DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

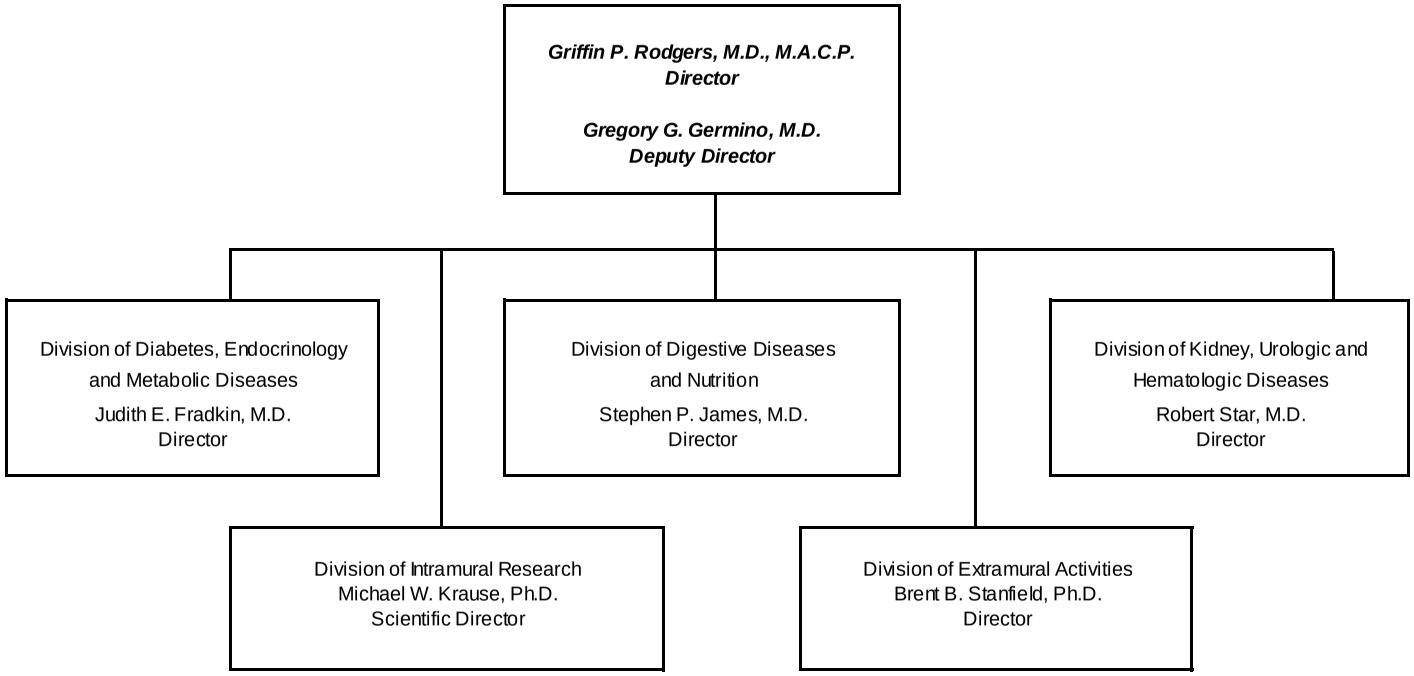
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

NOTE: The FY 2016 Enacted funding amounts cited throughout this chapter reflect the effects of OAR HIV/AIDS Transfers.

NATIONAL INSTITUTES OF HEALTH

National Institute of Diabetes and Digestive and Kidney Diseases

Organization Structure



NATIONAL INSTITUTES OF HEALTH

National Institute of Diabetes and Digestive and Kidney Diseases

For carrying out section 301 and title IV of the PHS Act with respect to diabetes and digestive and kidney disease, **[**$1,818,357,000**]***$1,786,086,000*.

NATIONAL INSTITUTES OF HEALTH
National Institute of Diabetes and Digestive and Kidney Diseases

Amounts Available for Obligation[1]

(Dollars in Thousands)

Source of Funding	FY 2015 Actual	FY 2016 Enacted	FY 2017 President's Budget
Appropriation	$1,749,681	$1,818,357	$1,816,310
Mandatory Appropriation: (non-add)			
Type 1 Diabetes[2]	*(150,000)*	*(150,000)*	*(150,000)*
Other Mandatory financing	*(0)*	*(0)*	*(30,224)*
Subtotal, adjusted appropriation	$1,749,681	$1,818,357	$1,816,310
OAR HIV/AIDS Transfers	-541	-2,047	0
Subtotal, adjusted budget authority	$1,749,140	$1,816,310	$1,816,310
Unobligated balance lapsing	-52	0	0
Total obligations	$1,749,088	$1,816,310	$1,816,310

[1] Excludes the following amounts for reimbursable activities carried out by this account:
FY 2015 - $2,104 FY 2016 - $4,000 FY 2017 - $4,000

[2] Mandatory Appropriation for the Special Statutory Authority for Type 1 Diabetes Research in accordance with P.L. 114-10, Medicare Access and CHIP Reauthorization Act of 2015, 42 U.S.C. 1305 note, Title II, Medicare and other health extenders, Sec. 213 (a).

NATIONAL INSTITUTES OF HEALTH
FY 2017 Congressional Justification
NIDDK

Budget Mechanism - Total[1]

(Dollars in Thousands)

MECHANISM	FY 2015 Actual		FY 2016 Enacted		FY 2017 President's Budget[3]		FY 2017 +/- FY 2016	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Projects:								
Noncompeting	1,778	$789,868	1,742	$804,438	1,895	$825,285	153	$20,847
Administrative Supplements	*(125)*	15,401	*(125)*	15,400	*(109)*	13,400	*(-16)*	-2,000
Competing:								
Renewal	199	93,874	210	101,903	195	94,013	-15	-7,890
New	460	174,291	487	190,555	449	175,564	-38	-14,991
Supplements	2	224	2	230	2	186		-44
Subtotal, Competing	661	$268,389	699	$292,688	646	$269,763	-53	-$22,925
Subtotal, RPGs	2,439	$1,073,659	2,441	$1,112,526	2,541	$1,108,448	100	-$4,078
SBIR/STTR	111	49,383	118	52,981	124	55,059	6	2,078
Research Project Grants	2,550	$1,123,041	2,559	$1,165,507	2,665	$1,163,507	106	-$2,000
Research Centers:								
Specialized/Comprehensive	98	$110,164	99	$113,919	98	$111,919	-1	-$2,000
Clinical Research								
Biotechnology								
Comparative Medicine		537		647		647		
Research Centers in Minority Institutions								
Research Centers	98	$110,701	99	$114,566	98	$112,566	-1	-$2,000
Other Research:								
Research Careers	485	$72,627	510	$75,500	510	$74,500		-$1,000
Cancer Education								
Cooperative Clinical Research								
Biomedical Research Support								
Minority Biomedical Research Support		580		600		600		
Other	106	50,052	117	52,515	117	52,515		
Other Research	591	$123,260	627	$128,615	627	$127,615		-$1,000
Total Research Grants	3,239	$1,357,003	3,285	$1,408,688	3,390	$1,403,688	105	-$5,000
Ruth L Kirchstein Training Awards:	FTTPs		FTTPs		FTTPs		FTTPs	
Individual Awards	265	$12,185	268	$12,600	268	$12,852		$252
Institutional Awards	816	45,255	832	46,700	832	47,400		700
Total Research Training	1,081	$57,440	1,100	$59,300	1,100	$60,252		$952
Research & Develop. Contracts	109	$91,039	112	$95,405	112	$95,405		
(SBIR/STTR) (non-add)[2]	*(4)*	*(464)*	*(4)*	*(464)*	*(5)*	*(500)*	*(1)*	*(36)*
Intramural Research	347	$177,678	350	$184,430	350	$187,381		$2,951
Res. Management & Support	284	65,980	287	68,487	287	69,584		1,097
Res. Management & Support (SBIR Admin) (non-add)[2]	*(1)*	*(75)*	*(3)*	*(100)*	*(3)*	*(100)*		
Office of the Director - Appropriation[2]								
Office of the Director - Other								
ORIP/SEPA (non-add)[2]								
Common Fund (non-add)[2]								
Buildings and Facilities								
Appropriation								
Type 1 Diabetes (non-add)		*(150,000)*		*(150,000)*		*(150,000)*		
Program Evaluation Financing								
Cancer Initiative Mandatory Financing								
Other Mandatory Financing						-$30,224		-$30,224
Subtotal, Labor/HHS Budget Authority		**$1,749,140**		**$1,816,310**		**$1,786,086**		**-$30,224**
Interior Appropriation for Superfund Res.								
Total, NIH Discretionary B.A.		**$1,749,140**		**$1,816,310**		**$1,786,086**		**-$30,224**
Type 1 Diabetes								
Proposed Law Funding								
Cancer Initiative Mandatory Financing								
Other Mandatory Financing						$30,224		$30,224
Total, NIH Budget Authority		**$1,749,140**		**$1,816,310**		**$1,816,310**		
Program Evaluation Financing								
Total, Program Level		**$1,749,140**		**$1,816,310**		**$1,816,310**		

[1] All Subtotal and Total numbers may not add due to rounding.
[2] All numbers in italics and brackets are non-add.
[3] Includes mandatory financing.

NATIONAL INSTITUTES OF HEALTH
FY 2017 Congressional Justification
T1D

Budget Mechanism - Total[1]

(Dollars in Thousands)

MECHANISM	FY 2015 Actual		FY 2016 Enacted		FY 2017 President's Budget[3]		FY 2017	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Projects:								
Noncompeting		$10,832		$9,422		$4,600		-$4,822
Administrative Supplements	*(4)*	1,251	*(5)*	1,400	*(5)*	1,400		
Competing:								
Renewal								
New	28	128,478	28	129,066	30	133,947	2	4,881
Supplements								
Subtotal, Competing	28	$128,478	28	$129,066	30	$133,947	2	$4,881
Subtotal, RPGs	28	$140,560	28	$139,888	30	$139,947	2	$59
SBIR/STTR	9	4,939	10	5,164	11	5,475	1	311
Research Project Grants	37	$145,499	38	$145,052	41	$145,422	3	$370
Research Centers:								
Specialized/Comprehensive								
Clinical Research								
Biotechnology								
Comparative Medicine								
Research Centers in Minority Institutions								
Research Centers								
Other Research:								
Research Careers	6	$2,231	7	$2,500	7	$2,500		
Cancer Education								
Cooperative Clinical Research		2,000		2,000		2,000		
Biomedical Research Support								
Minority Biomedical Research Support								
Other	1	47	1	78	1	78		
Other Research	7	$4,278	8	$4,578	8	$4,578		
Total Research Grants	44	$149,777	46	$149,630	49	$150,000	3	$370
Ruth L Kirchstein Training Awards:	FTTPs		FTTPs		FTTPs		FTTPs	
Individual Awards								
Institutional Awards	6	223	9	370			-9	-370
Total Research Training	6	$223	9	$370			-9	-$370
Research & Develop. Contracts								
(SBIR/STTR) (non-add) [2]								
Intramural Research								
Res. Management & Support								
Res. Management & Support (SBIR Admin) (non-add) [2]								
Office of the Director - Appropriation [2]								
Office of the Director - Other								
ORIP/SEPA (non-add) [2]								
Common Fund (non-add) [2]								
Buildings and Facilities								
Appropriation								
Type 1 Diabetes		-$150,000		-$150,000		-$150,000		
Program Evaluation Financing								
Cancer Initiative Mandatory Financing								
Other Mandatory Financing								
Subtotal, Labor/HHS Budget Authority		**$0**		**$0**		**$0**		
Interior Appropriation for Superfund Res.								
Total, NIH Discretionary B.A.		**$0**		**$0**		**$0**		
Type 1 Diabetes		$150,000		$150,000		$150,000		
Proposed Law Funding								
Cancer Initiative Mandatory Financing								
Other Mandatory Financing								
Total, NIH Budget Authority		**$150,000**		**$150,000**		**$150,000**		
Program Evaluation Financing								
Total, Program Level		**$150,000**		**$150,000**		**$150,000**		

[1] All Subtotal and Total numbers may not add due to rounding.
[2] All numbers in italics and brackets are non-add.
[3] Includes mandatory financing.

Major Changes in the Fiscal Year 2017 President's Budget Request

Major changes by budget mechanism and/or budget activity detail are briefly described below. Note that there may be overlap between budget mechanisms and activity detail and these highlights will not sum to the total change for the FY 2017 President's Budget for NIDDK, which is the same as the FY 2016 Enacted level, for a total of $1,816.310 million which excludes the Special Statutory Authority for Type 1 Diabetes of $150 million and includes other mandatory financing of $30.224 million. The total program level in the FY 2017 President's Budget for this Institutue is $1,966.310 million.

Research Project Grants (RPGs; -$4.078 million; total $1,108.448 million): NIDDK will continue to support competing research project grants (RPGs) – 646 awards in FY 2017. About 1,895 noncompeting RPG awards, totaling $1,108 million, also will be made in FY 2017.

Pilot Studies of Candidate Therapies for Pediatric Chronic Kidney Disease (CKD) (+$1.5 million; total $3.9 million): This initiative will establish a multicenter collaboration to perform pilot trials to optimize study designs for larger trials of new pediatric CKD treatments.

APOL1 Gene Variants in Patients Undergoing Kidney Transplantation (+$3.0 million; total $3.0 million): This initiative will support a multicenter study of African American kidney donors and recipients, including evaluation of *APOL1* genotypes and transplant outcomes.

Beyond Histology – Conquering the Heterogeneity within the Renal Biopsy (+$1.0 million; total $1.0 million): This initiative will provide research tools to help identify unique molecular signatures in biopsied kidney tissue to further understanding of the normal and diseased kidney.

Engineering a Human Islet to Liver Axis (+$3.0 million; total $3.0 million): This initiative will aim to build integrated human pancreatic islet and liver tissue chips to study metabolism and model human diseases.

Identification of Mechanisms Mediating the Effects of Circadian Misalignment and Sleep Disruptions of Energy Balance and Metabolism in Humans (+$1.6 million; total $1.6 million): This initiative will study how sleep and circadian rhythms affect metabolism and disease outcomes.

The Clinical Study of Diabetic Foot Ulcers (+$0.6 million; total $0.6 million): This consortium's goal is to improve our understanding of diabetic foot ulcers and the quality of clinical research in this area by establishing an observational registry and clinical cohorts.

NATIONAL INSTITUTES OF HEALTH
National Institute of Diabetes and Digestive and Kidney Diseases

Summary of Changes

(Dollars in Thousands)

FY 2016 Enacted	$1,816,310
FY 2017 President's Budget	$1,816,310
Net change	$0

CHANGES	FY 2017 President's Budget[1] FTEs	FY 2017 President's Budget[1] Budget Authority	Change from FY 2016 FTEs	Change from FY 2016 Budget Authority
A. Built-in:				
1. Intramural Research:				
a. Annualization of January 2016 pay increase & benefits		$72,830		$324
b. January FY 2017 pay increase & benefits		72,830		1,069
c. Two less days of pay		72,830		-468
d. Differences attributable to change in FTE		72,830		0
e. Payment for centrally furnished services		29,989		731
f. Increased cost of laboratory supplies, materials, other expenses, and non-recurring costs		84,562		1,295
Subtotal				$2,951
2. Research Management and Support:				
a. Annualization of January 2016 pay increase & benefits		$42,414		$188
b. January FY 2017 pay increase & benefits		42,414		636
c. Two less days of pay		42,414		-329
d. Differences attributable to change in FTE		42,414		0
e. Payment for centrally furnished services		955		23
f. Increased cost of laboratory supplies, materials, other expenses, and non-recurring costs		26,214		578
Subtotal				$1,097
Subtotal, Built-in				$4,048

NATIONAL INSTITUTES OF HEALTH
National Institute of Diabetes and Digestive and Kidney Diseases

Summary of Changes - Continued

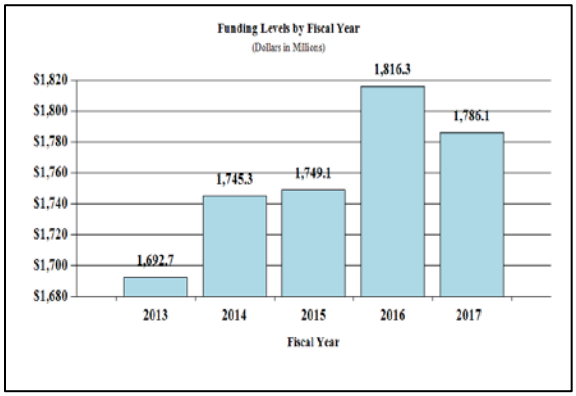
(Dollars in Thousands)

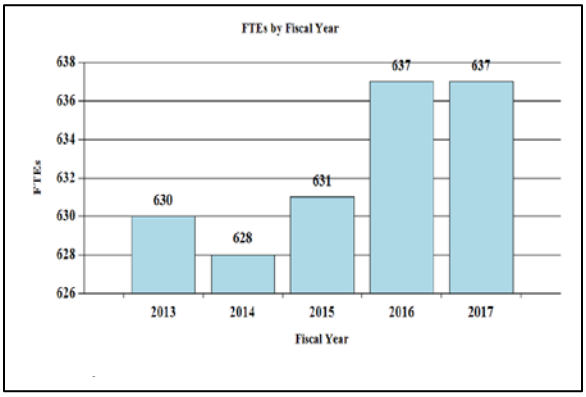
CHANGES	FY 2017 President's Budget[1]		Change from FY 2016	
	No.	Amount	No.	Amount
B. Program:				
1. Research Project Grants:				
a. Noncompeting	1,895	$838,685	153	$18,847
b. Competing	646	269,763	-53	-22,925
c. SBIR/STTR	124	55,059	6	2,078
Subtotal, RPGs	2,665	$1,163,507	106	-$2,000
2. Research Centers	98	$112,566	-1	-$2,000
3. Other Research	627	127,615	0	-1,000
4. Research Training	1,100	60,252	0	952
5. Research and development contracts	112	95,405	0	0
Subtotal, Extramural		$1,559,345		-$4,048
	FTEs		FTEs	
6. Intramural Research	350	$187,381	0	$0
7. Research Management and Support	287	69,584	0	0
8. Construction		0		0
9. Buildings and Facilities		0		0
Subtotal, Program	637	$1,816,310	0	-$4,048
Total changes				$0

[1] Excludes $150 million of mandatory funds Type 1 diabetes, and includes other mandatory financing.

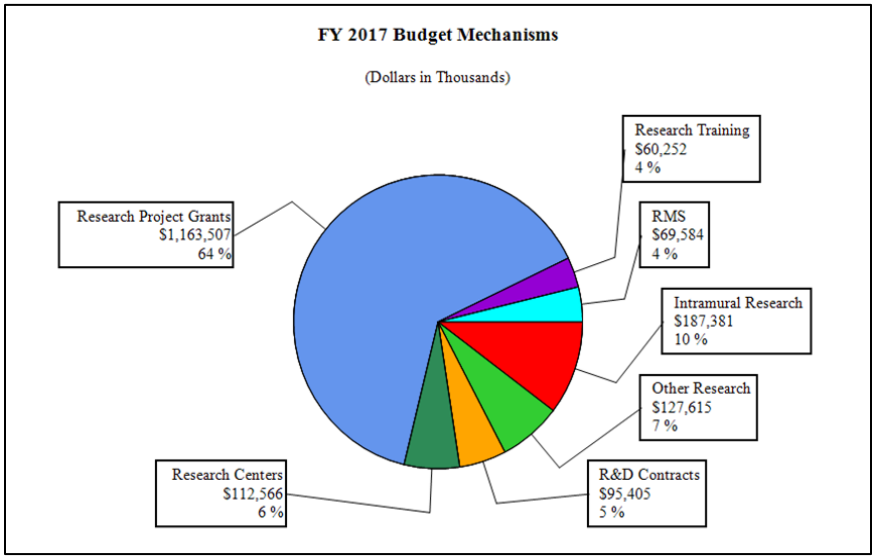
Fiscal Year 2017 Budget Graphs

History of Budget Authority and FTEs:

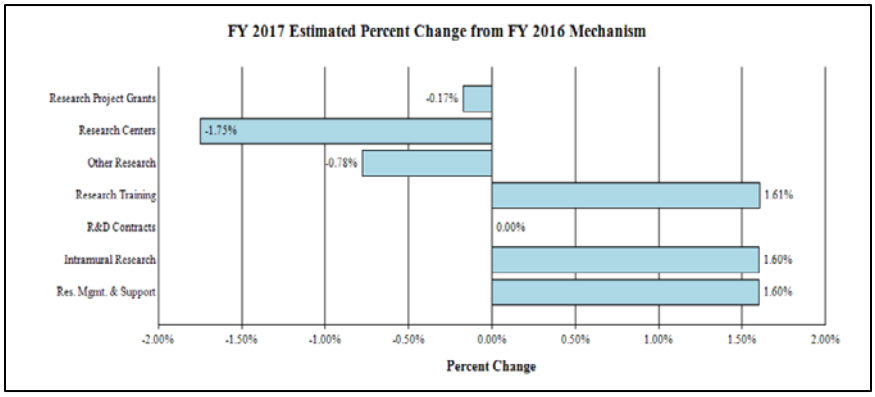




Distribution by Mechanism:



Change by Mechanism:



NATIONAL INSTITUTES OF HEALTH
National Institute of Diabetes and Digestive and Kidney Diseases

Budget Authority by Activity[1]
(Dollars in Thousands)

	FY 2015 Actual		FY 2016 Enacted		FY 2017 President's Budget[2]		FY 2017 +/- FY2016	
Extramural Research	**FTE**	**Amount**	**FTE**	**Amount**	**FTE**	**Amount**	**FTE**	**Amount**
Detail								
Diabetes, Endocrinology, and Metabolic Diseases		$618,830		$641,483		$639,822		-$1,661
Digestive Diseases and Nutrition		456,585		482,533		481,284		-1,249
Kidney, Urologic, and Hematologic Diseases		430,067		439,377		438,239		-1,138
Type 1 Diabetes		0		0		0		0
Subtotal, Extramural		**$1,505,482**		**$1,563,393**		**$1,559,345**		**-$4,048**
Intramural Research	**347**	**$177,678**	**350**	**$184,430**	**350**	**$187,381**	**0**	**$2,951**
Research Management & Support	**284**	**$65,980**	**287**	**$68,487**	**287**	**$69,584**	**0**	**$1,097**
TOTAL	**631**	**$1,749,140**	**637**	**$1,816,310**	**637**	**$1,816,310**	**0**	**$0**

[1] Includes FTEs whose payroll obligations are supported by the NIH Common Fund.
[2] Includes mandatory financing and excludes Special Diabetes program funding.

NATIONAL INSTITUTES OF HEALTH
National Institute of Diabetes and Digestive and Kidney Diseases

Authorizing Legislation

	PHS Act/ Other Citation	U.S. Code Citation	2016 Amount Authorized	FY 2016 Enacted	2017 Amount Authorized	FY 2017 President's Budget[1]
Research and Investigation	Section 301	42§241	Indefinite	$1,816,310,000	Indefinite	$1,786,086,000
National Institute of Diabetes and Digestive and Kidney Diseases	Section 401(a)	42§281	Indefinite		Indefinite	
Total, Budget Authority				$1,816,310,000		$1,786,086,000

[1]Excludes mandatory financing.

NATIONAL INSTITUTES OF HEALTH
National Institute of Diabetes and Digestive and Kidney Diseases

Appropriations History

Fiscal Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
2007	$1,844,298,000	$1,844,298,000	$1,857,753,000	$1,855,868,000
Rescission				$0
2008	$1,858,045,000	$1,881,893,000	$1,897,784,000	$1,855,868,000
Rescission				$0
Supplemental				$9,077,000
2009	$1,858,487,000	$1,767,071,000	$1,755,881,000	$1,911,338,000
Rescission				$0
2010	$1,931,494,000	$1,974,251,000	$1,940,518,000	$1,958,100,000
Rescission				$0
2011	$2,007,589,000		$2,004,674,000	$1,958,100,000
Rescission				($15,876,196)
2012	$1,987,957,000	$1,987,957,000	$1,922,045,000	$1,950,447,000
Rescission				($3,402,845)
2013	$1,942,107,000		$1,947,539,000	$1,797,044,155
Rescission				($3,594,088)
Sequestration				($97,849,260)
2014	$1,961,786,000		$1,949,745,000	$1,894,274,000
Rescission				$0
Sequestration				($10,800,000)
2015	$1,893,336,000			$1,899,681,000
Rescission				$0
2016	$1,938,133,000	$1,921,388,000	$1,975,162,000	$1,968,357,000
Rescission				$0
2017[1]	$1,966,310,000			

[1] Includes mandatory financing.

Justification of Budget Request

National Institute of Diabetes and Digestive and Kidney Diseases

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

Budget Authority (BA):

	FY 2015 Actual	FY 2016 Enacted	FY 2017 President's Budget[1]	FY 2017 +/- FY 2016
BA	$1,899,140,000	$1,966,310,000	$1,966,310,000	$0
Type 1 Diabetes	-$150,000,000	-$150,000,000	-$150,000,000	0
Labor/HHS:	$1,749,140,000	$1,816,310,000	$1,816,310,000	$0
FTEs	631	637	637	

[1] Includes mandatory financing

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 of Diabetes and Digestive and Kidney Diseases (NIDDK) is to support and conduct research to combat diabetes and other endocrine and metabolic diseases; liver and other digestive diseases; nutritional disorders; obesity; and kidney, urologic, and hematologic diseases. These diseases are chronic, common, costly, and consequential for patients, their families, and the Nation. Diabetes afflicts an estimated 29.1 million people in the United States, greatly increasing the risk for many serious complications, such as heart disease and kidney failure.[1] Estimates of chronic kidney disease (CKD) show that more than 20 million Americans are affected, and over 660,000 of these have kidney disease severe enough to require kidney replacement therapy.[2] Many urologic diseases are also highly prevalent.[3] Digestive diseases account for an estimated 72 million ambulatory care visits to doctor's offices, outpatient hospital clinics, and emergency departments, as well as 13.5 million hospitalizations with a primary or secondary diagnosis.[4] Obesity affects approximately one-third of U.S. adults and about 17 percent of children and adolescents, and is a strong risk factor for type 2 diabetes, nonalcoholic steatohepatitis (NASH), and many other diseases.[5]

[1] Centers for Disease Control and Prevention. National Diabetes Statistics Report: Estimates of Diabetes and Its Burden in the United States, 2014. Atlanta, GA: U.S. Department of Health and Human Services; 2014.
[2] Centers for Disease Control and Prevention. National Chronic Kidney Disease Fact Sheet, 2014. Atlanta, GA: U.S. Department of Health and Human Services; 2014.; U.S. Renal Data System, USRDS 2015 Annual Data Report: Atlas of Chronic Kidney Disease and End-Stage Renal Disease in the United States, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2015.
[3] NIDDK, NIH/DHHS. Kidney and urologic diseases statistics (http://kidney.niddk.nih.gov/statistics), 2010.
[4] Everhart JE, et al. Gastroenterology 136: 376-386, 2009.
[5] Ogden CL, et al. JAMA 311: 806-14, 2014.

Cystic fibrosis and other genetic diseases within NIDDK's purview are less widespread, but still devastating in their impact. Building on emerging opportunities from past research investments, NIDDK will continue to pursue discovery, clinical, and translational research; research training and career development; and health information dissemination, with continued focus on preserving a robust investigator-initiated research portfolio.

Theme 1: Foundation for Discoveries: Basic Research

In FY 2017, NIDDK will continue its support of multidisciplinary projects studying the gut microbiome; autoimmune diseases such as type 1 diabetes, celiac disease, inflammatory bowel diseases, autoimmune liver diseases, and some forms of CKD; and metabolic conditions including obesity, type 2 diabetes, and NASH. The NIH Common Fund's Stimulating Peripheral Activity to Relieve Conditions program will promote development of technologies to explore how the peripheral nervous system controls organ function, including that of the lower urinary tract. Investigators working in mouse model systems identified a type of fat molecule that may improve blood glucose control and reduce inflammation and showed for the first time that a virus in the intestinal tract could have beneficial effects similar to those granted by gut bacteria.[6,7] Researchers also revealed a critical role for immune cells in the development and activity of calorie-burning beige fat, and another group developed a new research model of the human small intestine by growing intestinal tissue from human stem cells.[8,9] A new imaging technique has also given novel insights into chemotherapy-induced CKD in mice which may lead to better prevention strategies in people.[10]

Theme 2: The Promise of Precision Medicine

In FY 2017, NIDDK will continue its support of investigations into how individual variability in genes, environment, and lifestyle affect disease biology. The Diabetes Prevention Program Outcomes Study will investigate how such variability influences the response to interventions to delay type 2 diabetes. The Human Heredity and Health in Africa Initiative will continue to support a network of African investigators to study the interplay between environmental and genetic factors affecting the health of African populations. Research in humans and in mice has shed new light on how genetic factors shape the composition of the gut microbial community and can affect metabolism.[11] Genetic research has more than doubled the number of DNA regions known to be associated with obesity and body fat distribution patterns and found six new genetic regions associated with risk of developing inflammatory bowel disease and immunoglobulin A nephropathy, a major cause of kidney failure worldwide.[12,13]

[6] Yore, et al. Cell 159:318-32, 2014.
[7] Kernbauer E, et al. Nature 516: 94-98, 2014.
[8] Brestoff JR, et al. Nature 519: 242-246, 2015.; Lee M-W, et al. Cell 160: 74-87, 2015.
[9] Watson CL, et al. Nat Med 20: 1310-1314, 2014.
[10] Torres R, et al. J Am Soc Nephrol 2015 Aug 24. pii: ASN.2015010079.
[11] Goodrich JK, et al. Cell 159: 789-99, 2014.; Ussar S, et al. Cell Metab 22:516-530, 2015.
[12] Shungin, et al. Nature 518:187-96, 2015.; Locke, et al. Nature 518:197-206, 2015.
[13] Kiryluk K, et al. Nat Genet 46: 1187-1196, 2014.

Theme 3: Applying Big Data and Technology to Improve Health
In FY 2017, NIDDK will encourage the development of artificial pancreas technology by expanding research testing current and novel artificial pancreas systems. Input from an October 2015 NIDDK conference on using health information technology (HIT) to identify and manage the care of people with CKD will inform FY 2017 education efforts on using HIT to better the lives of people with chronic disease. Also, through the NIH Common Fund, the ICD-Pieces trial will test whether a collaborative model of primary and subspecialty care enhanced by a novel HIT platform will result in better care and quality of life for those with multiple conditions, such as CKD, diabetes, and hypertension. NIDDK will continue to capitalize on advances in large-scale, high-throughput genetic analysis to investigate the genetic causes of disease, including through its support of the Inflammatory Bowel Disease Genetics Consortium.

Theme 4: Stewardship to Inspire Public Trust
In FY 2017, NIDDK will continue to foster the next generation of researchers by providing special funding consideration and mentoring opportunities for talented new investigators. The training and mentorship opportunities for underrepresented minorities offered by the Short-Term Research Experience for Underrepresented Persons program and the Network of Minority Health Research Investigators will continue to promote a diverse scientific research pipeline. FY 2017 diabetes initiatives will be informed by recent meetings of the NIDDK-led Diabetes Mellitus Interagency Coordinating Committee, focused on identifying gaps and opportunities in type 1 and type 2 diabetes research, and by a series of webinars soliciting further input from the research community. NIDDK will continue several public-private research partnerships, including the Hepatitis B Research Network and the PROTECT-UC study, which investigates new treatments for pediatric colitis. NIDDK will also collaborate with other NIH ICs as part of an NIH Common Fund program to investigate how physical activity translates into better health.

Program Descriptions and Accomplishments

Diabetes, Endocrinology, and Metabolic Diseases: The objectives of this program are to enhance the understanding of diabetes and other endocrine and metabolic disorders, and to develop and test prevention and treatment strategies. The program supports basic, clinical, and translational research, as well as research training, in areas that include type 1 and type 2 diabetes, cystic fibrosis, obesity, energy balance, and endocrinology. Knowledge from diabetes research is communicated to patients, health professionals, and the public through the National Diabetes Information Clearinghouse and the National Diabetes Education Program.

Recent NIDDK-supported research has made important contributions to the treatment and prevention of diseases that are associated with the endocrine system and metabolism, such as diabetes. To expand upon this progress, NIDDK participates in the Accelerating Medicines Partnership (AMP) Type 2 Diabetes Project, a public-private partnership between NIH, the Food and Drug Administration (FDA), 10 biopharmaceutical companies, and multiple non-profit organizations, that seeks to identify and validate the most promising biological targets of this disease for new diagnostic and drug development. AMP has developed and is continuing to expand a Knowledge Portal to leverage the dramatic, NIH-led progress in understanding type 2 diabetes genetics.[14] The Portal includes data from more than 100,000 de-identified genetic

[14] http://www.type2diabetesgenetics.org/

samples collected by several major international networks through decades of research. The Portal allows open-access searching of human genetic and clinical information on type 2 diabetes and provides a way to identify the most promising therapeutic targets for diabetes from troves of potentially relevant human data.

Program Portrait: Glycemia Reduction Approaches in Diabetes: A Comparative Effectiveness Study (GRADE)

FY 2016 Level: $29.5 million
FY 2017 Level: $29.8 million
Change: +$0.3 million

Diabetes places an enormous public health burden on the Nation. Direct and indirect medical costs to the country reached an estimated $245 billion in 2012. Improving medical therapy for diabetes can help to slow the loss of insulin production and reduce development of the associated complications, which can be life-threatening and costly to treat. Therefore, research to find the best ways to optimize treatment and prevention of type 2 diabetes can have a major public health impact by improving health of patients and reducing costs associated with treatment and complications. The safe and well-tolerated drug metformin is the first-line medication of choice for most people with type 2 diabetes, but most people with the disease eventually come to need two or more medications to properly control their blood glucose. A critical question is: Which of the many other FDA-approved alternatives available is best when metformin alone is not sufficient? GRADE is a major trial that recently began to compare commonly used diabetes medications, with the goal of determining which drug – in combination with metformin – is most safe and effective for patients. The study will compare drug effects on glucose levels, adverse effects, diabetes complications and quality of life over an average of nearly five years. GRADE will recruit 5,000 participants diagnosed with type 2 diabetes within the last 10 years at 45 clinical sites around the country and will include broad representation of racial/ethnic groups disproportionately affected by type 2 diabetes.

Budget Policy: The FY 2017 President's Budget estimate for this program is $639.822 million, a decrease of $1.661 million or 0.2 percent compared to the FY 2016 Enacted level. With FY 2017 resources, NIDDK will continue major diabetes clinical trials and encourage and support development of major new investigator-initiated clinical studies. FY 2017 funds will also support research capitalizing on new opportunities to identify diabetes risk genes in minority populations, to advance progress toward developing new therapeutic approaches, and to support comparative effectiveness research. NIDDK will also continue to fund translational research in FY 2017 and support health information dissemination activities to bring scientific discoveries in diabetes and obesity to real-world medical practice and other community settings. In FY 2017, NIDDK will continue an initiative encouraging collaborative, multidisciplinary research teams to work on complex biomedical problems in diabetes, endocrinology, and metabolic diseases. NIDDK will also continue funding for research centers to advance research relevant to diabetes and to cystic fibrosis and other genetic metabolic diseases. NIDDK plans for FY 2017 include capitalizing on new findings relevant to brown fat and gestational diabetes and pursuing other efforts as part of an overall balanced research program.

Digestive Diseases and Nutrition: The objectives of this program are to enhance understanding of digestive diseases, nutrition, and obesity, and to develop and test strategies for disease prevention and treatment. This program supports discovery, clinical, and translational research, and research training. The supported research includes fundamental studies of the digestive system; targeted studies involving diseases of the esophagus, stomach, small intestine, large intestine and anorectum, liver and biliary system, and pancreas; studies relevant to nutrition; and research on obesity. Insights gleaned from scientific efforts are communicated to patients, health professionals, and the public through NIDDK's National Digestive Diseases Information Clearinghouse and Weight-control Information Network.

In FY 2017, NIDDK will continue to support programs aimed at improving the treatment and prevention of diseases associated with the digestive system. NIDDK sponsored meetings in 2015 to identify digestive-disease related research opportunities, in collaboration with both federal and non-federal partners. These included a workshop focusing on liver injury associated with herbal and dietary supplements, a workshop on the development of new pancreatic disease biomarkers, and a symposium exploring the function of the lymphatic system in organ-specific health and disease. NIDDK will support research to define interactions between the host and the gut microbiota that regulate normal physiology and pathophysiology of diseases. The goal of these projects is to discover specific human gut microbiota-derived factors that affect or are affected by host physiology and disease and to define the specific interactions and pathways by which these factors affect host processes within the gut and/or at distant organ sites. In 2015, the Digestive Diseases and Nutrition division released two funding opportunity announcements to encourage research on the human microbiome and its effects on human nutrition, obesity, and digestive and liver diseases. NIDDK will also continue to support the Hepatitis B Research Network, which is testing treatments in at-risk populations of both children and adults, such as Asian Americans and Pacific Islanders, as well as conducting ancillary studies and assembling a large biospecimen repository and clinical database for future studies. A free source of evidence-based information for health care professionals and for researchers studying liver injury associated with prescription and over-the-counter drugs, herbals, and dietary supplements is produced by the NIDDK together with the National Library of Medicine.[15]

[15] www.livertox.nih.gov

Program Portrait: Consortium for the Study of Chronic Pancreatitis, Diabetes, and Pancreatic Cancer

FY 2016 Level: $3.5 million
FY 2017 Level: $3.5 million
Change: $0.0 million

Chronic pancreatitis (CP) is a progressive, debilitating, incurable disease that affects 120,000 to 150,000 people in the United States. People with CP experience progressive loss of pancreatic function, resulting in nutritional and metabolic disease characterized by malnutrition and secondary (type 3c) diabetes. The risk of pancreatic cancer increases progressively with the duration of the disease, and is highest in patients with CP accompanied by type 3c diabetes. The factors which determine the initiation of CP, the loss of pancreatic function, and CP's possible links to pancreatic cancer are all unclear.

In conjunction with the National Cancer Institute (NCI), the NIDDK has recently funded a new multi-center Consortium for the Study of Chronic Pancreatitis, Diabetes and Pancreatic Cancer to pursue clinical research on pancreatic diseases, including CP, acute recurring pancreatitis (ARP), pancreatic cancer, and the type 3c diabetes that may result from these diseases. The Consortium will include up to nine Clinical Centers that will work to establish and characterize a large cohort of pediatric and adult patients with CP and ARP to encourage translational research. The Consortium's work will include conducting studies to improve understanding of disease processes and related outcomes such as diabetes and pancreatic cancer development. The Consortium will also undertake studies on the development of pancreatic cancer in newly diagnosed diabetic patients. In addition, a major collaborative effort within the Consortium will be the establishment of an annotated repository of biospecimens (blood, pancreatic and duodenal juice, stools, and, when feasible, pancreatic tissue) to allow for the identification and validation of disease biomarkers to measure disease risk and/or to allow early detection of disease.

Budget Policy: The FY 2017 President's Budget estimate for this program is $481.284 million, a decrease of $1.249 million or 0.2 percent compared to the FY 2016 Enacted level. In FY 2017, NIDDK will continue major clinical research networks to help understand and treat liver diseases, including hepatitis B and nonalcoholic steatohepatitis. Among its obesity-related efforts in FY 2017, NIDDK will support major ongoing studies to assess the health risks and benefits of weight-loss surgery in extremely obese adolescents and the impact of lifestyle interventions to reduce excessive weight gain in overweight and obese pregnant women. NIDDK will also use FY 2017 funds to support Digestive Diseases Research Core Centers, and to sustain a consortium that is conducting cutting-edge genetic research on inflammatory bowel diseases. Research on intestinal stem cells that can benefit a variety of digestive diseases will continue in FY 2017, along with other efforts as part of an overall balanced research program.

Kidney, Urologic, and Hematologic Diseases: The objectives of this program are to increase the understanding of diseases and disorders of the kidneys, urinary tract, and blood (hematologic), and to develop and test prevention and treatment strategies. Discovery, clinical, and translational research, as well as research training, are supported in the areas of kidney disease, including chronic kidney disease (CKD), diabetic kidney disease, end-stage renal disease (ESRD or kidney failure), polycystic kidney disease, and many other kidney diseases; urologic disease, including urinary incontinence, benign prostatic hyperplasia, interstitial cystitis/painful bladder syndrome, stones, impotence, congenital urologic disorders, and urinary tract infections; and disorders of the blood and blood-forming organs, including sickle cell disease, Cooley's anemia, hemochromatosis, and anemia due to inflammation and chronic disease.

In FY 2017 NIDDK will continue to support research aimed at improving the treatment and prevention of kidney, urologic, and hematologic diseases. Two reports from the HALT-PKD study have shown that using two drugs is no more effective than a single drug in slowing disease progression in people with autosomal dominant polycystic kidney disease.[16] Another group showed that people who choose to donate one of their kidneys to someone with kidney failure remain relatively healthy three years after their donation, suggesting that living donor kidney donation can improve the health of donor recipients without compromising the health of the donor, at least within the first three years after donation.[17] Researchers also discovered new insights that could yield novel, non-antibiotic approaches to treat and prevent urinary tract infections. One group of scientists discovered a new mechanism by which bacteria such as *E. coli* survive and promote urinary tract infections, and another found that in mice, bacteria that do not cause symptomatic urinary tract infections may be an effective therapy against ones that do.[18] Investigations also have begun to identify some of the regulatory mechanisms that govern pluripotency, or the ability that allows certain types of stem cells to give rise to many different types of tissues. Knowing how to control the path these pluripotent stem cells take will allow for more efficient use of these cells in disease treatments or regenerative medicine.[19]

[16] Schrier RW, et al. New Engl J Med 371: 2255-2266, 2014.; Torres VE, et al. New Engl J Med 371: 2267-2276, 2014.
[17] Kasiske BL, et al. Am J Kidney Dis 66: 114-124, 2015.
[18] Nagamatsu K, et al. Proc Natl Acad Sci U S A 112:E871-80, 2015.; Rudick CN, et al. PLoS One 9: e109321, 2014.
[19] Kumar RM, et al. Nature 516: 56-61, 2014.

Program Portrait: Multidisciplinary Approach to the Study of Chronic Pelvic Pain (MAPP) Research Network

FY 2016 Level: $7.5 million
FY 2017 Level: $7.5 million
Change: $0.0 million

The urologic chronic pelvic pain syndromes (UCPPS) interstitial cystitis/painful bladder syndrome (IC/PBS) and chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS) reduce quality of life and productivity and incur significant health care costs for millions of Americans. The NIDDK-sponsored multi-site MAPP Research Network was established to conduct innovative, collaborative studies of IC/PBS and CP/CPPS that can pave the way to understanding the cause(s) of these conditions, improved diagnosis, more effective treatments, and ways to prevent onset. The Network is also studying the possible relationships between urologic pelvic pain and other chronic pain disorders, such as irritable bowel syndrome and fibromyalgia. During Phase I of the Network, tremendous progress was made in studies conducted through six Discovery Sites, a Data Coordinating Center, and a Tissue and Technology Center. Network scientists recently reported a variety of differences in brain structure and function between women and men with UCPPS and healthy counterparts, findings now being pursued to determine the potential role(s) of these differences in symptom manifestation, maintenance, and amelioration. Another report described the burden and impact of self-reported symptom flares on quality of life for women with IC/PBS. Other findings emerging from Network studies include insights into the course of UCPPS in women and men; potential biomarkers; differences between patients and healthy controls in microbes associated with the bladder; characterization of different, potentially clinically relevant subgroups among people with UCPPS; and tools to track symptom changes and outcomes in people with UCPPS over time. With co-funding from the NIH Office of Research on Women's Health, NIDDK renewed this very productive Network for a second five year phase in FY 2014 through issuance of two funding opportunity announcements, in order to continue efforts that it is hoped will provide a foundation for effective clinical interventions for IC/PBS and CP/CPPS. Additionally, the Network has been enhanced in Phase II by the integration of three additional Discovery Sites. More information can be found at the MAPP Research Network website. [20]

Budget Policy: The FY 2017 President's Budget estimate for this program is $438.239 million, a decrease of $1.138 million or 0.2 percent compard to the FY 2016 Enacted level. In FY 2017, NIDDK will continue support for ongoing major clinical studies of CKD in adults and children and fund new research to identify and validate biomarkers and risk assessment tools for patients with this condition. NIDDK also plans to continue to sponsor planning grants to conduct translational research on the effectiveness of interventions shown in clinical trials to prevent, treat, and manage CKD, and will continue to sponsor studies to improve adherence to medical therapy in adolescents with CKD. In FY 2017, NIDDK will continue studies to improve measurements of outcomes in lower urinary tract disorders of the prostate and urinary bladder. Centers focused on kidney, urologic, and hematologic research will receive continued funding, as will research on acute kidney injury. NIDDK will also continue support for the Time to Reduce Mortality in End-Stage Renal Disease (TiME) trial and for other efforts as part of an overall balanced research portfolio.

Special Statutory Funding Program for Type 1 Diabetes Research: Complementing efforts of the Diabetes, Endocrinology, and Metabolic Disease program, the Special Program's goal is to foster improved treatment, prevention, and cure of type 1 diabetes and its complications through basic, clinical, and translational research around six scientific goals: 1) identifying genetic and environmental causes of type 1 diabetes ($26 million); 2) preventing or reversing the disease ($53 million); 3) developing cell replacement therapy ($16 million); 4) improving management

[20] http://www.mappnetwork.org

and care ($30 million); 5) preventing or reducing diabetes complications ($17 million); and 6) attracting new talent and applying new technologies to research ($8 million) (FY 2017 estimate dollars). Although focused on type 1 diabetes, aspects of this research are relevant to other autoimmune disorders, as well as type 2 diabetes. Both type 1 and type 2 diabetes share impaired function of insulin-producing beta cells of the pancreas along with potential complications, such as heart disease, stroke, blindness, kidney failure, nerve damage, and lower limb amputations. In FY 2017, NIDDK plans to support new research in several areas, including: advanced clinical trials to test artificial pancreas device systems in people with type 1 diabetes, as well as research into behavioral and psychosocial factors that affect the use of these devices; the genetic causes of type 1 diabetes and small business research to develop new type 1 diabetes diagnostic technologies; clinical trials networks to test agents to prevent or reverse type 1 diabetes; and, to maximize past investments in clinical research, ancillary studies using archived samples to investigate type 1 diabetes causes, progression, and development of diabetic complications.

Budget Policy: The FY 2017 President's Budget for the Special Statutory Funding Program for Type 1 Diabetes Research is $150.000 million as authorized.

Intramural Research: The objective of the NIDDK's Intramural Research Program (IRP) is to conduct basic, translational, and clinical biomedical research related to diabetes and other endocrine and metabolic diseases; digestive diseases, including liver diseases and nutritional disorders; obesity; kidney diseases; and hematologic diseases. Intramural research is conducted in the Institute's laboratories and clinical facilities in Bethesda, Maryland, as well as in Phoenix, Arizona, where a long-standing research relationship with the Pima Indians in the region, who have the highest rate of diabetes in the world, has led to important scientific advances in type 2 diabetes and obesity. For example, IRP is using genome-wide association studies on large cohorts of Americans Indians to continue to identify genes (e.g., FOXO1A) linked to an increased risk for obesity and diabetes.[21] IRP also provided the first in lab studies showing variability between individuals in energy expenditure (calorie burning) after fasting and overfeeding may play a role in weight loss.[22] IRP research on hepatitis C revealed the efficacy of an over-the-counter drug for inhibiting infection in cultured cells in the laboratory and in animal studies, paving the way for in-human trials of this safe and affordable alternative treatment.[23] Other IRP research determined the first causative mutation for human carcinoid tumors of the gastrointestinal tract, identified a potential new therapy for hepatitis D infection, determined the structure of a protein/DNA complex needed to generate the diverse antibody repertoire in humans, and extended our understanding of the relationship between body temperature and energy expenditure for modeling human energy homeostasis.[24,25,26,27] Research training is also an integral component of the IRP. This training occurs in both clinical and basic laboratory research at the high school, postbaccalaureate, postdoctoral, and clinical fellow levels, including summer programs specifically targeting under-represented minorities.

[21] Muller YL, et al. Obesity 23: 1960-1965, 2015.
[22] Reinhardt M, et al. Diabetes 64, 2859-2867, 2015.
[23] He S, et al. Sci Transl Med 7, 282ra49, 2015.
[24] Sei Y, et al. Gastroenterology 149, 67-78, 2015.
[25] Koh C, et al. Lancet Infect Dis 15, 1167-1174, 2015.
[26] Kim MS, et al. Nature 518, 507-511, 2015.
[27] Abreu-Vielra G, et al. Mol Metab 4, 461-470, 2015.

Budget Policy: The FY 2017 President's Budget estimate for this program is $187.381 million or 1.06 percent above the FY 2016 Enacted level.

Research Management and Support (RMS): RMS activities provide administrative, budgetary, logistical, and scientific support in the review, award, and monitoring of research grants, training awards, and research and development contracts. RMS functions also encompass strategic planning, coordination, and evaluation of the Institute's programs, regulatory compliance, international coordination, and liaison with other Federal agencies, Congress, and the public. Through RMS activities, NIDDK continues to administratively support meritorious discovery, clinical, and translational research and research training efforts, and also continues its health information dissemination and education/outreach activities.

Budget Policy: The FY 2017 President's Budget estimate for this program is $69.584 million or 1.06 percent above the FY 2016 Enacted level.

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Budget Authority by Object Class[1]

(Dollars in Thousands)

	FY 2016 Enacted	FY 2017 President's Budget[2]	FY 2017 +/- FY 2016
Total compensable workyears:			
Full-time employment	637	637	0
Full-time equivalent of overtime and holiday hours	1	1	0
Average ES salary	$185	$186	$1
Average GM/GS grade	12.0	12.0	0.0
Average GM/GS salary	$103	$103	$1
Average salary, grade established by act of July 1, 1944 (42 U.S.C. 207)	$111	$112	$1
Average salary of ungraded positions	$95	$96	$1

	OBJECT CLASSES	FY 2016 Enacted	FY 2017 President's Budget[2]	FY 2017 +/- FY 2016
	Personnel Compensation			
11.1	Full-Time Permanent	$37,647	$37,921	$275
11.3	Other Than Full-Time Permanent	35,218	35,475	257
11.5	Other Personnel Compensation	1,535	1,546	11
11.7	Military Personnel	1,566	1,577	11
11.8	Special Personnel Services Payments	12,312	12,500	188
11.9	**Subtotal Personnel Compensation**	**$88,277**	**$89,020**	**$743**
12.1	Civilian Personnel Benefits	$24,363	$25,031	$669
12.2	Military Personnel Benefits	1,184	1,193	9
13.0	Benefits to Former Personnel	0	0	0
	Subtotal Pay Costs	**$113,824**	**$115,244**	**$1,420**
21.0	Travel & Transportation of Persons	$2,134	$2,134	$0
22.0	Transportation of Things	185	182	-2
23.1	Rental Payments to GSA	0	0	0
23.2	Rental Payments to Others	0	0	0
23.3	Communications, Utilities & Misc. Charges	1,699	1,696	-3
24.0	Printing & Reproduction	5	5	0
25.1	Consulting Services	$2,707	$2,405	-$302
25.2	Other Services	19,703	18,824	-879
25.3	Purchase of goods and services from government accounts	165,867	177,383	11,516
25.4	Operation & Maintenance of Facilities	$1,653	$1,653	$0
25.5	R&D Contracts	21,576	16,576	-5,000
25.6	Medical Care	1,626	1,626	0
25.7	Operation & Maintenance of Equipment	5,364	5,364	0
25.8	Subsistence & Support of Persons	0	0	0
25.0	**Subtotal Other Contractual Services**	**$218,496**	**$223,831**	**$5,335**
26.0	Supplies & Materials	$13,108	$13,212	$104
31.0	Equipment	7,421	7,597	176
32.0	Land and Structures	0	0	0
33.0	Investments & Loans	0	0	0
41.0	Grants, Subsidies & Contributions	1,459,438	1,452,408	-7,030
42.0	Insurance Claims & Indemnities	0	0	0
43.0	Interest & Dividends	0	0	0
44.0	Refunds	0	0	0
	Subtotal Non-Pay Costs	**$1,702,486**	**$1,701,066**	**-$1,420**
	Total Budget Authority by Object Class	**$1,816,310**	**$1,816,310**	**$0**

[1] Includes FTEs whose payroll obligations are supported by the NIH Common Fund.

[2] Includes mandatory financing.

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Salaries and Expenses
(Dollars in Thousands)

OBJECT CLASSES	FY 2016 Enacted	FY 2017 President's Budget	FY 2017 +/- FY 2016
Personnel Compensation			
Full-Time Permanent (11.1)	$37,647	$37,921	$275
Other Than Full-Time Permanent (11.3)	35,218	35,475	257
Other Personnel Compensation (11.5)	1,535	1,546	11
Military Personnel (11.7)	1,566	1,577	11
Special Personnel Services Payments (11.8)	12,312	12,500	188
Subtotal Personnel Compensation (11.9)	**$88,277**	**$89,020**	**$743**
Civilian Personnel Benefits (12.1)	$24,363	$25,031	$669
Military Personnel Benefits (12.2)	1,184	1,193	9
Benefits to Former Personnel (13.0)	0	0	0
Subtotal Pay Costs	**$113,824**	**$115,244**	**$1,420**
Travel & Transportation of Persons (21.0)	$2,134	$2,134	$0
Transportation of Things (22.0)	185	182	-2
Rental Payments to Others (23.2)	0	0	0
Communications, Utilities & Misc. Charges (23.3)	1,699	1,696	-3
Printing & Reproduction (24.0)	5	5	0
Other Contractual Services:			
Consultant Services (25.1)	994	993	-2
Other Services (25.2)	19,703	18,824	-879
Purchases from government accounts (25.3)	111,208	113,823	2,616
Operation & Maintenance of Facilities (25.4)	1,653	1,653	0
Operation & Maintenance of Equipment (25.7)	5,364	5,364	0
Subsistence & Support of Persons (25.8)	0	0	0
Subtotal Other Contractual Services	**$138,922**	**$140,656**	**$1,735**
Supplies & Materials (26.0)	$13,108	$13,212	$104
Subtotal Non-Pay Costs	**$156,053**	**$157,886**	**$1,834**
Total Administrative Costs	**$269,876**	**$273,130**	**$3,254**

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Detail of Full-Time Equivalent Employment (FTE)

OFFICE/DIVISION	FY 2015 Actual			FY 2016 Enacted			FY 2017 President's Budget		
	Civilian	Military	Total	Civilian	Military	Total	Civilian	Military	Total
Division of Diabetes, Endocrinology, and Metabolic Diseases									
Direct:	27	2	29	28	2	30	28	2	30
Reimbursable:	1	-	1	1	-	1	1	-	1
Total:	28	2	30	29	2	31	29	2	31
Division of Digestive Diseases and Nutrition									
Direct:	21	2	23	22	2	24	22	2	24
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	21	2	23	22	2	24	22	2	24
Division of Extramural Activities									
Direct:	67	1	68	67	1	68	67	1	68
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	67	1	68	67	1	68	67	1	68
Division of Intramural Research Programs									
Direct:	338	8	346	341	8	349	341	8	349
Reimbursable:	1	-	1	1	-	1	1	-	1
Total:	339	8	347	342	8	350	342	8	350
Division of Kidney, Urologic, and Hematologic Diseases									
Direct:	24	-	24	24	-	24	24	-	24
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	24	-	24	24	-	24	24	-	24
Division of Nutrition Research Coordination									
Direct:	7	-	7	-	-	-	-	-	-
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	7	-	7	-	-	-	-	-	-
Office of the Director									
Direct:	132	-	132	140	-	140	140	-	140
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	132	-	132	140	-	140	140	-	140
Total	618	13	631	624	13	637	624	13	637
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
FISCAL YEAR	**Average GS Grade**								
2013	12.0								
2014	12.0								
2015	12.0								
2016	12.0								
2017	12.0								

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Detail of Positions[1]

GRADE	FY 2015 Actual	FY 2016 Enacted	FY 2017 President's Budget
Total, ES Positions	1	1	1
Total, ES Salary	181,726	184,652	186,000
GM/GS-15	52	50	50
GM/GS-14	67	68	68
GM/GS-13	95	97	97
GS-12	66	68	68
GS-11	29	31	30
GS-10	0	0	0
GS-9	26	28	30
GS-8	16	16	16
GS-7	24	22	21
GS-6	4	4	4
GS-5	3	4	4
GS-4	1	0	0
GS-3	0	0	0
GS-2	0	0	0
GS-1	0	0	0
Subtotal	383	388	388
Grades established by Act of July 1, 1944 (42 U.S.C. 207)	0	0	0
Assistant Surgeon General	0	0	0
Director Grade	9	9	9
Senior Grade	3	3	3
Full Grade	0	0	0
Senior Assistant Grade	1	1	1
Assistant Grade	0	0	0
Subtotal	13	13	13
Ungraded	255	258	258
Total permanent positions	388	392	392
Total positions, end of year	652	660	660
Total full-time equivalent (FTE) employment, end of year	631	637	637
Average ES salary	181,726	184,652	186,000
Average GM/GS grade	12.0	12.0	12.0
Average GM/GS salary	101,025	102,652	103,401

[1] Includes FTEs whose payroll obligations are supported by the NIH Common Fund.