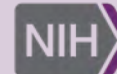


Director's Report

National Advisory Council on Minority Health and Health Disparities

September 7, 2018

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



National Institute
on Minority Health
and Health Disparities

NIH Appointment: Helene M. Langevin, M.D., C.M.

- Will serve as the director of the National Center for Complementary and Integrative Health
- Leader in the integrative health community studying the role of non-pharmacological treatment for pain
- Comes to NIH from Osher Center for Integrative Medicine, jointly based at Brigham and Women's Hospital and Harvard Medical School, Boston
- Expected to join NIH in November 2018



NIH Appointment: Bruce J. Tromberg, Ph.D.

- Will serve as the director of the National Institute of Biomedical Imaging and Bioengineering
- Leader in the field of biophotonics
- Comes to NIH from the University of California, Irvine, with dual appointments in the Departments of Biomedical Engineering and Surgery
- Expected to join NIH in the new year



NIH Departure: Patricia A. Grady, Ph.D., R.N., F.A.A.N.

- Served as Director of the National Institute of Nursing Research for more than 23 years
- During her tenure, NINR has supported discoveries that have improved quality of life through a better understanding of adverse symptoms, led NIH research on palliative care and symptom science
- NINR Scientific Director and Acting Deputy Director **Ann Cashion, Ph.D., R.N., F.A.A.N.**, to serve as acting director during the national search



Ongoing NIH Director Searches

NIH continues to conduct national searches for the following Institute and Center Directors:

- Center for Scientific Review
- National Institute on Deafness and Other Communication Disorders
- National Institute of Nursing Research



NIMHD Remembers the Honorable
Margaret M. Heckler

**Former Congresswoman (R-MA),
Secretary, U.S. Department of Health and
Human Services and U.S. Ambassador
June 21, 1931- August 6, 2018**



Honorable Margaret M. Heckler

- The 1985 Heckler Report became the first federal document exposing the existence of health disparities by race in the U.S.
- Heckler Report played a substantial role in the creation of the Office of Minority Programs and the Office of Research on Minority Health, which was later elevated to the National Center on Minority Health and Health Disparities and to NIMHD



2008 NIH Health Disparities Summit



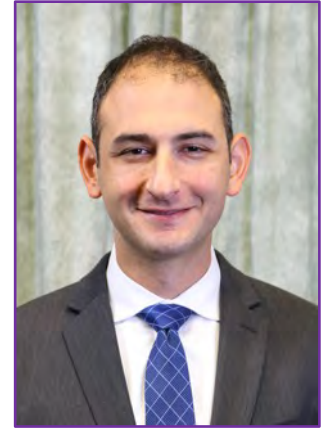
NIMHD New Hire

Nathaniel Davis, M.B.A.

NIMHD Budget Officer

Office of Administrative Management

- Serves as the Chief of Financial Management
- Natty served as a Senior Budget Analyst at the National Heart, Lung, and Blood Institute with primary focus on the \$2.5 billion extramural research portfolio
- Held positions within the Department of the Army as an Active Duty Officer and as a civilian Budget Analyst



NIMHD New Hires

- **Assen Assenov, Ph.D.**

Statistician, Office of Strategic Planning,
Legislation, and Scientific Policy



- **Janki Patel, M.B.A.**

Project Manager, Office of Communications and
Public Liaison



- **María Isabel Roldós, Ph.D.**

Scientific Policy Writer, Office of Strategic
Planning, Legislation, and Scientific Policy



NIMHD Intramural New Hires

- **Sherine El-Toukhy, Ph.D., M.A.**

Stadtman Tenure Track Investigator

Division of Intramural Research

Research Focus: Health communications, mHealth, health IT, and behavioral interventions using technology to address disparities



- **Faustine Williams, Ph.D., M.P.H., M.S.**

Stadtman Tenure Track Investigator

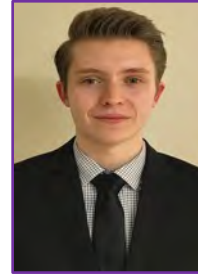
Division of Intramural Research

Research Focus: Community-based participatory research, systems modeling, geographic information science, and cancer disparities



NIMHD Intramural New Hires

- **Aaron Broun**
Post Baccalaureate Fellow
Division of Intramural Research
- **Danielle Duarte**
Post Baccalaureate Fellow
Division of Intramural Research
- **Cristian Escalera**
Post Baccalaureate Fellow
Division of Intramural Research



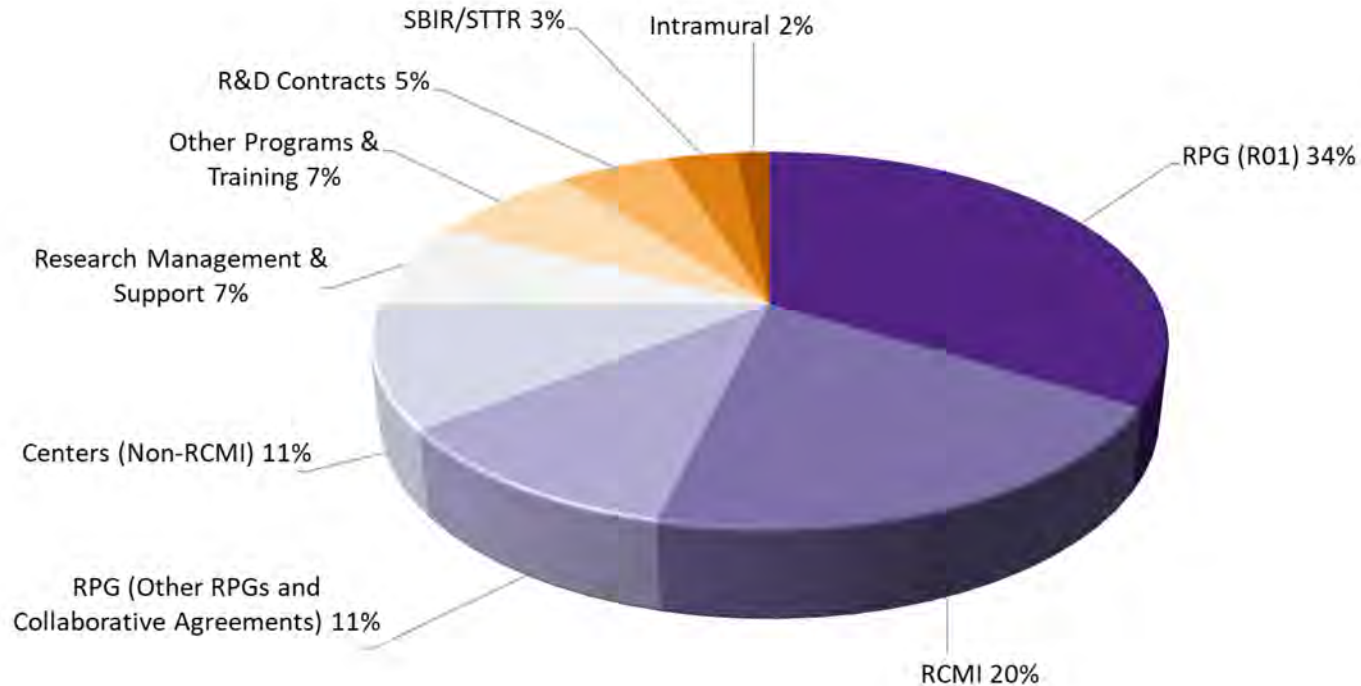
Legislative Update

Congressional Hearings by NIH Leadership

- **May 17, 2018:** Senate Appropriations Subcommittee on Labor, Health and Human Services, Education, and Related Agencies held a hearing on the NIH Budget
- **July 25, 2018:** House Energy and Commerce Subcommittee on Health held a hearing on the implementation of the 21st Century Cures Act
- **August 23, 2018:** Senate HELP Committee held a hearing entitled “Prioritizing Cures: Science and Stewardship at the National Institutes of Health”

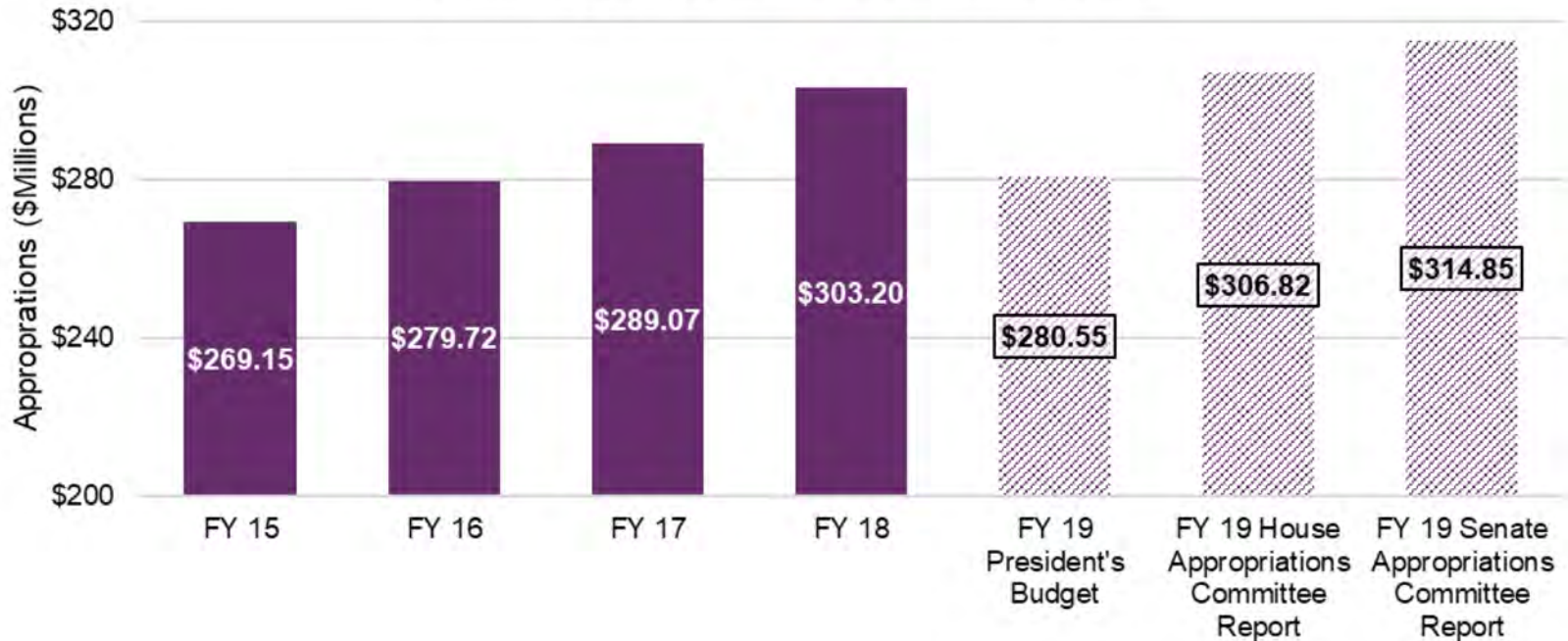


FY 2018 Projected Funding Distribution



FY 2019 Appropriations Outlook

NIMHD Appropriations by Fiscal Year

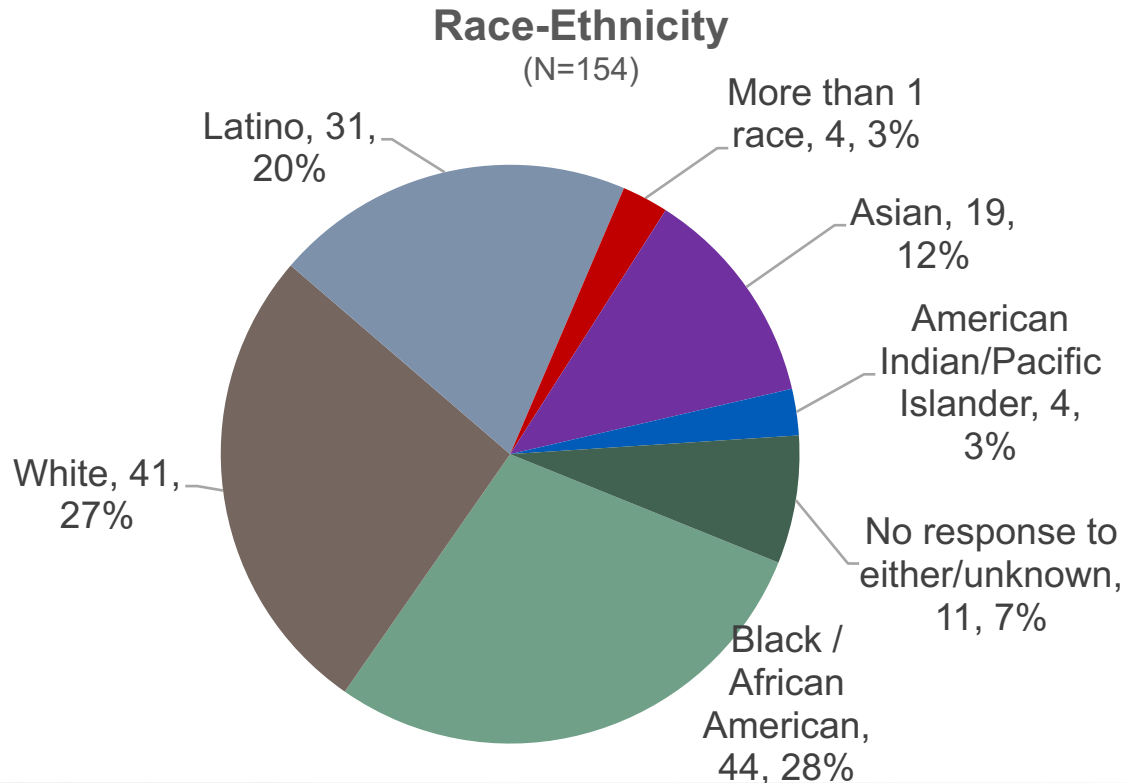


Health Disparities Research Institute

- 284 applications submitted—18% increase
- 50 early-stage career scientists selected to participate (84% women)
- 24 states, DC, and Puerto Rico
- Activities focused on developing skills to assist early-stage investigators
- Scientific sessions discussed the state-of-the-science on selected topics
- Interactive sessions that increased knowledge about extramural research process at NIH, grant writing, and peer review
- Network!



HDRI Demographics 2016–2018



Degrees	Percent
PhD, DSc, DrPH	66
MD	25
PhD + PA or RN	9

Gender	Percent
Female	81
Male	18
No answer	1



Potential Plans for HDRI Scholars

154 selected and attended 2016-2018

- Creating supplemental webinar/workshop series to increase grant writing skills and promote scientific career development
- Developing scholar mentoring network activities to facilitate progress through entire grant cycle, encouraging resubmission
- Developing a scholar web-portal for resource sharing
- Tracking progress of grant submissions (in development)
- Submitted to date: 16 R01s, 19 R21s, 6 R03s; 17 K01s or K23s, and 6 K99s



Director's Recent Presentations

NIH, Indian Health Service, Substance Abuse and Mental Health Services Administration Tribal Consultation Listening Session on the Opioid Crisis in Indian Country

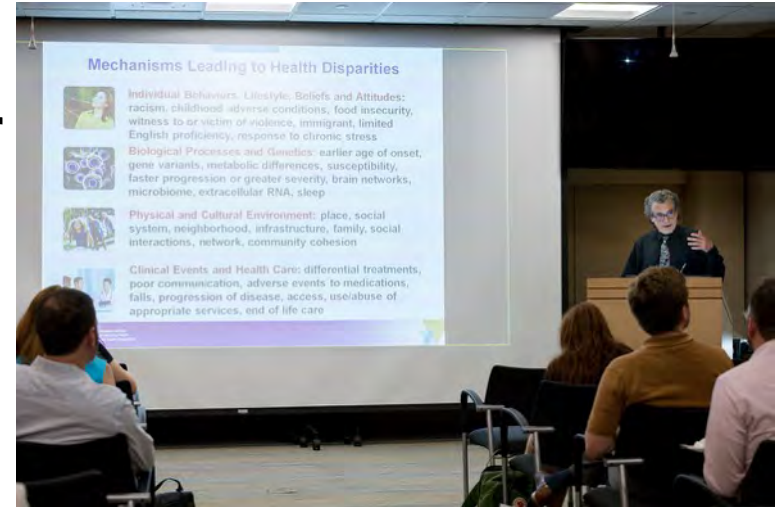
Nora Volkow, M.D., Ph.D. (NIDA) also presented
Prior Lake, Minnesota
May 21, 2018

Memorial Sloan Kettering Cancer Center

New York, NY
June 18, 2018

2018 Healthy Aging Summit, DHHS

Washington, DC
July 16, 2018



Director's Recent NIH Presentations

National Advisory Council on Drug Abuse

Bethesda, MD

May 15, 2017

National Advisory Mental Health Council

Bethesda, MD

May 17, 2017

Saunders-Watkins Leadership Workshop in Health Disparities and Implementation Research for Early Stage Investigators

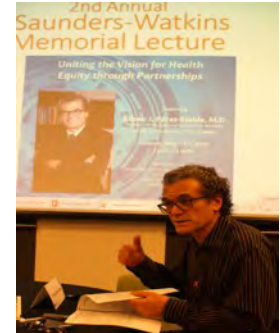
Bethesda, MD

May 22, 2018

13th Annual NIH Pain Consortium Panel on Disparities

NIH Main Campus, Bethesda, MD

June 1, 2018



NIMHD-Supported Grants and Programs



NIMHD Scientific Workshop

Role of Sleep in Health Disparities: Causes and Health Consequences

June 20–21, 2018

- National Heart, Lung, and Blood Institute and Office of Behavioral and Social Science Research

Objectives:

- Bring together health disparities and sleep health researchers to discuss ways to advance the field of sleep disparities
- Enhance understanding of research approaches to effectively integrate health disparities pathways with sleep biological mechanisms
- Identify gaps, opportunities, and strategies for future research directions in etiology and multi-level interventions to address sleep disparities



Health Policy Affects Health Outcomes: Community Determinants of Health

- Gulf States Health Policy Center (GS-HPC), a NIMHD Transdisciplinary Collaborative Center, PI- Dr. Regina Benjamin, 18th U.S. Surgeon General produced a Special Issue
- All GS-HPC research projects and pilots were policy focused and required community-academic partnerships
- 12 Articles that identify and evaluate policies impacting community health, including original research, lessons-learned from community-academic partnerships, education and training, and a community health needs assessment tool



([Progress in Community Health Partnerships](#), 2018, vol. 12)



Habit Formation Intervention to Prevent Obesity in Low-Income Preschoolers and Their Mothers

- First RCT that will evaluate the effectiveness of a habit-based obesity intervention (HABITS) delivered as part of ongoing home visitation services, compared to the existing home visitation services without obesity-related content, on weight outcomes of underserved preschoolers and their mothers
- HABITS is ecologically relevant and will focus on habit formation & modifications of food and activity cues in the home (choice architecture)
- Intervention can potentially improve maternal behaviors and outcomes while also address intergenerational transmission of obesity by testing whether maternal factors and home environment mediate children's outcomes

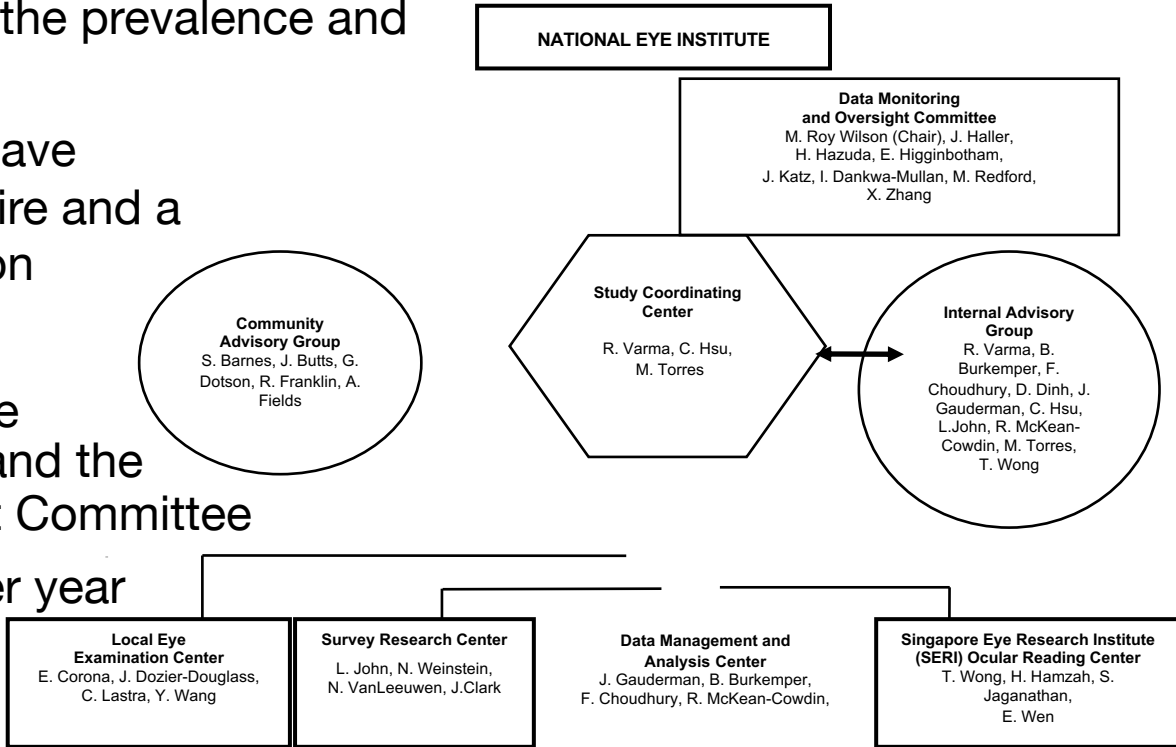
(Salvy et al., [Contemporary Clinical Trials](#), 2018)



African American Eye Disease Study (AFEDS)

The largest epidemiologic eye study among African Americans in the United States

- Will provide information about the prevalence and risk factors of ocular disease
- More than 6,000 participants have completed a home questionnaire and a comprehensive eye examination
- 63% women
- **Dr. Xinzhi Zhang** serves on the External Advisory Committee and the Data Monitoring and Oversight Committee
- NIMHD contributes ~\$100K per year



The Sickle Cell Disease Implementation Consortium (SCDIC)



Clinical Centers: University of Illinois Chicago; Duke University; Washington University School of Medicine; Mount Sinai School of Medicine; St. Jude Children's Research Hospital; Augusta University; Medical University of South Carolina; UCSF Children's Hospital Oakland

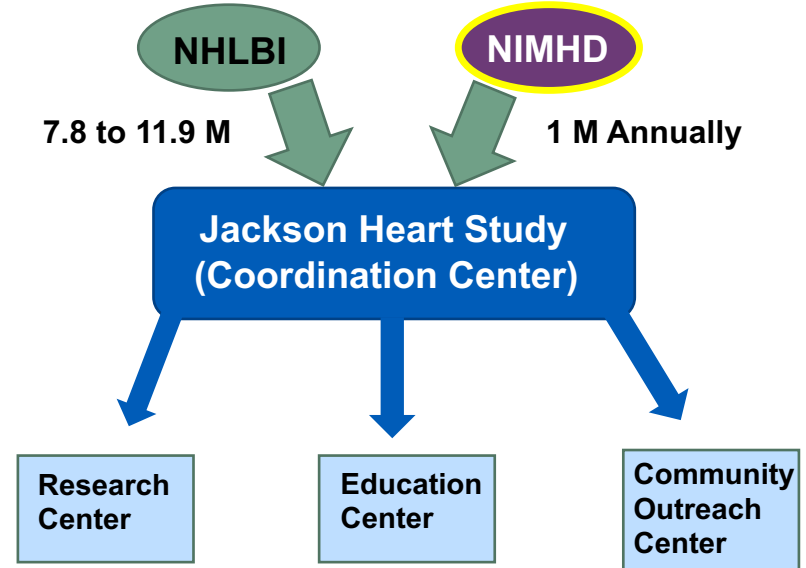
Data Coordinating Center: RTI International

- Develop SCD Registry, in collaboration with other clinical centers and NHLBI
- Conduct needs-based community assessment of barriers to care for subjects with SCD
- Design implementation research studies that address identified barriers to care
- **Dr. Xinzhi Zhang** serves as a Project Scientist
- NIMHD contributes ~\$100K per year

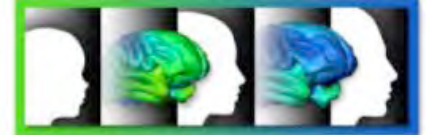


Jackson Heart Study

- Longitudinal, community-based study investigating the reasons for the greater prevalence of cardiovascular disease among African Americans and to uncover new approaches for reducing this health disparity
- Enrolled cohort of 5,301 African Americans from 3-county Jackson, MS metro area
- Study Centers:
 - Coordination Center
 - Research Center
 - Education Center
 - Community Outreach Center
- Study supported by NHLBI and NIMHD and renewed for FY 2018–2024



Adolescent Brain Cognitive Development Initiative

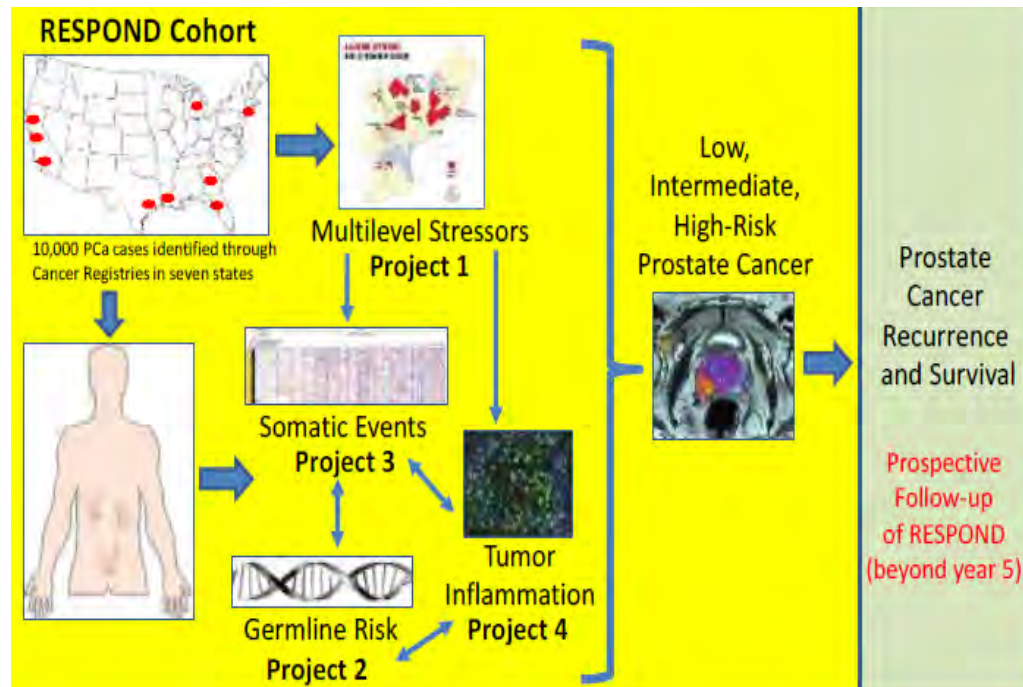


- Research Consortium funded in 2015 by the NIH Collaborative Research on Addiction (CRAN)
- The largest cohort study of brain development and child health in the U.S., recruiting about 10,000 children (ages 9-10) and their parents/caregivers to examine the neurodevelopmental and behavioral effects of substance use from early adolescence through young adulthood
- Data protocol includes cognitive, social, environmental, and behavioral assessments, as well as multimodal neuroimaging and biospecimen collection
- For FY 2018-2019, NIMHD will co-fund two administrative supplements to increase sample demographics
 - Florida International University site (U01DA041156)
 - University of Michigan and University of Florida sites (U01DA041106)



RESPOND- Research on Prostate Cancer in Men of African Ancestry Roles of Genetics, Tumor Markers and Social Stress

- New study supported by NCI, NIMHD and the Prostate Cancer Foundation to enroll 10,000 AA men with prostate cancer
- Examines associations between genetic variants, aggressive disease and exposures to neighborhood and environmental stressors such as discrimination, early-life adversity, and segregation
- Combines state-of-the-art molecular approaches with social and environmental science to unravel complex interactions of biological, behavioral and social factors that contribute to excess prostate cancer burden and poorer outcomes in AA men
- NIMHD co-funding \$1.95 million in 5 years



NIMHD Specialized Centers of Excellence Program

Mandated by the Minority Health and Health Disparities Research and Education Act of 2000 (P. L. 106-525)

- Advance the science of minority health and health disparities by conducting transdisciplinary, multi-level research and by providing research opportunities and support for post-doctoral fellows, junior faculty, and other investigators
- Institutional awards up to \$950k (direct costs) per year
- Important changes in FY 2017: 1) thematic focus and 2) addition of an Investigator Development Core

Example: Researchers found that greater frequency of cognitive activity is associated with better neurocognitive function such as global cognition, memory, and perceptual speed in older persons with HIV, particularly older African Americans



NIMHD Research Centers in Minority Institutions

Established in 1985; program moved to NIMHD in 2012 when the National Center for Research Resources was dissolved pursuant to the Consolidated Appropriations Act of 2012

- Institutional awards up to \$3M (direct costs) per year
- FY 2017 revisions:
 - 1) Addition of scientific Research Projects (R01 type)
 - 2) Addition of an Investigator Development Core
- Funded nine renewals or new RCMIIs focused on minority health and health disparities research
- RCMI Research Coordination Network initiative will enhance collaboration across RCMI institutions



NIMHD Research Endowment Program

Authorized by the Minority Health and Health Disparities Research and Education Act of 2000 (P. L. 106-525) and the Patient Protections and Affordable Care Act (P. L. 111-148) to institutions with NIMHD or HRSA COE

- Strengthen the research and training capacity or infrastructure of educational institutions by providing grants that create permanent endowment funds
- Institutional awards up to \$2M per year
- Five current awardees

Example: Researchers at San Diego State University are developing *tablet, mobile and web-based applications for bilingual participants in clinical research, for both data collection and intervention delivery. Also, developing systems for managing data across multiple sites that are compliant with IRB, HIPAA, etc.*



Photo Credit: San Diego State University



Science Advances



Tobacco Product Use Among Middle and High School Students, NYTS, US, 2014-17 (MMWR 2018 (67): 952-57)

Race or Ethnicity	Male %	Female %
White	18.0/7.0	12.6/6.1
Black	12.2/4.1	10.8/2.3
Latinos	15.6/6.3	13.5/5.0
Asian	5.8/2.0	2.0/2.0
AI/AN	21.8/10.0	19.1/10.9
NHOPI	29.6/13.1	16.8/na



Effects of Medicaid Expansion

- **Comparison of states by expansion decision between 1/1/10 and 12/31/14**
- **Uninsured hospitalizations for cardiovascular events significantly decreased in expansion states, but no difference in mortality**
- **Decreases in percent uninsured were greater in expansion states**
- **KY 8.3% to 2.1% and TN 9.1% to 7.5%**
- **Percentage of early stage diagnosis of cancer was higher**

(Akhabue, et al., [JAMA Network Open](#), 2018)



Societal Discrimination and Behavioral Outcomes in Adolescents

- 2 years of survey of 2,572 11th to 12th graders
- Concern, worry or stress regarding increased hostility and discrimination... race/ethnicity, sexual orientation/identity, immigrant status, religion, disability
- Cigarette, alcohol, MJ use, depression, ADHD
- 47% Latino, 19% Asian, 4% AA, 17% White
- Societal discrimination is common and was associated with increased substance use

(Leventhal, et al., [JAMA Pediatrics online](#), 2018)



Diet Quality Among US Adults by Supplemental Nutrition Assistance Program (SNAP) Participation Status

- Study assessed diet quality trends from 2003–2004 to 2013–2014 for SNAP participants, income-eligible nonparticipants, and higher-income individuals
- Study based diet quality on the American Heart Association 2020 Strategic Impact Goals and used a 24-hour diet recall from NHANES.
- Average diet score among SNAP did not improve independent of income
- Diet quality improved for income-eligible nonparticipants and higher-income individuals.
- SNAP participants did not meet recommendations for healthful diet—disparities persisted or worsened on most dietary components

Participant Status	Diet Quality - Mean Change	95% CI (P for Trend)
SNAP-Lower Income	0.32	-1.95 to 2.58 (0.36)
SNAP-Higher Income	-1.00	-4.6 to 2.6 (0.33)
Income-Eligible Nonparticipants	2.16	0.01-4.3 (0.008)
Higher-Income Nonparticipants	3.33	1.86-4.8 (<0.001)

(Zhang et al., [JAMA Network Open](#), 2018)



Free Testing and PrEP Without Outing Myself to Parents

Motivation to participate in PrEP clinical trials among adolescent men who have sex with men (AMSM)

Minority AMSM disproportionate number of new HIV diagnoses

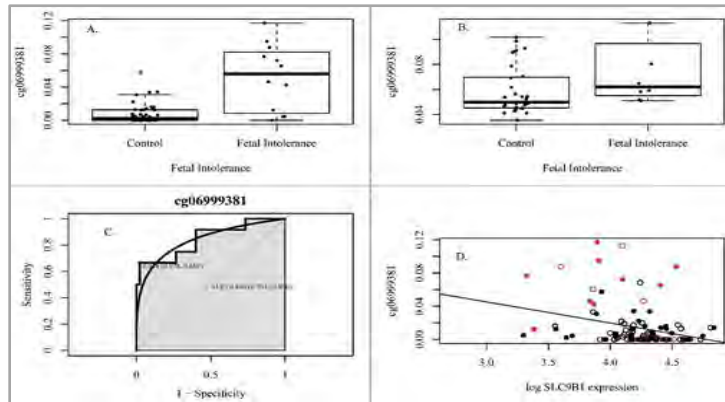
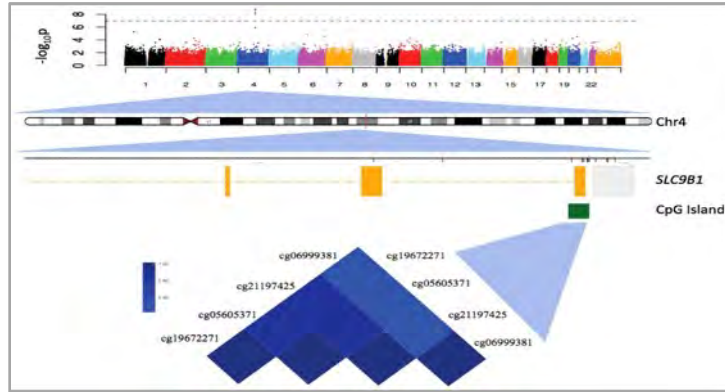
- 62% AMSM were likely to participate in research.
- One reason against participating was that clinic visits would reveal their sexual orientation and behavior to parents
- 55% of choice to participate was over erroneous assumption they would be assigned to condition best for them and access to free services (even if did not want to participate)
- PrEP RCT research for AMSM will need to address confidentiality concerns, enhance youth's understanding of random assignment, the continued importance of medication adherence and partner condom use during trial participation, and availability of alternative sexual health services

(Fisher et al., [PLoS ONE](#), 2018)



SLC9B1 Methylation Predicts Fetal Intolerance of Labor

- Fetal intolerance of labor is the most common indication for emergency Caesarean section associated with increased risk of fetal hypoxia and metabolic acidemia following delivery
- In African American women, methylation of four sites in the SLC9B1 gene detected in late second and early third trimesters are predicative of fetal intolerance of labor at delivery



(Knight et al., [Epigenetics](#), 2018)



Disparities in Functional Outcome after Intracerebral Hemorrhage among Asians and Pacific Islanders

Native Hawaiian and Other Pacific Islander (NHOPI) are more likely to achieve favorable functional outcome after ICH compared with Asians

- Study measured racial disparities in long-term functional outcomes after ICH in Asians and NHOPI
- Demographic information, initial blood pressure, Glasgow Coma Scale Score, prehospital baseline functional status, location of hemorrhage, ICH score and obesity status
- NHOPI were more likely to achieve favorable functional outcomes
- Findings emphasize the importance of disaggregating racial/ethnic populations that are historically grouped into a single racial/ethnic group

TABLE 2 | Comparison of ICH severity and outcome between Asians and NHOPI.

	Asians	NHOPI	<i>p</i>
ICH Score			
0	35 (21.9)	19 (32.2)	0.40
1	42 (26.3)	17 (28.8)	
2	38 (23.8)	10 (16.9)	
3	25 (15.6)	8 (13.6)	
4	15 (9.4)	2 (3.4)	
5	4 (2.5)	3 (5.1)	
6	1 (0.6)	0 (0)	
Total cohort (N = 220)			
mRS Score at 3 months			
0	4 (2.5)	5 (8.5)	0.02
1	26 (16.1)	14 (23.7)	
2	9 (5.6)	7 (11.9)	
3	23 (14.3)	6 (10.2)	
4	23 (14.3)	5 (8.5)	
5	11 (6.8)	8 (13.6)	
6	65 (40.4)	14 (23.7)	
Favorable outcome at 3 months (mRS ≤ 2)			
	39 (24.2)	26 (44.1)	0.004
In-hospital survivors (N = 155)			
mRS Score at 3 months			
0	4 (3.7)	5 (10.6)	0.10
1	26 (24.1)	14 (29.8)	
2	9 (8.3)	7 (14.9)	
3	23 (21.3)	6 (12.8)	
4	23 (21.3)	5 (10.6)	
5	11 (10.2)	8 (17.0)	
6	12 (11.1)	2 (4.3)	
Favorable outcome at 3 months (mRS ≤ 2)			
	39 (36.1)	26 (55.3)	0.03

ICH, intracerebral hemorrhage; NHOPI, Native Hawaiians and Other Pacific Islanders; mRS, modified Rankin Scale.

Data are n (%).

(Nakagawa et al., [Front Neurol](#), 2018)



Food Insecurity Among American Indians and Alaska Natives

- Food insecurity is strongly correlated with malnutrition, underweight, and increased risk for obesity.
- Current Population Survey—Food Security Supplement, 50,000 households, administered to all interviewed households that are 185% of poverty level and lower self-identified by responses identifying them as food insecure
- Food insecurity increased across all groups as a result of the economic downturn
- AI/AN populations experienced the highest levels of food insecurity

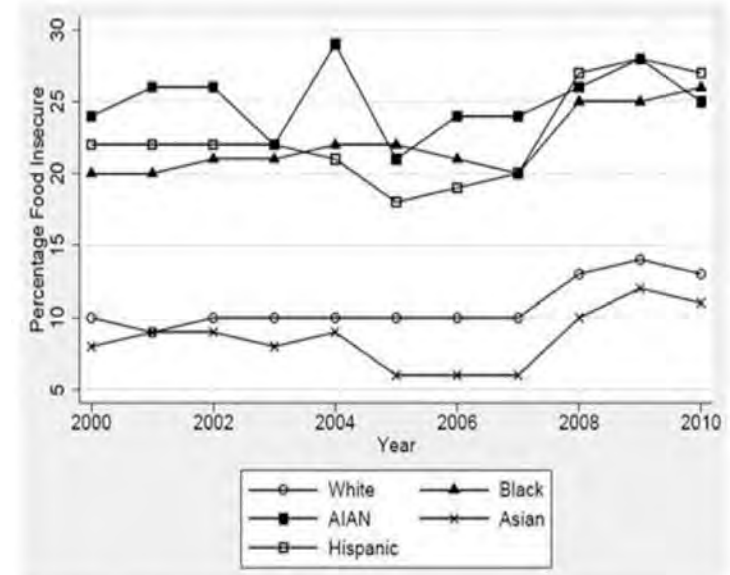


Figure 1.
Prevalence of food insecurity by race and ethnicity, 2000–2010.

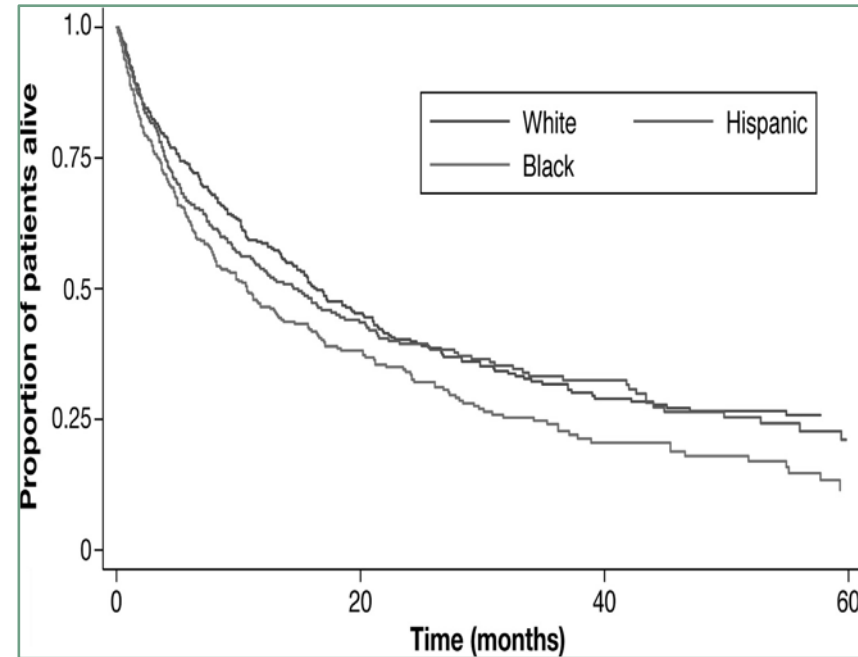
(Jernigan, et al., [Journal of Hunger and Environmental Nutrition](#), 2017)



Racial and Ethnic Differences in Presentation and Outcomes of Hepatocellular Carcinoma (HCC)

- **Latinos and Blacks less likely to be diagnosed with early-stage HCC**
- **Latinos and Blacks less likely than Whites to receive curative treatment**
- **Median overall survival:**
 - 10.6 months for Black patients
 - 14.4 months for Latino patients
 - 16.3 months for White patients
- **Adjusted Analyses showed Blacks had worse survival and Latinos had improved survival vs. Whites**

Fig. 1. Overall survival stratified by race/ethnicity



(Rich et al., [Clin Gastroenterol Hepatol](#), 2018)



Trajectories of Cigarette Smoking Behaviors

Tobacco Control

Supported by NIMHD Division of Intramural Research PI:
Dr. Kelvin Choi

- First U.S. national prospective cohort study to examine the effect of tobacco coupons and progression of smoking behaviors
- Found that lower education and higher poverty adults and White current smokers were more likely to have received these coupons
- Receipt of coupons was associated with subsequent progression of smoking behaviors, lower likelihood of smoking cessation, and higher likelihood of relapse



(Choi et al., [Tobacco Control](#), 2018)



NIMHD Intramural Research News

Fulbright Award

- **Launick Saint-Fort**, NIMHD Intramural Research Fellow funded by the NIH Office of the Director, has received a Fulbright U.S. Student Program Award.
- Will conduct research at the Luxembourg Institute of Health and the Centre Hospitalier de Luxembourg as part of a project to investigate “The Impact of Immigration on the State of Tobacco in the Grand-Duchy of Luxembourg”
- Joined the lab of **Dr. Kelvin Choi** to investigate immigration and tobacco product marketing



NIMHD Intramural Coleman Awards

2018 William G. Coleman Jr., Ph.D., Minority Health and Health Disparities Research Innovation Award



Megan Clarke, Ph.D., M.H.S.
Cancer Prevention Fellow
National Cancer Institute



Nancy Chiles Shaffer, Ph.D.
Postdoctoral Fellow
National Institute on Aging



Claire L. Meaney, Ph.D., M.P.H.
Cancer Prevention Fellow
National Cancer Institute



Michelle Shardell, Ph.D.
Postdoctoral Fellow
National Institute on Aging



Natalie Mora M.D., M.P.H.
Endocrinology Fellow
National Institute of Diabetes
and Digestive and Kidney
Diseases



Salman M. Tajuddin, M.D., Ph.D., M.P.H.
Postdoctoral Visiting Fellow
National Institute on Aging



NIMHD at NIH Summer Poster Day

- NIMHD Summer Interns participated in the NIH Poster Day on August 9, 2018.
- Topics included smoking cessation, diabetes, breast cancer, and more.



NIMHD Scholars:

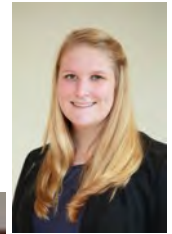
- Abel Amare (Mentor: Sharon Jackson, M.D.)
- Kathleen Dang (HiStep 2.0; Mentor: Launick Saint-Fort)
- Edward Kim (Mentor: Erik Rodriguez, Ph.D., M.P.H.)
- Leah Orozco (NINDS; Mentor: Julia Chen, Ph.D.)
- Socorro Ortiz (NINDS; Mentor: Anna Napoles, Ph.D., M.P.H.)
- Alyssa Watson (Mentor: Anna Nápoles, Ph.D., M.P.H.)



Intramural Research Seminar Series

June–August 2018

- **Victoria A. Cargill, M.D., M.S.C.E., AAHIVS:** “Sex, HIV and ART–It’s What’s in Your Genes and Not Your Jeans”
- **Jean Damascene Kabakambira, M.D.:** “Fixing Rwandan Hearts”
- **Jennifer E. Bayly:** “Investigating social and environmental determinants of health among vulnerable populations: Reflections of an MRSP fellow in NIMHD”
- **Sophie E. Claudel:** “Cross-sectional associations of neighborhood perception, physical activity, and sedentary time in community-dwelling, socioeconomically diverse adults”
- **Eliseo J. Pérez-Stable, M.D.:** “Tobacco Use in Minority Populations”
- **Candace Middlebrooks, Ph.D.:** "Investigation of genetic risk modifiers of leg ulcer development in sickle cell patients, using whole exome sequencing and microbiome characterization"



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Questions?



National Institute
on Minority Health
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