPH, University of Texas Health Science Center

**Ex Officio Members Present**

Judith Long, MD, VA Medical Center, University of Pennsylvania Perelman School of Medicine  
Donald Shell, MD, MA, Office of the Assistant Secretary of Defense

**Representative**

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

**Ad Hocs Present**

Lisa Barnes, PhD, Rush University Medical Center  
Neil Calman, MD, Institute for Family Health | Mt. Sinai Medical Center  
Matthew Lin, MD, University of California, San Francisco (retired)  
Kenneth Resnicow, PhD, University of Michigan  
Bill Southerland, PhD, Howard University College of Medicine

**Executive Secretary**

Joyce A. Hunter, PhD, NIMHD

**Presenters**

Fernando Sanchez Mendoza, MD, MPH, Stanford University  
Alka Kanaya, MD, University of California, San Francisco  
Eric Green, MD, PhD, National Human Genome Research Institute (NHGRI)  
Priscilla Grant, JD, NIMHD  
Michael Sayre, PhD, NIMHD  
Larissa Avilés-Santa, NIMHD

## **CALL TO ORDER**

Dr. Eliseo Pérez-Stable, Director of the National Institute on Minority Health and Health Disparities (NIMHD), called to order the Open Session of the 52<sup>nd</sup> meeting of the National Advisory Council on Minority Health and Health Disparities (NACMHD) at 8:13 a.m.

## **INTRODUCTION OF MEMBERS**

Council members and others present introduced themselves and their affiliations.

## **COUNCIL MINUTES REVIEW – May 2019**

Dr. Joyce Hunter brought the minutes before the Council and called for a motion to approve the minutes. The Council unanimously approved the minutes of the May 2019 Council meeting. Dr. Hunter reminded members that future meeting dates could be found in the agenda and added that the location for NACMHD meetings occasionally changed. She reminded members that they were only allowed to miss one meeting per year.

## **NIMHD DIRECTOR'S REPORT AND DISCUSSION**

Dr. Pérez-Stable provided a summary report on activities relevant to NIMHD since the May 2019 meeting.

### *HHS/NIH News*

- Dr. James Wyngaarden passed away in June 2019. Director of the NIH from April 1982 to July 1989, Dr. Wyngaarden led the NIH biomedical research response to the HIV/AIDS epidemic, and initiated NIH's role in the International Human Genome Project (HGP). Dr. Wyngaarden came to NIH from Duke University, where he had been Department of Medicine Chair, and an authority on purine biosynthesis and the genetics of gout. He was a strong advocate for physician-scientists in biomedical research.
- Dr. Donald A.B. Lindberg passed away in August 2019. Dr. Lindberg served as director of the National Library of Medicine (NLM) from 1984-2015. Dr. Lindberg was a pioneer in integrating computer technology and biomedical research at a time when many were not quite sure where this was going. He created and enabled improved access to medical literature through PubMed, and a health consumer information through MedlinePlus. He was also a motivating force in establishing ClinicalTrials.gov. He played an integral role in the establishment of the National Center for Biotechnology Information, a division of NLM, that provides access to biomedical and genomic information. Dr. Lindberg served as the first government-wide office of High-Performance Computing and Communications.
- Dr. Linda Birnbaum—Director of the National Institute of Environmental Health Sciences (NIEHS) and the National Toxicology Program (NTP)—will retire from the NIH on October 3rd of this year. NIEHS is located in Research Triangle in North Carolina. She has been a world leader in toxicology and environmental health research. Dr. Birnbaum will continue to do research in the intramural program at NIEHS. Dr. Richard Woychik, NIEHS Deputy Director, will serve as Acting Director as a search for a replacement is conducted.
- Dr. Paul Sieving, who has served as Director of the National Eye Institute (NEI) since 2001, will be retiring from federal service. He had a fundamental role in understanding the genetics of X-linked retinoschisis, a human condition leading to retinal degeneration, and initiated the first ever human gene therapy trial for the condition (2015). He also was a pioneer in the development of macular degeneration and retinal eye disease. He built a robust program at NEI on regenerative therapies. Dr. Sieving will launch and direct a new Center for Ocular Regenerative Therapy at the University of California, Davis. NEI Deputy Director Dr. Santa Tumminia will serve as Acting Director while a national search is conducted.
- On June 12<sup>th</sup>, Dr. Francis Collins released a statement titled "Time to End the Manel Tradition," in which he announced he will decline to participate in future panels that exclusively feature men. The goal is to help ensure all people are represented at the table and are fully participating in science. The best scientific minds come from all races, ethnicities, and genders and diverse research teams are better. Dr. Pérez-Stable released a supporting statement: "I want to

emphasize the importance of racial and ethnic diversity among scientist and clinicians. The participation of diverse scientists enriches discussion, expands the research perspectives, and leads to better and more exciting science”.

#### *NIMHD News and Updates*

- There are three new staff additions to the Division of Intramural Research (DIR): Jeremy Huckleby (Medical Research Scholar Program), Xiaohui Liu, PhD (Postdoctoral Fellow), and Francisco Alejandro Montiel-Ishino, PhD (Postdoctoral Fellow). DIR added a number of Post Baccalaureate Fellows: Peter Ajayi, Aniruddh (Anu) Ajith, Zahra Ansari, Jackie Bonilla, Isiah Brown, Koya Ferrell, and Sang Heon Lee.

#### *Legislative Update*

- On June 7<sup>th</sup>, Dr. Nathaniel Stinson met with senior congressional staff in Rep. John Lewis' (D-GA) office to discuss NIMHD research and programs. Dr. Natasha Williams and Donna Crews (NIH/OD) also attended.
- On August 2<sup>nd</sup>, the President signed the Bipartisan Budget Act of 2019, which sets the caps for the year's budget. The legislation raises limits on discretionary spending by \$321 billion through July 2021 and suspends the debt ceiling for two years. Non-defense spending would increase from \$605 billion during FY19 to \$632 billion in FY20 and \$634 billion in FY21. This is where the NIH budget comes from and may lead to a slight increase in the NIMHD budget.

#### *Budget*

- While the 2019 budget is not yet complete, Dr. Pérez-Stable provided an estimate of the funding distribution for the fiscal year.
- Roughly 45% of NIMHD's budget goes to Research Project Grants (includes R01s, R21s, R15s and the U01 grants), 20% is allocated to the Research Centers in Minority Institutions (RCMI), 10% to Non-RCMI Centers, 7% to Research Management & Support, 7% to Other Programs and Training, 5% goes to Research and Development Contracts, 3% to Small Business Innovation Research/Small Business Technology Transfer Program, and 2% to Intramural Programs.
- Dr. Pérez-Stable displayed the Sources of NIMHD's R01/U01 Applications. He noted there were significant increases in the number of applications in FY18 and FY19 compared to FY16 and FY17. The R01s are tracked by to submissions to the parent announcements or another IC, versus NIMHD RFA, or NIMHD PAR/PA. He noted that until 2014, NIMHD only had RFAs for R01s. In FY17, applications from the parent announcements increased and have continued to grow in FY 18 and 19. NIMHD maintains RFAs for the R01 applications focused on HIV/AIDS and the Youth Violence programs.

#### *Activities*

- The NIMHD Insights Blog featured Dr. Brian Mustanski, who wrote a very relevant and historical piece about Stonewall. The blog was titled “50 Years After Stonewall, Celebrating Progress and Striving for LGBTQ Health Equity”. Others will be invited to contribute. The blog also contained a feature on the future of minority health and health disparities.
- On November 12, at 3:00 p.m., NIMHD will host a Director's Seminar Series with Dr. Denise Dillard on the “Genetic Research with Alaska Native people, Lessons, and Future Possibilities. Dr. Dillard is Research Director for the South-Central Foundation in Alaska. This is an important topic for the All of Us and other research programs that interact with American Indians and Alaska Natives about ownership of data, sharing of data, genetics in particular, but also biological data.
- Drs. Pérez-Stable, Gary Gibbons and David Goff (NHLBI) visited the Jackson Heart Study (JHS) in June 2019. JHS is the largest investigation of causes of cardiovascular disease (CVD) in African Americans. The goals of the study are to investigate genetic, behavioral, social, clinical and environmental factors to understand how African Americans are disproportionately affected by CVD. They met with trainees, the steering committee, community leaders, and with

Institutional Leadership (Jackson State University, University of Mississippi Medical Center, and Tougaloo College).. NIMHD has been a co-sponsor of the study since its inception in 2000.

- On August 8th, NIH hosted a Summer Research Poster Day. NIMHD had ten dynamic summer interns, that worked in the DIR from May to September, to participate. The posters were terrific.
- On July 15th, the following NIMHD staff received the NIH Director's Award: Dr. Jennifer Alvidrez, Dr. Nancy Breen, Dr. Rina Das, Dr. Tilda Farhat, Dr. Nancy Jones, Dr. Richard Palmer, Sharita Brown, Dr. Joyce Hunter, and Dr. Nathaniel Stinson. Additionally, Dr. Courtney Aklin will receive the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) Collaboration Award on 11/21/19.
- NIMHD is planning the 10-year anniversary of the Institute's founding. The theme is "Building on the legacy, advancing the science of minority health and Health disparities". The first goal of the celebration is to recognize the accomplishments contributing to the legacy of NIMHD and the second goal is to set the state for the future of research in the field. Preliminary plans include: Scientific Symposium on March 3, 2020, Lectures and Webinars, Community Events, a Congressional reception, and Online events. Dr. Louis Sullivan, who was the Secretary of Health and Human Services at the time when the Office was established.
- There will be a second Inclusion Across the Lifespan Workshop on September 2-3, 2020. This is directly linked to the 21<sup>st</sup> Century Cures Bill. A prior workshop took place a little over a year ago in which NIMHD was involved. Joyce Hunter is on the Inclusion Governance Committee.

#### *NIMHD-Supported Programs*

- Dr. Karen Parker's office recently published a revised definition on sexual and gender minority (SGM) populations for research purposes (NOT-OD-19-139). The goal is to help enhance the representation of SGM individuals in the agency's research portfolio and to stimulate the development of novel research projects and strategies to better understand and advance SGM health.
- NIMHD participated in the publication of a special issue of *Ethnicity & Disease* (Supplement vol 29, 2019) that came out of the Transdisciplinary Collaborative Center (TCC) for Health Disparities at Morehouse School of Medicine (MSM). The Supplement is entitled "Advancing Health Equity and Reducing Disparities with Collaborative Policy." Innovative and groundbreaking policy research, policy actions, and health equity interventions from the TCC were presented. NIMHD authors included Drs. Pérez-Stable, Michael Sayre, and Derrick Tabor. Introductions were by MSM President, Dean and former NIMHD Advisory Council member, Dr. Valerie Montgomery-Rice and Principal Investigator, Dr. Kisha B. Holden.
- NIMHD is sponsoring a special issue of *Ethnicity & Disease* on "Structural Racism and Discrimination: Impact on Minority Health and Health Disparities." This follows the NIMHD/HHS Office of Minority Health 2017 Workshop on identifying structural racism/discrimination (SR/D) and addressing it in minority health and health disparities research. NIMHD is currently seeking authors and peer reviewers, and abstracts are due by September 30, 2019. We are looking for high-quality empirical articles. NIMHD will do more of these.
- Four NIMHD principal investigators (PIs) received the Presidential Early Career Award for Scientists and Engineers (PECASE). PECASE recognizes exceptional scientists at the beginning of independent research careers who demonstrate leadership in science. There were 60 NIH-supported recipients, including 9 NIH intramural researchers. Four of the 60 were NIMHD funded awardees. The NIMHD awardees were Drs. Sanjay Basu (Collective Health), Namkee Choi (U of Texas at Austin), Darrell Gaskin (Johns Hopkins University), and Colter Mitchell (University of Michigan).
- In July 2019, researchers from the University of Guam visited NIH, a historic visit. Drs. Margaret Hattori- Pérez and Rachael Leon-Guerrero discussed Building Population Health Research Capacity in the U.S. Affiliated Pacific Islands, Pacific Islands Cohort on Cardiometabolic Health. The visit included nursing students trained at the NIH Clinical Center in RCT protocols, a presentation at the NIMHD IRP Seminar Series, and networking with NIH staff. Most of the NIH ICs have some sort of global footprint. NIMHD global footprint is mostly in the US Territories (Puerto Rico, the Virgin Islands, Guam and the Pacific Islands).

- The fourth annual Health Disparities Research Institute (HDRI) took place in August. There were 289 applications submitted with 50 early-stage career scientists selected to participate. Twenty-five states (as well as the District of Columbia, Guam, and Puerto Rico) were represented. Activities focused on developing skills that will assist early-stage investigators and included: scientific sessions focused on state-of-the-art science and Interactive sessions to increase knowledge about NIH grant process, grant writing, and peer review. The scholars also had an opportunity to network with NIH program official and extramural scientists. The AAMC collaborated with NIMHD to host the workshop on grant writing and a reception for the scholars. Two other IC Directors attended the reception. Richard Palmer and Ligia Artiles and a Team put together the program. Dr. Pérez-Stable displayed the breakdown of the 2019 HDRI Cohort Summary: 28% of participants were African American, 26% were Latino, and 80% women. There were more PhDs and/or equivalents (72%) than physicians/clinicians (26%). The selection emphasis was on postdoctoral fellows and assistant professors. A new eligibility criterion required the applicants to have plans to write a grant within the next year.
- NIMHD recently completed the transition of the Research Centers in Minority Institutions (RCMI). Eleven RCMI have been funded, some of which are renewals (8) and some new (3). This program develops and strengthens RCMI infrastructure to facilitate state-of-the-art biomedical research and foster the next generation of researchers from across the country. RCMI can have a focus in basic science, behavioral science, or clinical science.

#### Science Advances

- A paper in *Addictive Behaviors* on “At Risk Alcohol Use and Smoking Co-Use Hispanic Community Health Study/Study of Latinos. Working with 16,412 HCHS/SOL participants from 6 population groups (79% of which are immigrant-born) across 4 sites, the study found that 26.7% of men were current smokers and 8% exhibited at-risk alcohol use, and that 8.8% of women were current smokers and 3.5% exhibited at-risk alcohol use. Puerto Rican women had a much higher risk for doing both. Depression was associated with co-use in both men and women. Acculturation was not related to co-use.
- An *Annals of Internal Medicine* article examined whether body-mass index (BMI) is associated with mortality in Mexico. It was large study with almost 160,00 adults. People who were sick at baseline were excluded from the study. Mean BMI was 28 in men and 29.6 in women. The mortality nadir was at the 25 to 27.5 range. For every increment of BMI (5kg/m<sup>2</sup>) there is a 1.3 increase hazard ratio of mortality. The association was strongest in ages 40-60 (midlife) compared to 60-75. The relationship of BMI to mortality wanes with age. Waist circumference was found to be strongly related to mortality.
- A paper in the *Journal of General Internal Medicine (JGIM)*, “Communication Disparities by LEP Status: Medical Expenditure Panel Survey, 2006-2015”, described trends in communication disparities by the limited English proficiency (LEP) status of patients. This is an ongoing survey done by the Agency for Healthcare Research and Quality (AHRQ). It is a time series analysis evaluating changes before and after 2010. There were 27,001 participants with at least one office visit. Three outcomes were used: 1) always explained things in a way that was easy to understand, 2) showed respect for what they had to say, and 3) listened carefully. The study found that from 2006-10 communication worsened for LEP patients and that after 2010, communication improved for LEP patients with narrowing of disparities. Communication has been steadily improving since 2010. Other studies have indicated that for these patients, the biggest factor that affects communication, is having a clinician who speaks their language.
- A study in the *Morbidity and Mortality Weekly Report (MMWR)* looked at dementia death rates by race/ethnicity and sex in 2017. Researchers found that women were more at risk for dementia and for Alzheimer’s disease than men. African Americans have been shown to have a higher risk for Alzheimer’s disease and dementia, although they also exhibit a lower mortality rate. Latino s have a lower rate of both compared to Whites.
- A National Center for Health Statistics (NCHS) Data Brief showed little disparity in mortality rates for African Americans and Whites over the age of 65. However, this study also found that the mid-life (25-44) mortality rate is increasing for African Americans, Whites, and Hispanics. Dr. Pérez-

Stable noted these figures could be due in part to the opioids and other substances as well as suicide. CDC does not publish national estimates for American Indians or Alaska Natives, but other analysis indicate that the data may be the same or worse for American Indians epidemic. There are limited data on Native Hawaiian /Pacific Islanders.

#### *NIMHD-Supported Science Advances*

- A research letter in the *Journal of the American Medical Association (JAMA)* studied penalties and rewards for safety net vs. non-safety net Hospitals in the first 2 years of the Medicare Comprehensive Care for Joint Replacement (MCJR) model. MCJR is a 5-year bundle payment. This mandated for ~700 hospitals in 67 metropolitan areas with penalties based on Medicare's quality-adjusted price. Hospitals were categorized into quartiles based on their disproportionate patient percentage linked to payments (i.e. Medicaid and Medicaid-like). This is a measure of the vulnerability of the patient population cared for by the hospital. The study found that 37% of safety net hospitals were penalized, and 31% got awards. Further, 14% of top quartile hospitals were penalized and 59% got awards. Middle quartiles had 15%/26% with penalties and 44%/43% with rewards. If a hospital that does disproportionate care for people lose money due to payment reform, and a hospital that limits the number of poor people seen, intentionally, but make more money, healthcare reform will not help social justice in how people are cared for. Dr. Pérez-Stable noted that these data seem to show that healthcare payment reforms could be causing more harm than good. Joint replacement (total knee) is the second most common surgical procedure in the U.S.
- NIMHD has been very involved in trying to get more genetic data out on different racial/ethnic groups. A study supported by NIMHD recently published a paper in *Nature* that identified 27 genetic variants associated with disease in multi-ethnic genomes. Conducting a genome-wide association study (GWAS) of 26 phenotypes in 49,839 non-White individuals, the study identified 27 novel loci, 38 secondary signals at known loci, and 1444 GWAS associations across traits. The data showed effect-size heterogeneity across ancestries from published data.
- A paper published in *Cancer*, examined disparities in triple-negative breast cancer (TNBC) epidemiology, was the product of a dissertation grant supported by NIMHD. They found that TNBC is more aggressive, more common, and harder to treat in African Americans. According to U.S. Cancer statistics, 8.4% of 1,151,724 cancer cases from 2010-14 were TNBC. In addition, mortality rates were higher for African American women. Latina women also had a higher risk of triple negative breast cancer as compared to White women. Women under 40 years of age had a higher risk than women 50-64, the most common period of diagnosis of invasive breast cancer. Additionally, the risk was higher for Stage 3 or 4. Overall the mortality rates were worse for Black women (28.7) than for White (20.3) women.
- Dr. Pérez-Stable noted that communicating about prostate-specific antigen guidelines is complex. A study in the *American Journal of Men's Health (AJMH)*, from an NIMHD funded grant, looked at cancer disparities in communicating prostate-specific antigen (PSA) test guidelines to African American men. Black men experience a 60% higher incidence of prostate cancer than white men and are twice as likely to die from the disease. This study used data from the 2015 Behavioral Risk Factor Surveillance System which included 3,877 men (10% were Black) ages 40-74 years. Participants reported the level of PSA done and being informed about the risks and benefits by race. For Blacks: 56% received PSA test and 40% were informed, and for Whites: 63% received PS and 29% were informed. The study emphasized communicating PSA-related information to all men regardless of race.
- A study published in *AIDS and Behavior* examined the location of pre-exposure prophylaxis (PrEP) services across New York City neighborhoods. While use of PrEP is increasing nationwide, it remains underutilized among minorities and those of low socioeconomic status (SES) individuals. This study found no association between PrEP clinician density and neighborhood-level race/ethnicity, SES, insurance or same-sex partner households, and additional providers may be needed in certain environments to reduce access barriers.
- Dr. Kelvin Choi (NIMHD Intramural Investigator) recently published a paper in *Preventive Medicine* on disparities in the receipt of direct tobacco mail/email coupons and coupon

redemption among U.S. adult smokers. Using the Population Assessment of Tobacco and Health (PATH) Study Wave 1 survey (n=10,994), he found that women, sexual minorities, and those with difficulties paying important bills were more likely to receive coupons for tobacco products and redeem them. This seems to be a marketing strategy that could help explain tobacco use disparities.

## PRESENTATIONS

### **Diversity, Inclusion, and Equity in the Biomedical Workforce: Looking in the Past to Go into the Future: Fernando Mendoza, MD, Professor of Pediatrics, Department of Pediatrics, School of Medicine, Stanford University, NACMHD Member.**

Dr. Mendoza gave a brief overview of his career and then displayed the NIMHD's mission. He noted two tenets of that mission statement that were critical for his presentation: 1) Promotes and supports the training of a diverse research workforce, and 2) Fosters innovative collaborations and partnerships.

The reality of the world has changed: in 2018, half of all U.S. children were minorities. Of those children, 52% were Latino, 27% were Black, 10% were Asian/Pacific Islander, 2% were American Indian, and 9% were of two or more races. By 2040, half of the U.S. adult population will be minorities. In 2016, one-quarter of children lived in an immigrant family, which will be one-third by 2050. By 2050, the percentage of Latino children will equal the number of White children. Given these realities, the whole country will soon be dealing with the issues that NIMHD works on. In addition, roughly two-thirds of Latino/a children were Mexican American as of 2013, and about two-thirds of that group is children of immigrant families.

There are currently 350 languages spoken in the U.S., 150 of which are spoken in metropolitan areas, which should have an impact on the way clinicians think about the ways they provide care. Moreover, precision medicine should primarily inform precision health. Recently, the Centers for Disease Control (CDC) and the World Health Organization (WHO) looked at the social implications for clinical care, education, and research, and showed the factors that most affect population health (genes, behaviors, medical care, and especially ecology and societal characteristics). Crucial social determinants such as poverty and low education levels can have an acute impact on health.

When researchers think about diversity in the workforce it's important to recognize that diversity means different things to different people. With regard to diversity in medical schools, the Liaison Committee on Medical Education (LCME) has issued diversity requirements for certification, and in 2004 the Institute of Medicine (IOM) said that a diverse workforce is critical for resolving health disparities. Because of this, healthcare systems are now looking at doing patient-centered care, which requires clinicians to be in tune with what patients require. Hospitals are also in competition for diverse patients, and patients want a responsive, unbiased community in which to receive care.

As these shifts are happening it is important to think about the ways the field can move forward on diversity. Dr. Mendoza's Stanford colleague Dr. Marc Nivet developed one such method in the Diversity Operating System (DOS), which has three stages. DOS 1.0 states that diversity is an end in itself, DOS 2.0 sees diversity as educationally additive, and DOS 3.0 uses diversity as a vehicle to excellence. To be sure, faculty and academic leaders are essential to executing DOS 3.0.

Dr. Mendoza presented data from the Association of American Medical Colleges (AAMC) showing the diversity of graduating medical students, which illustrated the relatively flat levels of diversity. According to another chart, African Americans made up 3.6% of medical school graduates in 1980 and only 5.7% today. By contrast, Asian American graduates went from 4.9% in 1980 to 21% today. Dr. Mendoza said that the diversity in medical school graduates is not following the growing national diversity. Dr. Mendoza displayed another chart which showed the diversity of medical school faculty from 1971-2017, which indicated that the population of White men has decreased, the population of White women has increased, and there has been almost no increase in minority populations other than Asian Americans.

Dr. Mendoza displayed a photo of the 1968 graduating class of Stanford's School of Medicine, which was overwhelmingly White and male. In part due to the American Civil Rights movement, Stanford implemented affirmative action programs in 1969, with a 12% target to achieve equity. In 1978 the Bakke decision upheld affirmative action programs, and since then educational institutions have been affected by the Supreme Court, the expanding definition of diversity, and their changing environment.

Dr. Mendoza displayed photographs of his incoming class at Stanford Medical School, and he noted that at that time Stanford had faculty that championed diversity, holistic reviews of medical school candidates, reviewed what obstacles those candidates had to overcome to get to where they are, and instituted unconscious bias training. Although those students were seen as less qualified when they came into Stanford, many of them have gone on to have distinguished medical careers. If nothing else, the case of Stanford medical school teaches that one's success is not solely determined by test scores.

Stanford Medical School has now been championing diversity for five decades, and Dr. Mendoza said that each decade taught its own lesson. In the first decade (starting in 1969), they proved that minorities could be successful at Stanford. In the second decade, Stanford decided how best to work with the new cohorts of diverse students. Dr. Mendoza said when he became a Dean in 1983, he and colleague Dr. Robert Cutler started an early matriculation program, wherein they encouraged incoming medical students to one day become faculty members. In the third decade, Stanford created institutional programs to increase diversity. In the fourth decade it was decided that diversity had been well established at Stanford, and there was a need to build out inclusion within the medical school (including creating a Diversity Cabinet). Finally, in fifth decade, Stanford is employing DOS 3.0, creating an Office of Faculty Development and Diversity as well as a Dean's Taskforce on Diversity and Societal Citizenship.

However, Stanford is just one institution in which these changes are taking place. Dr. Mendoza mentioned Harvard's Dr. Joan Reede as well as a number of Centers of Excellence (COE) that work diligently on this topic. In a pediatric Working Group on diversity, Dr. Mendoza and colleagues examined diversity in pediatric departments from residents to Dr.s. They found that while some departments are measuring diversity, departmental diversity remains unremarkable. The study found that although three-fourths of pediatric residents are female, women make up only 26% of department Dr.s. Stunningly, 69% of department Dr.s rated themselves as a four or higher (on a scale of 1-6) of success on diversity. This finding illustrates the need for leadership perspective across the biomedical workforce.

More recently, Dr. Mendoza's group published a commentary in *Pediatric Research* about diversity and inclusion (D&I) in pediatrics. In this study, they found that there were a number of systemic issues with regard to institutional diversity. In fact, one study of 24 medical schools found lower tenure rates for underrepresented minorities (URM) even after controlling for academic factors. Even at the NIH, grant funding is at lower rates for URM faculty after controlling for common factors. Still, Dr. Mendoza commented that while diversity had once been peripheral it was now becoming central to mission. Today, virtually every medical school has initiatives on diversity, and there are several organizations and societies—including the AAMC, NIH, and the National Academy of Science (NAS)—dedicated to D&I. Even Health Maintenance Organizations (HMO) like Kaiser in ultra-diverse California has established the Kaiser Permanente School of Medicine and Cultural Competency.

Looking to the future, Dr. Mendoza said there are a number of lessons to take from the last fifty years of building diversity in the biomedical workforce. Firstly, diversity has become institutionalized because of ally-ship with various groups. Secondly, inclusion has been slower as measured by faculty and institutional leaders. To remedy this, institutional leadership should be advocates. Thirdly, equity for URM is still an issue, especially as populations increase and become the majority of human capital. Fourthly, the biomedical workforce needs to learn from successful D&I programs that produced health care leaders by assessing them. Finally, opportunities exist at regional and national levels to found partnerships.



Dr. Mendoza reiterated that NIMHD is leading the charge for increasing diversity in the biomedical workforce. In particular, the Loan Repayment Program, R21 grants, and the Diversity Institute work to improve the state of D&I. Dr. Mendoza said one thing NIMHD could improve upon is supporting innovative collaborations across NIH, AAMC, Health Resources and Services Administration (HRSA), as well as Health Profession Groups on diversity. Dr. Mendoza stated that workforce diversity is the vaccine for health disparities.

**Mediators of Atherosclerosis in South Asians Living in America: Alka Kanaya, MD, Professor of Medicine Epidemiology and Biostatistics, Division of General Internal Medicine, Department of Medicine, University of California, San Francisco**

Dr. Kanaya gave a brief overview of her background and said her presentation would focus on what researchers have learned from the Mediators of Atherosclerosis in South Asians Living in America (MASALA) study. Dr. Kanaya displayed recent research on diabetes prevalence from 2011-2016 from the National Health and Nutrition Examination Survey (NHANES) data. This data was used to disaggregate the 19.1% Asian group in the study into 14% East Asian, 23.3% South Asian, 22.3% Southeast Asian, and 20.4% Other Asian. Dr. Kanaya then displayed a chart showing CVD mortality data from 34 states comparing Asians to Whites, wherein Asian Indians seemed to have the highest proportional mortality ratio for both men and women. As there is no longitudinal data on South Asians worldwide, further research was needed.

Facilitated by a K grant, the MASALA study's aims are to: 1) Determine the risk factors associated with subclinical atherosclerosis and Type 2 diabetes, 2) Compare adjusted prevalence of CVD risk factors to race-ethnic groups in the Multi-Ethnic Study of Atherosclerosis (MESA) and, 3) Investigate factors associated with incident CVD. Due to the collaboration with MESA, the study design of MASALA is similarly structured, with 900 South Asians aged 40-84 at two sites—University of California, San Francisco (UCSF) and Northwestern University (NWU)—undertaking a baseline exam from 2010-2013 and a second exam by 2018. The first exam was six hours long and consisted of blood tests, a glucose tolerance test, a coronary calcium computed tomography (CT), a carotid ultrasound, and an electrocardiogram (EKG). Following those tests, MASALA got another grant to analyze participant's personal social networks. Exam two took place from 2016-2018, in which they performed blood tests, a glucose tolerance test, and a coronary calcium CT. Dr. Kanaya said she is presently writing a grant to fund Exam three. To date MASALA has worked with 1,007 participants.

Roughly 98% of MASALA participants are U.S. immigrants: 83% from India, 6% from Pakistan, and 2-3% from other various South Asian and diaspora countries. The average amount of time a participant had been living in the U.S. was 28 years, and SES tended to be high due to who is eligible to immigrate to the U.S. in the current legal framework. Over 64% of men and 47% of women had greater than a bachelor's degree. In comparison to MESA data—which includes Whites, Blacks, and Latinos—South Asians are very unlikely to be current smokers (as is the case with Chinese Americans), and only 33% of South Asians consumed one or more alcoholic drinks/week. South Asians were also less likely to exercise compared to other groups.

The MASALA study also looked at the typical South Asian diet, specifically using a validated questionnaire developed in Canada which asks about types of food and preparation. In analyzing this data, researchers found there were three major dietary patterns of South Asians (33% each): 1) Animal protein, 2) Fried snacks and sweet and, 3) Fruits, vegetables, nuts, and legumes. About 40% of the cohort is vegetarian. With regard to body composition, the WHO has introduced different cut points for obesity, and the normal BMI for Asians stops at 22.9%. Given that, Dr. Kanaya said they used these cut point to categorize BMI in MASALA, and she displayed data on normal weight, overweight, and obesity for the five ethnic groups across the MASALA and MESA studies.

While they wanted to study metabolic risk factors based on BMI cut points, the Yudkin-Yanjik paradox demonstrates that a South Asian with a similar BMI of a non-South Asian may have a significantly higher

body fat than the latter. Therefore, MASALA researchers used CT scans to analyze hidden fat stores localized around organs, and they found that South Asians store fat in all the wrong places with the lowest lean mass. Delving further, researchers found that normal weight South Asians had the highest prevalence of metabolic abnormalities compared to other groups, which has a significant clinical impact. Dr. Kanaya continued that clinicians should keep in mind that metabolic abnormalities can occur even if a patient's BMI is normal.

About 26% of MASALA participants had diabetes, while 42% had normal glucose levels. About 30% of men had diabetes whereas only 15% of women did, which is consistent with the gender disparity in diabetes prevalence across ethnic groups. When researchers adjusted for potential factors that may explain differences in race/ethnicity South Asians still had a higher prevalence than other groups. Non-diabetic South Asians tended to have higher levels of insulin resistance and lower levels of beta cell function than groups from the MESA study.

MASALA researchers spent ample time looking at acculturation factors for South Asians, and they found that length of U.S. residency, English-language proficiency, food eaten inside/outside the home, frequency of cultural engagements, race/ethnicity of friends, and traditional beliefs all had an effect on health outcomes. When they looked at those factors and used a carotid ultrasound they found that people who had moderate cultural beliefs had a lower carotid intima media thickness (CIMT) compared to those with strong beliefs. These figures were consistent after adjusting for other risk factors. Using this information, the MASALA study developed three latent classes for acculturation: a separation class (23%), an integration class (54%), and assimilation class (23%). People in the separation class tended to have more depressive symptoms, while the assimilation class had a lower cardio metabolic risk.

MASALA also performed coronary artery calcium scans (CAC) to gain a better understanding of subclinical atherosclerosis. Assuming that South Asians would have higher prevalence of subclinical risk factors for atherosclerosis, researchers found that South Asians had similar CAC scores compared to other ethnic groups (although women displayed a slightly higher prevalence after the age of 65). They also looked changes in CAC scores over 5 years, and found that South Asian men have significantly faster changes in CAC scores than all other race/ethnic groups. However, after adjusting for traditional risk factors there was no difference between White and South Asian men. Overall, smoking, diabetes, and high blood pressure were associated with the development and progression of coronary calcium.

Combining their data with other Asian-American datasets, the MASALA study has influenced guidelines for diabetes screening, specifically recommending a cut point BMI of 23 for screening rather than 25 as was traditional. In addition, they put out a scientific statement on atherosclerotic cardiovascular disease in South Asians in the United States. As a result, the American Heart Association (AHA) and the American College of Cardiology (ACC) updated their lipid guidelines in November 2018, and being South Asian is now considered a risk-enhancing factor. MASALA has also been working with Rep. Pramila Jayapal (D-WA) to introduce H.R. 3131 – South Asian Heart Health Awareness and Research Act of 2019.

In conclusion, Dr. Kanaya said that South Asians do have several cardio metabolic risk factors, and adverse body composition may be partially responsible. As a result, clinicians should screen for risk factors regardless of BMI. Moreover, CAC progression is faster among South Asian men, and CAC is an important risk factor. However, several risk factors can be modified, specifically, diet, exercise, integration strategies, and reducing stress. To raise awareness, the MASALA study has partnered with the UK Biobank, UDAY, and The Center for Cardio metabolic Risk Reduction in South Asia (CARRS) to create a South Asian Consortium to further research on South Asian health around the world. In addition, MASALA recently received funding to do other types of 'omics work, having completed extensive work on metabolomes. Dr. Kanaya invited attendees to explore [masalastudy.org](http://masalastudy.org) for more information.

**The Human Genome Project Was Just the Beginning: Research Opportunities at the “Forefront of Genomics”:** Eric Green, MD, PhD, Director, National Human Genome Institute

Dr. Green thanked NIMHD for the opportunity to present and said his talk would give a snapshot of what is going on at the National Human Genome Research Institute (NHGRI), which has advanced beyond its original goal of leading research on the HGP. Dr. Green explained his presentation would delve into three areas of NHGRI: the first three decades of genomics, new realities and opportunities for the IC, and strategic planning.

Genomics is a relatively young discipline, with its first introduction in medical literature only occurring in 1987 with the establishment of *Genomics*. The reason a new field was created was because new technologies allowed for exponentially more data gathering ability on DNA, as well as the opportunity to sequence DNA. As scientists were potentially able to read out the billions of units in the human genome, the HGP was launched in 1990. Dr. Green said that by almost any measure the HGP was a success, setting up a number of its own and subsequent advances in science.

There have been several major highlights from the first three decades of genomics research. The first accomplishment was that the human genome was sequenced for the first time in 2003 by the HGP. Following that, NHGRI wanted to take genomics and apply it to medicine, as minute differences in genomes could lead to better health outcomes and patient treatment. Still, the notion of genomic medicine was in its nascent stage, and it was unclear what precisely was meant by the term.

Following the sequencing the human genome, the next major highlight in the history of genomics was that the cost of sequencing a genome has been reduced by 1 million-fold. As a result of this cost reduction, hundreds of thousands of human genomes have now been sequenced. With all of this information, researchers have the ability to hone in on any one of the 3-5 million differences between one's genomes, and can catalog those differences such that clinicians can use them to treat patients.

While the scientific literature is nowhere near complete, researchers have made profound advances in understanding how the human genome functions. In addition, while there is less understanding of sequencing outside of genes, scientists know that regulatory sequences are playing a major role in determining when a given cell chooses to turn on/off a certain set of its genes. Dr. Green explained that the regulatory sequences are a very important part of human biology, which may require another couple of generations to elucidate the complexity of genomics.

However, the complexity of genomics has not impeded some scientific understanding, as there have been significant advances in unraveling the genomic bases of human disease. In many single gene rare diseases the advances have been remarkable: in 1990 there were only 61 rare-mutated diseases for which scientists knew what the mutated gene was. Today there are over 5,400. Dr. Green said they would like to see more progress in common, more complex diseases like hypertension, Alzheimer's, and CVD. Genomic studies have also revolutionized the way cancer is studied.

Dr. Green said that while in the past he may have had to end his presentation here, he can now say that NHGRI is seeing vivid examples of genomic medicine emerging. When looking to how much progress has been made in genomic medicine, Dr. Green said this area has been particularly rich in cancer diagnostics and care, and there have been hundreds of cases wherein genomics has been able to guide research on rare (in many cases) undiagnosed diseases. Pharmacogenomics and prenatal testing are also novel areas genomics is impacting. Still, this is just the tip of the iceberg in genomics, and Dr. Green commented that he thought there would be significant advances in the science in the next ten years.

With regard to new realities and opportunities, Dr. Green said that while he typically outlines seven such opportunities he would only be able to go in depth on a couple for this presentation. The first opportunity is that there is a lack of diversity in genomics. In 2009 it came to light that some GWAS did not contain diverse samples because researchers were eager to use data they previously collected. By 2016, researchers were reminded by a number of publications that diversity in genomics was sorely lacking (with 96% of samples coming from European ancestry in 2009 to 81% in 2016). Further, 78% of the

increases in samples with non-European ancestry were of Asian ancestry, with all other race/ethnic groups making up less than 4% of genomics research.

Dr. Green displayed another chart from *Nature Genetics* which showed that over time the number of individuals that have had their genome analyzed has increased exponentially but the diversity of samples is not reflective of the global population. This is important because genomic data cannot be extrapolated across different race/ethnic populations, which Dr. Green stated would have utility issues if researchers did not fix what they were doing. As a result, NHGRI is trying to prioritize diversity in human genomics research, and they try to accept input from other experts around NIH. In addition, NHGRI partners with the Clinical Sequencing Evidence-Generating Research (CSER) and Implementing Genomics in Practice (IGNITE). A number of other NIH programs are also working on these issues, specifically the All of Us Precision Medicine Initiative—which has the explicit goal of increasing representation of groups that have traditionally been underrepresented in biomedical research—and the TOPMed Program from NHLBI.

The other major opportunity in genomics today is thinking about where genomics data is being generated, as the success of genomic medicine uptake in health systems is going to change that dynamic. The Global Alliance for Genomics and Health (GA4GH) recently put out data which showed that while about only 1% of human genome sequences were funded by healthcare systems, roughly 80% of them will be funded by such systems in 2022. This translates to roughly 50 million genome sequences by 2022, which will ultimately lead to a convergence of research and clinical genomics that is being paid by healthcare systems. Unfortunately, the introduction of healthcare systems inherently leads to disparities, and diverse communities will likely face barriers to accessing genomic medicine.

Moving to the future and especially a “2020 Vision for Genomics,” Dr. Green said to capitalize on everything they have learned so far they will have to think deeply about developing a strategic plan to invest in the genomics research community. In large part this strategy is developed out of the major strategic plans that previously guided NHGRI. Following the completion of the HGP, NHGRI developed a strategic plan for the broader IC, putting forth a vision for the future of the IC through 2010. From 2011 through today they operated under a different strategic plan, specifically targeting genomic medicine.

Although the 2011 strategic plan was helpful for its time, Dr. Green noted it needed to be revised for the future of genomic medicine. Thus, NHGRI began the Genomics2020 strategic planning process in 2017 with early planning, officially launching the timeline in February 2018 for publication in October 2020. Dr. Green noted that due to the growing complexity of genomics this strategic planning process was much more complicated than similar processes in the past. NHGRI has hosted about 40 events to get more information about the strategic planning process, with more taking place in the coming months.

While elements of the strategic planning process have been familiar for years, Dr. Green noted that the current process is different. Although NHGRI is not a big IC, a number of other ICs are also contributing to genomic research. To see why this round of strategic planning is so different, Dr. Green said one only need look at the databases of NIH grants and examine it for keywords like “human genome.” When one does this for 1990-2003, one finds that NHGRI was doing roughly 95% of research in the space. In 2003, NHGRI was still doing ~90% of genomic research, and in 2011 NHGRI was doing only 45% of genomic research, especially as the National Cancer Institute (NCI) gets more involved in the space. By 2020, NHGRI will only do 10% of genomic research at NIH, signifying how difficult it is to strategically plan for the future of research. Ultimately these statistics mean that NHGRI has to change their identity, and they now see themselves as being at “The Forefront of Genomics.”

NHGRI’s strategic plan will be the driving force for genomic research at NIH, providing a clear vision for using genomics to advance human health. Significantly, NHGRI will have to foster partnerships throughout the general public communities to accomplish these tasks, all of which will help to define the future of NHGRI as it exists at the forefront of genomics research. Dr. Green gave information for people to get more information about NHGRI and their work.

**Statement of Understanding (SOU): Priscilla Grant, JD, Chief Grants Management Officer (GMO), Grants Management Branch, Office of Extramural Activities, NIMHD**

NACMHD is charged with helping NIMHD achieve its goals by providing advice and recommendations to the Director on matters related to research activities and functions of the IC. Members are a national resource in developing NIMHD's priorities. Working groups can occasionally be formed to address critical scientific or policy issues that have been deemed critical by NIMHD. NIMHD will inform the Council of any scientific, legislative, budgetary, or other issues that will affect the mission of NIMHD and its constituencies. Two of the Council's most important functions are clearance of new initiatives (in open session) and secondary review of grant applications (in closed session). Individually considered actions include funding plans under Requests for Applications (RFA), applications of high or low program priority, applications from foreign institutions within a fundable range, summary statements requiring special discussions, co-funding of applications for which other ICs have responsibility, and some investigator-initiated applications.

NIH-published RFAs do not allow appeals of initial peer review. Administrative decisions/actions that do not require Council recommendations include: change of PI or grant, change of domestic institution, or additional support if well justified for increased cost within the previously peer-reviewed research project. The Council cannot alter scores given by the Scientific Review Groups (SRGs) in closed session. Rather, they can only concur with the SRGs, not concur with the SRGs, recommend high or low program priority, or defer to obtain additional information at a later time. Ms. Grant also reviewed the Institute's processes for *en bloc* summary statements as well as the options available to the Council when reviewing Concepts for Clearance in the open session. To summarize, Ms. Grant said the Statement of Understanding was intended to be comprehensive, and not all statements are intended to be applicable to the particular items discussed at the present meeting.

## **CONCEPT CLEARANCE**

**NIMHD Exploratory Developmental Research Grant Program: Michael Sayre, PhD, Director, Integrative Biological and Behavioral Sciences, NIMHD**

Dr. Sayre explained that the overarching objectives of this R21 grant are to: a) promote innovative investigator-related research projects with the potential to break new ground in the science of minority health and health disparities, b) extend previous discoveries toward new directions or applications that can directly contribute to improving minority health and reducing health disparities, and c) enhance opportunities for early stage investigators (ESI) to compete successfully for R01 funding. NIMHD joined the NIH R21 grant program in 2016. As many ICs no longer participate in the R21, NIMHD is receiving an increasing number of investigator-initiated projects that would typically go to other ICs (many of which have little to no relevance to the NIMHD's focus of minority health and health disparities).

To better align the R21 grant with NIMHD's interest, this initiative proposes to launch a specific NIMHD R21 program and withdraw NIMHD from the parent R21 grant. This new grant will host a wide range of projects. Projects lead by ESIs are particularly encouraged, and should exhibit strong potential to position ESIs to compete for future R01 funding. The program's guidelines will emphasize that R21 applications are neither expected nor required to include supportive preliminary data.

Projects will fall into one of three categories: 1) Secondary analysis of existing data or bio-specimens, 2) Development/Application of novel research measures, methodologies, or analytic approaches, and 3) Development and pilot testing of new or adapted interventions.

In the first category, projects are expected to primarily use quantitative/analytic approaches, which may be supplemented with qualitative data collection. Data sources can include NIH-funded cohort studies, federal population-based surveys, and Medicare or Medicaid claims data. The second category includes projects that seek to develop new measures for populations that experience health disparities. Projects proposing to apply existing measures or methods to populations that experience health disparities without

specifically adapting them to address minority health disparities research questions are not a priority. In the third category, projects that propose to develop the feasibility of new or adapted interventions should have a conceptual model that includes a rationale for why those adaptations are relevant for study. Projects that claim the existing intervention has not been tested in a given population are not a priority.

Council engaged in detailed discussions. While generally supportive, members had several questions and recommendations for consideration. Program staff made note of the suggestions for incorporation into the future funding opportunity announcement. Dr. Hunter requested a motion to approve the concept, which was seconded, and passed unanimously.

**Long-term Effects of Disasters on Healthcare Systems Serving Health Disparity Populations in the U.S. and its Territories: Larissa Avilés-Santa, MD Director, Clinical and Health Services Research, NIMHD**

Dr. Avilés-Santa said the objective of the concept is to understand the long-term effects of disasters on healthcare systems serving populations with healthcare disparities in the U.S. and its territories. Through that effort, the concept aims to identify the most effective strategies, specifically: a) Preserving the functionality and meeting medical needs, b) Preventing exacerbation of health/healthcare disparities, and c) Enable preparedness and resistance against future events. With these interventions, they hope to make different populations more resistant to disasters.

To the question of why focus on disasters, Dr. Avilés-Santa said they occur often, and experts may not be connecting the dots on how they affect different American populations. For example, different regions of the U.S. are stricken by tornados or earthquakes, as well as a number of manmade and natural disasters. Because of these events, many communities are left without resources. Moreover, low-income communities tend to experience the greatest impact due to fragile infrastructure, suboptimal preparedness, and overarching health disparities, among other reasons. While natural disasters occur often, there has not been significant research on the long-term effects of disasters on healthcare systems.

To the question of why focus on health systems, Dr. Avilés-Santa said under normal circumstances, a well-resourced system can deal with health issues in ways they may not be able to following a natural disaster. Depending on the intensity of the devastation wrought by the catastrophe, there could be a surge of secondary medical needs, which a well-equipped system can cope with. In the case of a community in which health disparities exist without a disaster, that disaster can exacerbate existing disparities, and the baseline of disparities can shift to a higher level.

Drawing from a literature review of disasters in the U.S., Dr. Avilés-Santa said that of 685 studies of disasters only 80 examined long-term effects. The majority of those studies are focused on health outcomes, and very few are dedicated to healthcare utilization and health systems. Therefore, there is a need for more quantitative research on the long-term effects. Currently, the Department of Health and Human Services (HHS) and the Federal Emergency Management Agency (FEMA) have collaborated on post-disaster health mission areas, which include public health, healthcare services, behavioral health, environmental health, food safety, long-term responder health, social services, disaster care management, and children in disasters. However, those efforts are focused on facilities and preparedness rather than health disparities and other healthcare outcomes.

Non-NIMHD funding on this topic is composed of 42 applications from 2012-2018, covering topics like restoration of facilities, mental health, and children's health, among others. Recently, NIEHS released PAR 19-250 on the environmental influences on aging and the effects a disaster can have on the aging process. On the other hand, NIMHD has funded ten applications related to disasters: one narrow R01 and nine that were funded out of a 2018 RFA. None of the nine RFAs consider the long-term effects of disasters on health disparities.

With this new initiative, Dr. Avilés-Santa explained they would like to support retrospective quantitative research, mixed-methods analysis, and prospective interventions and practices in communities with

healthcare disparities whose healthcare systems have been disrupted by natural or man-made disasters. Areas of interest include: a) Long-term population health profile and healthcare needs (e.g., population health before and after the disaster), b) Pre- and post-disaster management of chronic diseases (e.g., strategies to ensure access to and continuity of care), c) Post-disaster healthcare systems re-design, d) Pre- and post-disaster impact of state/territory and/or federal policies on healthcare services access/delivery, e) Pre- and post-disaster healthcare workforce migration and return (and the effect it could have on healthcare access, delivery, and quality, f) Post-disaster implementation of a disaster curriculum, and g) Comparison of long-term effects between health disparity communities throughout the country.

Council engaged in detailed discussions. While generally supportive, members had several questions and recommendations for consideration. Program staff made note of the suggestions for incorporation into the future funding opportunity announcement. Dr. Hunter requested a motion to approve the concept, which was seconded, and passed unanimously.

### **PUBLIC COMMENTS**

Dr. Pérez-Stable invited members of the public to make comments. Dr. Catherine Krebs, from the Physicians Committee for Responsible Medicine (PCRM) spoke. On 7/15/19, the PCRM established the Diversity in Dementia Working Group at the Alzheimer's Association International Conference (AAIC) to address biases in pre-clinical research strategies. Members of the Working Group included stakeholders from academia, healthcare, and advocacy organizations, and they outlined a path to reduce the health burden of dementia on underserved populations. Working Group members appreciate NIH efforts to increase participation of historically underrepresented minorities in biomedical research and recognize the efforts to collaborate with tribal nations. However, the Working Group did formulate several recommendations for the dementia research community that could be broadly applied to the medical community. While the full list will be released at a later date, Dr. Krebs brought up the notion of accountability as a part of effort to increase the participation of diverse populations in biomedical research. This lack of accountability leads to low ascertainment numbers from diverse populations. This could be combatted by creating a diversity standard, and the Working Group envisions that this could be combatted by using a diversity standard as an incentive, along with mandatory diversity impact statements.

Mr. Ace Robinson, from the National Minority AIDS Council (NMAC) spoke. Mr. Robinson thanked Members for their dedication to addressing health disparities. When trying to address how certain communities have been affected by health disparities, people working in the space are trying to facilitate change in how the clinical and research workforce is developed, which includes who is making selections to committees. Rather than blame lack of participation on subjects, experts are now beginning to turn that mirror around to those in the healthcare field. Mr. Robinson said they had to get to the point where they were no longer looking at disparities in participation, and he asked that NACMHD be very clear in developing a healthcare workforce that mirrors the populations that are being served (particularly Black men, who feel more comfortable with Black physicians in a clinical setting).

### **CLOSING REMARKS**

With no further business to attend to, Dr. Pérez-Stable adjourned the meeting at 1:37 p.m.

### **ADJOURNMENT**

### **REVIEW OF GRANT APPLICATIONS\_ CLOSE SESSION**

*A portion of the meeting was closed to the public in accordance with the provisions set forth in Sections 552b(c)4 and 552b(c)6, Title 5 U.S.C. and 10(d) of the Federal Advisory Committee Act as amended (5 U.S.C. appendix 2).*

Dr. Pérez-Stable called the Closed Session to order at 1:30 pm on May 21, 2019.

Dr. Hunter 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 discussions for which there was a potential conflict of interest, real or apparent.

The Council considered 503 applications requesting an estimated \$294,888,769 in requested total costs for year 1. 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.