Director’s Report
National Advisory Council on Minority Health and Health Disparities
February 27, 2018

Eliseo J. Pérez-Stable, M.D.
Director, National Institute on Minority Health and Health Disparities
HHS and NIH Updates
HHS Appointment: Alex M. Azar II, J.D.

- Sworn in as Secretary of Health and Human Services on January 29, 2018
- Worked in both the public and private sectors, as an attorney and in senior leadership roles focused on advancing healthcare reform, research and innovation
- Former pharmaceutical executive and Deputy Secretary HHS in George W. Bush’s administration
- Eric D. Hargan, who served as Acting Secretary, returns to his role as HHS Deputy Secretary
NIH Departure: Roderic Pettigrew, Ph.D., M.D.

• Served as the founding Director, National Institute of Biomedical Imaging and Bioengineering
• Joins Texas A&M University to become CEO of Engineering Health, the nation’s first comprehensive educational program to fully integrate engineering into all health-related disciplines
• Serves as executive dean for EnMed, new Houston-based engineering medicine track that will train Texas A&M medical students to invent solutions to challenging medical problems
• NIBIB Deputy Director Jill Heemskerk, Ph.D, serves as acting director during the national search
• NIBIB has $350 million budget; active search for new director
NIMHD Updates
NIMHD Appointment
Anna María Nápoles, Ph.D., M.P.H.

- Scientific Director, Division of Intramural Research, NIMHD started on November 13, 2017
- From University of California, San Francisco where she served as professor in the Division of General Internal Medicine, Department of Medicine
- Leader in developing methods for community-engaged, translational research to improve the health of disparity populations that build community capacity to deliver culturally suitable, evidence-based behavioral interventions
NIMHD Division of Intramural Research
Program Population, Social and Behavioral Sciences

Interventions
Late stage (T3 & T4) translation research
in minority and other health disparities communities

• Delivered in real-world communities
• Reflects scientific evidence
• Fits the target audience
• Considers the complex social
determinants of health disparities
• Builds community capacity to reduce
health disparities

Mechanisms
How environmental, social, psychological
and economic risk factors produce
health disparities

• Life course effects of early childhood
exposures
• Genetic susceptibility and modifiable
environmental factors
• Effects of health policies on population
subgroups
• Psychoneuroimmunology
NIMHD New Hires

- Jung Byun, Ph.D.
  Staff Scientist, Division of Intramural Research

- Starsky Cheng
  Office of Administrative Management

- Cen (Julia) Chen
  Pre-Doctoral Fellow, Division of Intramural Research

- Jeanne Jones
  Office of Administrative Management

- Thomas Moehlman
  Office of Science Policy, Strategic Planning, Analysis, Reporting, and Data

- Michael Ramsey
  Doctoral Student
  Division of Intramural Research

- Malaika Staff
  Office of Extramural Research Administration

- Matthew Wise
  Office of Administrative Management
NIMHD Departure: Bryan Maynard

- NIMHD Budget Officer since 2015 and member of the Leadership Group
- Transitioned February 3 to the Department of Housing and Urban Development with a promotion
- Kenneth Sonnenberg will serve as Acting Budget Officer
Legislative Update

September 2017

• 47th Congressional Black Caucus Foundation Annual Legislative Conference Health and Wellness Luncheon
  o “African American Participation in Clinical Trials: Challenging the Gold Standard”

• Congressional Black Caucus visits NIH with several IC Directors participating
Celebrating the Life and Legacy of U.S. Congressman Louis Stokes

• Thursday, October 12, 2017
• NIMHD and the NIH Office of the Director held a fireside chat in honor of former U.S. Congressman Louis Stokes
• NIH Director, Dr. Francis S. Collins hosted a conversation with the Stokes family in recognition of Stokes’ autobiography, "The Gentleman from Ohio"
• Former HHS Secretary Louis W. Sullivan provided remarks

View archive at https://videocast.nih.gov/
American Association for Cancer Research
Conference on the Science of Cancer Health Disparities
Atlanta, Georgia
September 26-27, 2017

Jackson State University
17th Annual Eliminating Health Disparities Conference
Jackson, Mississippi
October 6, 2017

Harvard Medical School
Equity and Social Justice Health Disparities
Advancing the Health Agenda for Disparity Populations
Boston, Massachusetts
October 25, 2017

Research Centers in Minority Institutions (RCMI)
Translational Science 2017
Scientific Vision on Minority Health and Health Disparities
Research, Washington, D.C.
October 30, 2017

Upstate Medical University
Dean's Grand Rounds
Syracuse, New York
November 1, 2017

2017 Academy Health Concordium
Working to Create More Bridges and Achieve Person-Centered Care; Panel moderator, Using Data to Promote Health Equity, Washington, D.C.
November 17, 2017

University of Virginia School of Medicine
Medicine Grand Rounds/Martin Luther King Celebration
Charlottesville, Virginia
January 17, 2018

Advancing the Science of Cancer in Latinos
University of Texas, San Antonio Health Sciences
San Antonio, Texas
February 21, 2018
Black History Month Observance
Department of Health and Human Services Office of Minority Health
February 23, 2018

Right Photo (l-r): Dr. Gary H. Gibbons, NHLBI Director, Dr. Matthew Y.C. Lin, HHS Deputy Asst. Secretary for Minority Health and Director, Office of Minority Health, Dr. Brett Giroir, HHS Asst. Secretary for Health, Alex M. Azar II, HHS Secretary for Health, Donna M. Christensen, Ret. Rep. (D-VI), VADM Jerome M. Adams, U.S. Surgeon General, and Dr. Eliseo J. Pérez-Stable, NIMHD Director
2017 Actual Funding Distribution
$287.7 Million
NIMHD Program Updates
Investigator Definitions

• **Early Stage Investigator**: ≤ 10 years from completing terminal research degree or end of post-graduate training

• **New Investigator**: Has not previously received substantial, independent funding from NIH (R01)

• **Established Investigator**: Has received funding for at least one R01 and >10 years since completion of research training
## R01 Applicant Award Rates FY2016 and FY2017

<table>
<thead>
<tr>
<th></th>
<th>Early Stage</th>
<th>New (not ESI)</th>
<th>Established</th>
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<tbody>
<tr>
<td></td>
<td>FY16</td>
<td>FY17</td>
<td>FY16</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>63</td>
<td>74</td>
</tr>
<tr>
<td>Awarded</td>
<td>6</td>
<td>25</td>
<td>13</td>
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<tr>
<td>Rate</td>
<td>24%</td>
<td>39.7%</td>
<td>17.6%</td>
</tr>
<tr>
<td>% Change</td>
<td>15.7%</td>
<td>10.3%</td>
<td>(–2.3%)</td>
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Racial and Ethnic Distribution of NIMHD and NIH Principal Investigators, FY 2017

- African American or Black: 15% NIMHD, 2% NIH
- AI/AN, NH/OPI: 3% NIMHD, 0% NIH
- Asian: 12% NIMHD, 19% NIH
- White: 68% NIMHD, 56% NIH
- More Than One Race: 3% NIMHD, 1% NIH
- Withheld or Unknown: 13% NIMHD, 9% NIH
- Hispanic or Latino: 13% NIMHD, 5% NIH
Race and Ethnic Distribution of NIMHD and NIH R01 Principal Investigators, 2017

*Note: the observations for AI/NA, NHOPI and more than one race were below the threshold for reporting for NIMHD.
Research Career Development Awards (K Programs)

NIMHD supports awards for senior level postdoctoral fellows and established investigators

- **K01**: Mentored Research Scientist Research
- **K08**: Mentored Clinical Scientist Research
- **K23**: Mentored Patient-Oriented Research
- **K99/R00**: NIH Pathway to Independence Award
- **K18**: Short-term Mentored Career Enhancement
  
  Awards for Mid-Career Investigator to Integrate Basic Behavioral and Social Sciences
NIMHD Diversity Supplements

Fiscal year 2016
- Received 18 applications
- Funded 16 (89%) applications

Fiscal year 2017
- Received 23 applications
- Funded 18 (78%) applications

<table>
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<tr>
<th>DIVERSITY SUPPLEMENTS BY MECHANISM FUNDED AWARDS</th>
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<tr>
<td>R01</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>2016</td>
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<td>2017</td>
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Trans-NIH Minority Health and Health Disparities Strategic Plan
Trans-NIH Minority Health and Health Disparities Strategic Plan

Categories & Goals

• **Scientific Research Categories**
  - Goal 1: Minority Health Improved
  - Goal 2: Etiology of Health Disparities
  - Goal 3: Interventions to Reduce Health Disparities
  - Goal 4: Measures, Metrics and Tools

• **Research-Sustaining Categories**
  - Goal 5: Training: Workforce Diversity and Scientific Expertise
  - Goal 6: Capacity Building to Advance Research
  - Goal 7: Inclusion of Minorities in Clinical Studies

• **Outreach, Collaboration and Dissemination Categories**
  - Goal 8: Community Engagement, Dissemination and Implementation
  - Goal 9: Research Community Building
Trans-NIH Minority Health and Health Disparities Strategic Plan

Starting Line:
• Current minority health and health disparities research efforts
• Minority health and health disparities initiatives underway at NIH

Next Steps:
• Minority health and health disparities concepts in development
• Potential initiatives for advancing the science of minority health and health disparities within 5 years

Leap Forward:
• Visionary ideas that may dramatically reshape the science
• Bold, aggressive actions to improve minority health and reduce health disparities
Trans-NIH Minority Health and Health Disparities Strategic Plan

2018 Plans

• Community listening sessions will take place between March – May
  - Held across the country in six geographically diverse locations
  - Two virtual sessions to supplement

• Draft for discussion by July

• NIH clearance process in September
Scientific Advancement Plan
NIMHD Scientific Advancement Plan

Advances in biomedical science, such as the emergence of genomics, precision medicine, population science, big data, and health IT hold greater promise to improve our nation’s health

Scientific Advancement Plan

• A transformational research agenda to advance the science of minority health and health disparities
• Champions the fields of minority health and health disparities to contribute to and benefit from biomedical research advances
NIMHD Scientific Advancement Plan

To meet the demands of scientific advances and demographic changes in the population, NIMHD is redefining, reorganizing, and establishing new research programs and activities:

• Strengthen the science in minority health and health disparities
• Increase investigator-initiated research
• Strengthen the evaluation and reporting of minority health and health disparities research
• Support the expansion of workforce diversity
NIMHD Scientific Advancement Plan

• Enhance opportunities for early-stage investigators
• Leverage the NIMHD Health Disparities Research Institute to cultivate the next generation
• Expand research career training awards
• Redefine and strengthen legacy research programs
  1. Centers of Excellence
  2. Research Centers in Minority Institutions
  3. Research Endowment Program
Scientific Advances

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<tr>
<th></th>
<th>%Males</th>
<th>%Females</th>
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<tr>
<td>Whites</td>
<td>16.9 / 9.6</td>
<td>22.5 / 7.5</td>
</tr>
<tr>
<td>Blacks</td>
<td>21.1 / 14.5</td>
<td>21.0 / 16.3</td>
</tr>
<tr>
<td>Latinos</td>
<td>24.4 / 12.9</td>
<td>23.9 / 14.0</td>
</tr>
<tr>
<td>Asian</td>
<td>16.9 / 7.9</td>
<td>9.2 / 3.3</td>
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Ogden, C.L., et. al., MMWR February, 2018
Disparities Among Non-poor African Americans and Latinos: Role of Discrimination

- National longitudinal survey of youth, parents and children, 1979-2012
- 45% White, 34% Black, 21% Latino
- Acute and chronic discrimination measured
- Increased SES for Whites = less discrimination
- Upwardly mobile or higher SES Blacks and Latinos experienced more discrimination
- May Explain Black-White gap in self-rated health

Integrative Biological and Behavioral Sciences

Targeting weight loss interventions to reduce cardiovascular complications of type 2 diabetes

Heterogeneous treatment effects in the Look AHEAD trial

- Intensive weight loss intervention did not reduce cardiovascular events on average
- Subgroup with well-controlled diabetes but poor self-reported general health experienced negative effects negating overall effects
- A short questionnaire on general health might identify people with T2D likely to benefit from the intervention

Baum A., et. al., Lancet Diabetes Endocrinology, 2017
Perspective of older breast cancer survivors towards physical activity

- Although AA (59%) and SES non-disadvantaged (78%) participants reported that race and culture influenced their attitudes toward physical activity, it did not translate to racial and SES differences in preferences.
- Preference was for strength training (80%) due to diminished upper body strength after cancer treatment.
- Conclusion: Physical activity programs should focus on cancer treatment related concerns and include strength training.

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<tr>
<th>Facilitators</th>
<th>Percentage</th>
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<tr>
<td>Community Environment</td>
<td>20%</td>
</tr>
<tr>
<td>Family</td>
<td>50%</td>
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<tr>
<td>Religious Faith</td>
<td>38%</td>
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<tr>
<th>Barriers</th>
<th>Percentage</th>
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<tr>
<td>Lack of PA Buddy</td>
<td>22%</td>
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<tr>
<td>Inclement Weather</td>
<td>40%</td>
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<tr>
<td>Health Issues</td>
<td>43%</td>
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</table>

Owusu, C., et. al., J Geriatric Oncology, 2018, epub
Genome-Wide Association Study of Heavy Smoking and Daily/Nondaily Smoking in the HCHS/SOL

- Hispanic Community Health Study/Study of Latinos: genetic associations with smoking behavior among 12,741 with smoking data and 5119 ever smokers
- CHRNA5, encodes the α5 cholinergic nicotinic receptor subunit, associated with heavy smoking at genome-wide significance ($p \leq 5 \times 10^{-8}$)
- Loci on chromosome 2 and 4 achieved genome wide significance for association with non-daily smoking, but replication attempts were limited by small Latino samples

Recent Grants and Programs
Integrative Biological and Behavioral Sciences

Social Epigenomics Grants Funded

• Launched in 2017
• 10 R01 awards, ~ $30 million
  ❑ Nine NIMHD awards
  ❑ One NCI award
• Wide range of research topics
  ❑ Violence exposure
  ❑ Epigenetic changes and asthma risk
  ❑ Social stress and prostate cancer risk
  ❑ DNA methylation and disparities in cardiovascular mortality
  ❑ Epigenomic predictors of PTSD
  ❑ Traumatic stress
<table>
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<tr>
<th>Name</th>
<th>Institution</th>
<th>Grant Number</th>
<th>Project Title</th>
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<tr>
<td>Susan Gennaro, Ph.D.</td>
<td>Boston College</td>
<td>R01-MD-012770</td>
<td>Healthy Lifestyle Intervention for High-Risk Minority Pregnant Women: A RCT</td>
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<tr>
<td>Margaret Rosenzweig, Ph.D.</td>
<td>University of Pittsburgh</td>
<td>R01-MD-012245</td>
<td>The Symptom Experience, Management and Outcomes According to Race and Social Determinants of Health during Breast Cancer Chemotherapy</td>
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<td>Evans Doug, Ph.D.</td>
<td>George Washington University</td>
<td>R21-MD-011652</td>
<td>Fit4Mom: Digital Healthy Weight Program for African American Postpartum Women</td>
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Clinical and Health Services Research

Opioid Epidemic – Problem

U.S. Heroin and Non-heroin Opioid Death Rates
Per 100,000 People by Race/Ethnicity, 2015

Statistically significant difference from total rate at 95% level
Clinical and Health Services Research

Opioid Epidemic – Responses

Current NIMHD investment in opioid research: 10 grants that address opioid/pain management for $3.1 million

Planned NIMHD investment in research on etiologic factors, healthcare quality, access, treatment and prevention research that impacts minority and health disparity populations

Research Solicitation: Addressing the Challenges Posed by the Opioid Epidemic in Health Disparity Populations

Outreach Activities: Howard University Symposium, November 2017
Tribal Health Board Consultation planned for May 2018
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Questions?