

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
NATIONAL INSTITUTES OF HEALTH

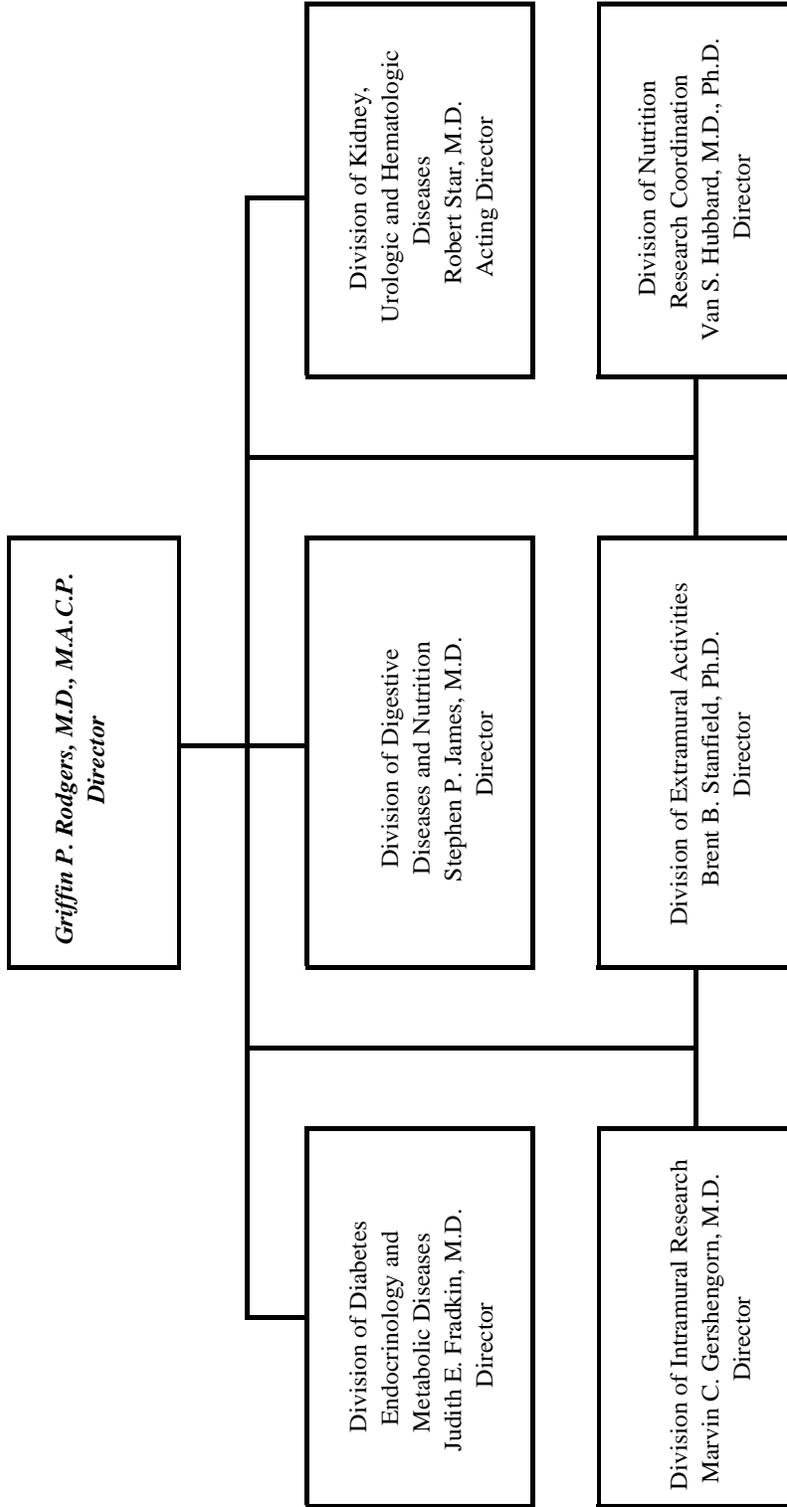
National Institute of Diabetes and Digestive and Kidney Diseases

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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 Public Health Service Act with respect to diabetes and digestive and kidney diseases, ~~\$1,736,199,000~~ **\$1,708,487,000**

(Department of Health and Human Services Appropriation Act, 2008)

**National Institutes of Health  
National Institute of Diabetes and Digestive and Kidney Diseases**

**Amounts Available for Obligation 1/**

Source of Funding	FY 2007 Actual	FY 2008 Enacted	FY 2009 Estimate
Appropriation	\$1,704,925,000	\$1,736,199,000	\$1,708,487,000
Pay cost add-on	943,000		
Type 1 Diabetes <u>2/</u>	150,000,000	150,000,000	150,000,000
Rescission		-30,331,000	
Subtotal, adjusted appropriation	1,855,868,000	1,855,868,000	1,858,487,000
Real transfer under Director's one-percent transfer authority (GEI)	2,872,000		
Comparative transfer to NIBIB	-76,000		
Comparative transfer to OD	-34,000		
Comparative transfer to NCRR	-529,000		
Comparative transfers to the Office of the Assistant Secretary for Admin. and Mgmt. and to the Office of the Assistant Secretary for Public Affairs	-3,000		
Comparative transfer from NHLBI for administration of NIBIB's Director's laboratory	800,000	816,000	
Comparative transfer under Director's one-percent transfer authority (GEI)	-2,872,000		
Subtotal, adjusted budget authority	1,856,026,000	1,856,684,000	1,858,487,000
Unobligated balance lapsing	-6,000		
Total obligations	1,856,020,000	1,856,684,000	1,858,487,000

1/ Excludes the following amounts for reimbursable activities carried out by this account:

FY 2007 - \$9,335,000    FY 2008 - \$15,000,000    FY 2009 - \$15,000,000

Excludes \$5,000,000 in FY 2008 and \$5,000,000 in FY 2009 for royalties.

2/ Type 1 Diabetes Special Statutory Authority in Accordance with P.L. 106-554 and P.L. 107-360.

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

(Dollars in Thousands)

Budget Mechanism - Total

MECHANISM	FY 2007 Actual		FY 2008 Enacted		FY 2009 Estimate		Change	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Grants:								
<u>Research Projects:</u>								
Noncompeting	2,383	\$911,166	2,234	\$882,298	2,214	\$842,047	(20)	-\$40,251
Administrative supplements	(213)	36,525	(176)	27,239	(213)	36,525	(37)	9,286
<u>Competing:</u>								
Renewal	264	101,347	271	105,181	298	115,561	27	10,380
New	453	132,626	466	137,643	512	151,226	46	13,583
Supplements	0	0	0	0	0	0	0	0
Subtotal, competing	717	233,973	737	242,824	810	266,787	73	23,963
Subtotal, RPGs	3,100	1,181,664	2,971	1,152,361	3,024	1,145,359	53	-7,002
SBIR/STTR	107	45,339	108	45,452	108	45,347	0	-105
Subtotal, RPGs	3,207	1,227,003	3,079	1,197,813	3,132	1,190,706	53	-7,107
<u>Research Centers:</u>								
Specialized/comprehensive	80	87,607	80	91,368	82	92,868	2	1,500
Clinical research	0	0	0	0	0	0	0	0
Biotechnology	0	0	0	0	0	0	0	0
Comparative medicine	1	4,902	1	4,902	1	5,047	0	145
Research Centers in Minority Institutions	0	0	0	0	0	0	0	0
Subtotal, Centers	81	92,509	81	96,270	83	97,915	2	1,645
<u>Other Research:</u>								
Research careers	521	67,209	535	71,202	542	73,572	7	2,370
Cancer education	0	0	0	0	0	0	0	0
Cooperative clinical research	0	3,024	0	3,024	0	3,000	0	-24
Biomedical research support	0	0	0	0	0	0	0	0
Minority biomedical research support	0	509	0	509	0	509	0	0
Other	100	31,464	100	32,264	100	32,290	0	26
Subtotal, Other Research	621	102,206	635	106,999	642	109,371	7	2,372
<b>Total Research Grants</b>	<b>3,909</b>	<b>1,421,718</b>	<b>3,795</b>	<b>1,401,082</b>	<b>3,857</b>	<b>1,397,992</b>	<b>62</b>	<b>-3,090</b>
<u>Research Training:</u>								
Individual awards	159	7,359	159	7,359	159	7,419	0	60
Institutional awards	952	47,059	947	46,768	966	48,084	19	1,316
Total, Training	1,111	54,418	1,106	54,127	1,125	55,503	19	1,376
Research & development contracts (SBIR/STTR)	287 (3)	156,606 (105)	343 (3)	174,001 (105)	343 (3)	174,105 (105)	0 (0)	104 (0)
<u>Intramural research</u>	<u>414</u>	<u>164,732</u>	<u>414</u>	<u>168,043</u>	<u>414</u>	<u>170,564</u>	<u>0</u>	<u>2,521</u>
<u>Research management and support</u>	<u>222</u>	<u>58,552</u>	<u>223</u>	<u>59,431</u>	<u>228</u>	<u>60,323</u>	<u>5</u>	<u>892</u>
<b>Total, NIDDK</b>	<b>636</b>	<b>1,856,026</b>	<b>637</b>	<b>1,856,684</b>	<b>642</b>	<b>1,858,487</b>	<b>5</b>	<b>1,803</b>

Includes FTEs which are reimbursed from the NIH Roadmap for Medical Research

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

(Dollars in Thousands)

Budget Mechanism - Type 1 Diabetes Special Statutory Authority Funding Only

MECHANISM	FY 2007 Actual		FY 2008 Enacted		FY 2009 Estimate		Change	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Grants:								
<u>Research Projects:</u>								
Noncompeting	84	\$57,660	84	\$56,507	86	\$57,202	2	\$695
Administrative supplements	(13)	9,066	(16)	13,239	(13)	9,066	(-3)	-4,173
Competing:								
Renewal	0	0	0	0	0	0	0	0
New	10	4,498	0	0	0	0	0	0
Supplements	0	0	0	0	0	0	0	0
Subtotal, competing	10	4,498	0	0	0	0	0	0
Subtotal, RPGs	94	71,224	84	69,746	86	66,268	2	-3,478
SBIR/STTR	7	4,167	7	4,167	7	4,167	0	0
Subtotal, RPGs	101	75,391	91	73,913	93	70,435	2	-3,478
<u>Research Centers:</u>								
Specialized/comprehensive	0	968	0	968	0	968	0	0
Clinical research	0	0	0	0	0	0	0	0
Biotechnology	0	0	0	0	0	0	0	0
Comparative medicine	1	4,855	1	4,855	1	5,000	0	145
Research Centers in Minority Institutions	0	0	0	0	0	0	0	0
Subtotal, Centers	1	5,823	1	5,823	1	5,968	0	145
<u>Other Research:</u>								
Research careers	0	992	0	0	7	2,370	7	2,370
Cancer education	0	0	0	0	0	0	0	0
Cooperative clinical research	0	3,024	0	3,024	0	3,000	0	-24
Biomedical research support	0	0	0	0	0	0	0	0
Minority biomedical research support	0	0	0	0	0	0	0	0
Other	0	874	0	874	0	900	0	26
Subtotal, Other Research	0	4,890	0	3,898	7	6,270	7	2,372
<b>Total Research Grants</b>	<b>102</b>	<b>86,104</b>	<b>92</b>	<b>83,634</b>	<b>101</b>	<b>82,673</b>	<b>9</b>	<b>-961</b>
<u>Research Training:</u>	<u>FTEPs</u>		<u>FTEPs</u>		<u>FTEPs</u>			
Individual awards	0	0	0	0	0	0	0	0
Institutional awards	5	291	0	0	19	950	19	950
Total, Training	5	291	0	0	19	950	19	950
Research & development contracts (SBIR/STTR)	18 (0)	62,901 (0)	22 (0)	65,651 (0)	22 (0)	65,651 (0)	0 (0)	0 (0)
Intramural research	<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>	
Research management and support	0	0	0	0	0	0	0	0
	0	704	0	715	0	726	0	11
Total, NIDDK	0	150,000	0	150,000	0	150,000	0	0

Includes FTEs which are reimbursed from the NIH Roadmap for Medical Research

**NATIONAL INSTITUTES OF HEALTH**  
**National Institute of Diabetes and Digestive and Kidney Diseases**  
**Budget Authority by Activity**  
(Dollars in thousands)

	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2007</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>Change</b>
	<b>Actual</b>	<b>Actual</b>	<b>Actual</b>	<b>Comparable</b>	<b>Enacted</b>	<b>Estimate</b>	<b>Estimate</b>	<b>Change</b>
	<b>FTEs</b>	<b>FTEs</b>	<b>FTEs</b>	<b>FTEs</b>	<b>FTEs</b>	<b>FTEs</b>	<b>FTEs</b>	<b>FTEs</b>
	<b>Amount</b>	<b>Amount</b>	<b>Amount</b>	<b>Amount</b>	<b>Amount</b>	<b>Amount</b>	<b>Amount</b>	<b>Amount</b>
<b>Extramural Research</b>								
<u>Detail:</u>								
Diabetes, Endocrinology, and Metabolic Diseases	680,221	652,641	630,171	\$631,178	\$636,368	\$635,680	-688	
Digestive Diseases and Nutrition	417,681	428,918	430,187	\$430,866	\$429,178	\$428,715	-463	
Kidney, Urologic, and Hematologic Diseases	392,765	398,966	420,746	\$421,402	\$414,379	\$413,931	-448	
Type 1 Diabetes Special Statutory Authority	150,000	150,000	150,000	150,000	150,000	150,000	0	
<b>Subtotal, Extramural</b>	<b>1,640,667</b>	<b>1,630,525</b>	<b>1,631,104</b>	<b>1,633,446</b>	<b>1,629,925</b>	<b>1,628,326</b>	<b>-1,599</b>	
<b>Intramural research</b>	<b>437</b>	<b>428</b>	<b>414</b>	<b>414</b>	<b>414</b>	<b>414</b>	<b>0</b>	
<b>Res. management &amp; support</b>	<b>188</b>	<b>210</b>	<b>222</b>	<b>222</b>	<b>223</b>	<b>228</b>	<b>5</b>	
<b>TOTAL</b>	<b>625</b>	<b>638</b>	<b>636</b>	<b>636</b>	<b>637</b>	<b>642</b>	<b>5</b>	
	<b>1,863,584</b>	<b>1,853,753</b>	<b>1,852,996</b>	<b>1,856,026</b>	<b>1,856,684</b>	<b>1,858,487</b>	<b>1,803</b>	

Includes FTEs which are reimbursed from the NIH Roadmap for Medical Research

## Major Changes in the Fiscal Year 2009 Budget Request

Major changes by budget mechanism and/or budget activity detail are briefly described below. Note that there may be overlap between budget mechanism and activity detail and these highlights will not sum to the total change for the FY 2009 budget request for NIDDK, which is \$1.803 million more than the FY 2008 Enacted, for a total of \$1,858.487 million.

Research Project Grants (-\$7.1 million, total \$1,190.7 million): NIDDK will support a total of 3,132 Research Project Grant (RPG) awards in FY 2009. Noncompeting RPGs will decrease by 20 awards and decrease by \$31.0 million. Competing RPGs will increase by 73 awards and increase by \$24.0 million. The NIH budget policy in FY 2009 is to provide no inflationary increases in noncompeting RPGs and no increase in average cost for competing RPGs. Intramural Research and Research Management and Support receive modest increases to help offset the cost of pay and other increases. NIDDK will continue to support new investigators and to maintain an adequate number of competing RPGs.

Hepatitis B Clinical Research Network (+\$3.0 million; total \$3.0 million): This network will be established.

Hepatitis C Antiviral Long-Term Treatment Against Cirrhosis (HALT-C) (-\$1.9 million; total \$1.3 million): This clinical trial is nearing completion.

Longitudinal Assessment of Bariatric Surgery (+\$3.7 million; total \$3.7 million): Because of the importance of advancing this area of research, a solicitation will be issued to provide additional funding for this consortium beyond its original project period, so that the research can continue in FY 2009.

GenitoUrinary Development Molecular Anatomy Project (-\$2.0 million; total \$1.0 million): This consortium is nearing completion of its efforts.

Frequent Hemodialysis Network (-\$3.4 million; total \$0.5 million): This clinical study is moving toward completion; FY 2009 funds will support data analysis.

Systolic Blood Pressure Intervention Trial (+\$0.5 million; total \$0.5 million): This study will be beginning. It will be led by NHLBI, with additional collaborative support from NIDDK.

HEALTHY Study (-\$12 million; total \$10.5 million): For this school-based study of ways to reduce risk factors for type 2 diabetes, the intervention will be completed during FY 2009, and follow-up data analysis will be less expensive.

Studies to Elucidate Effects of Intrauterine Environment on Offspring's Risk for Obesity and Diabetes: (+\$6.0 million; total \$6.0 million): Efforts are planned to fund new studies in this area.

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

FY 2008 enacted		\$1,856,684,000	
FY 2009 estimated budget authority		1,858,487,000	
Net change		1,803,000	
CHANGES	2008 Current Enacted Base		Change from Base
	FTEs	Budget Authority	FTEs Budget Authority
A. Built-in:			
1. Intramural research:			
a. Annualization of January			
2008 pay increase		\$57,490,000	\$426,000
b. January FY 2009 pay increase		57,490,000	825,000
c. One less day of pay		57,490,000	(219,000)
d. Payment for centrally furnished services		31,423,000	471,000
e. Increased cost of laboratory supplies, materials, and other expenses		79,130,000	1,670,000
Subtotal		3,173,000	
2. Research management and support:			
a. Annualization of January			
2008 pay increase		\$31,498,000	\$239,000
b. January FY 2009 pay increase		31,498,000	464,000
c. One less day of pay		31,498,000	(120,000)
d. Payment for centrally furnished services		9,794,000	147,000
e. Increased cost of laboratory supplies, materials, and other expenses		18,139,000	392,000
Subtotal		1,122,000	
Subtotal, Built-in		4,295,000	

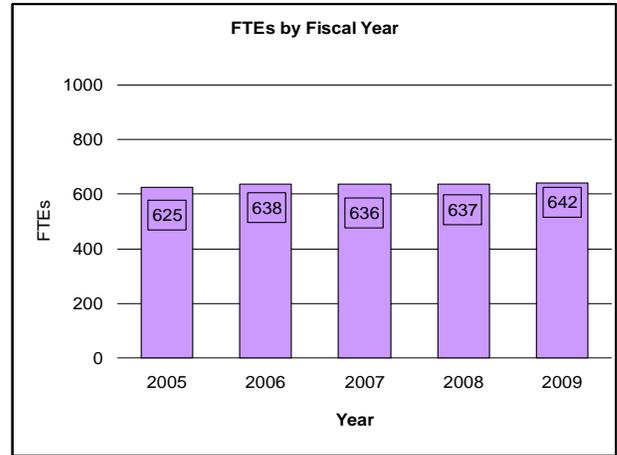
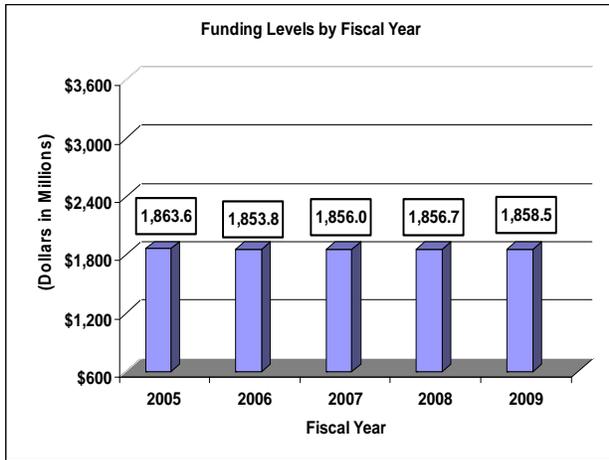
**NATIONAL INSTITUTES OF HEALTH**  
**National Institute of Diabetes and Digestive and Kidney Diseases**

**Summary of Changes--continued**

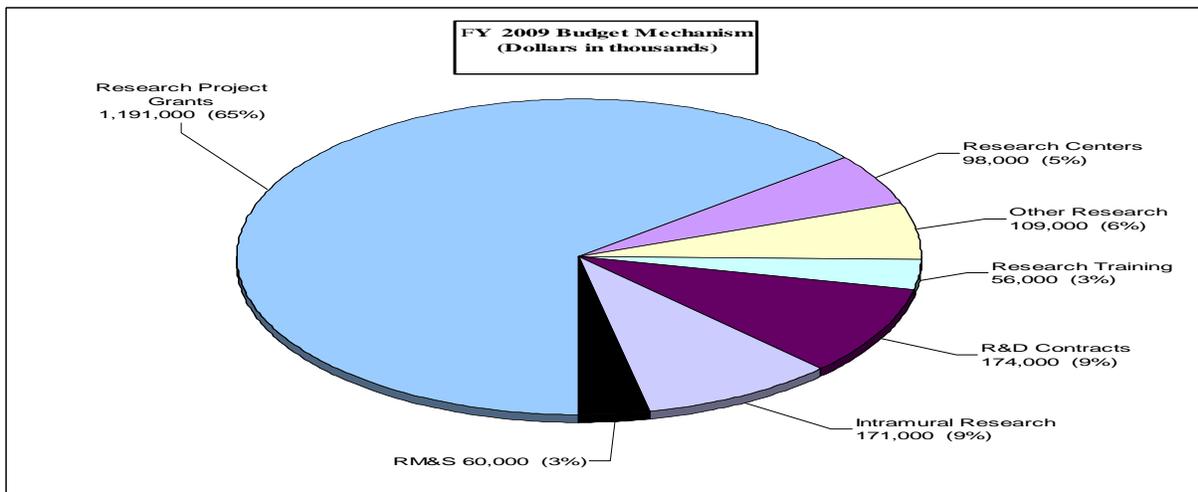
CHANGES	2008 Current Enacted Base		Change from Base	
	No.	Amount	No.	Amount
<b>B. Program:</b>				
1. Research project grants:				
a. Noncompeting	2,234	\$909,537,000	(20)	(\$30,965,000)
b. Competing	737	242,824,000	73	23,963,000
c. SBIR/STTR	108	45,452,000	0	(105,000)
Total	3,079	1,197,813,000	53	(7,107,000)
2. Research centers	81	96,270,000	2	1,645,000
3. Other research	635	106,999,000	7	2,372,000
4. Research training	1,106	54,127,000	19	1,376,000
5. Research and development contracts	343	174,001,000	0	104,000
Subtotal, extramural				(1,610,000)
	<u>FTEs</u>		<u>FTEs</u>	
6. Intramural research	414	168,043,000	0	(652,000)
7. Research management and support	223	59,431,000	5	(230,000)
Subtotal, program		1,856,684,000		(2,492,000)
Total changes	637		5	1,803,000

## Fiscal Year 2009 Budget Graphs

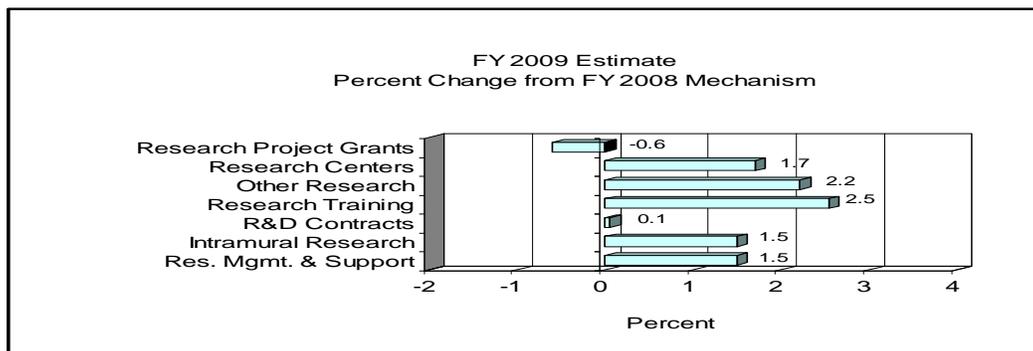
### History of Budget Authority and FTEs:



### Distribution by Mechanism:



### Percent Change by Mechanism:



**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:

FY 2007 Actual		FY 2008 Enacted		FY 2009 Estimate		Increase or Decrease	
<u>FTEs</u>	<u>BA</u>	<u>FTEs</u>	<u>BA</u>	<u>FTEs</u>	<u>BA</u>	<u>FTEs</u>	<u>BA</u>
636	\$1,856,026,000	637	\$1,856,684,000	642	\$1,858,487,000	9	+\$1,803,000
Type 1 Diabetes:							
	-\$150,000,000		-\$150,000,000		-\$150,000,000		
Labor/HHS:							
	\$1,706,026,000		\$1,706,684,000		\$1,708,487,000		

This document provides justification for the Fiscal Year (FY) 2009 activities of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), including NIH/AIDS activities. Details of the FY 2009 HIV/AIDS activities are in the "Office of AIDS Research (OAR)" Section of the Overview. Details on the Common Fund are located in the Overview, Volume One. Program funds are allocated as follows: Competitive Grants/Cooperative Agreements; Contracts; Direct Federal/Intramural and Other.

**DIRECTOR'S OVERVIEW**

The mission of the NIDDK is to support research to combat diabetes and other endocrine and metabolic diseases, liver and other digestive diseases, nutritional disorders, obesity, kidney and urologic diseases, and hematologic diseases. These diseases are chronic, have severe health consequences, and are costly for patients, their families, and our Nation. Many are also common. Diabetes affects an estimated 20.8 million people in the U.S. and greatly increases the risk for many serious complications, such as heart disease and kidney failure.<sup>1</sup> An estimated 16 million adults have moderately or severely reduced kidney function; and approximately 485,000 have irreversible kidney failure (end stage renal disease).<sup>2</sup> Many digestive diseases are also highly prevalent, as are urologic diseases.<sup>2,3</sup> Obesity affects approximately one-third of U.S. adults, and about 17 percent of children and adolescents are overweight.<sup>4</sup> Obesity is a strong risk factor for type 2 diabetes, fatty liver disease, and many other diseases and disorders. Also within NIDDK's research purview are such diseases as

<sup>1</sup> Centers for Disease Control and Prevention. National Diabetes Fact Sheet, United States, 2005.

<sup>2</sup> NIDDK, NIH/DHHS. Kidney and urologic diseases statistics (<http://kidney.niddk.nih.gov/statistics/>) 2007; U.S. Renal Data System, USRDS 2007 Annual Data Report, NIH, NIDDK; *JAMA* 298:2038, 2007.

<sup>3</sup> NIDDK, NIH/DHHS. Digestive diseases statistics, 2005 (<http://digestive.niddk.nih.gov/statistics/>).

<sup>4</sup> NIDDK, NIH/DHHS. Statistics related to overweight and obesity, 2007 (<http://www.win.niddk.nih.gov/statistics/index.htm>); *JAMA* 295:1549, 2006; National Center for Health Statistics, Data Brief no 1, 2007.

cystic fibrosis and other genetic diseases which are less wide-spread, but nonetheless devastating in their impacts. Building upon the emerging opportunities that are the fruits of past research investments, the Institute will continue to pursue the most compelling basic, clinical, and translational research studies; research training and career development; and health information dissemination. These efforts will lead to better strategies for predicting susceptibility to disease, preempting disease in those at risk, personalizing treatments for individuals with disease, and fostering participatory approaches, so as to improve the lives of patients, their families, and those at risk.

The NIDDK's research on obesity, type 2 diabetes, and kidney disease represents a paradigm of its integrated research programs. The epidemic levels of obesity in the U.S. are contributing to an escalation in the prevalence of type 2 diabetes, which, in turn, is the leading cause of kidney failure. To address the complex interplay of factors that promote excess weight gain, NIDDK continues to support a multidimensional research portfolio on obesity. For example, studies are elucidating the biologic pathways that regulate appetite and energy expenditure, with implications for future therapeutic strategies. Ongoing prevention and treatment studies encompass interventions in schools and other community sites in diverse populations, along with research on the risks and benefits of bariatric surgery as a treatment for severe obesity.

A number of NIDDK-funded studies are at the nexus of obesity and type 2 diabetes. For example, the middle school-based HEALTHY study is determining whether changes in school food services and physical education classes, along with activities to encourage healthy behaviors will reduce risk factors for type 2 diabetes in youth. In an emerging area of opportunity, NIDDK sponsored a solicitation and workshops to spur novel research on the metabolic effects that maternal obesity and diabetes during pregnancy have on offspring. Through research solicitations and other efforts, NIDDK also supports research to explore cost-effective ways to translate findings from diabetes and obesity intervention studies to real-world clinical practice and community settings, with an emphasis on disproportionately-affected populations. Future opportunities for such translation may arise from ongoing studies, such as the HEALTHY study.

Several areas of study are critical not only for patients with type 2 diabetes, but also for those with type 1 diabetes, a form of diabetes that often strikes in youth, thus placing particular burden on children and their families. Both forms of diabetes share the same devastating complications. Research on type 1 diabetes is not only improving health outcomes of people with this disease, but has also benefited those with type 2 diabetes.

The Institute is actively pursuing a range of research avenues on kidney disease. One ongoing study is investigating chronic kidney disease in adults. The diverse study population and the presence of diabetes in about half of the participants reflect the health disparities associated with kidney disease as well as its link to diabetes. In another effort, NIDDK is collaborating in the planning of a new clinical trial, to be led by the National Heart, Lung, and Blood Institute, to assess whether lowering blood pressure beyond current standards will reduce cardiovascular disease and chronic kidney disease in individuals at high risk. Through recent research solicitations, NIDDK

will support studies of acute kidney injury, chronic kidney disease in children, and hemodialysis, and other important basic and clinical research areas.

These efforts are examples of NIDDK's broad spectrum of research areas. Highlighted throughout this document are other examples of NIDDK's research on the many chronic and debilitating diseases within its mission. The Institute also disseminates science-based health information through its Weight-control Information Network; National Diabetes Education Program, which it co-sponsors with the CDC; National Kidney Disease Education Program; information clearinghouses; and other venues, such as its celiac disease awareness campaign, and ongoing efforts to develop a women's urologic health outreach program, which will be informed by a recent workshop.

Importantly, in planning for the future, NIDDK will continue to seek and value external advice from investigators, professional organizations, patient advocates, and the public. Input from the Institute's National Advisory Council, Interagency Coordinating Committees, strategic planning processes, *ad hoc* planning groups, and scientific conferences and workshops will continue to inform resource allocation decisions. Active collaboration with other components of the NIH and other federal agencies will also remain a cornerstone of NIDDK planning efforts, as will Congressional emphases. For example, NIDDK has a leadership role in trans-NIH obesity research efforts and leads collaborative research efforts in diabetes, liver diseases, and other areas.

Ever-increasing knowledge and new technologies bring new research opportunities for alleviating and conquering the many diseases within NIDDK's mission. The Institute's continuing goal is to build upon these opportunities to improve public health.

## **FY 2009 Justification by Activity Detail Program Descriptions and Accomplishments**

**Diabetes, Endocrinology, and Metabolic Diseases:** The goals of Diabetes, Endocrinology, and Metabolic Diseases efforts are to increase understanding of, and develop and test potential prevention and treatment strategies for these diseases. This program supports basic, clinical, and translational research, as well as research training, in the areas of type 1 and type 2 diabetes, cystic fibrosis, and other endocrine and metabolic disorders; obesity, neuroendocrinology, and energy balance; and development, metabolism, and basic biology of endocrine and metabolic tissues. Knowledge gained from research is broadly communicated to patients, health professionals, and the public through the support for the National Diabetes Information Clearinghouse and the National Diabetes Education Program.

Examples of program accomplishments include the following. Twenty-five years after the initiation of the Diabetes Control and Complications Trial, over 90 percent of the 1441 patient volunteers continue to participate in the follow up of that landmark study demonstrating that a finite period of improved glucose control yields major prolonged reductions in the heart, kidney, eye and nerve complications of diabetes. Efforts to enhance approaches to translate this and other research into clinical practice included an ongoing solicitation for diabetes and obesity prevention and control projects, expansion of Diabetes Research and Training Centers in 2007 and 2008, and the continued efforts of the National Diabetes Education Program. New risk genes for type 1 and type 2 diabetes have been identified and additional studies to identify risk genes in minority populations were initiated in 2007 and 2008. A workshop in November 2007 focused on research to understand the effects of maternal diabetes or obesity on the offspring's risks for diabetes, obesity and other metabolic conditions. The NIDDK, in collaboration with other NIH components, issued a solicitation to extend the Type 1 Diabetes TrialNet research network. TrialNet launched a pilot clinical study in FY 2007 of a potential strategy for preventing or delaying type 1 diabetes in individuals at risk, completed recruitment for two trials to preserve insulin production in patients with newly diagnosed type 1 diabetes, and approved several additional trials to prevent or reverse type 1 diabetes for implementation in 2008. In the fall of 2006, the NIDDK launched a multi-center, middle school-based study of strategies for reducing risk factors for type 2 diabetes in children, the HEALTHY study, which is continuing in 2008. Over half the students at the 42 middle schools where the study is being conducted participated in the baseline examinations.

**Budget Policy:** The FY 2009 budget estimate for Diabetes, Endocrinology, and Metabolic Diseases efforts is \$635.7 million, a decrease of \$0.7 million or 0.1 percent from the FY 2008 budget. Within the context of this budget, the NIDDK will pursue the most promising and scientifically meritorious research while maintaining a balanced portfolio. Basic, clinical, and translational research studies will be supported. Areas of emphasis include the following. The NIDDK will continue to support clinical research to identify optimal approaches to treatment and prevention of diabetes and its complications including the Diabetes Prevention Program Outcomes Study, the

Epidemiology of Diabetes Interventions and Complications study, the Treatment Options for Type 2 Diabetes in Adolescents and Youth study, and the Type 1 Diabetes TrialNet research network. To bring scientific discoveries in diabetes and obesity to real world medical practice and other community settings, the Institute will continue support for translational research project grants, translational research efforts within diabetes Centers, and health information dissemination activities (see portrait). In developing research translation efforts for FY 2009, the Institute will pursue opportunities that may arise from results of studies that are currently ongoing and are expected to provide important data in 2009. Such studies include the middle-school based HEALTHY study of ways to reduce risk factors for type 2 diabetes in youth, and the Diabetes Prevention Program Outcomes Study of the durability of interventions for type 2 diabetes prevention in adults. The NIDDK will support Diabetes Endocrinology Research Centers and Diabetes Research and Training Centers to promote and enhance many avenues of research. To advance research relevant to cystic fibrosis and other genetic metabolic diseases, the Institute will continue funding for Molecular Therapy Core Centers. Other areas of focus will include research to increase understanding of how elevated blood sugar (glucose), a hallmark of diabetes, exerts its toxic effects on the body, and how excess fat tissue contributes to diabetes and other adverse health problems. Additionally, the Institute will support research to capitalize on new genetic findings in diabetes, to advance progress toward developing new therapeutic approaches. Meritorious unsolicited investigator-initiated research projects, addressing the molecular mechanisms underlying diabetes, obesity and other metabolic diseases as well as other topics will receive support, as will other studies resulting from NIDDK's research solicitations.

**Portrait of a Program: Translating Diabetes Research to Clinical Practice and Community Settings**

FY 2008 Level: \$25.2 Million\*

FY 2009 Level: \$25.3 Million\*

Change: \$0.1 Million

Dedicated to improving the health of people with diabetes and those at risk, NIDDK pursues a multifaceted program to translate scientific discoveries to real world medical practice and other community settings. These efforts are informed by external input and reflect the challenges of a chronic and devastating disease that affects diverse populations. The program includes the NIDDK-supported Diabetes Research and Training Centers, translational research project grants, and health information dissemination activities. Among the Centers' many efforts are Prevention and Control components to enhance translation of research, both in the general population and in minority and underserved groups. Through recent research solicitations, NIDDK is renewing its commitment to translational and other research efforts at diabetes centers. Complementing the Centers' activities, NIDDK funds a variety of translational research project grants and planning grants, in response to ongoing research solicitations, to develop and test potential cost-effective ways to bring research findings to real-world settings. Interventions being studied target health care and other community sites, and encompass children and adults, patients with diabetes and those at risk, and diverse populations, including disproportionately-affected minority groups. For example, one study is exploring whether YMCAs could be used to deliver a lifestyle change program designed to reduce risk for type 2 diabetes, based on the successful lifestyle intervention of the landmark Diabetes Prevention Program clinical trial. Finally, NIDDK disseminates a wealth of science-based diabetes information to patients, health care providers, and the public through the National Diabetes Education Program (NDEP). Co-sponsored by NIDDK and the Centers for Disease Control and Prevention, NDEP also involves over 200 partner organizations. Its ongoing education campaigns translate research findings with a wide range of materials, many tailored to groups at high risk

for diabetes. For the future, as ongoing clinical and other studies come to fruition, the Institute will continue efforts to translate new research findings to clinical practice and community venues.

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\*These amounts include \$3.6 Million each year for the Prevention and Control components of the Diabetes Research and Training Centers; \$16.3 Million each year for translational research project grants and \$2.5 Million each year for translational research planning grants; and \$2.8 Million and \$2.9 Million in FY 2008 and FY 2009, respectively, for NDEP.

**Digestive Diseases and Nutrition:** The goals of Digestive Diseases and Nutrition efforts are to increase understanding of digestive diseases, nutrition, and obesity, and to develop and test strategies for disease prevention and treatment. This program supports basic, clinical, and translational research, as well as research training, encompassing fundamental studies of the digestive system; disease-targeted research involving 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 broadly communicated to patients, health professionals, and the public through the Institute's National Digestive Diseases Information Clearinghouse and Weight-control Information Network.

Examples of program accomplishments include the following. In April 2007, NIDDK launched an observational study to collect data on the health outcomes of bariatric surgical procedures that are being performed in clinical practice as a treatment for extreme obesity in adolescents; the study is ongoing. Also in 2007, the NIDDK began funding for a new clinical trial, which is still ongoing in 2008, to evaluate a treatment approach for the debilitating abdominal pain associated with certain pancreatic and biliary disorders known as Sphincter of Oddi dysfunction. In December 2007, the NIDDK, along with the Office of Medical Applications of Research and other NIH components, sponsored a State-of-the-Science Conference on Prevention of Fecal and Urinary Incontinence in Adults to evaluate the state of the science in this area and to address future challenges. To better understand the phenomenon that certain bariatric surgical procedures are observed to be associated with amelioration of obesity-related type 2 diabetes even before substantial weight loss has occurred, NIDDK released a program announcement to encourage studies in this arena, as such research may help improve both surgical and nonsurgical therapies. NIDDK also released a research solicitation in October 2007 to establish a Hepatitis B Clinical Research Network and a research solicitation in November 2007 to extend and expand the institute-supported Drug Induced Liver Injury Network.

**Budget Policy:** The FY 2009 budget estimate for NIDDK's Digestive Diseases and Nutrition efforts is \$428.7 million, a decrease of \$0.5 million or 0.1 percent from the FY 2008 budget. Within the context of this budget, the NIDDK will pursue the most promising and scientifically meritorious research while maintaining a balanced portfolio. Basic, clinical, and translational research studies will be supported. Areas of emphasis include the following. In a new effort, NIDDK will support a Hepatitis B Clinical Research Network, which will be established in response to a recently-issued research solicitation (noted above). Also in the area of liver disease research, NIDDK will

continue support for the Drug Induced Liver Injury Network, as well as the Nonalcoholic Steatohepatitis Clinical Research Network, a group of adult and pediatric research centers studying the causes and progression of this disease and therapeutic approaches. Among the NIDDK's obesity-related efforts, the Longitudinal Assessment of Bariatric Surgery consortium will receive support for further analysis of the risks and benefits of this surgery as a treatment for extreme obesity in adults. Additionally, the Institute will continue support for the ongoing observational study to assess the health risks and benefits of this surgery in severely obese adolescents. With support from NIDDK, the Look AHEAD (Action for Health in Diabetes) multi-center clinical trial will continue its evaluation of the long-term health effects of a lifestyle intervention to achieve and maintain weight loss in obese adults with type 2 diabetes. In the area of inflammatory bowel disease, the NIDDK will sustain funding for a consortium that is conducting cutting-edge genetic research (see portrait). Meritorious unsolicited investigator-initiated research projects will also receive support, as will other studies resulting from NIDDK's research solicitations.

#### Portrait of a Program: Inflammatory Bowel Disease Genetics Consortium

FY 2008 Level: \$3.0 Million

FY 2009 Level: \$3.0 Million

Change: \$0

The NIDDK is actively pursuing new insights into the complex genetics of inflammatory bowel disease (IBD), which consists of two types, Crohn's disease and ulcerative colitis. Although existing drug therapies help control symptoms, there is no cure for IBD, and treatment often requires major surgery. The NIDDK-supported discovery in 2001 of a gene that confers susceptibility to Crohn's disease ignited the search for other genetic determinants and their environmental triggers.

The NIDDK issued a research solicitation to establish the IBD Genetics Consortium. This effort was informed by recommendations from external experts. In 2002, the Consortium initiated research that led to a genome-wide association study—an analysis of thousands of genetic variations across the human genome to identify genes associated with IBD. In 2006, the Consortium published its first major discovery using this new approach: sequence variations in the gene *IL23R* influence risk for IBD. Additional key findings, published in 2007, included the identification of a gene called *ATG16L1* as associated with Crohn's disease. Studies by several research groups had identified functions for these genes: *IL23R* in inflammation, and *ATG16L1* in eliminating unwanted cellular components. The newly-discovered associations of these genes with IBD may lead to the development of IBD therapies that target their functions. In light of the success of the Consortium's collaborative efforts and the benefits of further genetic research, NIDDK renewed funding for the Consortium in 2007 for an additional 5 years. This support will enable genetic analyses of larger numbers of people in the upcoming years to facilitate the identification of additional genes that may each have only modest effects on disease. It will also facilitate analyses of subgroups of patients, such as those from certain minority populations, or those with an early-onset form of the disease. Discoveries of additional IBD-associated genes will open opportunities for developing gene-based diagnostic tests as well as improved therapies. FY 2009 funds will enable the Consortium's investigators to continue their genetic research on IBD.

**Kidney, Urologic, and Hematologic Diseases:** The goals of Kidney, Urologic, and Hematologic Diseases efforts are to increase understanding of diseases and disorders of the kidneys, urinary tract, and blood (hematologic), and to develop and test potential prevention and treatment strategies. Basic, clinical, and translational research, as well as research training, is supported in the areas of chronic kidney disease, diabetic kidney

disease, end-stage renal disease (kidney failure), polycystic kidney disease, and many other kidney diseases; urinary incontinence, benign prostatic hyperplasia, painful bladder syndrome/interstitial cystitis, 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 the anemia of inflammation and of chronic disease. Science-based information is communicated to patients, health professionals, and the public through NIDDK's National Kidney and Urologic Diseases Information Clearinghouse and National Kidney Disease Education Program.

Examples of program accomplishments include the following. In 2007, NIDDK launched a clinical trial to determine, in children with vesicoureteral reflux, whether long-term antibiotic treatment prevents urinary tract infections and severe scarring of the kidneys; this trial includes additional support from the National Institute of Child Health and Human Development. NIDDK led a mid-course scientific review in 2007 of the Chronic Renal Insufficiency Cohort study (in adults) and the Chronic Kidney Disease in Children study. It concluded that these major studies of chronic kidney disease are progressing well and should continue. NIDDK released new research solicitations in FY 2007 and early FY 2008. The aims of these solicitations, which address several different topics, are: to begin a study to understand why arteriovenous fistulas, which are surgically created for use in hemodialysis, do not always develop as necessary to become suitable for dialysis and thus do not work in some patients; to establish a consortium to study acute kidney injury; to augment career development training opportunities in urologic research; to establish a new Multidisciplinary Approach to the Study of Chronic Pelvic Pain research network to study interstitial cystitis/painful bladder syndrome and chronic prostatitis; to enhance the institute's urology centers program; and, with other NIH components, to support new research on the anemia of inflammation and of chronic disease. NIDDK additionally co-funded, with the NIH Office of Research on Women's Health, three Specialized Centers of Research focused on irritable bowel syndrome and interstitial cystitis/painful bladder syndrome, urinary incontinence, and urinary tract infections.

**Budget Policy:** The FY 2009 budget estimate for Kidney, Urologic, and Hematologic Diseases efforts is \$413.9 million, a decrease of \$0.5 million or 0.1 percent from the FY 2008 budget. Within the context of this budget, the NIDDK will pursue the most promising and scientifically meritorious research while maintaining a balanced portfolio. Basic, clinical, and translational research studies will be supported. Areas of emphasis include the following. The NIDDK will continue funding for multi-center studies focused on chronic kidney disease: the Chronic Kidney Disease in Children study (with additional funding from other NIH Institutes) and the Chronic Renal Insufficiency Cohort study in adults. The Randomized Intervention for Children with Vesicoureteral Reflux clinical trial will continue research to determine whether long-term antibiotic treatment in children with this condition prevents urinary tract infections and severe scarring of the kidneys. NIDDK will also support research conducted by the Urinary Incontinence Treatment Network (see portrait). Centers focused on kidney, urologic, and hematologic research will receive funding. Building upon recently-completed studies, NIDDK will fund new research on acute kidney injury, and a new study of arteriovenous

fistulas, which are used in hemodialysis (as described above). NIDDK will also support new research on the anemia of inflammation and of chronic disease. A Multidisciplinary Approach to the Study of Chronic Pelvic Pain research network, to be established, will receive funding. In another effort, currently being planned, NIDDK will contribute support for a Systolic Blood Pressure Intervention Trial, which will be led by the National Heart, Lung, and Blood Institute. The trial will assess whether lowering blood pressure beyond current standards will reduce cardiovascular disease and chronic kidney disease in individuals at high risk. Meritorious unsolicited investigator-initiated research projects will also receive support, as will other studies resulting from NIDDK's research solicitations.

**Portrait of a Program: The Urinary Incontinence Treatment Network (UITN)**

FY 2008 Level: \$4.4 Million

FY 2009 Level: \$4.4 Million

Change: \$0

To improve the lives of women with urinary incontinence, NIDDK established a research network to compare different treatments for this common and costly condition. Urinary incontinence, or loss of bladder control, can be embarrassing and difficult to deal with, and it reduces quality of life for many Americans, especially women. The most common forms are stress incontinence, in which urine loss is triggered by coughing, running, or other movements that put pressure on the bladder, and urge incontinence, the loss of urine after a sudden, strong urge to urinate.

The NIDDK issued research solicitations to establish the Urinary Incontinence Treatment Network (UITN) in 1999 and 2000, with additional funds from the National Institute of Child Health and Human Development and the Office of Research on Women's Health. With a subsequent solicitation, NIDDK renewed support through FY 2009 for this research network. These efforts were informed by external input. The first of three clinical studies begun by the UITN, the Stress Incontinence Surgical Treatment Efficacy Trial (SISTER), compared two traditional operations for stress urinary incontinence in women. Results, published in 2007, showed that a "sling" procedure helps more women achieve dryness than the Burch technique. A second trial, the Behavior Enhances Drug Reduction of Incontinence (BE-DRI), assessed whether behavioral changes such as emptying the bladder on a regular schedule and practicing Kegel exercises could enable women to stop drug therapy while maintaining bladder control. This trial is now complete, and findings are expected to be published soon. Recruitment is ongoing for a third UITN study, the Trial of Mid-Urethral Slings (TOMUS), which will compare two minimally invasive surgeries for the treatment of stress urinary incontinence, complementing the research of the SISTER trial. Collectively, these studies are providing critical information to help patients and their doctors make informed treatment decisions.

**Type 1 Diabetes:** Complementing the efforts of the Diabetes, Endocrinology and Metabolic Diseases program, the goals of the Type 1 Diabetes program's efforts are to foster improved treatment, prevention, and cure of type 1 diabetes and its complications through basic, clinical, and translational research. Although focused on type 1 diabetes, aspects of this research will also benefit those with other autoimmune disorders, as well as those with type 2 diabetes. Both type 1 and type 2 diabetes share a basis in impaired function of the insulin producing beta cells of the pancreas along with the same possible complications, such as heart disease, stroke, blindness, kidney failure, nerve damage, and lower limb amputations.

Examples of accomplishments include the following. In 2007, a Congressionally-mandated evaluation report on this program was transmitted to the Congress by the Secretary, HHS; it is available on the NIDDK web site. Developed under the auspices of the statutory Diabetes Mellitus Interagency Coordinating Committee, led by the NIDDK, this evaluation report describes the significant progress made by this program, highlighting its unique, extraordinarily collaborative, and scientifically comprehensive research efforts. In November 2007, NIDDK released a request for applications for a type 1 diabetes pathfinder award, to support new investigators studying type 1 diabetes or its complications.

**Budget Policy:** The FY 2009 budget for the Special Statutory Funding Program for Type 1 Diabetes Research is \$150 million, the same as FY 2008. The NIDDK administers the program, but because of its trans-HHS nature, the resources are disbursed among multiple NIH institutes and centers and the CDC. Among ongoing efforts that will be continued in FY 2009 are The Environmental Determinants of Diabetes in the Young (TEDDY) study, an ambitious study which aims to identify environmental causes of type 1 diabetes in genetically susceptible individuals, and the Type 1 Diabetes TrialNet research network. Additional research emphases for this Program in FY 2009 will be informed by several planning efforts. The NIDDK will convene a panel of experts for an advisory meeting, in April 2008, to assess the clinical research efforts that the Program has supported thus far, and to aid in prioritizing future research directions. In the summer 2008, NIDDK will hold a workshop in conjunction with the Food and Drug Administration to address research opportunities toward development of an “artificial pancreas,” a mechanical replacement for the insulin-producing pancreatic cells that are destroyed in type 1 diabetes. Finally, the Type 1 Diabetes Research Strategic Plan, developed under the auspices of the statutory Diabetes Mellitus Interagency Coordinating Committee, will continue to serve as a scientific guidepost for identifying compelling research opportunities for FY 2009.

**Intramural Research:** The goal of NIDDK’s Intramural Research Program 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 partnership with the Pima Indians in the region has led to important scientific advances in the areas of type 2 diabetes and obesity. Research training is also an integral component of the Intramural research program.

The NIDDK’s Intramural Research Program continued basic and clinical research on a broad range of research areas within the Institute’s mission. In 2007, the NIDDK, in collaboration with the NIH Clinical Center, opened the new Metabolic Clinical Research Unit at the NIH’s intramural Clinical Research Center. The MCRU will serve as a unique, trans-NIH resource for obesity research efforts.

**Budget Policy:** The FY 2009 budget estimate for NIDDK's Intramural Research Program is \$170.6 million, an increase of \$2.5 million or 1.5 percent over the FY 2008 budget. Within the context of this budget, the NIDDK will pursue the most promising and scientifically meritorious research. The Intramural research program will continue a broad spectrum of research studies to strengthen understanding of basic biology and disease mechanisms, and evaluate potential therapeutic approaches. For example, intramural scientists will continue research on obesity in the new trans-NIH Metabolic Clinical Research Unit, as well as research relevant to diabetes; digestive diseases, including liver disease; kidney disease; and hematologic disease. The Intramural Research Program will also continue to support research training.

**Research Management and Support:** NIDDK 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 its research management and support activities, NIDDK has continued to fund meritorious basic, clinical, and translational research and research training efforts, and the institute has also continued its health information dissemination and education/outreach activities. Additionally, the institute's strategic planning, evaluation, and other activities have continued; some of these are highlighted above. In another example, the Institute has been providing leadership and support to the National Commission on Digestive Diseases, established by the NIH Director, for the ongoing development of a long-range plan for digestive diseases research.

**Budget Policy:** The FY 2009 budget estimate for RMS is \$59.6 million, an increase of \$0.9 million or 1.5 percent over the FY 2008 budget. Within the context of this budget, the NIDDK will continue effective research management and support so as to deploy research resources to the most meritorious and promising areas, and to communicate research opportunities and findings to investigators, health professionals, and the public.

**NIH Common Fund:** The NIDDK is the lead Institute for the Training for a New Interdisciplinary Research initiative. The NIDDK participates in the support of the Epigenomics initiative funded through the NIH Common Fund.

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

**Budget Authority by Object**

	FY 2008 Enacted	FY 2009 Estimate	Increase or Decrease
Total compensable workyears:			
Full-time employment	637	642	5
Full-time equivalent of overtime and holiday hours	3	3	0
Average ES salary	\$0	\$0	\$0
Average GM/GS grade	11.6	11.6	0.0
Average GM/GS salary	\$86,718	\$89,233	\$2,515
Average salary, grade established by act of July 1, 1944 (42 U.S.C. 207)	\$89,581	\$92,179	\$2,598
Average salary of ungraded positions	109,888	113,074	3,186
<b>OBJECT CLASSES</b>	<b>FY 2008 Enacted</b>	<b>FY 2009 Estimate</b>	<b>Increase or Decrease</b>
Personnel Compensation:			
11.1 Full-time permanent	\$36,154,000	\$37,626,000	\$1,472,000
11.3 Other than full-time permanent	19,403,000	20,079,000	676,000
11.5 Other personnel compensation	1,180,000	1,221,000	41,000
11.7 Military personnel	2,067,000	2,127,000	60,000
11.8 Special personnel services payments	12,481,000	12,800,000	319,000
<b>Total, Personnel Compensation</b>	<b>71,285,000</b>	<b>73,853,000</b>	<b>2,568,000</b>
12.0 Personnel benefits	16,033,000	16,649,000	616,000
12.2 Military personnel benefits	1,670,000	1,718,000	48,000
13.0 Benefits for former personnel	0	0	0
<b>Subtotal, Pay Costs</b>	<b>88,988,000</b>	<b>92,220,000</b>	<b>3,232,000</b>
21.0 Travel and transportation of persons	2,282,000	2,271,000	(11,000)
22.0 Transportation of things	292,000	290,000	(2,000)
23.1 Rental payments to GSA	0	0	0
23.2 Rental payments to others	0	0	0
23.3 Communications, utilities and miscellaneous charges	1,167,000	1,160,000	(7,000)
24.0 Printing and reproduction	1,443,000	1,432,000	(11,000)
25.1 Consulting services	1,132,000	1,125,000	(7,000)
25.2 Other services	7,551,000	7,498,000	(53,000)
25.3 Purchase of goods and services from government accounts	155,263,000	153,931,000	(1,332,000)
25.4 Operation and maintenance of facilities	3,246,000	3,215,000	(31,000)
25.5 Research and development contracts	120,987,000	120,987,000	0
25.6 Medical care	3,824,000	3,790,000	(34,000)
25.7 Operation and maintenance of equipment	3,471,000	3,453,000	(18,000)
25.8 Subsistence and support of persons	0	0	0
<b>25.0 Subtotal, Other Contractual Services</b>	<b>295,474,000</b>	<b>293,999,000</b>	<b>(1,475,000)</b>
26.0 Supplies and materials	16,910,000	16,800,000	(110,000)
31.0 Equipment	10,899,000	10,800,000	(99,000)
32.0 Land and structures	0	0	0
33.0 Investments and loans	0	0	0
41.0 Grants, subsidies and contributions	1,439,209,000	1,439,495,000	286,000
42.0 Insurance claims and indemnities	0	0	0
43.0 Interest and dividends	20,000	20,000	0
44.0 Refunds	0	0	0
<b>Subtotal, Non-Pay Costs</b>	<b>1,767,696,000</b>	<b>1,766,267,000</b>	<b>(1,429,000)</b>
<b>Total Budget Authority by Object</b>	<b>1,856,684,000</b>	<b>1,858,487,000</b>	<b>1,803,000</b>

Includes FTEs which are reimbursed from the NIH Roadmap for Medical Research

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

**Salaries and Expenses**

OBJECT CLASSES	FY 2008 Enacted	FY 2009 Estimate	Increase or Decrease
<b>Personnel Compensation:</b>			
Full-time permanent (11.1)	\$36,154,000	\$37,626,000	\$1,472,000
Other than full-time permanent (11.3)	19,403,000	20,079,000	676,000
Other personnel compensation (11.5)	1,180,000	1,221,000	41,000
Military personnel (11.7)	2,067,000	2,127,000	60,000
Special personnel services payments (11.8)	12,481,000	12,800,000	319,000
<b>Total Personnel Compensation (11.9)</b>	<b>71,285,000</b>	<b>73,853,000</b>	<b>2,568,000</b>
Civilian personnel benefits (12.1)	16,033,000	16,649,000	616,000
Military personnel benefits (12.2)	1,670,000	1,718,000	48,000
Benefits to former personnel (13.0)	0	0	0
<b>Subtotal, Pay Costs</b>	<b>88,988,000</b>	<b>92,220,000</b>	<b>3,232,000</b>
Travel (21.0)	2,282,000	2,271,000	(11,000)
Transportation of things (22.0)	292,000	290,000	(2,000)
Rental payments to others (23.2)	0	0	0
Communications, utilities and miscellaneous charges (23.3)	1,167,000	1,160,000	(7,000)
Printing and reproduction (24.0)	1,443,000	1,432,000	(11,000)
<b>Other Contractual Services:</b>			
Advisory and assistance services (25.1)	1,132,000	1,125,000	(7,000)
Other services (25.2)	7,551,000	7,498,000	(53,000)
Purchases from government accounts (25.3)	84,593,000	83,046,000	(1,547,000)
Operation and maintenance of facilities (25.4)	3,246,000	3,215,000	(31,000)
Operation and maintenance of equipment (25.7)	3,471,000	3,453,000	(18,000)
Subsistence and support of persons (25.8)	0	0	0
<b>Subtotal Other Contractual Services</b>	<b>99,993,000</b>	<b>98,337,000</b>	<b>(1,656,000)</b>
Supplies and materials (26.0)	16,798,000	16,688,000	(110,000)
<b>Subtotal, Non-Pay Costs</b>	<b>121,975,000</b>	<b>120,178,000</b>	<b>(1,797,000)</b>
<b>Total, Administrative Costs</b>	<b>210,963,000</b>	<b>212,398,000</b>	<b>1,435,000</b>

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

**Authorizing Legislation**

	PHS Act/ Other Citation	U.S. Code Citation	2007 Amount Authorized	FY 2008 Enacted	2008 Amount Authorized	FY 2009 Budget Estimate
Research and Investigation	Section 301	42§241	Indefinite		Indefinite	
National Institute of Diabetes and Digestive and Kidney Diseases	Section 402(a)	42§281	Indefinite	\$1,856,684,000	Indefinite	\$1,858,487,000
<b>Total, Budget Authority</b>				<b>1,856,684,000</b>		<b>1,858,487,000</b>

**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 <u>1/</u>
2000	1,002,747,000 <u>2/</u>	1,087,455,000	1,130,056,000	1,174,588,000
Rescission				-6,112,000
2001	1,186,266,000 <u>2/</u>	1,315,530,000	1,318,106,000	1,470,385,000
Rescission				-429,000
2002	1,457,915,000 <u>2/</u>	1,446,705,000	1,501,476,000	1,563,833,000
Rescission				-453,000
2003	1,706,292,000 <u>2/ 3/</u>	1,731,754,000	1,731,754,000	1,733,347,000
Rescission				-10,617,000
2004	1,820,000,000 <u>3/</u>	1,820,007,000	1,833,007,000	1,821,240,000
Rescission				-10,654,000
2005	1,877,696,000 <u>3/</u>	1,876,196,000	1,889,100,000	1,863,584,000
Rescission				-14,112,000
2006	1,872,146,000 <u>3/</u>	1,872,146,000	1,917,919,000	1,854,925,000
Rescission				-17,221,000
2007	1,844,298,000 <u>3/</u>	1,844,298,000	1,857,753,000	1,855,868,000
2008	1,858,045,000 <u>3/</u>	1,881,893,000	1,897,784,000	1,855,868,000
2009	1,858,487,000 <u>3/</u>			

1/ Reflects enacted supplementals, rescissions, and reappropriations.

2/ Excludes funds for HIV/AIDS research activities consolidated in the NIH Office of AIDS Research.

3/ Includes Type 1 Diabetes Special Statutory Authority Funds.

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**Details of Full-Time Equivalent Employment (FTEs)**

OFFICE/DIVISION	FY 2007 Actual	FY 2008 Enacted	FY 2009 Estimate
Office of the Director	64	65	65
Division of Diabetes, Endocrinology, and Metabolic Diseases	27	27	27
Division of Digestive Diseases and Nutrition	22	22	22
Division of Kidney, Urologic, and Hematologic Diseases	18	18	18
Division of Nutrition Research Coordination	9	9	9
Division of Extramural Activities	82	82	87
Division of Intramural Research	414	414	414
<b>Total</b>	<b>636</b>	<b>637</b>	<b>642</b>
Includes FTEs which are reimbursed from the NIH Roadmap for Medical Research			
FTEs supported by funds from Cooperative Research and Development Agreements	(4)	(4)	(4)
FISCAL YEAR	Average GM/GS Grade		
2005	11.8		
2006	11.5		
2007	11.6		
2008	11.6		
2009	11.6		

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**Detail of Positions**

GRADE	FY 2007 Actual	FY 2008 Enacted	FY 2009 Estimate
Total, ES Positions	0	0	0
Total, ES Salary	0	0	0
GM/GS-15	42	42	42
GM/GS-14	62	62	65
GM/GS-13	72	72	72
GS-12	61	62	64
GS-11	45	45	45
GS-10	0	0	0
GS-9	29	29	29
GS-8	22	22	22
GS-7	24	24	24
GS-6	6	6	6
GS-5	1	1	1
GS-4	4	4	4
GS-3	2	2	2
GS-2	0	0	0
GS-1	2	2	2
Subtotal	372	373	378
Grades established by Act of July 1, 1944 (42 U.S.C. 207):			
Assistant Surgeon General	1	1	1
Director Grade	12	12	12
Senior Grade	4	4	4
Full Grade	5	5	5
Senior Assistant Grade	1	1	1
Assistant Grade	0	0	0
Subtotal	23	23	23
Ungraded	286	286	286
Total permanent positions	459	460	465
Total positions, end of year	681	682	687
Total full-time equivalent (FTE) employment, end of year	636	637	642
Average ES salary	0	0	0
Average GM/GS grade	11.6	11.6	11.6
Average GM/GS salary	82,992	86,718	89,233

Includes FTEs which are reimbursed from the NIH Roadmap for Medical Research.

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**New Positions Requested**

	FY 2009		
	Grade	Number	Annual Salary
Health Scientist Administrator	GS-14	3	\$98,033
Contract Specialist	GS-12	2	\$69,764
<b>Total Requested</b>		<b>5</b>	