

DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

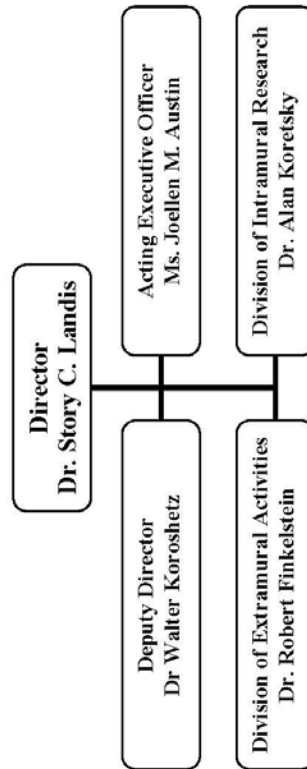
National Institute of Neurological Disorders and Stroke

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NATIONAL INSTITUTES OF HEALTH

National Institute of Neurological Disorders and Stroke

Organizational Chart



**FY 2008 Proposed Appropriation Language**

**NATIONAL INSTITUTES OF HEALTH**

National Institutes of Neurological Disorders and Stroke

*For carrying out section 301 and title IV of the Public Health Services Act with respect to neurological disorders and stroke, \$1,534,116,000.*

**Supplementary Exhibit**

**Comparison of Proposed FY 2008 Appropriation Language to  
Most Recently Enacted Full-Year Appropriations**

**NATIONAL INSTITUTES OF HEALTH**

National Institutes of Neurological Disorders and Stroke

For carrying out section 301 and title IV of the Public Health Services Act with respect to  
*neurological disorders and stroke, [~~\$1,550,260,000~~]**\$1,537,019,000** (Department of Health and  
Human Services Appropriation Act, 2006)*

**National Institutes of Health  
National Institute of Neurological Disorders and Stroke**

**Amounts Available for Obligation 1/**

Source of Funding	FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 Estimate
Appropriation	\$1,550,260,000	\$1,534,757,000	\$1,537,019,000
Enacted Rescissions	-15,503,000	0	0
Subtotal, Adjusted Appropriation	1,534,757,000	1,534,757,000	1,537,019,000
Real Transfer under Roadmap Authority	-13,715,000		
Real Transfer under Secretary's One-percent transfer authority	-1,054,000		
Comparative transfer from OD for NIH Roadmap	13,715,000		
Comparative Transfer to NIBIB	-70,000	-71,000	
Comparative transfer to OD	-31,000	-32,000	
Comparative Transfer to NCRR	-554,000	-535,000	
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	-3000	
Subtotal, adjusted budget authority	1,533,045,000	1,534,116,000	1,537,019,000
Unobligated Balance, start of year	0	0	0
Unobligated Balance, end of year	0	0	0
Subtotal, adjusted budget authority	1,533,045,000	1,534,116,000	1,537,019,000
Unobligated balance lapsing	-17,000	0	0
Total obligations	1,533,028,000	1,534,116,000	1,537,019,000

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

FY 2006 - \$10,227,000    FY 2007 - \$10,500,000    FY 2008 - \$10,640,000

Excludes \$561,000 in FY 2007 and \$424,000 in FY 2008 for royalties.

**NATIONAL INSTITUTES OF HEALTH**  
**National Institute of Neurological Disorders and Stroke**

(Dollars in Thousands)

Budget Mechanism - Total

MECHANISM	FY 2006 Actual		FY 2007 Continuing Resolution		FY 2008 Estimate		Change	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Grants:								
<u>Research Projects:</u>								
Noncompeting	2,085	\$808,246	2,050	\$779,231	1,950	\$753,002	-100	-\$26,229
Administrative supplements	(94)	5,447	(50)	3,500	(90)	5,447	40	1,947
Competing:								
Renewal	187	75,137	204	81,739	225	90,183	21	8,444
New	465	137,920	506	150,037	558	165,619	52	15,582
Supplements	3	1,047	3	1,139	3	1,175	0	36
Subtotal, competing	655	214,104	713	232,915	786	256,977	73	24,062
Subtotal, RPGs	2,740	1,027,797	2,763	1,015,646	2,736	1,015,426	-27	-220
SBIR/STTR	103	37,017	99	35,732	97	35,162	-2	-570
Subtotal, RPGs	2,843	1,064,814	2,862	1,051,378	2,833	1,050,588	-29	-790
<u>Research Centers:</u>								
Specialized/comprehensive	68	87,684	67	86,339	67	86,339	0	0
Clinical research	0	0	0	0	0	0	0	0
Biotechnology	0	0	0	0	0	0	0	0
Comparative medicine	0	473	0	0	0	0	0	0
Research Centers in Minority Institutions	0	0	0	0	0	0	0	0
Subtotal, Centers	68	88,157	67	86,339	67	86,339	0	0
<u>Other Research:</u>								
Research careers	289	46,906	308	50,011	321	51,181	13	1,170
Cancer education	0	0	0	0	0	0	0	0
Cooperative clinical research	48	1,824	70	6,987	70	6,987	0	0
Biomedical research support	0	0	0	0	0	0	0	0
Minority biomedical research support	5	1,583	4	1,244	4	1,244	0	0
Other	55	13,369	51	12,560	51	12,560	0	0
Subtotal, Other Research	397	63,682	433	70,802	446	71,972	13	1,170
Total Research Grants	3,308	1,216,653	3,362	1,208,519	3,346	1,208,899	-16	380
<u>Research Training:</u>	<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>			
Individual awards	404	15,345	404	15,602	404	15,602	0	0
Institutional awards	333	12,690	333	17,301	333	17,301	0	0
Total, Training	737	28,035	737	32,903	737	32,903	0	0
Research & development contracts (SBIR/STTR)	108 (2)	81,013 (83)	107 (2)	80,608 (510)	107 (2)	81,808 (510)	0 0	1,200 (0)
<u>Intramural research</u>	<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>	
Intramural research	374	142,555	384	141,840	392	140,847	8	-993
Research management and support	151	51,074	153	51,840	153	52,358	0	518
Cancer prevention & control	0	0	0	0	0	0	0	0
Construction		0		0		0		0
Buildings and Facilities		0		0		0		0
NIH Roadmap for Medical Research	1	13,715	2	18,406	2	20,204		1,798
Total, NINDS	526	1,533,045	539	1,534,116	547	1,537,019	8	2,903

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

NATIONAL INSTITUTES OF HEALTH  
National Institute of Neurological Disorders and Stroke  
Budget Authority by Program  
(Dollars in thousands)

<b>Extramural Research</b>	<b>FY 2004</b>		<b>FY 2005</b>		<b>FY 2006</b>		<b>FY 2006</b>		<b>FY 2007</b>		<b>FY 2008</b>		<b>Change</b>	
	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount
Detail:														
Channels, Synapses & Circuits		\$222,967		\$228,548		\$220,843		\$220,289		\$219,679		\$219,942		\$263
Neural Environment		295,604		336,501		329,612		329,612		328,699		329,092		393
Neurodegeneration		190,864		196,362		184,915		184,915		184,403		184,623		220
Neurogenetics		233,105		216,997		203,358		203,358		202,795		203,037		242
Repair & Plasticity		131,870		135,078		139,690		139,690		139,303		139,469		166
Systems & Cognitive Neuroscience		193,623		193,979		187,749		187,749		187,229		187,453		224
Technology Development, Infrastructure & Resources		49,573		41,637		60,088		60,088		59,922		59,994		72
<b>Subtotal, Extramural</b>		1,317,606		1,349,102		1,326,255		1,325,701		1,322,030		1,323,610		1,580
<b>Intramural research</b>	392	137,612	385	134,617	374	142,648	374	142,555	384	141,840	392	140,847	8	-993
<b>Res. management &amp; support</b>	176	43,047	146	45,997	151	51,085	151	51,074	153	51,840	153	52,358	0	518
<b>NIH Roadmap for Medical Research</b>		5,156		9,732	1	13,715	1	13,715	2	18,406	2	20,204	0	1,798
<b>TOTAL</b>	568	1,503,421	531	1,539,448	526	1,533,703	526	1,533,045	539	1,534,116	547	1,537,019	8	2,903

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

## **Major Changes in the Fiscal Year 2008 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 2008 budget request for NINDS, which is \$2.903 million more than the FY 2007 Estimate, for a total of \$1,537.019 million.

Research Project Grants (-\$0.22 million, total \$1,015.4 million). NINDS will support a total of 2,736 Research Project Grant (RPG) awards in FY 2008. Noncompeting RPGs will decrease by 100 awards and decrease by \$26.2 million. Competing RPGs will increase by 73 awards and increase by \$24.1 million.

Research Careers (+\$1.17 million; total \$51.181 million): NINDS will support the Pathway to Independence program, by funding an additional 13 awards in FY 2008. Total support for the Pathway program in FY 2008 is 25 awards and \$2.25 million dollars.

NIH Roadmap for Biomedical Research (+\$1.8 million; total \$20.204 million): NINDS will continue its support of the NIH Roadmap, an incubator for new ideas and initiatives that will accelerate the pace of discovery, in FY 2008.

Intramural Research - Developmental and Metabolic Neurology (-\$2.2 million). In consultation with its Board of Scientific Counselors, NINDS will close a major intramural laboratory. The NINDS will maintain an already extensive program of research in this area of disease via its extramural program. The NINDS Intramural Program will continue to explore what future role it should play in this research area with the advice of its Board of Scientific Counselors.

NINDS Pilot Therapeutics Network (NPTUNE) (-\$2.4 million): NINDS will not continue the NPTUNE pilot therapeutics program which was designed to expedite pilot clinical trials for rare disorders. The program has not been sufficiently effective, and NINDS will pursue the need for pilot clinical trials through other ongoing NINDS clinical trials programs.

The NINDS Human Genetics Repository (+\$2.0 million): In 2003 NINDS established the Human Genetics Repository to collect, store, characterize, and distribute DNA samples and cell lines and standardized clinical data for the research community. Because the program has proven to be a cost effective catalyst for high priority genetic research, the NINDS will expand the program, doubling the number of samples. To partially compensate for the cost of expansion, the repository will no longer create cell lines for each sample, which has been less useful.

**NATIONAL INSTITUTES OF HEALTH**  
**National Institute of Neurological Disorders and Stroke**  
**Summary of Changes**

FY 2007 Estimate			\$1,534,116,000	
FY 2008 Estimated Budget Authority			1,537,019,000	
Net change			2,903,000	
CHANGES	FY 2007			
	Continuing Resolution Base		Change from Base	
	FTEs	Budget Authority	FTEs	Budget Authority
A. Built-in:				
1. Intramural research:				
a. Annualization of January 2007 pay increase		\$50,053,000		\$491,000
b. January 2008 pay increase		50,053,000		1,674,000
c. Two extra days of pay		50,053,000		396,000
d. Payment for centrally furnished services		24,685,000		247,000
e. Increased cost of laboratory supplies, materials, and other expenses		67,102,000		1,322,000
Subtotal	4,130,000			
2. Research Management and Support:				
a. Annualization of January 2007 pay increase		\$19,430,000		\$204,000
b. January 2008 pay increase		19,430,000		697,000
c. Two extra days of pay		19,430,000		154,000
d. Payment for centrally furnished services		11,209,000		112,000
e. Increased cost of laboratory supplies, materials, and other expenses		21,201,000		404,000
Subtotal	1,571,000			
Subtotal, Built-in	5,701,000			



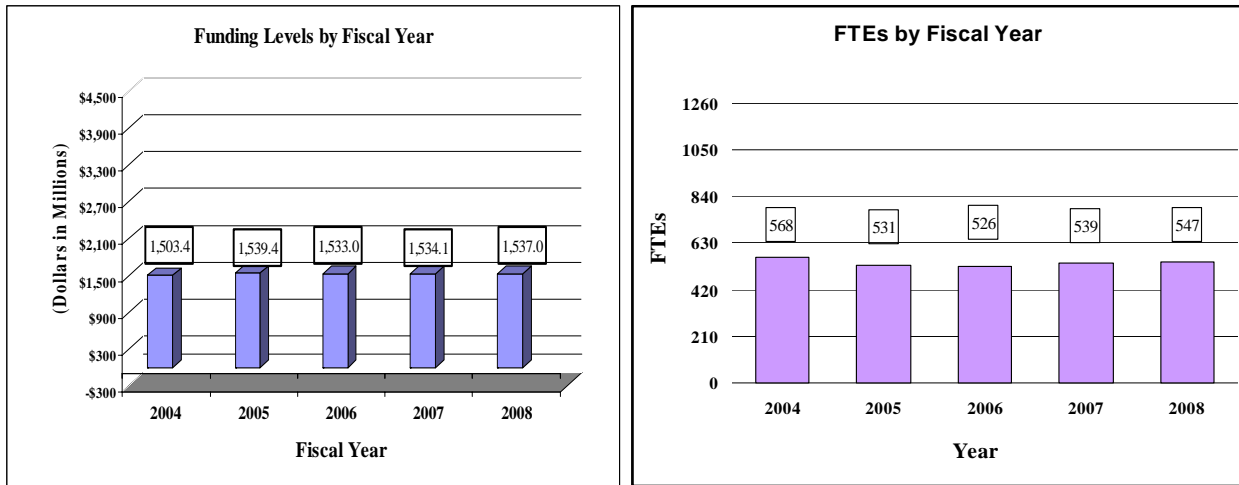
**NATIONAL INSTITUTES OF HEALTH**  
**National Institute of Neurological Disorders and Stroke**

**Summary of Changes--continued**

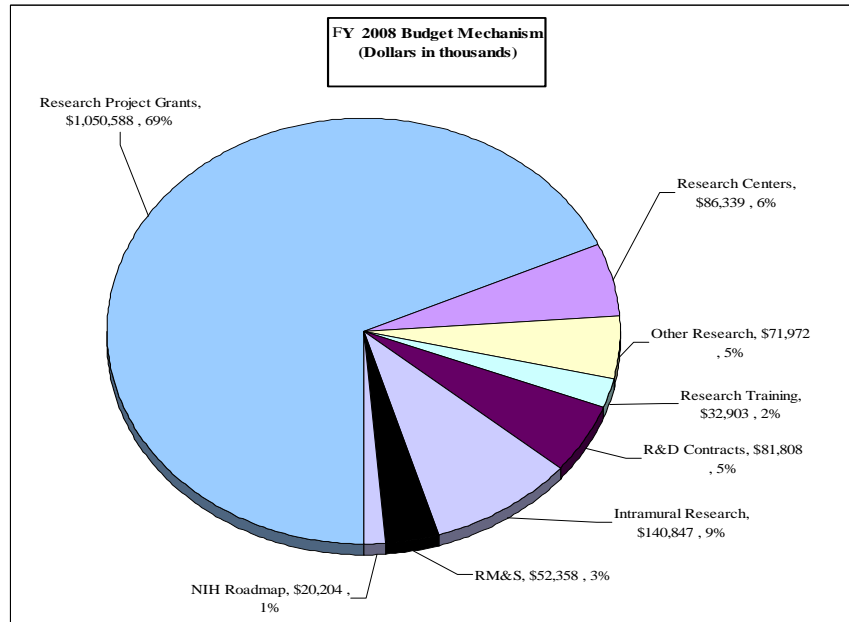
CHANGES	2007			
	Continuing Resolution Base		Change from Base	
	No.	Amount	No.	Amount
B. Program:				
1. Research project grants:				
a. Noncompeting	2,050	\$782,731,000	-100	-\$24,282,000
b. Competing	713	232,915,000	73	24,062,000
c. SBIR/STTR	99	35,732,000	-2	-570,000
Total	2,862	1,051,378,000	-29	-790,000
2. Research centers	67	86,339,000	0	0
3. Other research	433	70,802,000	13	1,170,000
4. Research training	737	32,903,000	0	0
5. Research and development contracts	107	80,608,000	0	1,200,000
Subtotal, extramural				1,580,000
	<u>FTEs</u>		<u>FTEs</u>	
6. Intramural research	384	141,840,000	8	-5,123,000
7. Research management and support	153	51,840,000	0	-1,053,000
8. Cancer control and prevention	0	0	0	0
9. Construction		0		0
10. Buildings and Facilities		0		0
11. NIH Roadmap for Medical Research	2	18,406,000	0	1,798,000
Subtotal, program		1,534,116,000		-2,798,000
Total changes	539		8	2,903,000

## Fiscal Year 2008 Budget Graphs

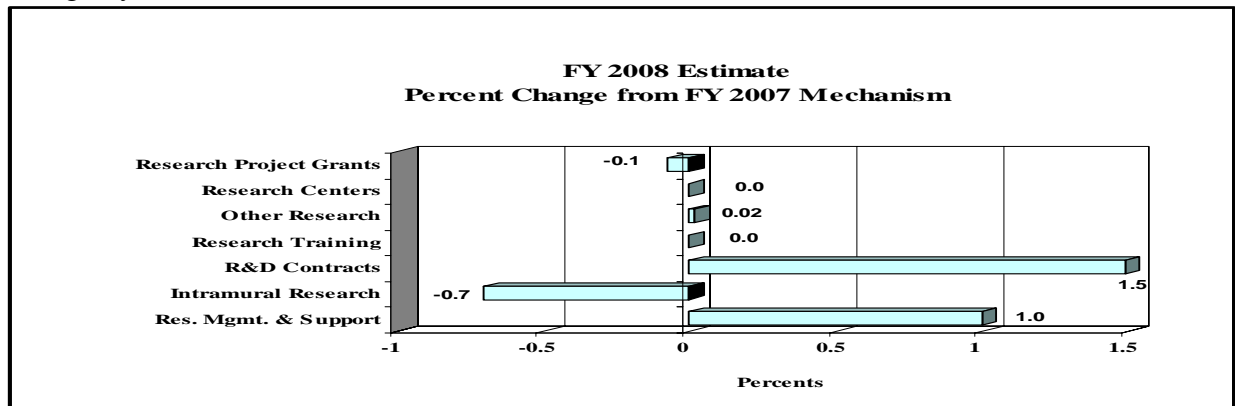
### History of Budget Authority and FTEs:



### Distribution by Mechanism:



### Change by Selected Mechanisms:



**Justification**  
**National Institute of Neurological Disorders and Stroke**

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

Budget Authority:

FY 2006 Actual		FY 2007 Continuing Resolution		FY 2008 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>
526	\$1,533,045,000	539	\$1,534,116,000	547	\$1,537,019,000	8	\$2,903,000

This document provides justification for the Fiscal Year (FY) 2008 activities of the National Institute of Neurological Disorders and Stroke (NINDS), including HIV/AIDS activities. Details of the FY 2008 HIV/AIDS activities are in the “Office of AIDS Research (OAR)” section of the Overview. Details on the Roadmap/Common Fund are located in the Overview, Volume One.

**Director’s Overview**

The mission of the National Institute of Neurological Disorders and Stroke (NINDS) is to reduce the burden of neurological disorders through research. NINDS supports research to understand the brain, spinal cord, and nerves of the body in health and disease, and to translate that knowledge into prevention, diagnosis, and treatment.

Because of progress over the last half century, hundreds of thousands of strokes are prevented each year<sup>1</sup>, plus emergency treatment can improve the outcome for people who do have a stroke, and effective science-based stroke rehabilitation is emerging. Treatments are still not adequate for stroke and many other neurological disorders, but better drugs and surgical treatments help people who have brain tumors, chronic pain, dystonia, epilepsy, essential tremor, migraine, multiple sclerosis, myasthenia gravis, neuropathies, Parkinson’s disease, spinal cord injury, Tourette syndrome, and many other diseases. Advances in brain imaging and in genetic testing also enhance diagnosis and treatment of neurological disease. As the nation’s largest supporter of research on the nervous system in health and disease, NINDS is a major driver of this progress.

NINDS has its most immediate impact on public health through phase III clinical trials that test the safety and effectiveness of interventions. At the request of the National Advisory Neurological Disorders and Stroke (NANDS) Council, the Institute contracted for an independent evaluation of the costs and benefits of all NINDS phase III clinical trials conducted from 1977 to 2000<sup>2</sup>. The total cost of the clinical trials in the study was \$335 million (adjusted to 2004 dollars). Over 10 years, the benefits from these trials exceeded \$15 billion and added

<sup>1</sup> MMWR Weekly 48:649-56, 1999; Circulation 113:e85-151, 2006

<sup>2</sup> The Lancet 367:1319-27, 2006

470,000 healthy years of life to people in the U.S. For the entire period, the benefits surpassed \$50 billion, which was greater than the total NINDS budget over that period (\$29.5 billion), even without considering private sector clinical advances that build on NINDS research. These conservative estimates included costs but not benefits of trials for which data on changes in health care practices were not available and did not consider less quantifiable benefits. The first ever successful trial of an emergency stroke treatment energized research, invigorated community stroke education, and stimulated the organization of more than 250 certified primary stroke centers nationally.

To sustain progress against neurological disorders, NINDS plans at multiple levels of analysis to meet the diverse challenges that these disorders present. NINDS strategic planning develops a broad vision of scientific and program priorities. Building on the framework of the strategic plan, NINDS is developing research strategies for specific diseases, for training of physician scientists, and for health disparities in neurological disorders. Scientific workshops on specific topics assess the state of the science, engage the research community in setting research agendas, and, when appropriate, help the institute to shape initiatives. At the most detailed level, every grant proposal NINDS accepts presents specific aims that are significant for the institute's mission and provides a research plan to accomplish these goals. Finally, to address issues beyond the mission of NINDS alone, the institute plans with other NIH Centers and the NIH Office of the Director through the NIH Roadmap, NIH Blueprint for Neuroscience Research, CounterACT chemical counterterrorism program, and many other activities.

NINDS extramural organization reflects the cross cutting themes around which strategic planning coalesced. Primary responsibility for coordinating research on each disease is assigned according to the theme that is most relevant, but expertise from across the entire institute is brought to bear on each disease. Through that structure the institute implements strategic and disease plans in several ways. The most direct is via targeted grant and contract solicitations. Since 2000, the Institute has issued more than 125 requests for applications, requests for proposals, program announcements, and targeted supplement programs that address priorities of strategic or disease plans. NINDS also established flexible programs that engage the expertise and creativity of the scientific community to address continuing strategic and diseases priorities for preclinical therapy development, clinical trials, and research resources. In addition to these programs and solicitations, NINDS follows the guidance of the NINDS Council in relying heavily on unsolicited investigator-initiated research, which is well suited to the diverse challenges that neurological disorders present. It is not happenstance that many highly ranked unsolicited grants respond to planning priorities because the priorities are well publicized and reflect a consensus among researchers about what is important. From unsolicited grant proposals, NINDS director, scientific staff, and the NINDS Council also identify meritorious "High Program Priority" grant proposals that score outside of the funding range but are especially important for the Institute's goals. All NINDS research, whether solicited or not, is rigorously evaluated, first by peer review and then by the NINDS Council, for significance, scientific merit, and relevance to the Institute's mission.

Although NINDS plans for diseases and scientific issues each year through formal planning exercises, scientific workshops, and the constant attention of its scientific and clinical staff, the Institute has not revised its broad strategic plan since 1999. Following consultation with the

NANDS Council in 2006, NINDS began a new strategic planning process starting with translational research, defined as preclinical therapy and diagnostics development. The choice of translational research reflects both the intense interest of the Congress and the public in translating scientific advances to therapies and the dramatic growth of NINDS translational research programs since the last strategic plan. After a thorough consideration of translational research in 2007, the strategic planning process will take up basic and clinical research, and then integrate across basic, translational, and clinical research from the perspective of diseases.

NINDS will launch initiatives in 2007 that provide medicinal chemistry resources for drug development, improve animal models to develop drugs for pediatric and geriatric epilepsy, supplement collaborative translational research, and expand NINDS Human Genetics Repository and GENSAT, the Gene Expression Nervous System Atlas. Initiatives continuing through 2007 from previous years focus on brain tumor, chronic pain, epilepsy, lysosomal storage diseases, multiple sclerosis, muscular dystrophy, neuroAIDs, neurofibromatosis, Parkinson's disease, Rett syndrome, stem cell biology, stroke, transmissible spongiform encephalopathies, tuberous sclerosis, vascular cognitive impairment, and cognitive deficits from central nervous system disorders. In 2008, NINDS will develop tools to estimate prospectively the public health impact of proposed clinical trials for neurological disorders, based on the approach used for the analysis of earlier clinical trials. These tools will aid planning in coming years.

#### **FY2008 Justification by Activity Detail**

Overall Budget Policy: Investigator-initiated research projects and new investigator research and career development are the Institute's highest priorities. The NINDS carefully evaluates investigator-initiated requests to submit grant applications for all large programs. The level of support provided for Institute-initiated projects (e.g., RFAs) is also evaluated. The Institute maintains a balance between solicitations issued to the extramural community in areas that need stimulation and funding made available to support investigator-initiated projects.

**Channels, Synapses, and Circuits** Channels, synapses, and neural circuits are fundamental elements of the nervous system. NINDS supports research on how these elements operate in health and disease and on diseases in which they play an important role, including epilepsy, muscular dystrophies, neuropathies, and channelopathies. Among recent activities: A March 2007 conference "Curing Epilepsy II" will assess progress in epilepsy and guide future research. The meeting is a follow up to the March 2000 conference "Curing Epilepsy: Focus on the Future," which NINDS organized in cooperation with several non-governmental organizations. In November 2005, the Muscular Dystrophy Coordinating Committee (MDCC) approved a detailed Action Plan for the Muscular Dystrophies, with more than 70 specific goals. The Action plan builds on the 2004 Muscular Dystrophy Research and Education Plan. An NINDS workshop in October 2006 brought together researchers and patient advocates across the different types of neuropathy to share information and identify research objectives for the field as a whole. A 2007 request for applications focuses on how defects in the cell nucleus contribute to Emery-Dreifuss, facioscapulohumeral, oculopharyngeal and other muscular dystrophies.

Budget Policy: The 2008 budget estimate of \$219,942,000 for Channels, Synapses, and Circuits represents an increase of \$263,000 from the 2007 estimate. NINDS will continue to rely upon a

balance of investigator initiated and solicited research. The October 2006 workshop on peripheral neuropathies, and the March 2007 “Curing Epilepsy II” conference, and the Action Plan for the Muscular Dystrophies will guide future activities. A Spring 2007 planning meeting focused on translational research for muscular dystrophies will also provide guidance for future activities. NINDS funds two of the six NIH Senator Paul D. Wellstone Muscular Dystrophy Cooperative Research Centers. With continuation of the centers in 2008, NINDS will place increased emphasis on concerted collaborative development of therapies within and across centers, while retaining the requirement that centers provide research resources to the muscular dystrophy research community. A program announcement to encourage research on the causes of muscular dystrophies and the development of therapies will remain open thorough 2008. In addition to support for Senator Paul D. Wellstone Muscular Dystrophy Research Fellowships within the Centers program, the NIH issued two program announcements that are active through 2008 to encourage training of scientists in muscle disease research. NINDS Cooperative Program on Translational Research, which is open to all diseases within the Institute’s mission, will continue funding of at least four projects related to muscular dystrophy in FY2008. To encourage additional translational research for muscular dystrophy, NINDS and the National Institute of Arthritis and Musculoskeletal Diseases (NIAMS) have issued a program announcement that is active through 2008.

**Neural Environment** Fewer than 1 out of 10 cells in the human brain are nerve cells. The other cells maintain the local environment that surrounds nerve cells, fight infections, restrict which molecules in the blood circulation get into the brain, and serve the healthy and diseased brain in many other ways. NINDS supports research on how these non-neuronal cells regulate the healthy brain and on several diseases in which these cells play a critical role, including stroke, multiple sclerosis, brain tumor, neurofibromatosis, tuberous sclerosis, transmissible spongiform encephalopathies, neuroAIDs, and other infectious diseases that attack the nervous system. Among recent activities: In 2006, NINDS convened members of the original Stroke Progress Review Group (PRG) and newly recruited experts to conduct a major mid-course review of progress and programs, which will be available in 2007. A program announcement with set aside funds, active through 2007, addresses the dispersal of tumor cells through the brain, which the Brain Tumor PRG identified as a major obstacle to treatment. The first neurofibromatosis (NF) center, awarded in 2005, has established new mouse models of neurofibromatosis that better parallel the symptoms and complications of human neurofibromatosis. Researchers are using these models to better understand NF and to test therapies. Beginning in 2006, NINDS is also sponsoring a clinical trial to test interventions for reading disabilities in neurofibromatosis, which is a critical quality of life issue for children with this disorder.

**Budget Policy:** The 2008 budget estimate of \$329,092,000 for Neural Environment represents an increase of \$393,000 from the 2007 estimate. NINDS will continue to rely on investigator-initiated and solicited research to address cross-cutting research themes and disease specific priorities. Among stroke activities continuing through 2008 are preclinical therapy development projects in NINDS’ Cooperative Program in Translational Research, seven SPOTRIAS (Specialized Program of Translational Research in Acute Stroke) centers, clinical data and tissue sample repositories, the Stroke Prevention/Intervention Research Program (focused on minority populations and the “stroke belt”), NINDS Human Genetics Resource Center, and the Alaska Native Stroke Registry. Clinical stroke studies continuing through 2008 include the “Reasons

for Geographic and Racial Differences in Stroke (REGARDS)” epidemiological study, which has recruited more than 20,000 out of a projected 30,000 individuals, and a clinical trials program, which includes more than 50 trials of interventions for prevention, emergency treatment, or rehabilitation for stroke. The Institute continues its comprehensive multiple sclerosis programs that fund research from basic studies to clinical trials. An NINDS program announcement with set aside funds on axon (nerve fiber) damage in multiple sclerosis is active through 2008. NINDS has supplemented an ongoing phase III clinical trial of combination therapies in multiple sclerosis to explore potential biomarkers, which are measurable indicators of disease that expedite research on new therapies. NINDS has recently funded multiple sclerosis related projects through solicitations that are continuing in 2008 on immunomodulation, on the neurovascular system, and on translational research. In 2005, the NIH and the Tuberous Sclerosis Alliance released a program announcement with set-aside funds to stimulate research on priorities of the trans-NIH Research Plan for Tuberous Sclerosis, which will be active until March 2008.

**Portrait of a Program: Specialized Program of Translational Research in Acute Stroke (SPOTRIAS)**

FY 2007 Level: \$13.7M

FY 2008 Level: \$13.7M

Change: \$0

A decade ago, an NINDS clinical trial of the clot busting drug t-PA established the first emergency treatment proven to reduce disability from the most common type of stroke. Building on this advance to further improve stroke therapy is a high priority of NINDS Stroke PRG. In 2001, the Institute established the SPOTRIAS as a national network of research centers to develop acute stroke therapies from preclinical research through early phase clinical trials. SPOTRIAS also improve pre-hospital stroke care, innovate in community education, and develop telemedicine to expand access to acute stroke care. With the addition of one center in 2006, the Institute now supports seven SPOTRIAS centers, including NINDS Intramural SPOTRIAS in cooperation with nearby Suburban Hospital in Bethesda, Maryland and Washington Hospital in Washington, D.C. Promising results for new acute stroke treatments, such as enhancement of t-PA effectiveness with ultrasound, are already moving from preliminary SPOTRIAS clinical testing to large, multi-site clinical trials.

In addition to scientific progress, the SPOTRIAS performance to date has yielded programmatic insights that NINDS will apply when the next centers re-compete in 2008. The SPOTRIAS have demonstrated convincingly that NINDS can raise expectations for how rapidly stroke patients can be evaluated and treated, setting higher goals for acute stroke care systems generally and opening new opportunities for interventions. It is also now apparent that SPOTRIAS centers at major academic medical centers can collaborate with community hospitals to enhance the recruitment of patients and improve dissemination of state-of-the-art care to the community. Telemedicine can provide neurology consultations to community hospitals that lack on-call neurologists, as is necessary for emergency stroke treatment protocols. Finally, funding to establish shared SPOTRIAS clinical databases, tissue repositories, and brain imaging data has proven to be an efficient way to catalyze SPOTRIAS network interactions and provide resources to the broader stroke research community.

**Neurodegeneration** Parkinson’s disease, amyotrophic lateral sclerosis (ALS), Huntington’s disease, Alzheimer’s disease, and Pick’s disease are among the neurodegenerative diseases that affect adults. Most neurodegenerative disorders are increasingly prevalent as people age, and will have increasing economic and public health impact as the U.S. population ages unless prevention and treatment improve. Research on what causes nerve cells to degenerate,

translation of these insights into therapeutic strategies, and on testing the safety and effectiveness of interventions for neurodegenerative disorders are NINDS priorities. In 2000, NINDS engaged the Parkinson's disease community in developing a Parkinson's Disease Research Agenda. Since then, dozens of initiatives, new research resources, and scientific workshops, and hundreds of individual research grants have addressed Agenda priorities. NINDS again convened academic researchers, industry scientists, clinicians, members of non-governmental organizations, and NIH scientists to develop a new Parkinson's Disease Research Plan, which was completed and publicized in 2006. In other activities in 2006, NINDS funded a large translational research grant to screen drugs for Picks' disease and other frontotemporal dementias and the Translational Research Advancing Therapies for Amyotrophic Lateral Sclerosis (TREAT ALS) program, a collaboration between the ALS Association and NINDS, published an analysis of 20 potential drug therapies for ALS.

Budget Policy: The 2008 budget estimate for Neurodegeneration activities is \$184,623,000 represents an increase of \$220,000 from the FY 2007 estimate. The identification of abnormal genes that can cause neurodegenerative diseases has energized research on the underlying mechanisms and on the development and clinical testing of strategies to slow neurodegeneration. NINDS will pursue these opportunities through initiatives and investigator initiated research. In 2008, the Committee to Identify Neuroprotective Agents for Parkinson's (CINAPS) and Neuroprotection Exploratory Trials in Parkinson's Disease (NET-PD) initiatives will continue to develop neuroprotective drugs for Parkinson's disease and test them in clinical trials. A formal external review of the network of twelve Morris K. Udall Parkinson's Disease Centers of Excellence is underway and will inform NINDS management of this program in 2008 and the future. Investigator initiated research projects through the institute's translational research programs are developing drugs, cell, and gene therapy for Parkinson's disease, ALS, frontotemporal dementia, and Huntington's disease, and clinical trials continuing through 2008 are evaluating drugs, natural biological factors, surgical treatments, and supportive therapies.



### **Portrait of a Program: Neuroprotective drugs for Parkinson's disease -- CINAPS and NET-PD**

FY 2007 Level: \$8.8M

FY 2008 Level: \$11.3M

Change: \$2.5M

The progressively worsening tremor, slowness of movement, and rigidity of Parkinson's disease reflect the death of brain cells that control movement. Developing drugs that slow this neurodegeneration is a priority for Parkinson's disease research because even a moderate slowing of neurodegeneration would have a major public health impact. Although a cure for Parkinson's disease is the goal of many NINDS research projects, the Institute developed the Committee to Identify Neuroprotective Agents for Parkinson's (CINAPS) and Neuroprotection Exploratory Trials in Parkinson's Disease (NET-PD) initiatives to select, develop, and test drugs that can be made available as soon as possible and are at least moderately effective.

In 2003, CINAPS solicited candidate drugs to slow the progress of Parkinson's disease from scientists, pharmaceutical companies, and the lay public, and evaluated the drugs according to a rigorous set of objective criteria. In all, CINAPS evaluated 59 drug candidates, proposed by 42 scientists from 13 countries. From these, 4 were selected for testing in early phase clinical trials through NET-PD to see if further development was warranted. NET-PD efficiently completed these preliminary trials in 2006 through coordinated research at 40 clinical centers throughout the United States. Following additional preclinical work in 2007, the most promising drug, creatine, is moving forward to a definitive phase III clinical trial of safety and effectiveness, which may begin in 2007 and continue in 2008. In 2006, NINDS established a contract facility to conduct animal tests and provide research support for the CINAPS preclinical drug evaluation process on additional drug candidates, which will also continue in 2008. The innovative CINAPS drug selection process has been discussed widely and adopted by other disease communities, including Huntington's disease, ALS, and spinal muscular atrophy.

**Neurogenetics** NINDS supports research to understand genes and the nervous system and to understand and develop treatments for the hundreds of genetic diseases that affect the nervous system. Neurogenetic disorders include the ataxias, Down syndrome, dystonia, lysosomal storage diseases (which include Batten disease and the mucopolysaccharidoses), Rett syndrome, and Tourette syndrome. Identifying gene defects that contribute to neurological disorders, investigating how mutations cause disease, identifying drug targets, developing gene therapies, and studying genes in normal brain function are continuing research priorities. Among recent activities: In 2006, the Trans-NIH Ataxia-Telangiectasia (A-T) Research Working Group, which includes program directors from 12 NIH institutes and centers and representatives from 3 A-T non-governmental organizations, released a comprehensive research plan for basic through clinical A-T research. The first implementation step was a clinical research workshop, held in March 2006, to address issues raised by the plan on clinical criteria and standards. NINDS, with the NIH Office of Rare Disorders (ORD) and the Lysosomal Storage Disease Research Consortium, offers two program announcements with set-aside funds through 2007 that encourage development of therapies for these diseases. NINDS currently funds a number of Batten disease projects from this initiative, including one in which multiple research teams will together develop gene replacement therapy for the late infantile form of this disease.

**Budget Policy:** The 2008 budget estimate of \$203,037,000 for Neurogenetics represents an increase of \$242,000 from the 2007 estimate. NINDS will continue investigator initiated grants and targeted activities in Neurogenetics. Among the initiatives continuing in 2008: In 2007, NINDS will issue a program announcement, which will continue in 2008, to solicit research on

priorities of the new A-T plan. NINDS is committed to maintaining the momentum of advances in understanding Rett syndrome through a program announcement with set aside funds and will remain active through 2008. The GENSAT (Gene Expression Nervous System Atlas), which provides data on the activity of genes and supplies genetically engineered lines of mice to researchers, met its 2006 production targets. The contract will re-compete in 2007 and NINDS plans to continue the GENSAT project at least through 2008. Developing gene therapies is a major goal of NINDS strategic plan and is the focus of ongoing investigator initiated grants and solicited research. An initiative continuing through 2008 supports SBIR grants to improve the technology for RNAi therapy, which NINDS grantees showed has promise for silencing harmful genes in several neurological disorders.

#### **Portrait of a Program: The NINDS Human Genetics Repository**

FY2007 Level: \$2M  
 FY2008 Level: \$4M  
 Change: \$2M

NINDS strategic and disease plans highlight resources to support gene discovery because identifying genes that contribute to neurological disorders energizes research on causes and treatment. In 2003 the institute established the NINDS Human Genetics Repository to collect, store, characterize, and distribute DNA samples and cell lines and standardized clinical data for the research community. As of September 2006, the repository had collected material from 13,831 unique subjects, including stroke (3700), epilepsy (993), Parkinsonism (3038), motor neuron diseases, including ALS (1783), and control samples (3771). The ethnically diverse collection represents populations from Asia, South America, and Europe, as well as the U.S. More than 50 scientific articles have been published or are undergoing review based on data from this resource. In 2007 the NINDS plans to award contracts to extend the facility for another five years and to add Tourette syndrome to the repository.

Technological advances that make “whole genome screening” for disease genes feasible have enhanced the value of the repository. NIH Intramural investigators, for example, are using repository data for whole genome screens in Parkinson’s disease and stroke. NINDS has worked with the National Center for Biotechnology Information (NCBI) at the National Library of Medicine to improve database capabilities to support such activities. The repository has also developed collaborations that enhance data and sample collection. Among the partners are the Parkinson’s Disease Data Organizing Center (PD-DOC), ongoing NINDS-supported clinical trials (via a supplement program), the first project within the new NINDS Clinical Research Collaboration (CRC) of academic and community-based physicians, and a public-private partnership supplement program with the ALS association, which has driven growth from 50 ALS samples a year ago to more than 1000 today. A new investigator-initiated epilepsy consortium is among several NINDS grants that will also provide valuable material to the repository. Finally, the repository is pioneering free and open sharing of genotyping data by setting high standards and implementing them aggressively. In less than one year since it was posted (beginning in Dec 2005), the first ever entirely public, anonymized, and free genotyping data for Parkinson’s disease and neurologically normal controls was accessed by 234 scientists who are using the data for data modeling, development of data analysis methods, and as controls in the study of attention deficit hyperactivity disorder (ADHD), heart disease, and other disorders. In 2008, the repository will double the number of samples and partially compensate for the cost by no longer creating cell lines for each sample, which has proven to be less valuable. There will also be increasing emphasis on the distribution and use of the data and samples by the research community.

**Repair and Plasticity** NINDS supports extensive research on spinal cord injury, on traumatic brain injury, and on strategies to repair damage to the nervous system from disease or trauma. Research on repair includes longstanding support for the study of neural stem cells, of the brain’s innate capacity to adapt through “plasticity,” and of neural prostheses, which are devices that

restore function. In 2005, the Institute of Medicine (IOM) reported on the status and needs of spinal cord injury research, based on two years of work by a distinguished committee of experts. The report recommends increased research. NIH supports activities on every major priority of the report through solicitations, scientific workshops, investigator-initiated grant programs, and other mechanisms. Among these are combination therapies, clinical trials, cross-disciplinary research centers of excellence, coordination of research, quality of life issues, and training. Similarly, NINDS supports multiple individual laboratories and multi-disciplinary research teams to investigate how traumatic injury affects the brain, translate these insights to practical treatments, and test interventions in clinical trials. Clinical trials are now testing drugs, hormones, hypothermia, oxygen therapy, and surgical interventions. In 2006, stimulated by the high rate of traumatic brain injury among U.S. military personnel in Iraq, NINDS convened representatives from the several Federal Agencies that support research on traumatic brain injury to enhance coordination. This group will continue to work together in the coming year.

Budget Policy: The 2008 budget estimate of \$139,469,000 for Repair and Plasticity represents an increase of \$166,000 from the 2007 estimate. NINDS continues to rely on investigator initiated research and targeted solicitations. As the IOM spinal cord injury research report noted, NINDS Facilities of Research Excellence in Spinal Cord Injury (FORE SCI), which were established in 2003, address critical needs for spinal cord injury research. In 2008, NINDS will renew funding for one FORE-SCI contract center to provide hands-on training and two centers that replicate promising therapeutic results in animals with spinal cord injury. Replication in animals is essential before clinical trials in people are warranted, and comprehensive replication studies are difficult for investigators to take on without contract support. The vigorous NINDS extramural stem cell portfolio supports research on adult and embryonic animal stem cells and on human adult and NIH-approved lines of human embryonic stem cells. An NINDS program announcement with set aside funds, active through 2008, focuses on the interaction of stem cells with their microenvironment in the brain and spinal cord, which is critical for use of stem cells in therapy.

**Systems and Cognitive Neuroscience:** Stroke, brain trauma, neurodegenerative disorders, and many other neurological diseases affect learning, memory, attention, language, thinking, emotion, sleep, response to pain, and feeding. In addition to basic research on how healthy brain systems carry out these complex functions, and on counteracting loss of higher brain functions from neurological disorders, NINDS activities include research on other disorders in which a systems perspective is paramount, including neuroendocrine disorders, sleep disorders, and pain, including migraine and other chronic pain conditions.

Budget Policy: The 2008 budget estimate of \$187,453,000 for Systems and Cognitive Neuroscience represents an increase of \$224,000 from the 2007 estimate. NINDS continues to emphasize investigator initiated research in this area, with initiatives as appropriate. As the largest NIH supporter of research on pain, NINDS is a leader of the NIH Pain Consortium, which promotes collaboration among the many NIH institutes and centers that have activities addressing pain. Based on thorough review of NIH pain related activities, NINDS and the NIH Pain Consortium issued a program announcement, which will continue in 2008, on mechanisms, models, measurement, and management in pain research. In 2007, NINDS is issuing a program

announcement on cognitive deficits in central nervous system disorders, which will continue in 2008.

**Technology Development, Infrastructure, and Resources:** NINDS fosters preclinical therapeutics development, provides access to research resources, and supports research infrastructure, including infrastructure for clinical trials. The nine Specialized Neuroscience Research Programs (SNRPs), which strengthen the research capabilities of basic and clinical neuroscience research programs at minority institutions, are among the continuing programs of the Office of Minority and Health Research. The Spinal Muscular Atrophy (SMA) Project, which will continue through 2008, is implementing its detailed drug development plan, and NINDS has applied for provisional patents to cover promising new compounds that are emerging from the project. The Anticonvulsant Screening Program (ASP), which catalyzes academic and industry efforts to develop drugs for epilepsy, added tests in 2006 to screen drugs for treatment resistant epilepsy and in 2007 will begin testing of compounds for treatment of seizures from chemical threat agents. In 2007, an NINDS initiative will address a major barrier to developing drugs for neurological disorders by investigators outside of large pharmaceutical companies—the lack of access to resources for medicinal chemistry. The Neurological Emergencies Treatment Trials (NETT) will focus on stroke, head and spinal cord trauma, status epilepticus (continuous seizures), and other neurological emergencies, which constitute 5 to 10% of all medical emergencies and often cause long term disability. NINDS awarded the contract for the statistical center in 2006 and plans to award the clinical hubs and coordinating center in 2007. In its first clinical trial, NETT will test the effectiveness of the drug midazolam for continuous seizures, which is important both as a countermeasure for seizures from chemical threat agents and for seizures from natural causes. The Clinical Research Collaboration (CRC) engages physicians in the community to speed clinical research, minimize costs, improve access to diverse patients, enable more trials of rare diseases, and encourage the transfer of research results to clinical practice in community settings. NINDS awarded the initial contract for the CRC Facility in 2005, and in 2006 trained and certified the first cohort of participating physicians, established a web site for patients and physicians to find active clinical studies, and opened a genetic specimen repository to CRC physicians. The CRC plans to open two stroke studies and an epilepsy study in 2007.

**Budget Policy:** The 2008 budget estimate of \$59,922 for Technology Development, Infrastructure, and Resources represents an increase of \$72,000 from the 2007 estimate. In 2002, NINDS developed the Cooperative Program in Translational Research to support collaborative preclinical research to develop therapies, and the institute has renewed the program through 2008 via program announcements with special review that increase efforts to engage small businesses and add resource centers for therapy development. The program currently funds projects that are developing drug, stem cell, or gene therapies for more than 20 diseases, including ALS, Batten disease, epilepsy, Huntington's disease, muscular dystrophy, Parkinson's disease, tuberous sclerosis, traumatic brain injury and stroke. The institute will continue the SMA Project, Anticonvulsant Screening Program, Microarray Centers, SNRPs, medicinal chemistry support, CRC and NETT clinical trials infrastructure, research cores, and other ongoing resource programs in 2008.

### **Intramural Research**

NINDS Intramural Research Program conducts basic, translational, and clinical research on the NIH campus in Bethesda, Maryland, which is the largest community of neuroscientists in the world. Among the unique resources of the NIH campus, the Mark O. Hatfield Clinical Center is a hospital totally dedicated to clinical research and the NIH Neuroscience Center is designed to integrate neuroscience across NIH institutes and disciplinary boundaries. In the past year, NINDS intramural experts and the Clinical Center rapidly addressed public health issues raised by the emergence of a rare viral infection among people who had received a promising new drug for multiple sclerosis. The Intramural program continues to pioneer movement of scientific insights to testing in patients, with promising results this year in a phase II clinical trial of the drug idebenone for Friedreich's ataxia carried out in a public-private partnership with the Friedreich's Ataxia Research Alliance and a private pharmaceutical company. Ongoing Intramural activities that respond to high priorities of the Institute include a joint brain tumor program with the National Cancer Institute, the Suburban Hospital and Washington Hospital Center Stroke centers for research on stroke including minority populations, pioneering research on neural stem cells, investigations of biomarkers to accelerate therapy development for multiple sclerosis, research to move gene findings to therapies for neurogenetic diseases, and research on the consequences of head trauma in military personnel, which will be extended in 2008 to those injured in Iraq.

**Budget Policy:** The 2008 budget estimate of \$140,847,000 for the Intramural Research Program represents a decrease of \$993,000 from the 2007 estimate. With the appointment of a new Scientific Director at the start of fiscal year 2007, the Intramural program is examining how its programs can best serve NINDS mission. An external blue ribbon panel of distinguished basic and clinical scientists will also evaluate the Intramural Research Program and provide recommendations for its future.

### **Research Management and Support (RMS)**

NINDS 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. The Institute currently oversees more than 3,200 research project grants and centers, as well as more than 100 research and support contracts. More than 1,000 research projects involve human subjects, including 153 clinical trials.

**Budget Policy:** The 2008 budget estimate of \$52,358,000 represents an increase of \$518,000 from the 2007 estimate.

**NATIONAL INSTITUTES OF HEALTH**  
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**Budget Authority by Object**

	FY 2007 Continuing Resolution	FY 2008 Estimate	Increase or Decrease
Total compensable workyears:			
Full-time employment	539	547	8
Full-time equivalent of overtime & holiday hours	1	1	0
Average ES salary	\$158,967	\$163,593	4,626
Average GM/GS grade	10.8	10.9	0
Average GM/GS salary	\$76,820	\$79,055	2,235
Average salary, grade established by act of July 1, 1944 (42 U.S.C. 207)	\$92,225	\$94,909	2,684
Average salary of ungraded positions	107,237	110,358	3,121
<b>OBJECT CLASSES</b>	<b>FY 2007 Appropriation</b>	<b>FY 2008 Estimate</b>	<b>Increase or Decrease</b>
Personnel Compensation:			
11.1 Full-Time Permanent	\$31,836,000	\$33,188,000	1,352,000
11.3 Other than Full-Time Permanent	15,216,000	15,950,000	734,000
11.5 Other Personnel Compensation	1,056,000	1,100,000	44,000
11.7 Military Personnel	653,000	683,000	30,000
11.8 Special Personnel Services Payments	7,224,000	7,585,000	361,000
<b>Total, Personnel Compensation</b>	<b>55,985,000</b>	<b>58,506,000</b>	<b>2,521,000</b>
12.0 Personnel Benefits	13,081,000	13,668,000	587,000
12.2 Military Personnel Benefits	417,000	438,000	21,000
13.0 Benefits for Former Personnel	0	0	0
<b>Subtotal, Pay Costs</b>	<b>69,483,000</b>	<b>72,612,000</b>	<b>3,129,000</b>
21.0 Travel & Transportation of Persons	3,096,000	2,791,000	-305,000
22.0 Transportation of Things	183,000	164,000	-19,000
23.1 Rental Payments to GSA	0	0	0
23.2 Rental Payments to Others	152,000	152,000	0
23.3 Communications, Utilities & Miscellaneous Charges	938,000	938,000	0
24.0 Printing & Reproduction	587,000	587,000	0
25.1 Consulting Services	6,859,000	6,698,000	-161,000
25.2 Other Services	7,307,000	6,604,000	-703,000
25.3 Purchase of Goods & Services from Government Accounts	122,282,600	123,803,000	1,520,400
25.4 Operation & Maintenance of Facilities	2,397,000	2,134,000	-263,000
25.5 Research & Development Contracts	36,359,000	36,357,000	-2,000
25.6 Medical Care	490,000	436,000	-54,000
25.7 Operation & Maintenance of Equipment	9,106,000	8,282,000	-824,000
25.8 Subsistence & Support of Persons	0	0	0
<b>25.0 Subtotal, Other Contractual Services</b>	<b>184,800,600</b>	<b>184,314,000</b>	<b>-486,600</b>
26.0 Supplies & Materials	7,859,000	7,288,000	-571,000
31.0 Equipment	6,649,000	6,162,000	-487,000
32.0 Land and Structures	0	0	0
33.0 Investments & Loans	0	0	0
41.0 Grants, Subsidies & Contributions	1,241,957,400	1,241,802,000	-155,400
42.0 Insurance Claims & Indemnities	0	0	0
43.0 Interest & Dividends	5,000	5,000	0
44.0 Refunds	0	0	0
<b>Subtotal, Non-Pay Costs</b>	<b>1,446,227,000</b>	<b>1,444,203,000</b>	<b>-2,024,000</b>
<b>NIH Roadmap for Medical Research</b>	<b>18,406,000</b>	<b>20,204,000</b>	<b>1,798,000</b>

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**Salaries and Expenses**

OBJECT CLASSES	FY 2007 Continuing Resolution	FY 2008 Estimate	Increase or Decrease
<b>Personnel Compensation:</b>			
Full-Time Permanent (11.1)	\$31,836,000	\$33,188,000	1,352,000
Other Than Full-Time Permanent (11.3)	15,216,000	15,950,000	734,000
Other Personnel Compensation (11.5)	1,056,000	1,100,000	44,000
Military Personnel (11.7)	653,000	683,000	30,000
Special Personnel Services Payments (11.8)	7,224,000	7,585,000	361,000
<b>Total Personnel Compensation (11.9)</b>	<b>55,985,000</b>	<b>58,506,000</b>	<b>2,521,000</b>
Civilian Personnel Benefits (12.1)	13,081,000	13,668,000	587,000
Military Personnel Benefits (12.2)	417,000	438,000	
Benefits to Former Personnel (13.0)	0	0	0
<b>Subtotal, Pay Costs</b>	<b>69,483,000</b>	<b>72,612,000</b>	<b>3,129,000</b>
Travel (21.0)	3,096,000	2,791,000	-305,000
Transportation of Things (22.0)	183,000	164,000	-19,000
Rental Payments to Others (23.2)	152,000	152,000	0
Communications, Utilities and Miscellaneous Charges (23.3)	938,000	938,000	0
Printing and Reproduction (24.0)	587,000	587,000	0
<b>Other Contractual Services:</b>			
Advisory and Assistance Services (25.1)	1,752,000	1,591,000	-161,000
Other Services (25.2)	7,307,000	6,604,000	-703,000
Purchases from Govt. Accounts (25.3)	70,735,600	71,003,000	267,400
Operation & Maintenance of Facilities (25.4)	2,397,000	2,134,000	-263,000
Operation & Maintenance of Equipment (25.7)	9,106,000	8,282,000	-824,000
Subsistence & Support of Persons (25.8)	0	0	0
<b>Subtotal Other Contractual Services</b>	<b>91,297,600</b>	<b>89,614,000</b>	<b>-1,683,600</b>
Supplies and Materials (26.0)	7,839,000	7,270,000	-569,000
<b>Subtotal, Non-Pay Costs</b>	<b>104,092,600</b>	<b>101,516,000</b>	<b>-2,576,600</b>
<b>Total, Administrative Costs</b>	<b>173,575,600</b>	<b>174,128,000</b>	<b>552,400</b>

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**Authorizing Legislation**

	PHS Act/ Other Citation	U.S. Code Citation	2007 Amount Authorized	FY 2007 Continuing Resolution	2008 Amount Authorized	FY 2008 Budget Estimate
Research and Investigation	Section 301	42§241	Indefinite		Indefinite	
National Institute of Neurological Disorders and Stroke	Section 402(a)	P.L.-109-482	Indefinite	\$1,534,116,000	Indefinite	\$1,537,019,000
				1,534,116,000		1,537,019,000
Total, Budget Authority						



**NATIONAL INSTITUTES OF HEALTH**  
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**Appropriations History**

Fiscal Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation <u>1/</u>
1999	815,649,000 <u>2/3/</u>	851,066,000	903,278,000	903,278,000
Rescission				-598,000
2000	890,816,000 <u>2/</u>	979,281,000	1,019,271,000	1,034,886,000
Rescission				-5,510,000
2001	1,050,412,000 <u>2/</u>	1,185,767,000	1,189,425,000	1,176,482,000
Rescission				-383,000
2002	1,316,448,000	1,306,321,000	1,352,055,000	1,328,188,000
Rescission				-1,522,000
2003	1,432,305,000	1,432,305,000	1,466,005,000	1,466,005,000
Rescission				-9,529,000
2004	1,468,926,000	1,468,326,000	1,510,926,000	1,510,776,000
Rescission				9,569,000
2005	1,545,623,000	1,545,623,000	1,569,100,000	1,539,448,000
Rescission				-12,675,000
2006	1,550,260,000	1,550,260,000	1,591,924,000	1,550,260,000
Rescission				-1,503,000
2007	1,524,750,000	1,524,750,000	1,537,703,000	1,534,757,000 <u>4/</u>
2008	1,537,019,000			

1/ Reflects enacted supplementals, rescissions, and reappropriations.

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

3/ Reflects a decrease of \$2,457,000 for the budget amendment for Bioterrorism

4/ Annualized current rate

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

OFFICE/DIVISION	FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 Estimate
Office of the Director	54	55	55
Division of Intramural Research	374	384	392
Division of Extramural Activities	98	100	100
Total	526	539	547
Includes FTEs which are reimbursed from the NIH Roadmap for Medical Research			
FTEs supported by funds from Cooperative Research and Development Agreements			
	(2)	(2)	(2)
FISCAL YEAR	Average GM/GS Grade		
2004	11.2		
2005	11.3		
2006	10.7		
2007	10.8		
2008	10.9		

**NATIONAL INSTITUTES OF HEALTH**  
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**Detail of Positions**

GRADE	FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 Estimate
Total, ES Positions	3	3	3
Total, ES Salary	463,731	476,901	490,779
GM/GS-15	39	41	41
GM/GS-14	32	33	33
GM/GS-13	71	72	73
GS-12	58	59	60
GS-11	46	45	47
GS-10	6	6	6
GS-9	40	43	44
GS-8	20	20	21
GS-7	18	23	22
GS-6	2	2	3
GS-5	6	6	8
GS-4	18	18	20
GS-3	5	8	10
GS-2	6	6	4
GS-1	6	4	2
Subtotal	373	386	394
Grades established by Act of July 1, 1944 (42 U.S.C. 207):			
Assistant Surgeon General			
Director Grade	4	4	4
Senior Grade	2	2	2
Full Grade	1	1	1
Senior Assistant Grade			
Assistant Grade			
Subtotal	7	7	7
Ungraded	201	208	213
Total permanent positions	449	550	550
Total positions, end of year	583	596	604
Total full-time equivalent (FTE) employment, end of year	526	539	547
Average ES salary	154,577	158,967	163,593
Average GM/GS grade	10.7	10.8	10.9
Average GM/GS salary	74,699	76,820	79,055

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

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**New Positions Requested**

	FY 2008		
	Grade	Number	Annual Salary
Intramural Fellow	AD	8	\$70,000
Total Requested		8	