

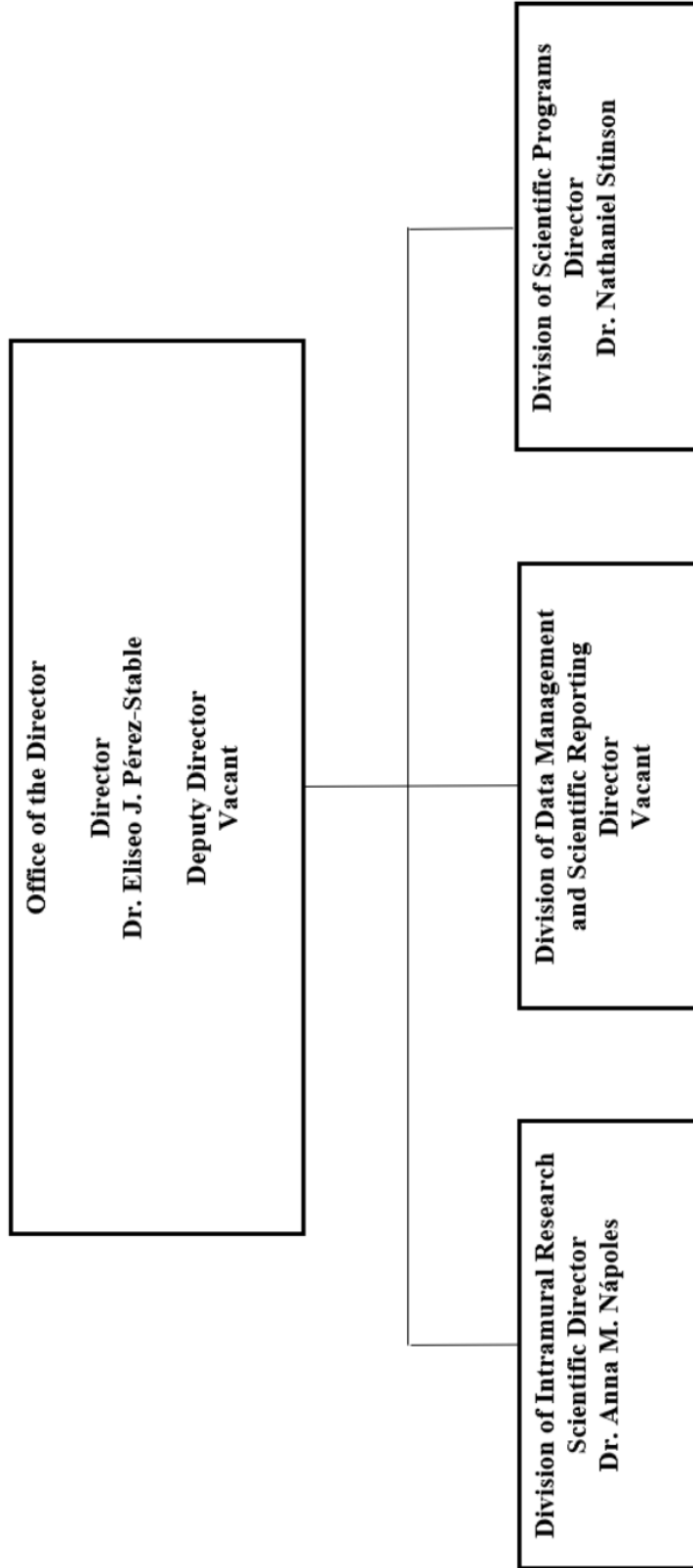
DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

National Institute on Minority Health and Health Disparities (NIMHD)

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**National Institutes of Health  
National Institute on Minority Health and Health Disparities  
Organizational Structure**



**NATIONAL INSTITUTES OF HEALTH**

National Institute on Minority Health and Health Disparities

For carrying out section 301 and title IV of the PHS Act with respect to minority health and health disparities research, [~~\$314,679,000~~]*\$270,870,000*.

**NATIONAL INSTITUTES OF HEALTH**  
**National Institute on Minority Health and Health Disparities**

**Amounts Available for Obligation<sup>1</sup>**  
(Dollars in Thousands)

Source of Funding	FY 2018 Final	FY 2019 Enacted	FY 2020 President's Budget
Appropriation	\$303,200	\$314,679	\$270,870
Mandatory Appropriation: (non-add)			
<i>Type 1 Diabetes</i>	(0)	(0)	(0)
<i>Other Mandatory financing</i>	(0)	(0)	(0)
Rescission	0	0	0
Sequestration	0	0	0
Secretary's Transfer	-712	0	0
Subtotal, adjusted appropriation	\$302,488	\$314,679	\$270,870
OAR HIV/AIDS Transfers	1,908	0	0
Subtotal, adjusted budget authority	\$304,396	\$314,679	\$270,870
Unobligated balance, start of year	0	0	0
Unobligated balance, end of year	0	0	0
Subtotal, adjusted budget authority	\$304,396	\$314,679	\$270,870
Unobligated balance lapsing	-24	0	0
Total obligations	\$304,372	\$314,679	\$270,870

<sup>1</sup> Excludes the following amounts (in thousands) for reimbursable activities carried out by this account:  
FY 2018 - \$764    FY 2019 - \$1,100    FY 2020 - \$1,003

**NATIONAL INSTITUTES OF HEALTH**  
**National Institute on Minority Health and Health Disparities**

**Budget Mechanism - Total<sup>1</sup>**

(Dollars in Thousands)

MECHANISM	FY 2018 Final		FY 2019 Enacted		FY 2020 President's Budget		FY 2020 +/- FY 2019 Enacted	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
<b>Research Projects:</b>								
Noncompeting	185	\$98,265	195	\$113,029	214	\$92,738	19	-\$20,291
Administrative Supplements	(20)	3,225	(10)	1,500	(3)	400	(-7)	-1,100
<b>Competing:</b>								
Renewal	0	0	2	200	2	708	0	508
New Supplements	70	34,557	52	25,352	89	31,493	37	6,141
	0	0	0	0	0	0	0	0
Subtotal, Competing	70	\$34,557	54	\$25,552	91	\$32,201	37	\$6,649
Subtotal, RPGs	255	\$136,048	249	\$140,081	305	\$125,339	56	-\$14,743
SBIR/STTR	27	10,376	25	10,695	23	9,199	-2	-1,496
Research Project Grants	282	\$146,424	274	\$150,777	328	\$134,538	54	-\$16,239
<b>Research Centers:</b>								
Specialized/Comprehensive	21	\$32,572	21	\$31,225	19	\$23,932	-2	-\$7,293
Clinical Research	0	0	0	0	0	0	0	0
Biotechnology	0	395	0	0	0	0	0	0
Comparative Medicine	0	0	0	0	0	0	0	0
Research Centers in Minority Institutions	21	61,478	20	63,407	20	54,594	0	-8,814
Research Centers	42	\$94,445	41	\$94,632	39	\$78,525	-2	-\$16,107
<b>Other Research:</b>								
Research Careers	11	\$1,314	17	\$2,075	11	\$1,279	-6	-\$796
Cancer Education	0	0	0	0	0	0	0	0
Cooperative Clinical Research	0	0	0	0	0	0	0	0
Biomedical Research Support	0	0	0	0	0	0	0	0
Minority Biomedical Research Support	0	504	0	497	0	80	0	-416
Other	40	21,483	34	20,479	20	17,475	-14	-3,004
Other Research	51	\$23,302	51	\$23,051	31	\$18,835	-20	-\$4,216
Total Research Grants	375	\$264,171	366	\$268,459	398	\$231,897	32	-\$36,562
<b>Ruth L. Kirchstein Training Awards:</b>								
Individual Awards	11	\$440	11	\$460	8	\$385	-3	-\$75
Institutional Awards	0	9	0	10	0	5	0	-5
Total Research Training	11	\$450	11	\$470	8	\$390	-3	-\$80
Research & Develop. Contracts <i>(SBIR/STTR) (non-add)</i>	77 (0)	\$15,554 (21)	77 (2)	\$16,750 (114)	46 (0)	\$13,783 (98)	-31 (-2)	-\$2,967 (-21)
Intramural Research	5	4,114	5	6,000	5	5,250	0	-750
Res. Management & Support <i>Res. Management &amp; Support (SBIR Admin) (non-add)</i>	67 (0)	20,107 (0)	63 (0)	23,000 (5)	63 (0)	19,550 (4)	0 (0)	-3,450 (4)
Construction		0		0		0		0
Buildings and Facilities		0		0		0		0
Total, NIMHD	72	\$304,396	68	\$314,679	68	\$270,870	0	-\$43,809

<sup>1</sup> All items in italics and brackets are non-add entries.

## **Major Changes in the Fiscal Year 2020 President's Budget Request**

Major changes by budget mechanism and/or budget activity detail are briefly described below. The FY 2020 President's Budget for NIMHD is \$270.8 million, a decrease of \$43.8 million from the FY 2019 Enacted level. The FY 2020 President's Budget reflects the Administration's fiscal policy goals for the Federal Government. Within that framework, NIMHD will pursue its highest research priorities through strategic investments and careful stewardship of appropriated funds.

### Research Project Grants (RPGs) (-\$16.2 million; total \$134.5 million):

NIMHD will fund approximately 328 RPGs in FY 2020. Funding will support existing and new NIMHD initiatives as well as investigator-initiated research.

### Research Centers (-\$16.1 million; total \$78.5 million):

The reduction in FY 2020 will require budget reductions to many Centers of Excellence and Transdisciplinary Collaborative Centers but will help prioritize funds within NIMHD's overall request level toward the RPG award portfolio.

### Other Research (-\$4.2 million; total \$18.8 million):

NIMHD will continue to award Career Development and Clinical Research Education grants while also supporting other intra-NIH collaborative projects.

### Research Management and Support (-\$3.5 million; total \$19.6 million):

The reduced funding relative to FY 2019 will help prioritize funds toward NIMHD's RPG awards while still providing program management and administrative support to the Institute.

**NATIONAL INSTITUTES OF HEALTH  
National Institute on Minority Health and Health Disparities**

**Summary of Changes**

(Dollars in Thousands)

<b>FY 2019 Enacted</b>				\$314,679
<b>FY 2020 President's Budget</b>				\$270,870
<b>Net change</b>				-\$43,809
CHANGES	FY 2020 President's Budget		Change from FY 2019 Enacted	
	FTEs	Budget Authority	FTEs	Budget Authority
<b>A. Built-in:</b>				
<b>1. Intramural Research:</b>				
a. Annualization of January 2019 pay increase & benefits		\$1,512		\$4
b. January FY 2020 pay increase & benefits		1,512		5
c. Paid days adjustment		1,512		6
d. Differences attributable to change in FTE		1,512		0
e. Payment for centrally furnished services		749		-83
f. Cost of laboratory supplies, materials, other expenses, and non-recurring costs		2,989		73
Subtotal				\$5
<b>2. Research Management and Support:</b>				
a. Annualization of January 2019 pay increase & benefits		\$11,699		\$12
b. January FY 2020 pay increase & benefits		11,699		36
c. Paid days adjustment		11,699		45
d. Differences attributable to change in FTE		11,699		0
e. Payment for centrally furnished services		644		-72
f. Cost of laboratory supplies, materials, other expenses, and non-recurring costs		7,208		214
Subtotal				\$235
Subtotal, Built-in				\$240

**NATIONAL INSTITUTES OF HEALTH  
National Institute on Minority Health and Health Disparities**

**Summary of Changes**

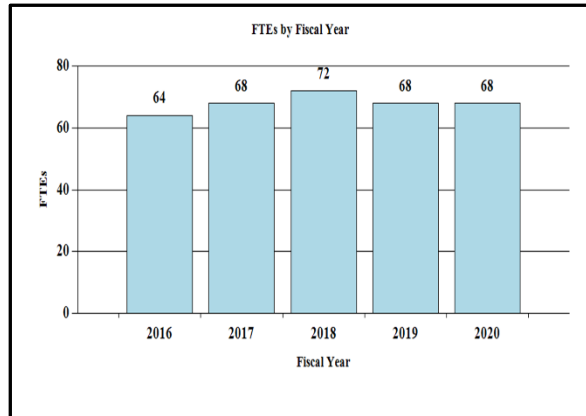
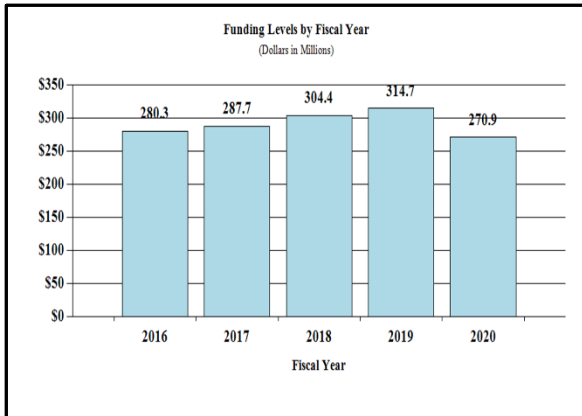
(Dollars in Thousands)

CHANGES	FY 2020 President's Budget		Change from FY 2019 Enacted	
	No.	Amount	No.	Amount
<b>B. Program:</b>				
<u>1. Research Project Grants:</u>				
a. Noncompeting	214	\$93,138	19	-\$21,391
b. Competing	91	32,201	37	6,649
c. SBIR/STTR	23	9,199	-2	-1,496
Subtotal, RPGs	328	\$134,538	54	-\$16,239
2. Research Centers	39	\$78,525	-2	-\$16,107
3. Other Research	31	18,835	-20	-4,216
4. Research Training	8	390	-3	-80
5. Research and development contracts	46	13,783	-31	-2,967
Subtotal, Extramural		\$246,070		-\$39,609
6. Intramural Research	<u>FTEs</u> 5	\$5,250	<u>FTEs</u> 0	-\$755
7. Research Management and Support	63	19,550	0	-3,685
8. Construction		0		0
9. Buildings and Facilities		0		0
Subtotal, Program	68	\$270,870	0	-\$44,049
Total changes				-\$43,809

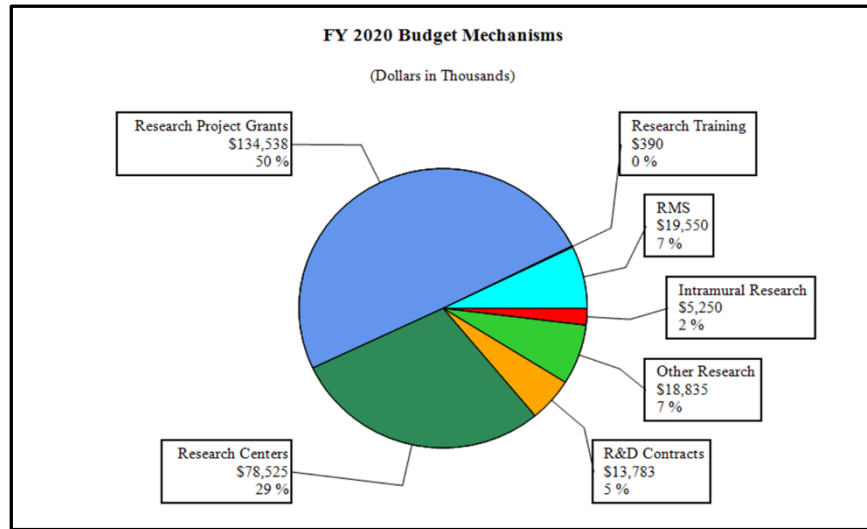
**Fiscal Year 2020 Budget Graphs**



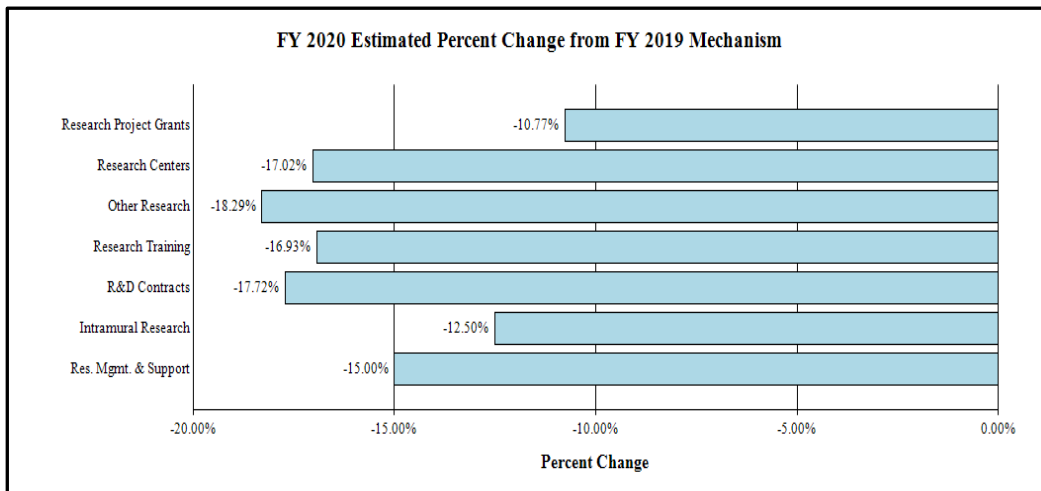
History of Budget Authority and FTEs:



Distribution by Mechanism:



Change by Selected Mechanisms:



**NATIONAL INSTITUTES OF HEALTH**  
**National Institute on Minority Health and Health Disparities**

**Budget Authority by Activity<sup>1</sup>**  
(Dollars in Thousands)

	FY 2018 Final		FY 2019 Enacted		FY 2020 President's Budget		FY 2020 +/- FY2019	
	<u>FTE</u>	<u>Amount</u>	<u>FTE</u>	<u>Amount</u>	<u>FTE</u>	<u>Amount</u>	<u>FTE</u>	<u>Amount</u>
<b><u>Extramural Research</u></b>								
<u>Detail</u>								
Integrative Biological and Behavioral Sciences		\$53,375		\$55,522		\$49,086		-\$6,437
Clinical and Health Services Research		69,788		69,557		61,493		-8,063
Community Health and Population Sciences		34,967		38,716		34,228		-4,488
Research Centers on Minority Health and Health Disparities		95,790		95,969		79,446		-16,523
Training and Career Development		26,255		25,915		21,818		-4,098
<b>Subtotal, Extramural</b>		<b>\$280,176</b>		<b>\$285,679</b>		<b>\$246,070</b>		<b>-\$39,609</b>
<b>Intramural Research</b>	<b>5</b>	<b>\$4,114</b>	<b>5</b>	<b>\$6,000</b>	<b>5</b>	<b>\$5,250</b>	<b>0</b>	<b>-\$750</b>
<b>Research Management &amp; Support</b>	<b>67</b>	<b>\$20,107</b>	<b>63</b>	<b>\$23,000</b>	<b>63</b>	<b>\$19,550</b>	<b>0</b>	<b>-\$3,450</b>
<b>TOTAL</b>	<b>72</b>	<b>\$304,396</b>	<b>68</b>	<b>\$314,679</b>	<b>68</b>	<b>\$270,870</b>	<b>0</b>	<b>-\$43,809</b>

<sup>1</sup> Includes FTEs whose payroll obligations are supported by the NIH Common Fund.

**NATIONAL INSTITUTES OF HEALTH  
National Institute on Minority Health and Health Disparities**

**Authorizing Legislation**

	<b>PHS Act/ Other Citation</b>	<b>U.S. Code Citation</b>	<b>2019 Amount Authorized</b>	<b>FY 2019 Operating Level</b>	<b>2020 Amount Authorized</b>	<b>FY 2020 President's Budget</b>
Research and Investigation	Section 301	42§241	Indefinite		Indefinite	
National Institute on Minority Health and Health Disparities	Section 401(a)	42§281	Indefinite	\$314,679,000	Indefinite	\$270,870,000
<b>Total, Budget Authority</b>				<b>\$314,679,000</b>		<b>\$270,870,000</b>

**NATIONAL INSTITUTES OF HEALTH**  
**National Institute on Minority Health and Health Disparities**

**Appropriations History**

<b>Fiscal Year</b>	<b>Budget Estimate to Congress</b>	<b>House Allowance</b>	<b>Senate Allowance</b>	<b>Appropriation</b>
2011	\$219,046,000		\$218,705,000	\$211,572,000
Rescission				\$1,857,728
2012	\$214,608,000	\$214,608,000	\$272,650,000	\$276,963,000
Rescission				\$523,460
2013	\$279,389,000		\$280,236,000	\$276,439,540
Rescission				\$552,879
Sequestration				(\$13,875,364)
2014	\$283,299,000		\$281,416,000	\$268,322,000
Rescission				\$0
2015	\$267,953,000			\$269,154,000
Rescission				\$0
2016	\$281,549,000	\$272,493,000	\$287,379,000	\$279,718,000
Rescission				\$0
2017 <sup>1</sup>	\$280,680,000	\$286,446,000	\$292,323,000	\$289,069,000
Rescission				\$0
2018	\$214,723,000	\$293,583,000	\$297,784,000	\$303,200,000
Rescission				\$0
2019	\$280,545,000	\$306,821,000	\$314,845,000	\$314,679,000
Rescission				\$0
2020	\$270,870,000			

<sup>1</sup> Budget Estimate to Congress includes mandatory financing.

**Justification of Budget Request**  
***National Institute on Minority Health and Health Disparities***

Authorizing Legislation: Section 301 and title IV of the Public Health Service Act, as amended.  
Budget Authority:

	FY 2018 Actual	FY 2019 Enacted	FY 2020 Budget Request	FY 2020 +/- FY 2019
BA	\$304,396,000	\$314,679,000	\$270,870,000	-\$43,809,000
FTE	72	68	68	0

Program funds are allocated as follows: Competitive Grants/Cooperative Agreements; Contracts; Direct Federal/Intramural and Other.

**Director’s Overview**

The mission of the National Institute on Minority Health and Health Disparities (NIMHD) is to lead scientific research to improve minority health and to reduce health disparities. NIMHD works to transform the field of minority health and health disparities by building on evidence-based advances in promising areas such as precision medicine, genomics, and health information technology that could be beneficial in improving the health of racial and ethnic minority populations, people living in rural communities, individuals of low socioeconomic status, and sexual and gender minorities who often experience poorer health and greater disparities in health outcomes.

Scientific research has provided evidence for the underlying causes of health disparities, and the multiple contributing factors, which have led NIMHD to use the knowledge gained from its programs to move the field forward to enhance methods and develop appropriate interventions, increase the capacity for investigators to initiate and conduct novel research, strengthen research efforts around evaluation and reporting, and promote diversity in the biomedical research workforce. To advance the field of minority health and health disparities, NIMHD has transitioned its funding to expand support for investigator-initiated research projects and transformed the Centers of Excellence and the Research Centers in Minority Institutions programs to specialized Centers on minority health and health disparities to conduct transdisciplinary, multi-level research, expand the capacity for health sciences research, and support development of early stage investigators.

An important facet of NIMHD’s research to understand and address the underlying factors that contribute to health disparities is to establish stronger associations between perceived discrimination, structural racism and unconscious clinician bias in adverse health outcomes and obtaining treatment services. In 2018, NIMHD organized a Structural Racism Workshop with national leaders to explore the issue and consider topics for future research. One example of NIMHD’s research to address structural racism focuses on surgical disparities. A study to address transplant outcomes and reduce disparities among kidney transplant recipients used community-based participatory research and applied predictive modeling to develop an electronic hospitalization risk dashboard to assist with clinical decision-making and identification of transplant recipients at high risk for post-transplant hospitalization. The goal is

to provide guidance on appropriate resource utilization to reduce surgical disparities, and hospitalization in post-transplant patients.

NIMHD continues to strengthen minority health and health disparities research around three broad scientific areas encompassing multiple domains and levels of influence on minority health and health disparities, which will guide its work to advance minority health and health disparities research over the next five years. The research priorities include:

- *Integrative Biological and Behavioral Research* which examines biological and behavioral mechanisms and pathways that influence resilience and susceptibility to adverse health conditions that disproportionately impact racial and ethnic minority populations, persons of less privileged socioeconomic status, and other health disparity populations. One example of NIMHD's priority in this area includes defining pathways to explain unhealthy behaviors among health disparity populations and leveraging mobile phone-delivered interventions to promote health and reduce disease risk.
- *Clinical and Health Services Research* that will contribute to the clinical and health services research knowledge base. One example of NIMHD's priority in this area will be research to define how medical care is delivered to racial and ethnic minorities and other health disparity populations to address potential health outcome disparities through health care utilization patterns, patient-clinician communication, and the quality of care received by comparing established metrics.
- *Community Health and Population Sciences* research will investigate the etiology, prevention, screening, early detection, and management of diseases and conditions with evidence of significant burden among health disparity populations. An example of NIMHD's priority in community health and population sciences will be to leverage epidemiologic studies that describe disease burden and risk factors in health disparity populations to integrate the multiple determinants of health.

### **NIH Director's Themes**

The work of the NIMHD intersects multiple diseases, conditions, and disciplines, and demands innovation at various levels. NIMHD supports the NIH Director's vision to transform tools and technologies and strengthen basic science to improve human health. For example, one project (Mobile Framework to Measure Ejection Fraction by Automated Non-invasive Analysis) is aimed at developing the first medical device to provide point-of-care assessment for the left chamber of the heart using a wireless smartphone. The availability of this device will mean medical teams will no longer need to rely on specially trained physicians to operate relevant diagnostic equipment, and technicians will be able to diagnose conditions instantly and effectively using consumer friendly mobile devices. In basic science, NIMHD is supporting advances in genetic research. Genetic Determinants of Telomere Length in African American Youth is the first genome-wide association study of telomere length (TL) in healthy African American youth, ages 8 to 20, using whole blood samples. Telomeres are the protective covers at the end of DNA strands. Many diseases are associated with telomere length which can be affected by environmental and genetic factors. The investigators discovered a novel genome-wide significant association between TL and a genetic variant on chromosome 14, a part of the

DNA. The findings underscore the importance of examining genetic associations with TL in diverse pediatric populations such as African Americans.

Overall Budget Policy:

The FY 2020 President's Budget request is \$270.9 million, a decrease of \$43.8 million or 13.9 percent compared with the FY 2019 Enacted level.

## **Program Descriptions and Accomplishments**

### **Integrative Biological and Behavioral Research**

Cutting-edge topics in integrative biological and behavioral research examine how social and environmental stressors and adverse life experiences affect health status due to inherited changes in how genes function through epigenomic modifications. NIMHD is funding a study that performed whole-genome sequencing to investigate the association between medications and genetic factors by examining drug response in racially diverse children with asthma. Researchers identified novel genetic risk markers that can predict which children are likely to respond poorly to the asthma medicine albuterol and other current first-line anti-asthma drugs. These findings could guide the development of new treatments that will be more effective and have the potential to reduce the burden of asthma deaths among racial and ethnic minority populations. Another study looked at gender differences in Hispanic or Latino adults to understand the relationship between specific depressive symptoms and alcohol use severity. The results showed higher levels of depression were associated with higher alcohol use severity across gender, while higher levels of complaints about physical symptoms and interpersonal problems were associated with higher alcohol use among men.

Investigators supported by NIMHD to advance its efforts to integrate biological and behavioral (biobehavioral) research are studying the interaction between epigenetic and biobehavioral determinants of preterm birth in African American women. Recent findings discovered that DNA methylation in the SLC9B1 gene in late second and early third trimesters can predict fetal intolerance of labor (FIL) or fetal distress at delivery, the most common indication for emergency Caesarean section, which is associated with increased risk of an insufficient supply of oxygen reaching the unborn baby and excessive acidity in the blood following delivery. These findings could set the basis for a diagnostic test to identify pregnant women at elevated risk for FIL well in advance of delivery.

To further advance biological and behavioral research, in FY 2018, NIMHD launched a new research initiative examining drivers of disparities in chronic liver diseases and liver cancer, focusing on risk factors such as hepatitis B and C infections, alcohol consumption, chronic inflammation, exposure to toxins, tobacco smoking, diabetes, and obesity. This initiative will allow NIMHD to examine drivers of health disparities in chronic liver disease and liver cancer by race and ethnicity. In addition, NIMHD is collaborating with the National Cancer Institute and the Prostate Cancer Foundation to support a new project, Research on Prostate Cancer in Men of African Ancestry: Defining the Roles of Genetics, Tumor Markers, and Social Stress (RESPOND). This is the largest coordinated research effort focused on biological and non-biological factors associated with aggressive prostate cancer in African American men. The study will enroll 10,000 prostate cancer patients to examine associations between genetic variants, aggressive disease and exposures to neighborhood and environmental stressors such as

discrimination, early-life adversity, and segregation. RESPOND combines state-of-the-art molecular approaches with social and environmental science to unravel the complex interactions between biological, behavioral, and social factors that contribute to excess prostate cancer burden and poorer outcomes among African American men.

**Program Portrait: Social Epigenomics Research Focused on Minority Health and Health Disparities**

FY 2019 Level: \$10.9 million

FY 2020 Level: \$8.3 million

Change: -\$2.6 million

The Social Epigenomics Research Focused on Minority Health and Health Disparities Initiative is a NIMHD collaboration with the National Cancer Institute and the National Institute on Aging, to support cutting-edge interdisciplinary research on epigenomic variations within and between health disparity populations. Epigenetic modifications such as DNA methylation can control gene expression. Social epigenomics examines how social experiences affect human gene function and physiology. For example, racial discrimination and other social stressors may alter the epigenome, affecting gene expression in ways that may in turn alter disease risk or severity. NIMHD's Social Epigenomics Initiative offers a unique opportunity to understand how exposures from the environment, diet, lifestyle, and other health determinants interact with our genes to influence minority health and health disparities in diseases and conditions ranging from pre-term birth to emotional well-being in children, to asthma, obesity, cardiovascular disease, prostate cancer, and post-traumatic stress disorder. The Initiative promotes novel interdisciplinary collaborations between social and behavioral scientists, clinicians, public health researchers, and molecular biologists to advance understanding of biological and behavioral mechanisms underlying health disparities.

Budget Policy:

The FY 2020 President's Budget request for Integrative Biological and Behavioral Research is \$49.1 million, a decrease of \$6.4 million or 11.6 percent compared with the FY 2019 Enacted level.

**Clinical and Health Services Research**

Healthcare system-level factors contribute to health disparities but have not been adequately explored in the scientific research sphere. Despite overall improvements in surgical care, surgical disparities remain a persistent concern in the healthcare system, and an understudied issue in health disparities research. NIMHD established the Surgical Disparities Research Initiative to understand and address disparities in surgical care and outcomes among health disparity populations. Disparities in surgical care by race and ethnicity are partly due to a lack of standardized quality indicators to measure surgical disparities and access to surgical care. The Developing Disparities-Sensitive Surgical Quality Metrics is a project funded by NIMHD aimed at developing a standardized disparities sensitive metric on quality of surgical care that can be implemented in various hospital settings. The project has adapted the Disparities Sensitive Metrics criteria for use with surgical metrics, including a ranked procedure and scoring system. Another project is examining the use of opioid pain medication in children after surgery to enhance understanding of the relationship between racial disparities in post-surgery pain management and opioid addiction.

Cultural difference or incongruity is a factor often associated with the patient-clinician experience and relationship. Patient-clinician interaction and communication during the clinical encounter are essential in defining the quality of care that patients receive including their satisfaction with care and defined clinical outcomes. NIMHD is funding a clinical trial involving eight academic medical centers to evaluate the effectiveness of the Provider Awareness and Cultural Dexterity Toolkit for Surgeons (PACTS), to assess surgical residents' knowledge,



attitudes, and cross-cultural skills in caring for patients of diverse cultural backgrounds. Cultural dexterity is a paradigm shift from cultural competency training which emphasizes context specific training, the development of skills to apply knowledge to practice, and aims to promote lasting institutional culture change. The core topics covered in the PACTS curriculum are: 1) relationship and trust building across cultures; 2) caring for patients with limited English proficiency; 3) management of pain across cultures; and 4) the informed consent process.

**Program Portrait: Leveraging Health Information Technology (Health IT) to Address Minority Health**

FY 2019 Level: \$0.0 million

FY 2020 Level: \$1.9 million

Change: +\$1.9 million

Health information technology (health IT) has tremendous potential for promoting health equity for racial and ethnic populations. Health IT tools such as electronic health records (EHRs), patient portals/patient health records (PHRs), and clinical decision support (CDS), may yield population health benefits for underserved populations by enhancing patient engagement, improving patient safety, and reducing adverse outcomes. EHRs and CDS may help improve documentation of social determinants of health (SDoH), inform patient care for those most vulnerable who have multiple chronic diseases and higher health risks. Availability of real time information, clinical care coordination, and decision support enabled by health IT tools may also reduce disparities in quality of care for underserved populations who often experience a greater burden of chronic diseases and are more likely to demonstrate signs of poor management of chronic disease. Better clinical care coordination via health IT could improve clinician performance and adherence to clinical guidelines, reduce redundant testing due to clinician biases, detect treatment risks, and thus consequently facilitate more equitable treatment for underserved populations. This will support the use of randomized and pragmatic clinical trials, comparative effectiveness research, observational studies, and implementation science to investigate how to leverage health information technology (health IT) to improve minority health care and reduce health care disparities by increasing access to care, delivery of higher quality care, improving patient-clinician communication, and health outcomes for minority health and health disparity populations in the U.S.

**Budget Policy:**

The FY 2020 President’s Budget request for Clinical and Health Services Research is \$61.5 million, a decrease of \$8.1 million or 11.6 percent compared with the FY 2019 Enacted level.

**Community Health and Population Sciences**

Research on community health and population sciences will position NIMHD to develop a scientific portfolio of projects on a wide array of topics that can be addressed by various disciplines including: 1) Epidemiologic studies that identify and describe disease burden and risk factors in health disparity populations; 2) Studies on behavioral, sociocultural, environmental, and policy influences on disease risks and outcomes; 3) Behavioral, social, applied, and surveillance research to understand the impact of social and structural determinants on community health and population wellbeing; 4) Research integrating the multiple determinants of health at the biologic, behavioral, and contextual levels and their interactions; 5) Population-level gene-environment interaction studies; and 6) Research to inform and establish community and population-level and public health practices that improve population health and reduce health disparities.

The Collaborative Minority Health and Health Disparities Research with Tribal Epidemiology Centers, is one example of a NIMHD community health and population sciences research initiative. The Navajo Nation Junk Food Tax on Obesity Outcomes is one project involving the Northwest Tribal Epidemiology Center that examines significant gaps in data and knowledge including an evaluation of the impact of the junk food tax in reducing obesity rates. The Low-

Cost Worksite-Based Weight Loss Maintenance for Native Hawaiians and Pacific Islanders is another project investigating whether low-cost delivery of a workplace intervention can help address obesity. Early engagement and initial physical functioning are key to improving long-term weight loss outcomes.

Collaborations are integral in NIMHD's work to improve minority health and reduce health disparities. NIMHD will re-start a partnership with the National Heart, Lung and Blood Institute in supporting the Hispanic Community Health Study (HCHS)/Study of Latinos (SOL) to investigate prevalence of cardiovascular, pulmonary, and other select chronic diseases by examining protective or harmful factors, and changes in health over time; as well as continue its long-standing support of the Jackson Heart Study to investigate the genetic and environmental factors that affect high blood pressure, heart disease, stroke, diabetes, and other important diseases among African Americans.

**Program Portrait: Time-Sensitive Research on Health Risk and Resilience after Hurricanes Irma and Maria in Puerto Rico and the U.S. Virgin Islands**

FY 2019 Level: \$1.6 million

FY 2020 Level: \$0.0 million

Change: -\$1.6 million

Unprecedented and widespread damage from Hurricanes Irma and Maria devastated the U.S. territories of Puerto Rico and the U.S. Virgin Islands (USVI). Individuals in this region experienced collective, territory-wide disruptions as well as individual, family, and community-level hardships that may make recovery from these disasters particularly difficult. The objective of this initiative was to better understand the health risks and health impacts of the hurricanes in Puerto Rico and the USVI, including onset of acute conditions, exacerbation of existing chronic conditions, and risk for future onset of chronic disease. Projects were expected to be time-sensitive, such that delays in study initiation might preclude addressing certain research questions or the collection of certain types of data, and eligibility was limited to institutions located in the specified region. Multiple NIH Institutes/Centers (NIAAA, NIA, NIAID, NCI, NIDA, NIDCR, and NIMH) also participated in this initiative.

In FY 2018, NIMHD supported nine awards, including eight from Puerto Rico and one from the USVI. Topics include projects to understand the impact of the hurricanes on the health of babies born immediately before or after the hurricanes; the impact of hurricane-related healthcare disruption for older adults and patients with cancer, HIV, and other chronic illnesses; the impact of social support as a buffer against food and water insecurity; and the role of spirituality in post-hurricane coping and resilience. Results from these awards are expected to inform efforts to improve disaster preparedness and recovery at the individual, family, community, and system level.

**Budget Policy:**

The FY 2020 President's Budget request for Community Health and Population Sciences Research is \$34.2 million, a decrease of \$4.5 million or 11.6 percent compared with the FY 2019 Enacted level.

**Research Centers on Minority Health and Health Disparities**

NIMHD funds research centers across the country to study the complexity of factors associated with minority health and health disparities from multiple disciplines. Our research centers examine the causes of health disparities from a systems approach; develop tailored interventions; integrate science, practice, and policy approaches; build community research capacity; train a diverse workforce; investigate national patterns of health disparities; and advance the translation and dissemination of research results.

The Centers of Excellence (COE) Program is one example of NIMHD's research centers. The COE program supports collaborative minority health and health disparities research to identify biological, behavioral, sociocultural, environmental, and health system factors that contribute to health disparities. The Centers also develop evidence-based interventions to reduce targeted health disparities, such as cardiovascular disease, hypertension, stroke, cancer, diabetes, HIV/AIDS, mental health, youth suicide, substance use, and obesity that disproportionately affect racial and ethnic minority, and other health disparity populations. Socio-cultural factors including trauma and violence, intergenerational transmission of racialized stress, health literacy, the role of social networks, access to health care, and resilience through the life course that affect health disparity populations comprise the thematic research foci of the currently funded COEs.

An example of current research supported by the COE program is a study examining the relationship between frequency of cognitive activity or the mental process of perception or understanding, and current neurocognitive performance; that is, of the functions of the brain that affect an individual's ability to reason or understand. The study found that greater frequency of cognitive activity is associated with better neurocognitive function in older persons with HIV, particularly older African Americans. The COE program will continue to contribute to the diversification of the research workforce by funding up to five pilot projects of early stage investigators each year.

The Research Centers in Minority Institutions Program (RCMI) is another model of NIMHD's research centers, which supports expansion and building of the national capacity for research in the health sciences. The RCMI program funds institutions that offer doctorate degrees in health-related fields that have a historical and current commitment to educating and training students from populations that are underrepresented in the health professions and health sciences and have funding from the NIH of less than \$50 million per year. An example of the type of research the RCMI program supports is a study that aims to identify new treatment for triple negative breast cancer, which is the most aggressive type of breast cancer and disproportionately affects African American women. The study recently discovered that Monocyte Chemoattractant Protein-1 (MCP-1) mediated pathways could have potential for treating triple negative breast cancer, and consequently reduce cancer health disparities. NIMHD will continue to support the RCMI Coordinating Center to leverage the research infrastructure, resources, and expertise of the RCMI-funded institutions to strengthen research collaborations to address health disparities.

#### Budget Policy:

The FY 2020 President's Budget request for Research Centers on Minority Health and Health Disparities is \$79.4 million, a decrease of \$16.5 million or 17.2 percent compared with the FY 2019 Enacted level.

#### **Training and Career Development**

A central goal of NIMHD's efforts to improve minority health and reduce health disparities is to promote diversity of the scientific research workforce through training and career development for individuals from health disparity backgrounds in biomedical, behavioral, clinical, and social sciences research. The Mentored Career Development Awards program is one example of

NIMHD's commitment to training. The program enhances the pool of highly trained new investigators from diverse backgrounds who are underrepresented in research areas of interest to the NIMHD and encourages underrepresented postdoctoral scholars to pursue research independence. In FY 2018, NIMHD funded 10 new projects focused on areas such as developing research skills in cardiometabolic health in racial and ethnic minority youth and African American breast cancer survivors; epigenetic mechanisms of prenatal environmental stressors and offspring obesity risk; mobile health interventions to reduce diabetes disparities in Chinese Americans; social media use to address depression outcomes among U.S. lesbian, gay, and bisexual young adults; and precarious employment as a determinant of overweight and cardiometabolic risk.

Another NIMHD career development program is the Loan Repayment Program which supports racial and ethnic minority investigators and individuals from disadvantaged economic backgrounds with a doctoral degree in a health-related field who compete for loan repayment awards of up to \$35,000 per year while they remain active in research of any type. The Loan Repayment Program also provides identical support to awardees of any background committed to conduct minority health or health disparities research in non-federal research settings for at least two years. In FY 2018, NIMHD made 67 awards to recruit and retain scholars to pursue minority health and health disparities research, and 10 awards to individuals from disadvantaged backgrounds to conduct clinical research.

NIMHD will continue to advance its research training opportunities globally. The Minority Health and Health Disparities Research Training Program will support up to 16 new awards to promote domestic and international training opportunities across the pipeline for individuals from diverse backgrounds underrepresented in biomedical, behavioral, clinical, and social sciences research who are at domestic institutions or at specified foreign low and middle-income locations. The program is intended to promote training opportunities in a diverse and inclusive environment for eligible undergraduate, post-baccalaureate, and graduate students, as well as for eligible residents, fellows, and postdoctoral residents. The program provides an opportunity for trainees to work with a mentor to obtain research experience in a clinical trial.

#### Budget Policy:

The FY 2020 President's Budget request for research Training and Career Development is \$21.9 million, a decrease of \$4.1 million or 15.8 percent compared with the FY 2019 Enacted level.

### **Intramural Research Program**

The NIMHD Intramural Research Program (IRP) conducts collaborative high-risk, high impact, minority health and health disparities research and builds and sustains capacity to conduct cutting-edge transdisciplinary research to address minority health and health disparities. A study from the IRP program examining the association between direct mail or email coupons and smoking behavior among adults found that direct mail or email coupons for tobacco products were most often received by poorer adults and those with lower education. The study also showed that people who received these coupons were more likely to start or increase their smoking, were less likely to quit smoking, and more likely to start smoking again if they had stopped in the past. Another IRP study on tobacco and smoke-free policies at post-secondary educational institutions in the U.S. found that only 35 percent of institutions have tobacco-free or

smoke-free policies. The findings suggest the need for increased dissemination of evidence-based interventions to stimulate post-secondary educational institutions to adopt tobacco-free policies.

Advancing the science of minority health and health disparities is a major priority of the NIMHD that the Intramural Research Program will support through its research. For example, the IRP will conduct experimental studies to assess how low and high income young adult smokers respond to advertisements with and without tobacco discount coupons, and how it affects their smoking behaviors. Another study will focus on the effectiveness of supplementing the National Cancer Institute's QuitGuide smoking cessation mobile application with tailored messages among low-income young adult daily smokers. A study aimed at promoting weight-loss and physical activity among overweight African Americans and Hispanics or Latinos will test the effectiveness of using interventions delivered by mobile phone. Through the IRP, NIMHD will develop a profile of the U.S. burden of disease at the county and census tract levels by categories of race and ethnicity, socioeconomic status, sex, and geography in collaboration with other NIH Institutes and Centers.

Budget Policy:

The FY 2020 President's Budget request for Intramural Research is \$5.2 million, a decrease of \$0.8 million or 12.5 percent compared with the FY 2019 Enacted level.

**Research Management and Support**

Research Management and Support (RMS) activities provide support for the review, award, and monitoring of research grants, training awards, and research and development contracts. In FY 2020, RMS activities will continue to include efforts to manage and update NIMHD website content, which will include expansion of the data portal and release of an interventions portal, to communicate and disseminate information effectively to the public and the many constituencies invested in the outcomes of NIMHD research.

Budget Policy:

The FY 2020 President's Budget request for RMS is \$19.5 million, a decrease of \$3.5 million or 15.0 percent compared with the FY 2019 Enacted level.

**NATIONAL INSTITUTES OF HEALTH**  
**National Institute on Minority Health and Health Disparities**

**Budget Authority by Object Class<sup>1</sup>**  
(Dollars in Thousands)

	<b>FY 2019 Enacted</b>	<b>FY 2020 President's Budget</b>	<b>FY 2020 +/- FY 2019</b>
Total compensable workyears:			
Full-time equivalent	68	68	0
Full-time equivalent of overtime and holiday hours	0	0	0
Average ES salary	\$0	\$0	\$0
Average GM/GS grade	13.0	13.0	0.0
Average GM/GS salary	\$122	\$122	\$0
Average salary, grade established by act of July 1, 1944 (42 U.S.C. 207)	\$124	\$128	\$4
Average salary of ungraded positions	\$171	\$171	\$0
<b>OBJECT CLASSES</b>	<b>FY 2019 Enacted</b>	<b>FY 2020 President's Budget</b>	<b>FY 2020 +/- FY 2019</b>
Personnel Compensation			
11.1 Full-Time Permanent	7,780	7,810	30
11.3 Other Than Full-Time Permanent	1,452	1,457	6
11.5 Other Personnel Compensation	186	186	1
11.7 Military Personnel	372	385	13
11.8 Special Personnel Services Payments	403	404	2
<b>11.9 Subtotal Personnel Compensation</b>	<b>\$10,193</b>	<b>\$10,242</b>	<b>\$50</b>
12.1 Civilian Personnel Benefits	2,724	2,775	51
12.2 Military Personnel Benefits	187	193	6
13.0 Benefits to Former Personnel	0	0	0
<b>Subtotal Pay Costs</b>	<b>\$13,103</b>	<b>\$13,211</b>	<b>\$108</b>
21.0 Travel & Transportation of Persons	183	144	-39
22.0 Transportation of Things	25	25	0
23.1 Rental Payments to GSA	0	0	0
23.2 Rental Payments to Others	0	0	0
23.3 Communications, Utilities & Misc. Charges	133	133	0
24.0 Printing & Reproduction	0	0	0
25.1 Consulting Services	305	305	0
25.2 Other Services	2,731	2,731	0
25.3 Purchase of goods and services from government accounts	21,120	15,884	-5,236
25.4 Operation & Maintenance of Facilities	8	8	0
25.5 R&D Contracts	7,000	5,000	-2,000
25.6 Medical Care	122	122	0
25.7 Operation & Maintenance of Equipment	112	112	0
25.8 Subsistence & Support of Persons	1	1	0
<b>25.0 Subtotal Other Contractual Services</b>	<b>\$31,399</b>	<b>\$24,163</b>	<b>-\$7,236</b>
26.0 Supplies & Materials	315	315	0
31.0 Equipment	591	591	0
32.0 Land and Structures	0	0	0
33.0 Investments & Loans	0	0	0
41.0 Grants, Subsidies & Contributions	268,929	232,287	-36,642
42.0 Insurance Claims & Indemnities	0	0	0
43.0 Interest & Dividends	0	0	0
44.0 Refunds	0	0	0
<b>Subtotal Non-Pay Costs</b>	<b>\$301,576</b>	<b>\$257,659</b>	<b>-\$43,917</b>
<b>Total Budget Authority by Object Class</b>	<b>\$314,679</b>	<b>\$270,870</b>	<b>-\$43,809</b>

<sup>1</sup> Includes FTEs whose payroll obligations are supported by the NIH Common Fund.

**NATIONAL INSTITUTES OF HEALTH**  
**National Institute on Minority Health and Health Disparities**

**Salaries and Expenses**  
(Dollars in Thousands)

OBJECT CLASSES	FY 2019 Enacted	FY 2020 President's Budget	FY 2020 +/- FY 2019
<b>Personnel Compensation</b>			
Full-Time Permanent (11.1)	\$7,780	\$7,810	\$30
Other Than Full-Time Permanent (11.3)	1,452	1,457	6
Other Personnel Compensation (11.5)	186	186	1
Military Personnel (11.7)	372	385	13
Special Personnel Services Payments (11.8)	403	404	2
<b>Subtotal Personnel Compensation (11.9)</b>	<b>\$10,193</b>	<b>\$10,242</b>	<b>\$50</b>
Civilian Personnel Benefits (12.1)	\$2,724	\$2,775	\$51
Military Personnel Benefits (12.2)	187	193	6
Benefits to Former Personnel (13.0)	0	0	0
<b>Subtotal Pay Costs</b>	<b>\$13,103</b>	<b>\$13,211</b>	<b>\$108</b>
Travel & Transportation of Persons (21.0)	\$183	\$144	-\$39
Transportation of Things (22.0)	25	25	0
Rental Payments to Others (23.2)	0	0	0
Communications, Utilities & Misc. Charges (23.3)	133	133	0
Printing & Reproduction (24.0)	0	0	0
<b>Other Contractual Services:</b>			
Consultant Services (25.1)	305	305	0
Other Services (25.2)	2,731	2,731	0
Purchases from government accounts (25.3)	21,120	15,884	-5,236
Operation & Maintenance of Facilities (25.4)	8	8	0
Operation & Maintenance of Equipment (25.7)	112	112	0
Subsistence & Support of Persons (25.8)	1	1	0
<b>Subtotal Other Contractual Services</b>	<b>\$24,277</b>	<b>\$19,041</b>	<b>-\$5,236</b>
Supplies & Materials (26.0)	\$315	\$315	\$0
<b>Subtotal Non-Pay Costs</b>	<b>\$24,934</b>	<b>\$19,659</b>	<b>-\$5,275</b>
<b>Total Administrative Costs</b>	<b>\$38,037</b>	<b>\$32,870</b>	<b>-\$5,167</b>

**NATIONAL INSTITUTES OF HEALTH**  
**National Institute on Minority Health and Health Disparities**

**Detail of Full-Time Equivalent Employment (FTE)**

OFFICE/DIVISION	FY 2018 Final			FY 2019 Enacted			FY 2020 President's Budget		
	Civilian	Military	Total	Civilian	Military	Total	Civilian	Military	Total
Division of Clinical and Health Services Research									
Direct:	-	-	-	-	-	-	5	-	5
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	-	-	-	-	-	-	5	-	5
Division of Community Health and Population Sciences									
Direct:	-	-	-	-	-	-	8	1	9
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	-	-	-	-	-	-	8	1	9
Division of Data Management and Scientific Reporting									
Direct:	-	-	-	-	-	-	-	-	-
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	-	-	-	-	-	-	-	-	-
Division of Integrative Biological and Behavioral Sciences									
Direct:	-	-	-	-	-	-	6	1	7
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	-	-	-	-	-	-	6	1	7
Division of Intramural Research									
Direct:	4	1	5	4	1	5	4	1	5
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	4	1	5	4	1	5	4	1	5
Division of Scientific Programs									
Direct:	20	3	23	19	2	21	-	-	-
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	20	3	23	19	2	21	-	-	-
Office of the Director									
Direct:	44	-	44	42	-	42	42	-	42
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	44	-	44	42	-	42	42	-	42
Reimbursable									
Direct:	-	-	-	-	-	-	-	-	-
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>68</b>	<b>4</b>	<b>72</b>	<b>65</b>	<b>3</b>	<b>68</b>	<b>65</b>	<b>3</b>	<b>68</b>
Includes FTEs whose payroll obligations are supported by the NIH Common Fund.									
FTEs supported by funds from Cooperative Research and Development Agreements.	0	0	0	0	0	0	0	0	0
<b>FISCAL YEAR</b>	<b>Average GS Grade</b>								
2016	12.7								
2017	12.9								
2018	13.0								
2019	13.0								
2020	13.0								



**NATIONAL INSTITUTES OF HEALTH**  
**National Institute on Minority Health and Health Disparities**

**Detail of Positions<sup>1</sup>**

GRADE	FY 2018 Final	FY 2019 Enacted	FY 2020 President's Budget
Total, ES Positions	0	0	0
Total, ES Salary	0	0	0
GM/GS-15	8	7	7
GM/GS-14	21	22	22
GM/GS-13	20	19	19
GS-12	3	3	3
GS-11	1	1	1
GS-10	0	0	0
GS-9	1	1	1
GS-8	3	3	3
GS-7	2	2	2
GS-6	0	0	0
GS-5	0	0	0
GS-4	0	0	0
GS-3	0	0	0
GS-2	0	0	0
GS-1	0	0	0
Subtotal	59	58	58
Grades established by Act of July 1, 1944 (42 U.S.C. 207)	0	0	0
Assistant Surgeon General	0	0	0
Director Grade	2	2	2
Senior Grade	0	0	0
Full Grade	1	0	0
Senior Assistant Grade	1	1	1
Assistant Grade	0	0	0
Subtotal	4	3	3
Ungraded	17	17	17
Total permanent positions	66	62	62
Total positions, end of year	89	87	87
Total full-time equivalent (FTE) employment, end of year	72	68	68
Average ES salary	0	0	0
Average GM/GS grade	13.0	13.0	13.0
Average GM/GS salary	120,053	121,509	121,509

<sup>1</sup> Includes FTEs whose payroll obligations are supported by the NIH Common Fund.