

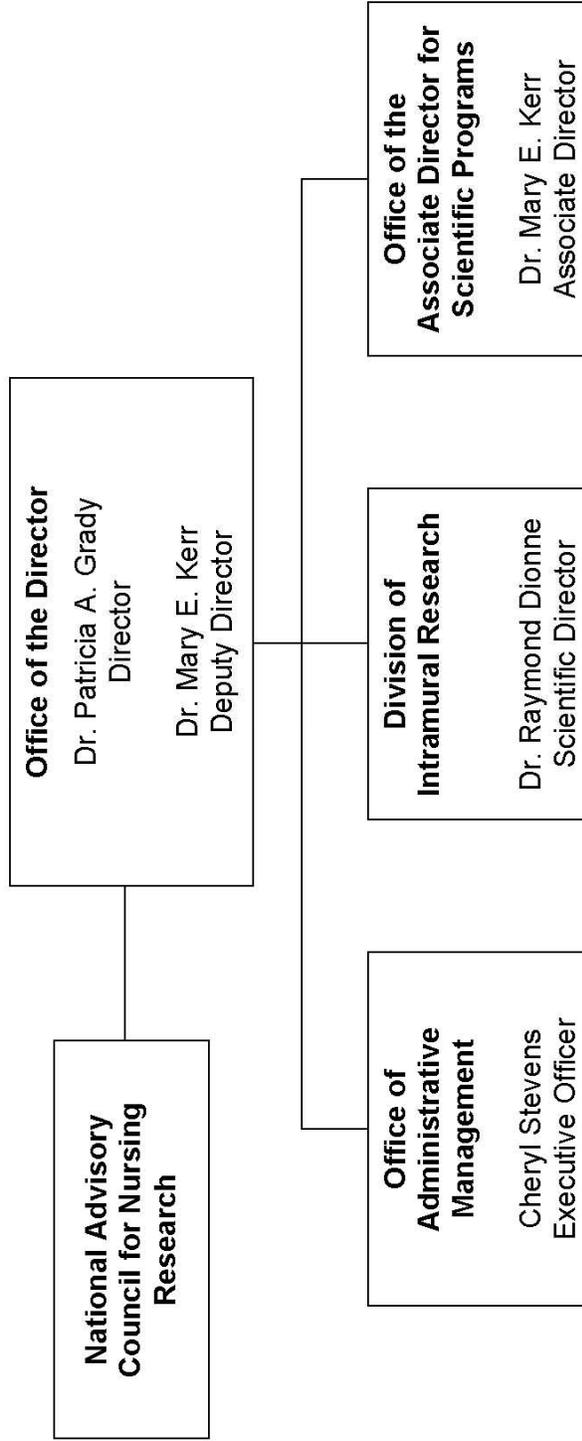
DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

National Institute of Nursing Research

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**National Institutes of Health
National Institute of Nursing Research
Organizational Chart**



FY 2008 Proposed Appropriation Language

NATIONAL INSTITUTES OF HEALTH

National Institute of Nursing Research

For carrying out section 301 and title IV of the Public Health Services Act with respect to nursing research \$137,800,000

Supplementary Exhibit

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

NATIONAL INSTITUTES OF HEALTH

National Institute of Nursing Research

For carrying out section 301 and title IV of the Public Health Services Act with respect to nursing research [~~\$137,729,000~~]**\$137,800,000** (Department of Health and Human Services Appropriation Act, 2006)

**National Institutes of Health
National Institute of Nursing Research**

Amounts Available for Obligation 1/

Source of Funding	FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 Estimate
Appropriation	\$138,729,000	\$137,342,000	\$137,800,000
Enacted Rescissions	-1,387,000	0	0
Subtotal, Adjusted Appropriation	137,342,000	137,342,000	137,800,000
Real Transfer under Roadmap Authority	-1,227,000	0	0
Real Transfer under Secretary's One-percent Transfer Authority	-94,000	0	0
Comparative Transfer from OD for NIH Roadmap	1,227,000	0	0
Comparative Transfer to NIBIB	-5,000	-5,000	0
Comparative Transfer to OD	-2,000	-2,000	0
Comparative Transfer to NCRR	-91,000	-110,000	0
Subtotal, Adjusted Budget Authority	137,150,000	137,225,000	137,800,000
Unobligated Balance Lapsing	0	0	0
Total Obligations	137,150,000	137,225,000	137,800,000

1/ Excludes the following amounts for reimbursable activities carried out by this account:
FY 2006 - \$108,000 FY 2007 - \$109,000 FY 2008 - \$0

NATIONAL INSTITUTES OF HEALTH

National Institute of Nursing Research

(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	195	\$71,530	166	\$63,629	170	\$66,660	4	\$3,031
Administrative supplements	(9)	341	(3)	395	(3)	288	(0)	-107
Competing:								
Renewal	11	5,039	9	4,123	15	6,871	6	2,748
New	62	19,183	80	25,403	65	19,837	-15	-5,566
Supplements	0	0	0	0	0	0	0	0
Subtotal, competing	73	24,222	89	29,526	80	26,708	-9	-2,818
Subtotal, RPGs	268	96,093	255	93,550	250	93,656	-5	106
SBIR/STTR	12	3,297	14	3,170	14	3,118	0	-52
Subtotal, RPGs	280	99,390	269	96,720	264	96,774	-5	54
<u>Research Centers:</u>								
Specialized/comprehensive	36	9,335	36	9,292	36	9,292	0	0
Clinical research	0	0	0	0	0	0	0	0
Biotechnology	0	0	0	0	0	0	0	0
Comparative medicine	0	0	0	0	0	0	0	0
Research Centers in Minority Institutions	0	0	0	0	0	0	0	0
Subtotal, Centers	36	9,335	36	9,292	36	9,292	0	0
<u>Other Research:</u>								
Research careers	23	2,428	28	2,846	30	3,026	2	180
Cancer education	0	0	0	0	0	0	0	0
Cooperative clinical research	0	0	0	0	0	0	0	0
Biomedical research support	0	0	0	0	0	0	0	0
Minority biomedical research support	0	0	0	0	0	0	0	0
Other	0	486	0	494	0	494	0	0
Subtotal, Other Research	23	2,914	28	3,340	30	3,520	2	180
Total Research Grants	339	111,639	333	109,352	330	109,586	-3	234
<u>Research Training:</u>	<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>			
Individual awards	86	2,774	94	2,905	94	2,905	0	0
Institutional awards	155	6,671	159	7,032	159	7,032	0	0
Total, Training	241	9,445	253	9,937	253	9,937	0	0
Research & development contracts (SBIR/STTR)	4 (0)	3,368 (7)	4 (0)	3,635 (7)	4 (0)	3,742 (7)	0 (0)	107 (0)
<u>Intramural research</u>	<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>		<u>FTEs</u>	
Intramural research	9	2,388	10	3,336	11	3,313	1	-23
Research management and support	34	9,083	34	9,317	34	9,414	0	97
NIH Roadmap for Medical Research	0	1,227	0	1,648	0	1,808	0	160
Total, NINR	43	137,150	44	137,225	45	137,800	1	575

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

NATIONAL INSTITUTES OF HEALTH
National Institute of Nursing Research
Budget Authority by Program
(Dollars in thousands)

	FY 2004 Actual		FY 2005 Actual		FY 2006 Actual		FY 2006 Comparable		FY 2007 Continuing Resolution		FY 2008 Estimate		Change	
	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount
Extramural Research														
Detail:														
Self-Management, Symptom Management, and Caregiving		\$51,901		\$50,128		\$46,686		\$46,686		\$44,459		\$44,312		-\$147
Health Promotion and Disease Prevention		39,947		37,132		35,299		35,299		34,300		34,051		-249
Research Capacity Development		22,145		23,081		23,396		23,305		23,958		23,578		-380
Technology Integration		3,775		7,702		9,891		9,891		10,200		10,474		274
End-of-Life		6,661		8,764		9,271		9,271		10,007		10,850		843
Extramural, Subtotal		124,429		126,807		124,543		124,452		122,924		123,265		341
Intramural Research	3	1,576	5	1,804	9	2,388	9	2,388	10	3,336	11	3,313	1	-23
Research Management & Support	34	8,275	31	8,589	34	9,089	34	9,083	34	9,317	34	9,414	0	97
NIH Roadmap for Medical Research		444		873		1,227		1,227		1,648		1,808	0	160
TOTAL	37	134,724	36	138,073	43	137,247	43	137,150	44	137,225	45	137,800	1	575

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

Major Changes in the FY 2008 Budget Request

Major changes by budget activity details are briefly described below. Because of the overlap between budget mechanisms and activity detail, these changes will not sum to the total change for the FY 2008 budget request for NINR, which is \$575 thousand more than the FY 2007 Continuing Resolution, for a total of \$137.800 million.

Research Careers (+\$180 thousand; total \$3.026 million). NINR will support the Pathway to Independence program by funding an additional two awards in FY 2008. Total support for the Pathway program in FY 2008 is three awards and \$270 thousand dollars.

NIH Roadmap for Biomedical Research (+\$160 thousand; total \$1.808 million). NINR 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.

Research Project Grants (+\$106 thousand, total \$93.656 million). NINR will support a total of 250 Research Project Grant (RPG) awards in FY 2008. Noncompeting RPGs will increase by four awards and increase by \$3.031 million. Competing RPGs will decrease by nine awards and decrease by \$2.818 million.

NATIONAL INSTITUTES OF HEALTH
National Institute of Nursing Research
Summary of Changes

FY 2007 Continuing Resolution		\$137,225,000	
FY 2008 Estimated Budget Authority		137,800,000	
Net change		575,000	
CHANGES	FY 2007		
	Continuing Resolution	Change from Base	
	Budget		Budget
	FTEs	FTEs	Authority
A. Built-in:			
1. Intramural research:			
a. Annualization of January			
2007 pay increase	\$1,217,000		\$8,000
b. January 2008 pay increase	1,217,000		28,000
c. Two extra days of pay	1,217,000		10,000
d. Payment for centrally furnished services	30,000		0
e. Increased cost of laboratory supplies, materials, and other expenses	2,089,000		48,000
Subtotal			94,000
2. Research Management and Support:			
a. Annualization of January			
2007 pay increase	\$4,117,000		\$27,000
b. January 2008 pay increase	4,117,000		95,000
c. Two extra days of pay	4,117,000		32,000
d. Payment for centrally furnished services	1,770,000		18,000
e. Increased cost of laboratory supplies, materials, and other expenses	3,430,000		78,000
Subtotal			250,000
Subtotal, Built-in			344,000

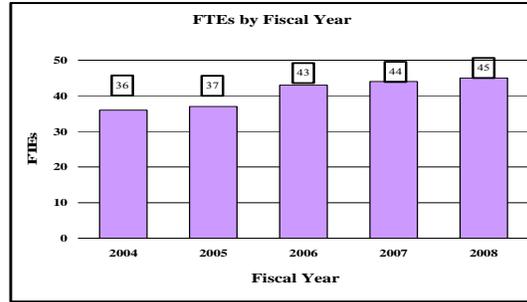
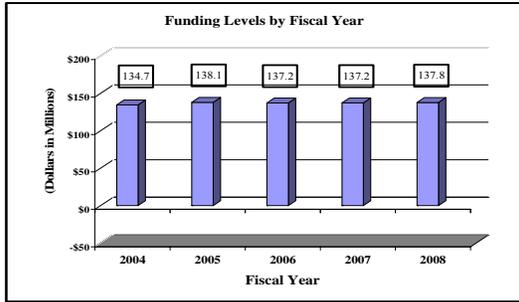
**NATIONAL INSTITUTES OF HEALTH
National Institute of Nursing Research**

Summary of Changes--continued

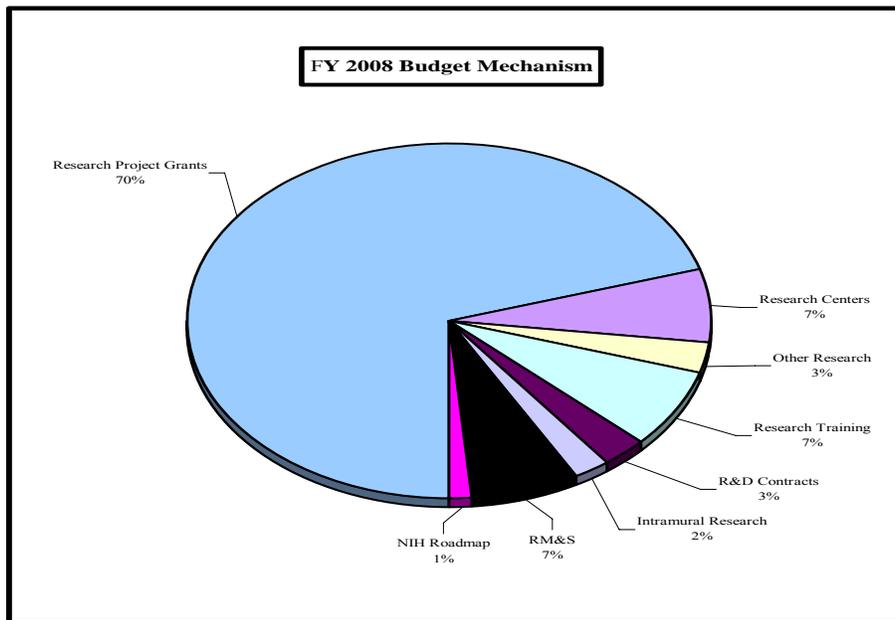
CHANGES	FY 2007			
	Continuing Resolution		Change from Base	
	No.	Amount	No.	Amount
B. Program:				
1. Research project grants:				
a. Noncompeting	166	\$64,024,000	4	\$2,924,000
b. Competing	89	29,526,000	-9	-2,818,000
c. SBIR/STTR	14	3,170,000	0	-52,000
Total	269	96,720,000	-5	54,000
2. Research centers	36	9,292,000	0	0
3. Other research	28	3,340,000	2	180,000
4. Research training	253	9,937,000	0	0
5. Research and development contracts	4	3,635,000	0	107,000
Subtotal, extramural				341,000
6. Intramural research	<u>FTEs</u> 10	3,336,000	<u>FTEs</u> 1	-117,000
7. Research management and support	34	9,317,000	0	-153,000
11. NIH Roadmap for Medical Research	0	1,648,000	0	160,000
Subtotal, program		137,225,000		231,000
Total changes	44		1	575,000

Fiscal Year 2008 Budget Graphs

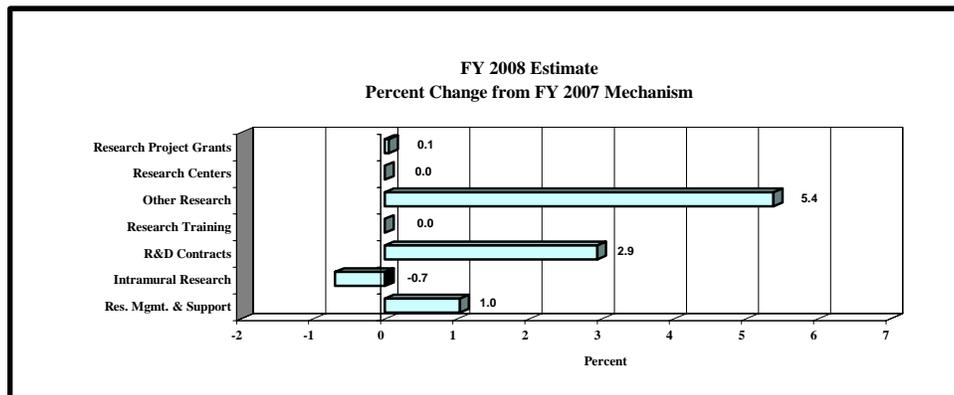
History of Budget Authority and FTEs:



Distribution by Mechanism:



Change by Selected Mechanism:



Justification of Budget Request

Authorizing legislation: Section 301 of the Public Health Services Act, as amended.

Budget Authority:

FY 2006 Actual		FY 2007 Continuing Resolution		FY 2008 Estimate		Increase or Decrease	
<u>FTE</u>	<u>BA</u>	<u>FTE</u>	<u>BA</u>	<u>FTE</u>	<u>BA</u>	<u>FTE</u>	<u>BA</u>
43	\$137,150,000	44	\$137,225,000	45	\$137,800,000	1	\$575,000

This document provides justification for the Fiscal Year 2008 activities of the National Institute of Nursing Research (NINR), including HIV/AIDS activities. Details of the NIH-wide FY 2008 HIV/AIDS activities are in the Office of AIDS Research (OAR) section of the Overview Volume One. Details on the Roadmap/Common Fund are located in the Overview, Volume One.

DIRECTOR'S OVERVIEW

The mission of the National Institute of Nursing Research (NINR) is to support clinical and basic research that establishes a scientific basis for the care of individuals across the lifespan. NINR's research encompasses the health of individuals, their families, and their caregivers. It also focuses on the special needs of at-risk and underserved populations with an emphasis on health disparities. The Institute's research focus transcends disciplines to address issues of self-management, symptom management, and caregiving; health promotion and disease prevention; end-of-life; technology integration; and research capacity development. NINR unites the disciplines of biological and behavioral sciences to elucidate the complex interactions between the physiological factors of health and disease, and the behavior, decisions, and perceptions of the individual. The Institute's ability to adapt emerging research strategies to major public health challenges is an intrinsic strength of nursing research. Taken together, the elements of NINR's mission shape a forward-looking research agenda, whose relevance is underscored by today's health care challenges and opportunities.

This society is experiencing a convergence of forces that will continue to exert a profound influence on the Nation's health care system and will be a potent driver of future research strategies. These forces include:

- 1) the aging of the U.S. population;
- 2) the growth of diverse racial and cultural populations in the U.S. and the attendant issue of health disparities;
- 3) the increased reliance on technology; and
- 4) the increased demand for nurses, both current and projected.

The U.S. population as a whole is aging. Elders generally have a greater need for multiple health care services to manage the normal aging process and to cope with chronic conditions that affect their functional ability and quality of life. A recent study showed that more than half of Medicare

patients are being treated for five or more chronic medical conditions, far more than 15 years ago.¹ NINR supports research on chronic conditions across the lifespan, including those of the elderly, focusing on promoting health and improving quality of life.

The U.S. population is also becoming increasingly diverse, both culturally and ethnically. Therefore, it is essential for nursing practices to be adaptable across diverse communities and to incorporate cultural components that impact health care within and across populations. NINR supports research for managing symptoms of chronic illnesses in the context of health disparities and with cultural sensitivity.

In addition, the U.S. is increasingly reliant on new, sophisticated technologies to improve the quality and effectiveness of health care. This emphasizes the need for an ever more educated nursing workforce capable of using new technology to improve health care and for innovative scientists to develop and apply new methods.

Finally, there is an increasing demand for nurses in health care settings across the U.S., and this demand is projected to continue and increase well into the future. To address this issue, NINR seeks to build research capacity by training scientists and supporting the development of collaborative research environments. Qualified nursing faculty and scientists are essential components of institutions whose missions are to teach and train the next generation of nursing students.

Within this dynamic healthcare environment, NINR developed its new Strategic Plan to set forth a comprehensive research strategy and provide a framework for the Institute's research portfolio. This Plan highlights important areas of research emphasis, including: Self-Management, Symptom Management, and Caregiving; Health Promotion and Disease Prevention; Research Capacity Development; Technology Integration; and End-of-Life. These areas are central to the Institute's research strategy over the next five years. NINR will ensure the sustained alignment of funded research with scientific priorities by evaluating progress in these areas across other key research matrices: the lifespan; diseases and conditions; disciplines; and populations. In addition, input from stakeholders, trans-NIH planning and priority setting processes such as the NIH Roadmap, Neuroscience Blueprint, and Pain Consortium, and changing public health trends all continue to shape the future directions of NINR.

NINR's priorities and future objectives are reflected in its program initiatives, which explore a wide range of scientific questions across research disciplines. In FY 2007 NINR will support studies on cultural influences in the prevention of HIV in young people, symptom clusters in cancer and immune diseases, biobehavioral research methods, and genome-wide association studies. In FY 2008 NINR plans to support academic research enhancement opportunities in minority-serving institutions, which have the potential for advancing knowledge in areas of emphasis such as Self-Management, Symptom Management, and Caregiving; and Health Promotion and Disease Prevention. NINR also plans to support advances in its Technology Integration program by stimulating technological strategies that improve health outcomes.

¹ The Rise In Spending Among Medicare Beneficiaries: The Role of Chronic Disease Prevalence and Changes in Treatment Intensity. Health Aff (Millwood). 2006 Aug 22; w378-w388

Results from these studies will not only inform future strategies, but will also contribute to the growing evidence-base of science.

NINR is committed to improving clinical practice through the generation of new knowledge and the development of leaders in nursing science. Today's health care challenges present unprecedented opportunities for the NINR to further expand its impact on the health of the Nation. By strategically integrating its priority-setting and research programs with current public health needs, the Institute will ensure that these challenges are proactively addressed. NINR sees a future of unlimited possibilities, where discoveries can reach across diseases, populations, and throughout all the stages of life.

Overall Budget Policy: Investigator-initiated research projects, new investigator research, training and career development are the Institute's highest priorities. The NINR carefully evaluates investigator-initiated grant applications for all research programs. A scientific review is conducted, and the results are presented to the National Advisory Council for Nursing Research to determine the level of recommended support, if any. The level of support provided for Institute-initiated projects 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.

FY 2008 JUSTIFICATION BY PROGRAM DETAIL

Self-Management, Symptom Management, and Caregiving: NINR studies quality of life as a continuum composed of three key elements: self-management, symptom management, and caregiving. Research on self-management examines strategies to encourage individuals to incorporate health promotion and disease prevention behaviors into their personal lifestyles, as well as empowering them, as much as possible, to take a greater role in attending to their own health. In symptom management research, research on the biological and behavioral components of health and illness focuses on improving recognition of, and response to, disease symptoms by both individuals and caregivers. Some individuals must rely on others for assistance with various aspects of their care; thus caregiving research examines the need for, and the quality of, caregiving across health conditions and settings, as well as the effects of caregiving on the caregiver. The NINR Self-Management, Symptom Management, and Caregiving program seeks to address the challenges of short- and long-term disease and disability management by enhancing the individual's role in managing disease, relieving symptoms, and improving outcomes. Research projects supported by the program explore the role of education in recognition and response to symptoms, communication skills, exercise and other strategies to empower patients to be more substantive partners in managing their care. Other aspects of the program explore the dynamic interactions between health and the psychological concerns of both patients and their caregivers. Understanding the science of quality of life and its role in enhancing clinical practice will continue to be a priority for NINR.

2008 Budget Policy: The FY 2008 budget estimate for the Self-Management, Symptom Management, and Caregiving program is \$44.312 million, a decrease of \$147 thousand or 0.3 percent from the FY 2007 Continuing Resolution. In this era of limited resources, difficult decisions must be made. Thus, in order to allow for a small growth in Research Project Grants

(RPGs) within the End-of-Life and Technology Integration programs, the Self-Management, Symptom Management, and Caregiving program is decreased slightly. The level of funding remaining in this program will cover our commitments and allow a smaller number of competing RPGs to be awarded in FY 2008. NINR plans in FY 2008 to continue addressing the challenges and opportunities that exist in the areas of self-management, symptom management, and caregiving as part of an overall balanced program portfolio.

Health Promotion and Disease Prevention: Health promotion and disease prevention encompasses the scientific discovery of predictors and strategies across conditions, diseases, and settings that are successful in achieving significant, long-term, positive health outcomes. As such, health promotion and disease prevention science transcends the disciplines of basic, translational, and clinical research. Discoveries can range from behavioral changes in individuals, to health risks in communities, to issues of patient safety. The NINR Health Promotion and Disease Prevention program studies the key factors that contribute to positive health outcomes. Research supported by NINR explores the connections among lifestyle, biology, behavior, the environment, geographic influences, socio-cultural contexts, technologies, economic factors, and health outcomes across the lifespan. Translational and clinical strategies include: applying genetic insights to understanding injuries and recovery of health; addressing the influence of diet and psychological factors in various conditions; and understanding the role of behaviors in maintaining health. With an increasingly aging and diverse population, and growing numbers of individuals suffering from chronic illnesses, the pursuit of strategies to maintain health and prevent disease across the lifespan will continue to be a priority for NINR.

2008 Budget Policy: The FY 2008 budget estimate for the Health Promotion and Disease Prevention program is \$34.051 million, a decrease of \$249 thousand or 0.7 percent from the FY 2007 Continuing Resolution . In this era of limited resources, difficult decisions must be made. Thus, in order to allow for a small growth in Research Project Grants (RPGs) within the End-of-Life and Technology Integration programs, the Health Promotion and Disease Prevention program is decreased slightly. The level of funding remaining in this program will cover our commitments and allow a smaller number of competing RPGs to be awarded in FY 2008. NINR plans in FY 2008 to continue addressing the challenges and opportunities in the field of health promotion and disease prevention as part of an overall balanced program portfolio.

Research Capacity Development: The NINR Research Capacity Development program: builds research capacity through centers programs for schools of nursing; fosters interdisciplinary training for the next generation of scientists in basic, translational, and clinical research; and supports other cross-cutting research activities. The Institute employs these mechanisms/activities across its scientific programs, such as the quality of life continuum, and health promotion and disease prevention. NINR currently supports three types of centers that establish or sustain hubs of focused research within institutions. The Developmental/Exploratory Centers support centralized resources and facilities for specific areas of inquiry for institutions that seek to expand research capacity. The Research Core Centers support shared resources and facilities among established investigators working collaboratively in a specific area of inquiry. The Minority Partnership Centers pair researchers, faculty, and students from minority-serving schools of nursing with those from institutions with established research programs to explore critical health disparities research questions and train investigators from underrepresented

populations. Training opportunities for pre- and post-doctoral investigators outside of research centers, another key component of the Research Capacity Development program, emphasizes innovation and exploration of new ideas. Among these opportunities, NINR provides targeted support for trainees from underrepresented populations. Through these Research Capacity Development activities, NINR is addressing the projected national shortage of nurses by contributing to the development of the nursing faculty needed to teach and mentor individuals entering the field. Together, the activities of the Research Capacity Development program emphasize collaborative efforts that address critical research questions while training future investigators and faculty, and will continue to be a priority for NINR.

2008 Budget Policy: The FY 2008 budget estimate for the Research Capacity Development program is \$23.578 million, a decrease of \$380 thousand or 1.6 percent from the FY 2007 Continuing Resolution. In this era of limited resources, difficult decisions must be made. Thus, in order to allow for a small growth in Research Project Grants (RPGs) within the End-of-Life and Technology Integration programs, the Research Capacity Development program is decreased slightly. The level of funding remaining in this program will cover our commitments and allow a smaller number of competing RPGs to be awarded in FY 2008. NINR plans in FY 2008 to continue addressing the national need for nursing faculty, innovative investigators, and overall enhanced research capacity as part of an overall balanced program portfolio.

Technology Integration: The NINR Technology Integration program supports innovative, interdisciplinary studies to develop new and adapt existing technologies to improve clinical care and quality of life. Within the quality of life continuum – self-management, symptom management, and caregiving – the program seeks to integrate functional technologies that assist patients in identifying and reporting biological indicators of health status, or biomarkers, such as breathing status, blood pressure, and blood glucose levels. In addition, devices that facilitate the remote monitoring of patients, such as those used for telemedicine with post-transplant patients, also fit within the framework of this program. Other areas of inquiry include the application of technologies to improve patient safety, education, and communication. NINR supports the role technology plays in current clinical practice, as well as the promise of emerging technologies that will better serve patients in the future. Therefore, research on technology and its incorporation into standard practice will continue to be a priority for NINR.

2008 Budget Policy: The FY 2008 budget estimate for the Technology Integration program is \$10.474 million, an increase of \$274 thousand or 2.7 percent from the FY 2007 Continuing Resolution. In FY 2008, NINR plans to continue addressing the national need for investigators who are innovative in their use and development of novel technologies that address current and future clinical care needs as part of an overall balanced program portfolio.

End-of-Life: The end of life is a complex period for the dying person, the family members, and both professional and informal caregivers. End-of-life science seeks to understand dying not only as a biological process, but also with respect to the needs of dying persons including: alleviation of symptoms; psychological care; near-death preferences; advance directives; and family decision-making. Likewise, this research addresses the cultural, spiritual, age- and disease-specific considerations that make each person's experience at the end of life unique. Consequently, the NINR End-of-Life research program applies biological as well as behavioral and social science strategies to advance the understanding of the dynamic interactions of these

factors, and to develop interventions that optimize patient and caregiver quality of life across care settings and cultural contexts. Currently, NINR-supported clinical studies explore topics such as: decision-making about care options for children; communication for the chronically critically ill; assessment of pain in non-communicative patients; and issues in hospice care settings.

2008 Budget Policy: The FY 2008 budget estimate for the End-of-Life program is \$10.850 million, an increase of \$843 thousand or 8.4 percent from the FY 2007 Continuing Resolution. Because of the enormous potential and great need for improving the quality of life of dying patients and their caregivers, NINR plans to support end-of-life research efforts, in FY 2008, to build upon previous accomplishments in this area. Specifically, NINR plans to advance knowledge in end-of-life research by supporting new multidisciplinary clinical studies.

Portrait: End-of-Life Research

FY 2007 Level:	\$10,007,000
FY 2008 Level:	<u>10,850,000</u>
Change	+843,000

The life expectancy of the American people has reached a historic high, but along with increased life expectancy comes an increase in the number of people living with, and dying from, chronic debilitating diseases such as heart disease, cancer, stroke and chronic lower respiratory disease.² Prolonged courses of decline at the end of life, palliative treatment options, and life-sustaining technologies have raised many important research questions within the last decade. In 1997, the Institute of Medicine (IOM) issued a landmark report on the end-of-life that reinvigorated the research community's interest in this science.³ The report, "Approaching Death: Improving Care at the End of Life," documented evidence of widespread dissatisfaction with end-of-life care and identified gaps in scientific knowledge. In the wake of this report, the Director of NIH designated NINR as the lead Institute for end-of-life research. In this role, NINR has stimulated scientific activity through a number of research solicitations and sponsored meetings and workshops, as part of an overall strategy to address urgent issues and set future directions for end-of-life research. As the field has grown, the importance of focusing research efforts on children also became evident.⁴ Accordingly, NINR cosponsored an initiative entitled "Improving Care for Dying Children and Their Families" to foster the science of palliative care for children and their families, as well as to develop and test interventions that care providers can implement across all settings, illnesses, and cultural contexts. In addition, in FY 2005, NINR co-sponsored the NIH State-of-the Science conference, *Improving End-of-Life Care*, which brought together 1,000 health care practitioners from around the world to plan and discuss future scientific directions in end-of-life research, and provided additional momentum to expand the evidence base. Consequently, in FY 2007 NINR is supporting a research initiative to continue capacity-building research activities for end-of-life. In FY 2008, NINR will support new studies to build on previous accomplishments in this program.

Intramural Research Program: NINR's Intramural Research Program (IRP) seeks to understand the underlying biological mechanisms of a range of symptoms, their effect on patients, and how patients respond to interventions. The NINR IRP is comprised of three major sections: the Symptom Management Laboratory, the Pain Research Unit, and Research Training. NINR laboratories leverage the benefits of the collaborative research environment of the NIH intramural research community wherein partnerships can be readily established. Training is provided by the IRP through several mechanisms including the Career Transition Award, which provides a unique career development opportunity by providing each fellow with both intramural

2 National Center for Health Statistics, Health, United States, 2006, With Chartbook on Trends in the Health of Americans, Hyattsville, MD: 2006; p67.

3 Institute of Medicine (1997). *Approaching Death: Improving Care at the End of Life*. Washington, DC: The National Academies Press.

4 Institute of Medicine (2002). *When children die: Improving palliative and end-of-life care for children and their families*. Washington, DC: The National Academies Press.

and extramural training towards the goal of achieving status as an independent investigator. The IRP also supports the Graduate Partnerships Program, which provides support for the pre-doctoral training of future scientists through university partnerships. Students from U.S. or international universities conduct part, or all, of their dissertation research activities within the IRP. Additionally, the IRP supports the NINR Summer Genetics Institute, which provides a foundation in molecular genetics for use in research and clinical practice to develop and expand research capacity among graduate students and faculty in nursing. The program is approved for graduate credit in nursing at the doctoral level. To establish its research and training goals, the IRP conducts and participates in a range of workshops and conferences, as well as centrally through NINR planning activities.

2008 Budget Policy: The FY 2008 budget estimate for the Intramural Research Program is \$3.313 million, a decrease of \$23 thousand or .7 percent from the FY 2007 Continuing Resolution. The program plans in FY 2008 to continue addressing the scientific challenges of symptom management through the application of unique approaches as part of an overall balanced program portfolio. NINR plans to continue research efforts and the training capacity of the program in FY 2008 as described (see portrait).

Portrait: Pain Research

FY 2007 Level:	\$650,000
FY 2008 Level:	<u>760,000</u>
Change	+110,000

Millions of Americans suffer from pain. A recent national survey revealed that twenty-five percent of adults experienced pain that lasted throughout the day in the month prior, and ten percent experienced the same pain for a duration of a year or more. Low back pain, migraines and severe headaches, joint pain, and aching or stiffness comprise the most common complaints of pain. Among adults 65 years and older, twenty percent experienced pain in the previous month that lasts for at least one full day, and for nearly sixty percent the pain lasted for at least one year.⁵ These results highlight the national need to address pain and pain management.

In FY 2006, the Board of Scientific Counselors conducted its quadrennial review of the NINR IRP. The expert panel acknowledged the program's focus on pain management research, especially on chronic pain, as a key strength. Consequently, the Board recommended that the IRP expand the scope of pain and pain management studies to include multiple pain research paradigms and therapeutic interventions. In FY 2007, the NINR IRP began to implement these recommendations and will seek to further expand its support for pre- and post-doctoral fellows in FY 2008.

Research Management and Support: The NINR Research Management and Support (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. The functions of RMS also encompass strategic planning, coordination, and evaluation of the Institute's programs and liaison with other Federal agencies, Congress, and the public.

2008 Budget Policy: The FY 2008 budget estimate for RMS is \$9.414 million, an increase of \$97 thousand or 1 percent from the FY 2007 Continuing Resolution. In FY 2008, NINR plans to continue addressing the challenges and opportunities that exist in managing a research portfolio.

5 National Center for Health Statistics, Health, United States, 2006, With Chartbook on Trends in the Health of Americans, Hyattsville, MD: 2006; p70.

**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	44	45	1
Full-time equivalent of overtime & holiday hours	0	0	0
Average ES salary	\$0	\$0	\$0
Average GM/GS grade	12.6	12.6	0.0
Average GM/GS salary	\$84,733	\$87,275	\$2,542
Average salary, grade established by act of July 1, 1944 (42 U.S.C. 207)	\$98,583	\$101,541	\$2,958
Average salary of ungraded positions	115,479	118,944	3,465
OBJECT CLASSES	FY 2007 Continuing Resolution	FY 2008 Estimate	Increase or Decrease
Personnel Compensation:			
11.1 Full-Time Permanent	\$3,264,000	\$3,480,000	\$216,000
11.3 Other than Full-Time Permanent	722,000	771,000	49,000
11.5 Other Personnel Compensation	35,000	37,000	2,000
11.7 Military Personnel	116,000	122,000	6,000
11.8 Special Personnel Services Payments	54,000	58,000	4,000
Total, Personnel Compensation	4,191,000	4,468,000	277,000
12.0 Personnel Benefits	1,042,000	1,111,000	69,000
12.2 Military Personnel Benefits	101,000	108,000	7,000
13.0 Benefits for Former Personnel	0	0	0
Subtotal, Pay Costs	5,334,000	5,687,000	353,000
21.0 Travel & Transportation of Persons	155,000	153,000	-2,000
22.0 Transportation of Things	15,000	15,000	0
23.1 Rental Payments to GSA	0	0	0
23.2 Rental Payments to Others	57,000	57,000	0
23.3 Communications, Utilities & Miscellaneous Charges	78,000	78,000	0
24.0 Printing & Reproduction	100,000	99,000	-1,000
25.1 Consulting Services	60,000	60,000	0
25.2 Other Services	822,000	820,000	-2,000
25.3 Purchase of Goods & Services from Government Accounts	9,209,000	9,045,000	-164,000
25.4 Operation & Maintenance of Facilities	7,000	7,000	0
25.5 Research & Development Contracts	60,000	60,000	0
25.6 Medical Care	0	0	0
25.7 Operation & Maintenance of Equipment	40,000	40,000	0
25.8 Subsistence & Support of Persons	0	0	0
25.0 Subtotal, Other Contractual Services	10,198,000	10,032,000	-166,000
26.0 Supplies & Materials	201,000	200,000	-1,000
31.0 Equipment	150,000	148,000	-2,000
32.0 Land and Structures	0	0	0
33.0 Investments & Loans	0	0	0
41.0 Grants, Subsidies & Contributions	119,289,000	119,523,000	234,000
42.0 Insurance Claims & Indemnities	0	0	0
43.0 Interest & Dividends	0	0	0
44.0 Refunds	0	0	0
Subtotal, Non-Pay Costs	130,243,000	130,305,000	62,000
NIH Roadmap for Medical Research	1,648,000	1,808,000	160,000
Total Budget Authority by Object	137,225,000	137,800,000	575,000

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

**NATIONAL INSTITUTES OF HEALTH
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Salaries and Expenses

OBJECT CLASSES	FY 2007 Continuing Resolution	FY 2008 Estimate	Increase or Decrease
Personnel Compensation:			
Full-Time Permanent (11.1)	\$3,264,000	\$3,480,000	\$216,000
Other Than Full-Time Permanent (11.3)	722,000	771,000	49,000
Other Personnel Compensation (11.5)	35,000	37,000	2,000
Military Personnel (11.7)	116,000	122,000	6,000
Special Personnel Services Payments (11.8)	54,000	58,000	4,000
Total Personnel Compensation (11.9)	4,191,000	4,468,000	277,000
Civilian Personnel Benefits (12.1)	1,042,000	1,111,000	69,000
Military Personnel Benefits (12.2)	101,000	108,000	7,000
Benefits to Former Personnel (13.0)	0	0	0
Subtotal, Pay Costs	5,334,000	5,687,000	353,000
Travel (21.0)	155,000	153,000	-2,000
Transportation of Things (22.0)	15,000	15,000	0
Rental Payments to Others (23.2)	57,000	57,000	0
Communications, Utilities and Miscellaneous Charges (23.3)	78,000	78,000	0
Printing and Reproduction (24.0)	100,000	99,000	-1,000
Other Contractual Services:			
Advisory and Assistance Services (25.1)	57,000	57,000	0
Other Services (25.2)	822,000	820,000	-2,000
Purchases from Govt. Accounts (25.3)	5,892,000	5,620,655	-271,345
Operation & Maintenance of Facilities (25.4)	7,000	7,000	0
Operation & Maintenance of Equipment (25.7)	40,000	40,000	0
Subsistence & Support of Persons (25.8)	0	0	0
Subtotal Other Contractual Services	6,818,000	6,544,655	-273,345
Supplies and Materials (26.0)	201,000	200,000	-1,000
Subtotal, Non-Pay Costs	7,424,000	7,146,655	-277,345
Total, Administrative Costs	12,758,000	12,833,655	75,655

**NATIONAL INSTITUTES OF HEALTH
National Institute of Nursing Research**

Authorizing Legislation

	PHS Act/ Other Citation	U.S. Code Citation	2007 Amount Authorized	2007 Continuing Resolution	2008 Amount Authorized	FY 2008 Budget Estimate
Research and Investigation	Section 301	42§241	Indefinite		Indefinite	
Research	Section 402(a)	P.L.-109-482	Indefinite	\$137,225,000	Indefinite	\$137,800,000
Total, Budget Authority				137,225,000		137,800,000

**NATIONAL INSTITUTES OF HEALTH
National Institute of Nursing Research**

Appropriations History

Fiscal Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation <u>1/</u>
1999	62,229,000 <u>2/ 3/</u>	68,198,000	69,834,000	69,834,000
Rescission				-46,000
2000	65,335,000 <u>2/</u>	76,204,000	90,000,000	90,000,000
Rescission				-478,000
2001	84,714,000 <u>2/</u>	102,312,000	106,848,000	104,370,000
Rescission				-20,000
2002	117,686,000	116,773,000	125,659,000	120,451,000
Rescission				-23,000
2003	129,768,000	131,438,000	131,438,000	131,438,000
Rescission				-854,000
2004	134,579,000	134,579,000	135,579,000	135,555,000
Rescission				-831,000
2005	139,198,000	139,198,000	140,200,000	139,198,000
Rescission				-1,126,000
2006	138,729,000	138,729,000	142,549,000	138,729,000
Rescission				-1,387,000
2007	137,342,000	136,550,000	137,848,000	137,225,000 <u>4/</u>
2008	137,800,000			

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 \$187,000 for the budget amendment for Bioterrorism

4/ Annualized current rate

**NATIONAL INSTITUTES OF HEALTH
National Institute of Nursing Research**

Detail of Full-Time Equivalent Employment (FTE)

OFFICE/DIVISION	FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 Estimate
Office of the Director	5	5	5
Office of Administrative Management	7	7	7
Division of Intramural Research	9	10	11
Office of Associate Director for Scientific Programs	22	22	22
Total	43	44	45
Includes FTEs which are reimbursed from the NIH Roadmap for Medical Research			
FTEs supported by funds from Cooperative Research and Development Agreements	(0)	(0)	(0)
FISCAL YEAR	Average GM/GS Grade		
2004	11.8		
2005	12.3		
2006	11.9		
2007	12.6		
2008	12.6		

**NATIONAL INSTITUTES OF HEALTH
National Institute of Nursing Research**

Detail of Positions

GRADE	FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 Estimate
Total, ES Positions	0	0	0
Total, ES Salary	0	0	0
GM/GS-15	2	3	3
GM/GS-14	12	12	13
GM/GS-13	6	6	6
GS-12	6	6	6
GS-11	0	0	0
GS-10	1	1	1
GS-9	5	5	5
GS-8	3	3	3
GS-7	1	1	1
GS-6	1	1	1
GS-5	0	0	0
GS-4	0	0	0
GS-3	0	0	0
GS-2	0	0	0
GS-1	0	0	0
Subtotal	37	38	39
Grades established by Act of July 1, 1944 (42 U.S.C. 207):			
Assistant Surgeon General	0	0	0
Director Grade	1	1	1
Senior Grade	0	0	0
Full Grade	0	0	0
Senior Assistant Grade	0	0	0
Assistant Grade	0	0	0
Subtotal	1	1	1
Ungraded	18	18	18
Total permanent positions	39	40	41
Total positions, end of year	56	57	58
Total full-time equivalent (FTE) employment, end of year	43	44	45
Average ES salary	\$0	\$0	\$0
Average GM/GS grade	11.9	12.6	12.6
Average GM/GS salary	\$82,554	\$84,733	\$87,275

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

**NATIONAL INSTITUTES OF HEALTH
National Institute of Nursing Research**

New Positions Requested

	FY 2008		
	Grade	Number	Annual Salary
Nurse Scientist	AD - 0	1	\$95,000
Total Requested		1	