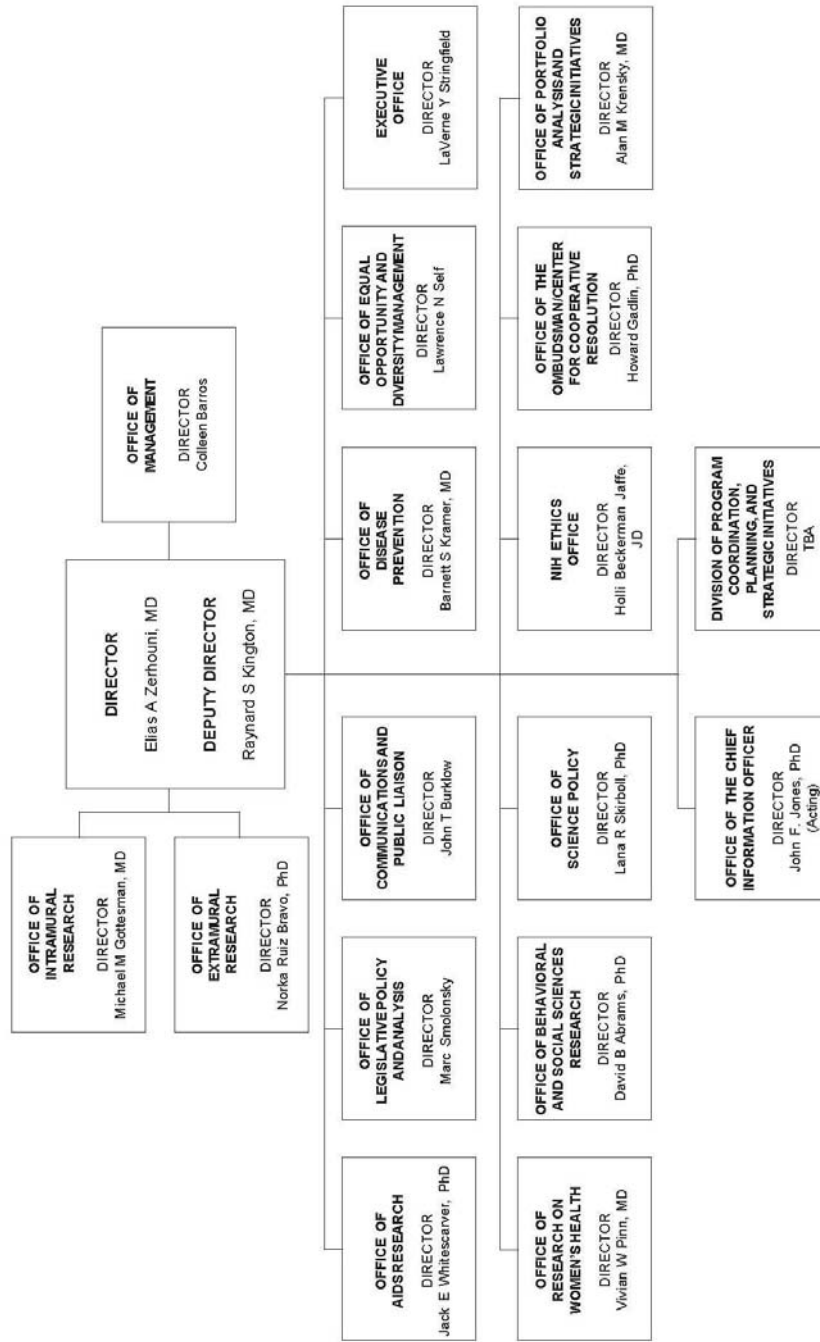


DEPARTMENT OF HEALTH AND HUMAN SERVICES
NATIONAL INSTITUTES OF HEALTH
Office of the Director

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NATIONAL INSTITUTES OF HEALTH

Office of the Director Organization Structure



NATIONAL INSTITUTES OF HEALTH

Office of the Director

For carrying out the responsibilities of the Office of the Director, National Institutes of Health, [\$1,128,819,000] **\$1,056,797,000**, of which up to \$25,000,000 shall be used to carry out section [215] 214 of this Act: *Provided*, That funding shall be available for the purchase of not to exceed 29 passenger motor vehicles for replacement only: *Provided further*, That the National Institutes of Health is authorized to collect third party payments for the cost of clinical services that are incurred in National Institutes of Health research facilities and that such payments shall be credited to the National Institutes of Health Management Fund: *Provided further*, That all funds credited to such Fund shall remain available for one fiscal year after the fiscal year in which they are deposited: [*Provided further*, That \$112,872,000 shall be available for continuation of the National Children's Study:] *Provided further*, That [\$504,420,000] \$533,877,000 shall be available for the Common Fund established under section 402A(c)(1) of the Public Health Service Act: *Provided further*, That of the funds provided \$10,000 shall be for official reception and representation expenses when specifically approved by the Director of NIH: [*Provided further*, That the Office of the AIDS Research within the Office of the Director, NIH may spend up to \$4,000,000 to make grants for construction or renovation of facilities as provided for in section 2354(a)(5)(B) of the Public Health Service Act]. (*Department of Health and Human Services Appropriations Act, 2008.*)

NATIONAL INSTITUTES OF HEALTH

Office of the Director

Language Analysis

Language Provision	Explanation
<i>Provided further</i> , That \$112,872,000 shall be available for continuation of the National Children's Study.	Funds are not requested for the National Children's Study for the National Institutes of Health in the FY 2009 President's Budget.
<i>Provided further</i> , That the Office of the AIDS Research within the Office of the Director, NIH may spend up to \$4,000,000 to make grants for construction or renovation of facilities as provided for in section 2354(a)(5)(B) of the Public Health Service Act.	Funds are not requested for grants for construction or renovation of facilities in the FY 2009 President's Budget.

**National Institutes of Health
Office of the Director**

Amounts Available for Obligation 1/

Source of Funding	FY 2007 Actual	FY 2008 Enacted	FY 2009 Estimate
Appropriation	\$1,046,284,000	\$1,128,819,000	\$1,056,797,000
Pay cost add-on	776,000	0	0
Rescission	0	-19,720,000	0
Subtotal, adjusted appropriation	1,047,060,000	1,109,099,000	1,056,797,000
Real transfer under Director's one-percent transfer authority (GEI)	-100,000	0	0
Comparative transfer to NIBIB	-59,000	0	0
Comparative transfer to OD	669,000	0	0
Comparative transfer to NCRR	-24,000	0	0
Comparative transfers to the Office of the Assistant Secretary for Admin. and Mgmt. and to the Office of the Assistant Secretary for Public Affairs	-2,000	0	0
Subtotal, adjusted budget authority	1,047,485,000	1,109,099,000	1,056,797,000
Unobligated balance lapsing	-444,000	0	0
Total obligations	1,047,041,000	1,109,099,000	1,056,797,000

1/ Excludes the following amounts for reimbursable activities carried out by this account:
FY 2007 - \$627,386,000 FY 2008 - \$700,100,000 FY 2009 - \$700,100,000.

NATIONAL INSTITUTES OF HEALTH

Office of the Director

Budget Mechanism

	FY 2007 Actual	FY 2008 Enacted	FY 2009 Estimate	Increase or Decrease
OD Operations	\$102,181,000	\$108,184,000	\$108,906,000	\$722,000
Division of Program Coordination, Planning & Strategic Initiatives				
Office of AIDS Research	60,359,000	61,757,000	61,757,000	0
Office of Research on Women's Health	40,955,000	41,919,000	41,919,000	0
Office of Behavioral & Social Sciences Research	26,127,000	26,742,000	26,742,000	0
Office of Disease Prevention	1,310,000	1,340,000	1,340,000	0
Office of Dietary Supplements	26,819,000	27,451,000	27,451,000	0
Office of Rare Diseases	15,553,000	15,920,000	15,920,000	0
Office of Medical Applications of Research	4,777,000	4,666,000	4,666,000	0
Office of Portfolio Analysis & Strategic Initiatives	9,107,000	9,014,000	8,061,000	-953,000
Director's Discretionary Fund	9,512,000	9,825,000	10,000,000	175,000
Office of Science Education	3,851,000	3,942,000	3,942,000	0
Office of Loan Repayment and Scholarship	7,154,000	7,323,000	7,323,000	0
Foundation for the National Institutes of Health	500,000	500,000	500,000	0
Nuclear/Rad Chemical Countermeasures	96,030,000	94,352,000	113,143,000	18,791,000
NIH Director's Bridge Award	91,250,000	89,656,000	91,250,000	1,594,000
Common Fund	483,000,000	495,608,000	533,877,000	38,269,000
National Children's Study	69,000,000	110,900,000	0	-110,900,000
Total	1,047,485,000	1,109,099,000	1,056,797,000	-52,302,000

NATIONAL INSTITUTES OF HEALTH

Office of the Director

Budget Mechanism

	FY 2007 Actual	FY 2008 Enacted	FY 2009 Estimate	Increase or Decrease
<u>Research Grants:</u>				
Research Projects	\$423,182	\$440,926	\$463,700	\$15,663
Research Centers	184,272	195,789	195,704	-85
Other Research	50,838	60,171	53,034	-26
Total, Research Grants	658,292	696,886	712,438	15,552
Training	18,112	20,168	20,145	-23
R&D Contracts	96,777	130,357	68,895	-61,462
Intramural Research	44,352	43,575	44,650	1,075
Res. Mgmt. and Support	127,771	109,929	101,763	-8,166
Cancer Control				
Construction				
Total	287,012	304,029	235,453	-68,576
OD Operations	102,181	108,184	108,906	722
Total , OD	1,047,485	1,109,099	1,056,797	-52,302

NATIONAL INSTITUTES OF HEALTH
Office of the Director
BA by Program
(Dollars in thousands)

	FY 2005		FY 2006		FY 2007		FY 2007		FY 2008		FY 2009	
	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount
Res. management & support	511	\$405,067	574	\$724,831	586	\$1,047,485	586	\$1,047,485	582	\$1,109,099	582	\$1,056,797
TOTAL	511	405,067	574	724,831	586	1,047,485	586	1,047,485	582	1,109,099	582	1,056,797

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

Major Changes in the Fiscal Year 2009 Budget Request

Major changes by budget mechanism and/or budget activity detail are briefly described below. Note that there may be overlap between budget mechanism and activity detail and these highlights will not sum to the total change for the FY 2009 budget request for OD, which is -\$52.302 million under the FY 2009 Estimate, for a total of \$1,056.797 billion.

Office of Portfolio Analysis and Strategic Initiatives (-\$.953 million; total \$8.061 million): OPASI funds were shifted to high-priority Nuc/Rad/Chem activities.

Common Fund (+\$38.269 million; total \$533.877 million): The OD will provide Roadmap with resources to address trans-NIH research priorities, and help fill knowledge gaps in FY 2009.

Director's Discretionary Fund (+\$.175 million; total \$10.000 million): The OD will continue fund high-priority research opportunities and health priorities in FY 2009.

OD Operations (+\$.722 million; total \$108.906 million): The OD will support the Clinical Research Policy and Analysis Coordination (CRpac) and the Public Private Partnerships (PPP) initiatives. The OD will also fund the NIH Director's IM Acceleration Funds.

National Children's Study (-\$110.9 million; total \$0.0 million): Consistent with the FY 2007 and FY 2008 President's Budget, the NIH OD budget does not continue the National Children's Study (NCS) in FY 2009. The FY 2009 President's budget requests no funds to continue implementation of the National Children's Study. To phase out this study, existing contracts for pilot studies and other activities will be allowed to expire when the FY 2008 funds provided for planning are exhausted and no additional contracts will be awarded. The NICHD will conduct no additional meetings of the National Children's Study Advisory Committee, and NCS program staff will be reassigned to other responsibilities.

Nuclear/Rad Chemical Countermeasures (\$18.791 million; total \$113.143million): The OD will support basic and applied research to develop new products for measuring radiation exposure, protecting against exposure and minimizing and treating the effects of exposure to a wide range of radioactive compounds. The OD will also initiate research to identify and characterize biomarkers that are predictive of organ and tissue damage due to acute radiation exposure.

NATIONAL INSTITUTES OF HEALTH
Office of the Director
Summary of Changes

FY 2008 estimate		\$1,109,099,000	
FY 2009 estimated budget authority		1,056,797,000	
Net change		(52,302,000)	
CHANGES	2008 Current Enacted Base		Change from Base
	FTEs	Budget Authority	FTEs Budget Authority
A. Built-in:			
1. Intramural research:			
a. Annualization of January 2008 pay increase			
		\$0	\$0
b. January FY 2009 pay increase			
		0	0
c. One less day of pay			
		0	0
d. Payment for centrally furnished services			
		0	0
e. Increased cost of laboratory supplies, materials, and other expenses			
		0	0
Subtotal		0	
2. Research management and support:			
a. Annualization of January 2008 pay increase			
		\$76,764,000	\$1,873,000
b. January FY 2009 pay increase			
		76,764,000	408,000
c. One less day of pay			
		76,764,000	(290,000)
d. Payment for centrally furnished services			
		0	0
e. Increased cost of laboratory supplies, materials, and other expenses			
		100,545,000	(1,991,000)
Subtotal		0	
Subtotal, Built-in		0	

**NATIONAL INSTITUTES OF HEALTH
Office of the Director**

Summary of Changes--continued

CHANGES	2008 Current Enacted Base		Change from Base	
	No.	Amount	No.	Amount
B. Program:				
1. Research project grants:				
a. Noncompeting	0	\$717,054,000	0	\$15,529,000
b. Competing	0	0	0	0
c. SBIR/STTR	0	0	0	0
Total	0	717,054,000	0	15,529,000
2. Research centers	0	0	0	0
3. Other research	0	0	0	0
4. Research training	0	0	0	0
5. Research and development contracts	0	130,357,000	0	(61,462,000)
Subtotal, extramural				(45,933,000)
	<u>FTEs</u>		<u>FTEs</u>	
6. Intramural research	0	43,575,000	0	1,075,000
7. Research management and support	0	218,113,000	0	(7,444,000)
8. Construction		0		0
9. Buildings and Facilities		0		0
Subtotal, program				(52,302,000)
Total changes	0		0	(52,302,000)

Justification

Office of the Director

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

Budget Authority:

FY 2007 Actual		FY 2008 Enacted		FY 2009 Estimate		Increase or Decrease	
<u>FTEs</u>	<u>BA</u>	<u>FTEs</u>	<u>BA</u>	<u>FTEs</u>	<u>BA</u>	<u>FTEs</u>	<u>BA</u>
591	\$1,047,485,000	591	\$1,109,099,000	591	\$1,056,797,000	--	-\$52,302,000

This document provides justification for the Fiscal Year (FY) 2009 activities of the Office the Director (OD), including HIV/AIDS activities. Details of the FY 2009 HIV/AIDS activities are in the “Office of AIDS Research (OAR)” section of the Overview. Details on the Common Fund are located in the Overview, Volume One. Program funds are allocated as follows: Competitive Grants/Cooperative Agreements; Contracts; Direct Federal/Intramural and Other.

FY 2009 DIRECTOR’S OVERVIEW

The Office of the Director (OD) provides leadership and guidance in scientific and administrative matters that foster trans-NIH activities by strategically planning, managing, and implementing policies and procedures to facilitate the coordination of cutting-edge biomedical research. As a key participant in the shaping of the overall NIH research agenda and outlook, the OD coordinates NIH’s science policy and related social, ethical, and legal issues; technology transfer and health information dissemination and education functions; legislative activities; oversight of the agency’s stewardship of public funds and extramural and intramural research activities. The NIH peer review processes have been significantly strengthened to provide oversight of grant and contract award functions, for both extramural and intramural research. Health information is communicated to the public and technology transfer is coordinated with the private sector. On June 8, 2007, NIH Director, Dr. Elias Zerhouni, called upon leaders from across the scientific community and NIH to join a trans-NIH effort to examine the two-level NIH peer review system with the goal of optimizing its efficiency and effectiveness, and to ensure that the NIH will be able to continue to meet the needs of the research community and public-at-large. The effort involves both external and internal working groups. In parallel, the Center for Scientific Review (CSR) has launched several peer review pilots and initiatives, which will help inform the ongoing effort. Once the diagnostic phase is complete, analyses and summaries of the various inputs, data collected and breadth of ideas will be provided to NIH leadership to determine next steps, including piloting and associated evaluations.

The OD plays a pivotal role in the management, prioritization and allocation of funds for administrative services including budget and financial management, human resources, information technology, procurement services, property management, extramural support, ethics, and administration of equal employment and diversity management practices. The consolidation and centralization of many of the OD's management and administrative services has created more efficiencies and better utilization of resources.

The OD promotes and fosters NIH research and research training efforts in the prevention and treatment of disease through program coordination offices responsible for stimulating specific areas of research throughout NIH to complement the efforts of the NIH Institutes and Centers (ICs). These offices focus on Acquired Immune Deficiency Syndrome (AIDS); women's health; disease prevention; science education; dietary supplements; rare diseases and disorders; and behavioral and social sciences research. While the OD provides the overall direction, coordination and oversight of these programs, the ICs manage the actual research operations.

In addition to providing these critical management activities, the OD leads the effort in implementing provisions set forth in the NIH Reform Act of 2006. The Act affirms the importance of the NIH and its vital role in advancing biomedical research to improve the health of the Nation and contains significant organizational and reporting requirements specific to the OD such as the establishment of the Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI), the appointment of the Council of Councils and the Scientific Management Review Board, the electronic coding system for research grants, and the biennial report to Congress.

The centerpiece of the Act is the creation of the DPCPSI to coordinate and facilitate trans-NIH research initiatives. Through DPCPSI, the Director, NIH is authorized to identify and report on research that would benefit from collaboration between two or more ICs, or otherwise benefit from strategic coordination and planning. The Division will be housed in the Office of the Director and will consist of the following existing OD offices, which will retain the authorities in effect prior to enactment of the bill: the Office of AIDS Research, the Office of Research on Women's Health, the Office of Behavioral and Social Sciences Research, the Office of Disease Prevention, the Office of Medical Applications Research, the Office of Dietary Supplements, the Office of Rare Diseases and the Office of Portfolio Analysis and Strategic Initiatives. The OD, through DPCPSI, will coordinate and report areas of emerging scientific opportunities, rising public health challenges, and other areas of special interest.

A number of areas have been highlighted in the Act as needing special emphasis. Some of which are expected to require long term, ongoing coordination. These particular areas are the subject of the specialized DPCPSI offices. Other areas are identified as cross-cutting areas of fundamental importance for which significant barriers to research exist. These areas are the focus of the NIH Roadmap for Medical Research, funded via the Common Fund. OPASI, now an office of DPCPSI, oversees the management of the Common Fund and organizes the trans-NIH effort to identify, plan for, and implement Roadmap programs.

The Council of Councils (CoC) was established on April 11, 2007 to advise on policies and activities of DPCPSI, including making recommendations regarding the conduct and support of

trans-NIH research. The Director, OPASI is leading this effort for the OD. The Scientific Management Review Board (SMRB) is being created to conduct periodic organizational reviews of NIH. The Board will examine the use of NIH's organizational authorities at least every seven years, provide a report on its review, and make recommendations regarding the use of such authorities. Implementation is underway to define the goals and objectives of the SMRB and to nominate and appointment board members. The initial report on SMRB activities is due in June 2008. The OD's Immediate Office of the Director has management responsibility of the SMRB.

The Act requires the Secretary, acting through the Director, NIH to "establish an electronic system to uniformly code research grants and activities." The Portfolio Analysis and Scientific Opportunities Branch within OPASI, is leading this effort. A new information technology system, the Research, Condition, and Disease Categorization (RCDC) tool, is being created. The tool automates the categorization/coding process and reports research projects by public health area of interest. A second tool, being created by the Office of Extramural Research, will facilitate searches of NIH research by a variety of codes, such as the type of research grant, the research entity managing the grant, and the public health area of interest and centrally house information, to generate reports as needed, on relevant literature and patents that are associated with research activities of the NIH.

The OD's Office of Science Policy (OSP) is leading the Act's provision to establish a biennial report that contains an assessment of the state of biomedical and behavioral research; a description of NIH policies and activities; classification and justification for NIH priorities, including a strategic plan and recommendations for future DPCPSI research activities; a catalogue of research activities of the ICs; a summary of research activities throughout the ICs; and a review of centers of excellence.

Utilizing its enhanced oversight and coordination responsibilities associated with the Act, the OD will embark on new collaboration efforts with the ICs to conduct priority-setting reviews to award grants for demonstration projects that bridge the biological sciences with the physical, chemical, mathematical, and computational sciences; and establish demonstration programs that award grants and contracts for high-impact, cutting-edge research demonstration programs. The OD will also exercise the greater degree of responsibility granted by the Act in employing techniques of scientific and administrative analysis that review research priorities, public health burdens, and progress in reducing health disparities.

FY 2009 Justification by Activity Detail

Program Description and Accomplishments

Division of Program Coordination, Planning, and Strategy Initiatives (DPCPSI): The Division identifies and reports on research that represents important areas of emerging scientific opportunities, rising public health challenges, or knowledge gaps that deserve special emphasis and would benefit from conducting or supporting additional research that involves collaboration between two or more ICs, or would otherwise benefit from strategic coordination and planning. The Division is comprised of the following offices:

- *Program Description and Accomplishments*

Office of AIDS Research (OAR): The NIH OAR coordinates the scientific, budgetary, legislative, and policy elements of the NIH AIDS research portfolio. The OAR has established unique and comprehensive trans-NIH planning, portfolio analysis, and budgeting processes. Through these processes, the OAR enhances collaboration across Institutes and Centers (ICs), minimizes duplication of research, and ensures that AIDS research dollars support research in the highest priority areas of scientific opportunity that will lead to new tools with which to fight the global AIDS pandemic.

In FY 2007, OAR coordinated the development of the annual Congressionally-mandated strategic plan for all NIH-supported HIV-related research, the *FY 2009 Trans-NIH Plan for HIV-Related Research*, which established the NIH AIDS research agenda and guided the formulation of the FY 2009 trans-NIH AIDS budget. The planning process, involving both government and non-government experts, resulted in the identification of clear, overarching AIDS-related research priorities, and specific research objectives and strategies. The most critical research priorities identified are (1) prevention of acquisition and transmission of HIV and (2) prevention and treatment of HIV-associated comorbidities, comortalities, and coinfections.

Budget Policy: The FY 2009 budget estimate for the Office of AIDS Research (OAR) is \$61.757 million, same as the FY 2008 budget. The program plans for FY 2009, along with expected accomplishments are as follows: OAR will place priority on initiatives to enhance prevention research, with a specific emphasis on microbicide research. OAR will: provide support for the administration of a Microbicide Research Working Group, a panel of outside experts to provide guidance to OAR, NIAID, NIH, and other entities in this critical area; continue to provide support to the Intramural AIDS Targeted Antiviral Program and the NIH AIDS Research Loan Repayment Program; continue to support the Bench-to-Bedside research initiatives of the Clinical Center; continue to support a number of initiatives to enhance dissemination of research findings, including sponsorship of the scientific panels that develop the AIDS treatment guidelines and the distribution of those guidelines through AIDS info, a web-based service to provide up-to-date information for caregivers and patients about AIDS treatment and prevention; and continue to provide support for international research initiatives and infrastructure development and capacity building, including support for the implementation of the Joint Statement between the U.S. Department of Health and Human Services and the Ministry of Health and Family Welfare of the Republic of India on Collaboration on Prevention of Sexually Transmitted Diseases and HIV/AIDS. OAR will reduce funding for supplements to HIV therapeutics research grants and will decrease the size and number of planning groups and scientific workshops.

- *Program Description and Accomplishments*

Office of Research on Women's Health (ORWH): This Office serves as a focal point for women's health research at the NIH, coordinating, promoting and strengthening efforts to improve the health of women through biomedical and behavioral investigation.

ORWH created a variety of new trans-NIH research and career development initiatives and trans-Federal programs in FY 2007 and 2008 to include a new trans-NIH investigator-initiated research program entitled Advancing Novel Science in Women's Health Research. This program, which boasts a partnership of 21 NIH institutes and centers, is designed to promote innovative interdisciplinary research that will advance new concepts in women's health research and the study of sex/gender differences.

Portrait of a Program: Interdisciplinary Research on Sex/Gender Aspects of Women's Health

FY 2008 Level: \$12,000,000

FY 2009 Level: \$12,000,000

The scale and complexity of biomedical research today increasingly demands that biomedical research scientists move beyond the confines of their own discipline and explore new organizational models for team science. The contributions from the Specialized Centers of Research (SCORs) on Sex and Gender Research go beyond just individual development in a particular area of research, but, rather, coordinate different perspectives in basic, clinical and translational research a particular topic and research efforts go from theoretical concepts to clinical applications, thereby making a difference in the health of women and men. Interdisciplinary research collaborations were expanded in the area of sex-based differences and scientific interactions were developed that would not have taken place without the SCOR Program.

The second round of the SCOR program was funded in 2007. Eleven centers were funded with researchers using an interdisciplinary team approach to science, thus providing a foundation for improved sex and gender appropriate healthcare. Seven of the original Centers were competitively renewed. This program has produced valuable outcomes of importance for health care delivery. Exciting advances in science have resulted such as findings from Yale University that men and women show a different pattern of brain activation during stress and drug/alcohol cue exposure and there are specific differences as a result of chronic cocaine abuse. These effects may characterize compulsive aspects of addiction and suggest that women may have a greater biological vulnerability to addiction than men. Female Irritable Bowel Syndrome patients have been shown through studies at UCLA to have greater responsiveness of arousal circuits, as indexed by greater startle responses, and greater anxiety ratings to visceral stimuli than healthy women. Washington University in St. Louis has established a new Women's Health Research Center based upon the success of the SCOR research.

Many other studies are coming to conclusion and are enriching the scientific literature with useful information for medical care of both women and men.

Budget Policy: The FY 2009 budget estimate for the ORWH is \$41.919 million, same as the FY 2008 budget. ORWH will focus on a variety of scientific initiatives that relate to women's health, interdisciplinary research and career development for women and men. Major efforts include revising the *NIH Research Agenda for Women's Health* through a series of scientific reviews and national, public meetings; and continuing several successful trans-NIH scientific partnerships, including the Specialized Centers of Research (SCOR) interdisciplinary research program, the Building Interdisciplinary Research Careers in Women's Health (BIRCWH) career development program and Advancing Novel Science In Women's Health Research (ANSWHR), an investigator-initiated research program. ORWH will also encourage and support studies for the prevention and treatment of diseases that may affect women and men differently, such as diabetes, heart disease, stroke, obesity, bone, and gastrointestinal and genitourinary diseases. Based on two meetings held in FY 2008, ORWH through the Trans-NIH

Working Group for Research on Chronic Fatigue Syndrome (CFS) will plan an RFA focusing on promising new clinical trials for CFS. The ORWH, in conjunction with the NIH Working Group on Women in Biomedical Careers, will develop new innovative career development initiatives based on recommendations derived from two career workshops held in FY 2008. These initiatives will include new mentoring programs, promotion of best practices and other issues related to the advancement of research careers for women as well as men.

- *Program Description and Accomplishments*
Office of Behavioral and Social Sciences Research (OBSSR): provides leadership and direction in the development, refinement, and implementation of a trans-NIH plan to increase the scope of and support for behavioral and social sciences research.

OBSSR and CDC co-sponsored the *2007 Symposia Series on Systems Science and Health*, designed to introduce systems science methodologies to behavioral and social scientists for applications in health. The following topics were presented: An overview of systems science methodologies, Network Analysis, Agent Based Modeling, and System Dynamics Modeling. The series proved extremely popular among NIH and CDC program staff, investigators at universities worldwide, as well as a variety of governmental and private organizations.

Portrait of a Program: Using Systems Science Methodologies to Address Pressing Public Health Problems

FY 2009 Level: \$4,000,000

A strong focus of OBSSR's new strategic plan is on Systems Science approaches to health. Systems approaches, take a "big picture" view of a problem; examining the dynamic interrelationships of variables at multiple levels of analysis (e.g., from cells to society) simultaneously (often through causal feedback processes), while also studying the impact on the behavior of the system as a whole over time. For example, tobacco use and successful cessation are influenced by genetic predisposition, peer influence, media exposure (both tobacco promotion and health messages), cultural norms, prior tobacco exposure, pharmacotherapy availability and usage, history of quit attempts, workplace bans, and a host of other factors. Complex problems such as this, most often require complex solutions. Just as systems biology revolutionized molecular biology, systems approaches yield insights that can help devise the necessary complex solutions and are required to understand and model how individual, group, societal and contextual factors interact.

In FY 2009, OBSSR plans to issue a new Funding Opportunity Announcements (FOA) *Using Systems Science Methodologies to Protect & Improve Population Health*. The FOA will call for applicants to use one or more specific system science methodologies to address one or more specific opportunities to protect and improve population health. Applicants may choose to refine and implement a particular strategy for system-wide leadership or tackle "policy resistant" health problems (i.e., ones in which the effects of planned interventions tend to be delayed, diluted, or defeated by responses of the system to the intervention itself). OBSSR is now chairing a planning committee to develop this FOA, and intends to fund this project using \$4 million of OBSSR funds. The success in attracting a large global audience for our webcasts of the *2007 Symposia Series on Systems Science and Health* (more than 7,000 viewings) and the *2007 Conference on Complex Approaches to Population Health* (more than 5,000 viewings) as well as the enthusiastic response to two OBSSR-led related FOAs (RM-07-004, 99 applications; PAR -07-379/380, 113 applications first round), demonstrates a strong and growing interest in this area among the investigator community.

Budget Policy: The FY 2009 budget estimate for OBSSR is \$26.742 million, the same as the FY 2008 budget. This will support new initiatives and continue to support key, ongoing programs in behavioral and social sciences research. OBSSR will initiate a program to support research on how interactions among social, behavioral and genetic factors influence health. Another important new initiative is the development and application of systems integrative science approaches to study how multiple factors – behavioral, social and biological – interact with each other and change over time to influence health (see program portrait for details). These approaches could be incorporated into two additional programs that will be supported by OBSSR in FY 2009: research to improve adherence to treatments and research to reduce or eliminate health disparities, two persistent public health problems that have thus far been resistant to solution. Supporting the Office’s vision of bringing together biomedical, behavioral and public health science research communities, OBSSR will continue to fund transdisciplinary research on prevention, policy, and health care, three broad areas influencing health disparities. OBSSR will continue to fund multi-year programs which support its mission and goals, including community-based participatory research (CBPR) with new CBPR programs which apply intervention research methods to disease prevention and health promotion, while also targeting medically underserved areas. OBSSR will also continue to support health literacy research and participate in the NIH Blueprint for Neuroscience, offer its annual summer training institutes (behavioral interventions in randomized clinical trials; social work research methods), add new ones in genetics training for behavioral and social scientists and in integrative systems science methodology, and host the second annual trans-NIH conference on dissemination and implementation science.

- *Program Description and Accomplishments*

Office of Disease Prevention (ODP): The mission of ODP is to foster, coordinate and assess research in prevention, which seeks to improve public health in the nation and throughout the world. ODP collaborates with other federal agencies, academic institutions, the private sector, non-governmental organizations and international organizations in the formulation of research initiatives and policies that promote public health. To carry out these diverse responsibilities, ODP has three administrative units: the Office Medical Applications of Research, Office of Dietary Supplements, and the Office of Rare Diseases.

Budget Policy: The FY 2009 budget estimate for ODP is \$1.340 million, the same as the FY 2008 budget. The program plans for FY 2009, along with expected accomplishments are as follows: to stimulate disease prevention research across the NIH and to coordinate and collaborate on related activities with other federal agencies as well as the private sector.

- *Program Description and Accomplishments*

Office Medical Applications of Research (OMAR) This Office is the focal point for evidenced-based assessments of medical practice and state-of-the-science on behalf of

the medical community and the public. It assesses, translates and disseminates the results of biomedical research that can be used in the delivery of important health services to the public.

Budget Policy: The FY 2009 budget estimate for OMAR is \$4.666 million, the same as the FY 2008 budget. The ODP/OMAR will continue to co-fund with NIH ICs the spectrum of research on disease prevention ranging from Tobacco and Health Research, Childhood Obesity and Prevention/Treatment and Healthy People 2010.

- *Program Description and Accomplishments*
Office of Dietary Supplements (ODS): The mission of ODS is to strengthen knowledge and understanding of dietary supplements by evaluating scientific information, stimulating and supporting research, disseminating research results, and educating the public to foster an enhanced quality of life and health for the U.S. population.

In collaboration with the National Library of Medicine and other federal agencies, ODS is developing a database of dietary supplement labels that will assist all stakeholders, including the public, with a regularly updated, accurate repository of all dietary supplements sold in the US.

Portrait of a Program: Evidence-based Review Program-ODS Vitamin D Initiative

FY 2008 Level: \$500,000

FY 2009 Level: \$500,000

This Congressionally mandated program has provided the research field with systematic reviews of the safety and efficacy of dietary supplement ingredients for the past five years, most of them in collaboration with AHRQ. Topics have included: ephedra, chromium, omega-3 fatty acids, soy, multivitamins, with the most recent being vitamin D.

The evidence report on vitamin D is an excellent example of how the systematic reviews produced through this program serve as a framework for coordinating and focusing the efforts of other ODS programs and staff on the highest priorities of the Office. With the vitamin D systematic review as its basis, ODS has initiated a multi-pronged program, designed to fill needed research gaps related to vitamin D. The major elements of this initiative were to: 1) sponsor a systematic review of the literature on efficacy and safety of vitamin D (released in August 2007, a joint effort with AHRQ); 2) hold a two-day conference and a roundtable discussion of the topic (completed in September 2007, cosponsored by NIAMS, NCI and the American Society for Nutrition); 3) support the development of much-needed analytical tools for vitamin D measurement in foods and dietary supplements (an ongoing activity with USDA and NIST); and 4) enhance tools for the measurement of vitamin D status in plasma (an ongoing activity with CDC and NIST). ODS convened a federal working group to assist in developing the next steps in a vitamin D research agenda.

Future reviews will be developed in collaboration with other ICs and agencies, with the primary goal to inform the development of NIH research agendas related to dietary supplements.

Budget Policy: The FY 2009 budget request for ODS is \$27.451 million, the same as the FY 2008 budget. Major activities that this budget would support include the ODS

vitamin D initiative (see program portrait), and the following activities: **Grants and Extramural Activities Program:** ODS will continue to co-fund research grants with NIH ICs on Dietary Supplements, ranging from in vitro laboratory and animal experiments to human studies and clinical trials. It will also work to create opportunities for DS- and nutrition-related research training and career development for young investigators. The total amount of the ODS budget used to fund these activities will decrease but the proportion will remain the same. **Analytical Methods and Reference Materials Program:** This Congressionally mandated program provides critical tools for quality assurance of Dietary Supplements. The program promotes development, validation, and dissemination of analytical methods and reference materials for commonly-used Dietary Supplements. An external panel of experts reviewed the Program and found that it had substantially raised the awareness of the need for better quality-control measures within the Dietary Supplement community. **Training and Career Development:** In May 2007, ODS conducted its first practicum on Dietary Supplements. Among the goals of the 5-day practicum were to provide a comprehensive overview of issues, concepts, controversies, and unknowns about Dietary Supplements and their ingredients; show the importance of scientific investigations to evaluate the efficacy and safety of these products; and supply information and resources that would enable attendees to provide more instruction about Dietary Supplements at their academic institutions. ODS will continue to offer this course annually to faculty and graduate students in all health-related disciplines including nutrition, food science, pharmacology and pharmacognosy, exercise/kinetics, medicine, dentistry, nursing, and complementary and alternative medicine. **Dietary Supplement Databases:** ODS will continue to develop and refine the Congressionally-mandated database of Dietary Supplements labels and a database developed jointly with U.S. Department of Agriculture of ingredients in Dietary Supplements. Both will be important tools in assessing Dietary Supplements intake in the U.S. population, which ODS undertakes in collaboration with Centers for Disease Control.

- *Program Description and Accomplishments*

Office of Rare Diseases (ORD): The mission of the ORD is to coordinate, stimulate and support research on rare diseases and respond to the needs of patients who have any one of the more than 6,000 rare diseases known today.

ORD developed the Collaboration, Education, and Genetic Test Translation (CETT) Project to make available to patients selected genetic tests from CLIA-certified laboratories. Once developed, these tests are made available to the general public. There are approximately 7,000 rare diseases, the majority of which are genetic disorders, thereby making genetic testing an essential part of the diagnosis and treatment continuum for rare diseases.

Budget Policy: The FY 2009 budget estimate for the ORD is \$15.920 million, the same as the FY 2008 budget. The program plans and funding utilization for FY 2009 are as follows: In FY 2008, a Funding Opportunity Announcement (FOA) was published to continue the Rare Diseases Clinical Research Consortia (RDCRC) Program. Approximately seven awards will be funded entirely by ORD and several NIH ICs are

expected to participate and fund meritorious applications. ORD will continue to fund the Collaboration, Education, and Genetic Test Translation (CETT) Pilot Project which makes available to patients genetic tests from CLIA-certified laboratories. ORD will continue to support the Rare Diseases Intramural Research Collaboration with the National Human Genome Research Institute (NHGRI) at the NIH Clinical Center (CC) and provide support for seven new Bench-to-Bedside awards jointly with NIH ICs. ORD is moving forward in collaboration with the NIH CC and experts from the NIH intramural research program to provide medical record review and possible assignment to clinical research protocols for patients with seemingly undiagnosable rare diseases. ORD plans to co-fund approximately 60 scientific conferences in FY 2009. The ORD will continue to support in collaboration with the NHGRI the Genetic and Rare Diseases Information Center (GARD). ORD will further develop a Web-based, publicly accessible database of national and international repositories of human bio-specimens for research on rare and common diseases. ORD has increased its support for the National Disease Research Interchange (NDRI) to remedy unmet research needs for rare diseases human tissues. NDRI collects, stores, and distributes rare diseases tissues and other biospecimen samples and informs researchers of their availability through an on-line catalog. NDRI continues to expand its collaboration with voluntary health organizations to provide an efficient avenue to store rare diseases tissues for them and thereby facilitate research. The NIH Office of Technology Transfer (OTT) and ORD launched the Rare Disease and Conditions Technologies Initiative. A Web site module invites not-for-profit organizations, academic research centers, and foundations in the United States and abroad to submit technologies available for licensing from their institutions. Currently, twenty-two participating institutions have brought 295 rare disease related technologies into this new Web site. In addition, OTT has contributed 237 rare diseases technologies developed by the NIH intramural research program, and is adding new ones as they become available. The ORD and the Office of Science Education will develop a rare diseases educational module for elementary and middle school science classes to increase the understanding of rare diseases. The ORD will collaborate with the World Health Organization (WHO) to review the International Classification of Diseases (ICD) for placement of rare diseases in the appropriate classification of the ICD XI.

- *Program Description and Accomplishments*

Office of Portfolio Analysis and Strategic Initiatives (OPASI): The OPASI furthers the ability of the ICs to participate in a collaborative research environment by providing management and technical expertise in support of trans-NIH biomedical research efforts. The divisions of OPASI provide this expertise utilizing several vehicles including: cycle analysis of the existing NIH research portfolio (enabling conference with the ICs in planning and managing new research efforts via the Common Fund) and systematic evaluation support (providing ICs with the necessary tools to improve future research efforts).

In FY 2007, developed a new cohort of Roadmap initiatives to include the Human Microbiome Project with the mission of generating resources enabling comprehensive characterization of the human microbiota and analysis of its role in human health and

disease, and Epigenomics which is an emerging frontier of science that involves the study of changes in the regulation of gene activity and expression that are not dependent on gene sequence.

Budget Policy: The FY 2009 budget estimate for the OPASI is \$8.061 million, a \$.953 million or 1.1 decrease under the FY 2008 budget. For FY 2009, the program plans and expected accomplishments are as follows: To provide administrative support to the Director's Office and also support the appointment of three division directors to implement the OPASI mission. The Division of Resource Development and Analysis will acquire software tools for capturing and analyzing scientific and meta data for portfolio analysis and to implement a data base on disease specific burden of disease. The division will also finalize the implementation of the new Research, Condition, and Disease Categorization system. The Division of Evaluation and Systematic Assessments will continue to manage the NIH Evaluation Set-Aside Program to support numerous NIH evaluations and provide leadership to the ICs, under GPRA, to set goals, measure performance, and report on NIH accomplishments. The Division of Strategic Coordination will continue its activities with respect to coordinating and tracking implementation of Roadmap/Common Fund initiatives.

Program Description and Accomplishments

Office of Science Policy (OSP): The OSP through its Office of Science Education (OSE), evaluates research on and emerging trends in science education to inform policy making at the NIH and nationwide, develops curriculum supplements for K-12 classrooms; develops and sponsors model science education programs serving students in elementary and secondary schools, college students, teachers, and the public; coordinates NIH science education activities with extramural, intramural, women's health, laboratory animal research, and minority program offices; collaborates with other public- and private-sector organizations to develop resources and coordinate education activities.

Many of the nation's science teachers gain access to NIH education resources through the OSE web-site which ranks among the "elite Federal sites" as assessed by the American Customer Satisfaction Index (ACSI) survey. OSE's score places it with such top-scoring sites as Amazon, Lexus, and Whirlpool. The OSE's *NIH Curriculum Supplements* series also passed a milestone with its 300,000th title requested. OSE has aligned these supplements to the science, math, health, and language arts standards for over 38 states (all alignments will be completed early in FY 2008). OSE also supports NIH's lead role on the Academic Competitiveness Council (ACC) in its work to improve STEM education programs across the government.

Budget Policy: The FY 2009 budget estimate for the OSE is \$3.942 million, the same as the FY 2008 budget. The program plans for FY 2008, along with expected accomplishments are as follows: OSE projections for the FY 2008 budget are based on the maintenance, updating, and continuation of all current projects. OSE will also continue to ensure that rigorous evaluations be performed on the effectiveness of science, technology, engineering, and math (STEM) education programs and practices consistent with the goals of the Academic Competitiveness Council (ACC). The goals of the evaluations are to obtain a better understanding of how K-12 science teachers use the NIH Curriculum Supplements and other OSE resources in the classroom

and to acquire further data on the effectiveness of the curricula on improving student achievement. Evaluation methods will include randomized controlled trials, where feasible, and well-matched comparison-group studies. In addition, OSE will assist NIH ICs in planning evaluations of their K-12 education materials.

Program Description and Accomplishments

Intramural Loan Repayment and Scholarship Programs (ILRSP): The mission of the ILRSP is to develop and manage programs that offer financial incentives and other benefits to attract highly qualified physicians, nurses, and scientists into careers in biomedical and clinical research as employees of the NIH. The Intramural Loan Repayment and Scholarship Programs repay outstanding eligible educational debt and in return, participants must enter into a contractual agreement to conduct qualified research as NIH employees. The NIH Undergraduate Scholarship Program (UGSP) offers competitive scholarships to exceptional students from disadvantaged backgrounds that are committed to biomedical, behavioral, and social science health-related research careers at the NIH. For every year of UGSP scholarship support, the recipients are obligated to participate in a ten-week summer internship and one year as a full-time paid employee in an NIH research laboratory.

During FY 2007, there were 13 new UGSP scholars and 8 renewal scholars. Also, 6 scholars returned to complete the service payback; 5 UGSP scholars successfully completed their service obligation and are currently enrolled in a graduate or medical program that include the Johns Hopkins University, Harvard University, Syracuse University and the University of Texas Southwestern Medical Center.

Budget Policy: The FY 2009 budget estimate for the Intramural Loan Repayment and Scholarship Program is \$7.323 million, the same as the FY 2008 budget. The program plans for FY 2009, along with expected accomplishments are as follows: Funding for FY 2009 is projected to be used to award the following loan repayment contracts and scholarships: NIH Clinical Loan Repayment Program – 7 awards; NIH General Loan Repayment Program – 80 awards; and NIH Undergraduate Scholarship Program – 21 awards. FY 2009 funding for the AIDS Research Loan Repayment Program is \$0.720 million and is projected to support 13 awards.

	(Dollars in Millions)					
	FY 2007		FY 2008		FY 2009	
	#	Amount	#	Amount	#	Amount
NIH Clinical Loan Repayment Program	7	\$0.300	7	\$0.361	7	\$0.361
NIH General Loan Repayment Program	69	4.090	80	4.767	80	4.767
AIDS Loan Repayment Program	9	0.194	13	0.720	13	0.720
Undergraduate Scholarship Program	13	0.160	19	0.380	20	0.400

Program Description and Accomplishments

Director's Discretionary Fund: The Director's Discretionary Fund (DDF) allows the NIH Director to respond quickly to new and emerging high-priority research opportunities and health priorities.

In FY 2007, funds were provided to multiple ICs in support of the trans-NIH initiative on Immunology, Autoimmunity and Inflammation.

Budget Policy: The FY 2009 budget estimate for the DDF is \$10.000 million, a \$.175 million or 1.8% increase over the FY 2008 appropriation. The program plans for FY 2009, along with expected accomplishments are as follows: The DDF will continue funding projects to help uncover new knowledge that prevents, detects, diagnoses, and treats disease and disability, from the common cold to the rarest genetic disorder.

Program Description and Accomplishments

Common Fund: This fund, initiated in FY 2005, as the NIH Roadmap, has now taken on broader purposes and is referred to as the Common Fund. The Common Fund will provide Roadmap with resources to address trans-NIH research priorities, and to help fill knowledge gaps.

In FY 2007, NIH established the New Innovator Award to support scientific investigations in the biological, behavioral, clinical, social, physical, chemical, computational, engineering, and mathematical sciences. This new program will both stimulate the application of innovative research approaches to important biomedical and behavioral research problems, and nurture creative investigators at the early stages of their research careers. This program underscores NIH's commitment to supporting the future of science relevant to the NIH mission and from a diverse pool of applicants.

Budget Policy: The FY 2009 budget estimate for the Common Fund is \$533.877 million, a \$38.269 million or 7.7% increase over the FY 2008 budget. Within this the New Innovator Award will receive \$0.56 million. For additional information on the Common Fund, see the NIH Overview Volume One.

Program Description and Accomplishments

Countermeasures against Nuclear/Radiological Threats and Chemical Countermeasures Research: The NIH will continue developing nuclear and radiological medical countermeasures, which prevent injury and restore damaged tissue. This includes supporting collaborative efforts with for-profit and non-profit organizations as well as eligible agencies of the Federal Government, such as the Armed Forces Radiobiology Research Institute (AFRRI) and National Cancer Institute. Ongoing initiatives include support for the Centers for Medical Countermeasures against Radiation (CMCR), which support basic, translational, and applied research leading to new medical countermeasures against radiological and nuclear exposures due to terrorist attacks, as well as grants and contracts with individual researchers and companies.

The CMCRs entered their third year of funding and scientific productivity increased substantially, with 41 scientific papers published during FY 2007, adding to the 19 published in

FY 2005 and FY 2006. Papers published by CMCR investigators were highlighted as significant advances in the journals Science, Cell, and Blood, and CMCR investigators presented more than 60 presentations and posters at the 13th International Congress of Radiation Research in San Francisco, CA in July, 2007.

Budget Policy: The FY 2009 budget estimate for the NIH Medical Chemical Countermeasures Research Program is \$113.143 million, a \$18.791 million or 19.9% increase from FY 2008's budget. The program plans for FY 2009, along with expected accomplishments are as follows: The research program for Countermeasures against Nuclear/Radiological Threats will support basic and applied research to develop new products for measuring radiation exposure, protecting against exposure and minimizing and treating the effects of exposure to a wide range of radioactive compounds. Examples of specific activities include expanding research to accelerate the development of medical countermeasures to reduce the gastrointestinal toxicity of acute radiation and to enhance the excretion of radionuclides from persons with internal radiological contamination. In addition, NIH will initiate research to identify and characterize biomarkers that are predictive of organ and tissue damage due to acute radiation exposure.

Within the Chemical Countermeasures research program, special attention will be directed at promising drugs and antidotes for nerve agents, poisons such as cyanide, toxic industrial chemicals capable of causing pulmonary edema, and vesicating (blistering) agents, such as mustard gas which blisters the skin and mucous membranes on contact. NIH will continue clinical safety and efficacy trials for specific products including midazolam, a promising anticonvulsant drug currently in advanced development. Elements of the research effort include basic research addressing critical gaps in knowledge important to product development, evaluation of mechanisms of injury and host response, along with the enhancement of the repair process, and the evaluation and development of promising countermeasures.

Program Description and Accomplishments

NIH Director's Bridge Award: The NIH Director's Bridge Award (NDBA) is designed to provide continued but limited funding for new and established grantees who have submitted a competing renewal grant application that describes a highly meritorious project.

Budget Policy: The FY 2009 budget estimate for the NDBA is \$91.250 million, a \$1.594 million or 1.8% increase from FY 2008's budget. The continued funding will permit the Principal Investigator additional time to strengthen a resubmission application. Investigators submitting a competing renewal research project grant (R01) application or the first resubmission of the competing renewal application (A1), who just miss the nominal funding payline for the IC to which it is primarily assigned may be nominated for the NDBA by the administering NIH Institute, provided the PI has less than \$200,000 in other support (total costs) from all sources to fund their research.

Program Description and Accomplishments

Foundation for the National Institutes of Health: The mission of the Foundation for NIH is to foster public health through scientific discovery, translational research, and the dissemination of research results through specially-configured, high-impact public-private partnerships consistent with the priorities of NIH. The Foundation for NIH helps to underwrite biomedical initiatives

that might not be attractive for private funding alone, or for one reason or another are not appropriate for wholly public funding. With the goals of NIH as its guide, the Foundation serves both the public and private sectors, helping them achieve significant breakthroughs in human health in areas of interest that overlap with those of NIH.

Budget Policy: The FY 2009 budget estimate for the Foundation for NIH is \$.500 million, the same as the FY 2008 budget. The Foundation for NIH will continue serving both the public and private sectors in those areas of interest that overlap with those of NIH.

Program Descriptions and Accomplishments

OD Operations: OD Operations is comprised of several OD offices that provide advice to the NIH Director, policy direction to the NIH research community, and administer centralized support services essential to the NIH mission. These include the Offices of Extramural Research, Intramural Research, Science Policy, Management, Budget, Communications and Public Liaison, Legislative Policy and Analysis, Equal Opportunity and Diversity Management, Financial Management, Disease Prevention, Human Resources, Executive Office, and NIH Chief Information Officer. Within the Office of Science Policy, the Office of Biotechnology Activities coordinates the functions of the Recombinant DNA and Gene Transfer Advisory Committee; the Secretary's Committee on Genetics, Health, and Society; and the National Science Advisory Board for Biosecurity.

Budget Policy: The FY 2009 budget estimate for OD Operations is \$108.906 million, a \$.722 million or .6% increase over the FY 2008 budget. The program plans for FY 2009, along with expected accomplishments are as follows: to support payroll growth to include the pay raise and support the NIH Reform Act's provision to establish a biennial report. The increase will also provide funding to support the Clinical Research Policy and Analysis Coordination (CRpac) and the Public Private Partnerships (PPP) initiatives currently managed by the Office of Science Policy and funded with NIH Roadmap dollars. Funding will also be used to lower (reduce) vulnerabilities to risks that exist in all areas at the NIH, including both extramural and intramural research, research information, IT, finance and administration. Funds will accommodate new and expanded initiatives/activities as follows: Human Subjects Research initiatives managed by the Office of Intramural Research, including empirical studies to investigate the extent to which the Office of Intramural Research is adequately protecting the wellbeing of research subjects. The Office of Extramural Research's Animal Welfare management activities including increased efforts in compliance oversight and educational outreach to ensure that the NIH's mission and the public's trust in biomedical research is not compromised. Funding plans for these critical program activities led by the Office of Management Assessment are as follows: expanding the NIH Management and Internal Controls Program, which will enhance NIH-wide risk management; and strengthening the NIH Privacy Program, which has constant new mandates as we move further into the electronic age that poses unique challenges for sensitive information. Funds will also be used to implement the Office of Information Technology's plan to restore the OD network infrastructure. Without enhancements to the network infrastructure, the OD can expect increasing network outages both in frequency and duration that will adversely impact OD-wide staff productivity.

OD Operations will also continue to fund the NIH Director's Challenge Fund established in FY 2008 for \$1.500 million. The Office of Intramural Research will use these funds to foster innovation, accelerate intramural science, and encourage trans-NIH collaboration. Initial funding support to the ICs is limited to 2 years for a pilot project, renewable for up to 2 more years with additional required support from the host IC depending on progress and competing new applications. Some funds may be set aside for one-time only use (i.e., instrumentation). Subsequently, the host ICs would be expected to fully support projects. Specific criteria for a successful project remain to be determined, but priority will be given to novel, high-risk approaches that include interdisciplinary and trans-NIH components.

National Children's Study: Consistent with the FY 2007 and FY 2008 President's Budget, the NIH OD budget does not continue the National Children's Study (NCS) in FY 2009. The FY 2009 President's budget requests no funds to continue implementation of the National Children's Study. To phase out this study, existing contracts for pilot studies and other activities will be allowed to expire when the FY 2008 funds provided for planning are exhausted and no additional contracts will be awarded. The NICHD will conduct no additional meetings of the National Children's Study Advisory Committee, and NCS program staff will be reassigned to other responsibilities.

**NATIONAL INSTITUTES OF HEALTH
Office of the Director**

Budget Authority by Object

	FY 2008 Enacted	FY 2009 Estimate	Increase or Decrease
Total compensable workyears:			
Full-time employment	591	591	0
Full-time equivalent of overtime and holiday hours	4	4	0
Average ES salary	\$164,289	\$169,053	\$4,764
Average GM/GS grade	12.3	12.3	0.0
Average GM/GS salary	\$97,457	\$100,283	\$2,826
Average salary, grade established by act of July 1, 1944 (42 U.S.C. 207)	\$108,433	\$111,578	\$3,145
Average salary of ungraded positions	149,688	154,029	4,341
OBJECT CLASSES	FY 2008 Estimate	FY 2009 Estimate	Increase or Decrease
Personnel Compensation:			
11.1 Full-time permanent	\$49,955,000	\$51,254,000	\$1,299,000
11.3 Other than full-time permanent	4,643,000	4,764,000	121,000
11.5 Other personnel compensation	2,381,000	2,442,000	61,000
11.7 Military personnel	1,256,000	1,288,000	32,000
11.8 Special personnel services payments	281,000	288,000	7,000
Total, Personnel Compensation	58,516,000	60,036,000	1,520,000
12.0 Personnel benefits	17,726,000	18,184,000	458,000
12.2 Military personnel benefits	522,000	535,000	13,000
13.0 Benefits for former personnel	0	0	0
Subtotal, Pay Costs	76,764,000	78,755,000	1,991,000
21.0 Travel and transportation of persons	1,757,000	1,747,000	(10,000)
22.0 Transportation of things	130,000	128,000	(2,000)
23.1 Rental payments to GSA	10,000	10,000	0
23.2 Rental payments to others	245,000	250,000	5,000
23.3 Communications, utilities and miscellaneous charges	1,001,000	1,002,000	1,000
24.0 Printing and reproduction	1,062,000	1,066,000	4,000
25.1 Consulting services	3,700,000	3,790,000	90,000
25.2 Other services	55,164,000	51,476,000	(3,688,000)
25.3 Purchase of goods and services from government accounts	104,423,000	100,630,000	(3,793,000)
25.4 Operation and maintenance of facilities	956,000	900,000	(56,000)
25.5 Research and development contracts	130,357,000	68,895,000	(61,462,000)
25.6 Medical care	0	0	0
25.7 Operation and maintenance of equipment	5,006,000	5,000,000	(6,000)
25.8 Subsistence and support of persons	0	0	0
25.0 Subtotal, Other Contractual Services	299,606,000	230,691,000	(68,915,000)
26.0 Supplies and materials	1,970,000	2,010,000	40,000
31.0 Equipment	9,500,000	8,555,000	(945,000)
32.0 Land and structures	0	0	0
33.0 Investments and loans	0	0	0
41.0 Grants, subsidies and contributions	717,054,000	732,583,000	15,529,000
42.0 Insurance claims and indemnities	0	0	0
43.0 Interest and dividends	0	0	0
44.0 Refunds	0	0	0
Subtotal, Non-Pay Costs	1,032,335,000	978,042,000	(54,293,000)
Total Budget Authority by Object	1,109,099,000	1,056,797,000	(52,302,000)

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

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Salaries and Expenses

OBJECT CLASSES	FY 2008 Enacted	FY 2009 Estimate	Increase or Decrease
Personnel Compensation:			
Full-time permanent (11.1)	\$49,955,000	\$51,254,000	\$1,299,000
Other than full-time permanent (11.3)	4,643,000	4,764,000	121,000
Other personnel compensation (11.5)	2,381,000	2,442,000	61,000
Military personnel (11.7)	1,256,000	1,288,000	32,000
Special personnel services payments (11.8)	281,000	288,000	7,000
Total Personnel Compensation (11.9)	58,516,000	60,036,000	1,520,000
Civilian personnel benefits (12.1)	17,726,000	18,184,000	458,000
Military personnel benefits (12.2)	522,000	535,000	13,000
Benefits to former personnel (13.0)	0	0	0
Subtotal, Pay Costs	76,764,000	78,755,000	1,991,000
Travel (21.0)	1,757,000	1,747,000	(10,000)
Transportation of things (22.0)	130,000	128,000	(2,000)
Rental payments to others (23.2)	245,000	250,000	5,000
Communications, utilities and miscellaneous charges (23.3)	1,001,000	1,002,000	1,000
Printing and reproduction (24.0)	1,062,000	1,066,000	4,000
Other Contractual Services:			
Advisory and assistance services (25.1)	3,700,000	3,790,000	90,000
Other services (25.2)	55,164,000	51,476,000	(3,688,000)
Purchases from government accounts (25.3)	104,423,000	100,630,000	(3,793,000)
Operation and maintenance of facilities (25.4)	956,000	900,000	(56,000)
Operation and maintenance of equipment (25.5)	5,006,000	5,000,000	(6,000)
Subsistence and support of persons (25.8)	0	0	0
Subtotal Other Contractual Services	169,249,000	161,796,000	(7,453,000)
Supplies and materials (26.0)	1,970,000	2,010,000	40,000
Subtotal, Non-Pay Costs	175,414,000	167,999,000	(7,415,000)
Total, Administrative Costs	252,178,000	246,754,000	(5,424,000)

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Authorizing Legislation

	PHS Act/ Other Citation	U.S. Code Citation	2007 Amount Authorized	FY 2008 Enacted	2008 Amount Authorized	FY 2009 Budget Estimate
Research and Investigation	Section 301	42§241	Indefinite	\$1,109,099,000	Indefinite	\$1,056,797,000
Office of the Director	Section 402(a)	42§281	Indefinite		Indefinite	
Total, Budget Authority				1,109,099,000		1,056,797,000

**NATIONAL INSTITUTES OF HEALTH
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Appropriations History

Fiscal Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation ^{1/}
2000	218,153,000 ^{2/}	270,383,000	299,504,000	283,509,000
Rescission	0	0	0	(1,509,000)
2001	262,456,000 ^{2/}	342,307,000	352,165,000	213,581,000
Rescission				(137,000)
2002	232,098,000 ^{2/}	323,098,000	236,408,000	235,540,000
Rescission				(140,000)
2003	253,859,000	0	257,974,000	267,974,000
Rescission				(1,742,000)
2004	317,983,000	317,568,000	323,068,000	329,707,000
Rescission				(2,203,000)
2005	359,645,000	359,645,000	364,100,000	361,145,000
Rescission				(3,099,000)
2006	385,195,000	532,216,000	537,434,000	532,395,000
Rescission				(4,829,000)
2007	667,825,000	667,825,000	687,825,000	478,650,000 ^{3/}
2008 ^{4/}	517,062,000	1,114,422,000	1,145,790,000	1,109,099,000
Rescission				(19,720,000)
2009 ^{4/}	1,056,797,000			

^{1/} Reflects enacted supplementals, rescissions, and reappropriations.

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

^{3/} Annualized current rate.

^{4/} Includes funds for the Common Fund.

**NATIONAL INSTITUTES OF HEALTH
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Details of Full-Time Equivalent Employment (FTEs)

OFFICE/DIVISION	FY 2007 Actual	FY 2008 Enacted	FY 2009 Estimate
Office of the Director	591	591	591
Total	591	591	591
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		
2005	12.3		
2006	12.2		
2007	12.2		
2008	12.2		
2009	12.3		

**NATIONAL INSTITUTES OF HEALTH
Office of the Director**

Detail of Positions

GRADE	FY 2007 Actual	FY 2008 Enacted	FY 2009 Estimate
Total, ES Positions	14	14	14
Total, ES Salary	2,201,212	2,300,046	2,366,748
GM/GS-15	101	101	101
GM/GS-14	108	108	108
GM/GS-13	146	146	146
GS-12	80	80	80
GS-11	35	35	35
GS-10	5	5	5
GS-9	40	40	40
GS-8	17	17	17
GS-7	15	15	15
GS-6	5	5	5
GS-5	7	7	7
GS-4	1	1	1
GS-3	2	2	2
GS-2	1	1	1
GS-1	2	2	2
Subtotal	565	565	565
Grades established by Act of July 1, 1944 (42 U.S.C. 207):			
Assistant Surgeon General	1	1	1
Director Grade	8	8	8
Senior Grade	1	1	1
Full Grade	0	0	0
Senior Assistant Grade	0	0	0
Assistant Grade	0	0	0
Subtotal	10	10	10
Ungraded	51	51	51
Total permanent positions	577	577	577
Total positions, end of year	640	640	640
Total full-time equivalent (FTE) employment, end of year	591	591	591
Average ES salary	157,229	164,289	169,053
Average GM/GS grade	12	12	12
Average GM/GS salary	93,269	97,457	100,283

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