PREPARED STATEMENT OF ELISEO J. PÉREZ-STABLE, M.D. DIRECTOR, NATIONAL INSTITUTE ON MINORITY HEALTH AND HEALTH DISPARITIES

Mr. Chairman and Members of the Committee: I am pleased to present the President's Fiscal Year (FY) 2019 budget request for the National Institute on Minority Health and Health Minorities of the National Institutes of Health (NIH).

ADVANCING THE SCIENCE OF MINORITY HEALTH AND HEALTH DISPARITIES RESEARCH

Today, revolutionary advances in biomedical science, such as the emergence of genomics, precision medicine, and health information technology hold greater promise to improve our nation's health than has ever before been possible. We are on the cusp of major scientific advances that will change how we think about minority health and health disparities. The mission of the National Institute on Minority Health and Health Disparities (NIMHD) is to lead scientific research to improve minority health and reduce health disparities. To accomplish this, NIMHD plans, coordinates, reviews, and evaluates NIH minority health and health disparities research and activities; conducts and supports research in minority health and health disparities; promotes and supports the training of a diverse research workforce; translates and disseminates research information; and fosters innovative collaborations and partnerships. As part of its charge to improve minority health and reduce health disparities, NIMHD is currently developing the 2018-2022 Trans-NIH Minority Health and Health Disparities Strategic Plan in collaboration with the other NIH Institutes and Centers and with input from community partners and key stakeholders. Once completed, this strategic plan will provide a blueprint to advance the direction and goals of minority health and health disparities research.

As the science of minority health and health disparities research evolves, a critical multidisciplinary approach is needed to focus on research studies that facilitate scientific advances to improve minority health and to reduce health disparities. Minority health research is the scientific investigation of distinctive health characteristics and attributes of minority racial and/or ethnic groups who are underrepresented in biomedical research in order to understand population health outcomes. Health disparities research is a field of study devoted to gaining greater scientific knowledge about the influence of health determinants, understanding the role of different pathways leading to disparities, and determining how findings translates into interventions to reduce health disparities. In order to ensure that all populations have an equal opportunity to live healthy and productive lives, NIMHD leads advancement in minority health and health disparities research and promotes a diverse scientific workforce reflective of the population.

RESEARCH

Advancing the science of minority health and health disparities requires scientific vision; that means building and developing evidence-based information that takes into account the social determinants of health and the places where we live, learn, work, and play. To meet the demands

of keeping up with biomedical advances, NIMHD is strengthening research in minority health and health disparities; increasing opportunities for investigator-initiated research; strengthening the evaluation and reporting of minority health and health disparities research; and supporting the expansion of workforce diversity.

NIMHD promoted the fields of minority health and health disparities by developing and posting NIMHD's Research Framework, a transformative scientific agenda which addresses the complex influences on health and health disparities. Specifically, the Research Framework reflects an evolving conceptualization of factors relevant to the understanding and promotion of minority health and to the understanding and reduction of health disparities. The framework focuses on how these influences affect individuals, families, communities and society at large. It serves as a vehicle for encouraging NIMHD- and NIH-supported research that addresses the complex and multi-faceted nature of minority health and health disparities and guides researchers on where on the scientific spectrum their research fits.

NIMHD's increased emphasis on the science of minority health and health disparities has evolved into the three focused areas of clinical and health services research, integrative biological and behavioral research, and community health and population sciences. The Clinical and Health Services Research area generates new knowledge to improve health outcomes and quality of health care for minority and underserved populations within the context of everyday clinical practice. It examines the development of preventive, diagnostic and therapeutic healthcare interventions that can contribute to reducing health disparities and how precision patient-clinician communication may reduce health disparities. Moreover, it supports clinical research that generates new knowledge to improve health outcomes and quality of healthcare. For example, researchers found that childhood cancer survivors who reported greater well-being rated religion and spirituality of high importance, accessed specialized cancer services more regularly, and expressed a greater level of health care self-efficacy.

The Integrative Biological and Behavioral Research area examines research on how biological and behavioral mechanisms and pathways influence resilience and susceptibility to adverse health conditions that disproportionately affect racial and ethnic minority populations, persons of less privileged socioeconomic status, and other health disparity populations. Research examples in this area include genomic and epigenomic risk and protective factors; human microbiome contributions to health and disease; and mechanisms through which behavioral risk and protective factors influence the development of adverse health conditions by triggering adverse biological pathways. For example, research found that changes in DNA, as a consequence of environmental factors, can be used to accurately estimate gestational age. This novel measure of gestational age may be a useful tool in addressing persistent higher rates of low birth weights for some minority populations.

The Community Health and Population Sciences research area focuses on community engaged research and large studies of populations in a defined geographic area that reflect overall health of minority and underserved population groups. Community engagement refers to the active participation of community members in contributing to the research process in a partnership with investigators. Studies within this area examine causes, prevention, screening, early detection, and management of disease such as epidemiologic studies that identify and describe disease burden

and risk factors in disparity populations; behavioral, sociocultural, and environmental influences on disease risks and outcomes; and research integrating the multiple determinants of health at the biologic, behavioral, and contextual levels and their interactions. In a study examining the perspective of older breast cancer survivors toward physical activity, researchers found that physical activity programs should focus on cancer treatment related concerns and include strength training.

Innovative partnerships and collaborations are instrumental and essential to improve minority health and reduce health disparities. NIMHD supports research partnerships across NIH and the federal government with a goal to create synergistic research approaches to improve public health for health disparity populations. Partnerships conducted and supported by the NIMHD have created innovative studies into how to promote screening for breast, prostate, and pancreatic cancers; examine how children's experiences affect brain development; investigate the effects of environmental exposures — including physical, chemical, biological, social, behavioral, natural and built environments — on child health and development; understand the sources of persistent health disparities in overall longevity, cardiovascular disease, and cerebrovascular disease; and to eventually eliminate health disparities in dental care and oral/pharyngeal cancer.

BUILDING A DIVERSE BIOMEDICAL WORKFORCE

At the core of NIMHD's transformative scientific agenda is its commitment to building institutional research capacity and a diverse cadre of minority health and health disparities researchers. The Centers of Excellence program creates collaborative hubs for minority health and health disparities research among research institutions and local communities, which support early-career scientists as well as established investigators. The Research Centers in Minority Institutions program builds research capacity, supports a new generation of researchers from underrepresented populations through pilot funding, and funds established scientists to conduct cutting edge science in basic, behavioral or clinical research topics. The Research Endowment program provides funds to low resource academic institutions with a diverse student body and faculty to support endowments that will help to support a training or research capacity program to promote minority health and health disparities research.

NIMHD is committed to supporting and developing a diverse biomedical workforce. We support training grants across the spectrum of experience from pre-doctoral awards through mid-career awards. Moreover, NIMHD has enhanced opportunities for early-stage investigators by: expanding awards to help senior postdoctoral fellows and junior faculty-level candidates to become competitive for major grant support; providing fellowships to help less experienced researchers to become productive, independent investigators; and restructuring the NIMHD Health Disparities Research Institute to support career development for promising early-career minority health and health disparities research scientists.

CONCLUSION

NIMHD continues to advance the science of minority health and health disparities by building upon evidence-based research; developing researchers from underrepresented populations and

retaining their diverse insights; and enhancing programs that create research infrastructure and train a diverse scientific workforce. Through this scientific research agenda, NIMHD's mission and vision will lead to discoveries that will promote health equity and ultimately improve minority health and reduce health disparities.

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

Eliseo J. Pérez-Stable, M.D. is Director of the National Institutes of Health's National Institute on Minority Health and Health Disparities (NIMHD), which seeks to advance the science of minority health and health disparities research. NIMHD is the newest institute at NIH and has a budget of \$303 million in FY 2018. NIMHD also promotes diversity in the biomedical workforce. Under this framework, the Institute conducts and supports research programs to advance knowledge and understanding of mechanisms to improve minority health, identifies and understands health disparities and develops effective interventions to reduce these disparities in community and clinical settings. NIMHD is the lead organization at the National Institutes of Health (NIH) for planning, reviewing, coordinating, and evaluating minority health and health disparities research activities conducted by NIH.

Prior to becoming NIMHD Director in September 2015, Dr. Pérez-Stable practiced general internal medicine for 37 years at the University of California, San Francisco (UCSF) before moving to NIH in September 2015. He was professor of medicine at UCSF and chief of the Division of General Internal Medicine for 17 years.

Dr. Pérez-Stable's research expertise spans a broad range of minority health and health disparities disciplines. His research interests include improving the health of racial and ethnic minorities and underserved populations, advancing patient-centered care, improving cross-cultural communication, and promoting diversity in the biomedical research workforce. For more than 30 years, Dr. Pérez-Stable led research on Latino smoking cessation and prevention interventions in the U.S. and Jujuy, Argentina, epidemiology of tobacco behavior among minority populations, tobacco biomarkers in subpopulations, cancer control behaviors, use of interpreters in medical care, and clinical, social and behavioral issues in minority aging. He has mentored over 70 minority investigators, published over 280 peer-reviewed articles and was elected to the National Academy of Medicine of the National Academies in 2001.

Dr. Pérez-Stable is a native of La Habana, Cuba and immigrated to the U.S. as a child. He earned his B.A. in chemistry in 1974 and M.D. in 1978 from the University of Miami and completed clinical training in primary care internal medicine residency and general internal medicine research fellowship at UCSF. Dr. Pérez-Stable practiced primary care internal medicine for 37 years at UCSF following a panel of about 200 patients at any given time. He also supervised and taught students and residents in the continuity ambulatory care clinic and on the medical service in the hospital setting.